Using different art forms to develop literacy in the early years settings

Αξιοποίηση μορφών τέχνης στην κατεύθυνση της ανάπτυξης του γραμματισμού στο νηπιαγωγείο

Subject area: Literacy procedures - Early Years Education

Γνωστικό αντικείμενο*: Διαδικασίες Γραμματισμού-Προσχολική Εκπαίδευση*

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*To all of my students,
you taught me well!*

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Abstract

Literacy is an important ability of people as it is highly linked with every area of learning. Thus, it is critical to find meaningful ways to support young children to develop their literacy performance. The arts are a promising approach as according to research (see Hanley et al, 2009) they are the most preferable activity choice of children and they also provide a liberal environment in which they can interact and communicate effectively. Considering the lack of research in examining the holistic effects of the arts in children's development, the aim of this research was to investigate an interdisciplinary approach of the arts and literacy in children's performance in literacy and social skills, involvement and literacy as a social practice in the age group of 5-6 years old. More specifically, it was investigated if there were the arts in general or a specific art form that could contribute more to children's performance in literacy and social skills, involvement and literacy as a social practice. It was expected that drama would have a better contribution. This was based on the fact that according to Sionti & Papadopoulos (2011) and Fleming et al. (2004) drama requires higher levels of participation because it required high levels of physical activity and improvisation.

An interdisciplinary framework was designed and suggested for this purpose and it was tested in a pilot implementation and in a final study against a control group. There was a random selection of 4 early years classrooms in Attica in Greece with 83 children and 4 early childhood teachers in total. In the final study there were 3 experimental groups, which each one of them were implementing the suggested interdisciplinary framework using a different kind of the arts. The effects of the intervention in children's performance in literacy and social skills, involvement and literacy as a social practice were measured using a mix method approach with qualitative and quantitative data. The practitioners' perspectives regarding the intervention were also gathered. The findings verified the beneficial effects of the arts in children's literacy and social skills, involvement and literacy as a social practice. When the arts were using as a means to develop literacy activities, children had a better performance from children in the control group. In contrast, with our hypothesis there was no significant difference between drama and the rest art forms. This leads us to suggest that there is no specific art form that has greater gains comparing with the other ones but it is the arts in general that have a beneficial impact on children's performance in literacy and social skills, involvement and literacy as a social practice.

The added value of this piece of research rests on the fact that it examined holistically the effects of the arts on children's performance in literacy and social skills, involvement and literacy as a social practice, which is something that is missing from the empirical literature. These findings are useful to early childhood practitioners as a

pioneering approach and to researchers as a motivating factor for further examination of this topic.

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1. Introduction

Children's experiences in the early years settings are a crucial factor for their performance and development in the future. They build skills and develop interests that will define their learning process in the later levels of their formal schooling (Tymms et al., 2009; Siraj-Blatchford et al., 2008). Considering this argument, great emphasis should be given in this area as it is the basis of formal learning.

Within the different areas of learning, it can be argued that literacy is the most important one as it is highly related with all the other ones. One main argument is that every area of learning has its own communication code, which is built in the basic principles of literacy. Thus, children need to develop effectively their literacy skills in order to succeed in the rest of the areas of learning. This argument places great importance in the development of literacy especially in the early years, which is considered a fundamental area for children's stance towards learning. Therefore, there is a need to find pioneering ways to support young children to develop such skills. The arts are a promising approach that can be used in an interdisciplinary research with literacy. The benefits of the arts rest on the fact that they develop an environment of freedom in which participants can communicate and exchange their true ideas (Vasudevan, 2014; Matthews, 2008). This argument has a great impact in the early years as according to research (see Hanley et al, 2009) art activities are the most frequent choice of children in their free play. Thus, such an interdisciplinary approach will come naturally to children as the arts are part of their existing free choice activities.

Art activities have attracted the attention of researchers and practitioners in all levels of education and they utilize them to develop learning outcomes in literacy (see Moritz 2015; Anderson & Loughlin, 2014; Greenfader et al., 2014; Change & Cress, 2013; Runfola et al., 2012). However, there is a gap in pieces of research that examine the arts and literacy holistically as most of the existing pieces of research in the early years are focusing in one kind of the arts and its effects in one area of literacy. Considering the findings and limitations of the existing empirical findings (see chapter 4) this research project was designed. It is obvious that in research in the early years settings, there is an over emphasis in music in relation to phonological awareness. Further gaps were also identified regarding the effects of the arts in both literacy and social skills, in literacy as a social practice and in children's involvement. The above situation, was a motivating factor for this PhD thesis. Considering the gaps in this area, there was an effort to contribute in the investigation of this relationship by offering further knowledge based on empirical findings.

The **aim** of this research was to investigate an interdisciplinary approach of the arts and literacy in children's performance in literacy and social skills, involvement and literacy as a social practice in the age group of 5-6 years old. More specifically, it was

investigated if there were the arts in general or a specific kind of the arts that could contribute more to children's performance in literacy and social skills, involvement and literacy as a social practice. For this reason, there was a comparison of the effects on 3 different art forms on literacy and social skills, of children's involvement and of children's use of literacy as a social practice. It was expected that drama play would contribute more and had better outcomes in children's performance as according to Sionti & Papadopoulos (2011) and Fleming et al. (2004) it requires more participation and has greater levels of freedom. The **research questions** were:

1. What are the effects on children's literacy skills when they are interacting with the arts?
2. What are the effects on children's use of literacy as a social practice when they are interacting with the arts?
3. What are the effects on children's social skills when they are interacting with the arts?
4. What are the effects on children's involvement when they are interacting with the arts?

The following chapter 2 analyses the content of literacy and the basic principles in developing literacy in the early years settings. Chapter 3 presents the concept of the arts and establishes their pedagogical value by examining the different Early Years curriculums across the world and by linking them with some of the major pedagogical theories in the early years settings. Chapter 4 introduces the importance of interdisciplinary research and analyses the existing pieces of research about arts and literacy. The importance of this PhD thesis is identified through the gaps of the existing empirical research in this chapter. Chapter 5 discusses the importance of involvement in children's school performance and examines the existing pieces of research in relation to the arts. Relevant gaps were identified and linked with this PhD thesis. Chapter 6 discusses the importance of social skills in children's academic performance and create a link with this PhD thesis. Chapter 7 analyses the different teaching styles and their effects on children's learning as an important factor of the effects of the current intervention. Chapter 8 presents the methodology of the PhD thesis and describes the methodological choices. Chapter 9 presents the data analysis and the discussion of the findings. Chapter 10 summarises the discussion and presents the conclusions. In the appendices, the necessary pedagogical and research resources are presented.

2. The concept of literacy

Literacy is a fundamental part of people's language development, which involves their ability to read and write and also their ability for verbal and non-verbal communication. It includes critical thinking skills, numeracy skills and is highly linked with every other aspect or learning area. Studying further the concept of literacy, it can be argued that it is a very important ability in people's lives. It covers people's need for communication and enables them to gain knowledge and to categorize and organize new information from the surroundings. Literacy is also a very broad concept that applies to a lot aspects of people's lives.

Every area of learning and development has its own communication code that is basically based on people's literacy skills. For example, in a mathematical problem, students have to be able to 'read' the numeric symbols, discuss about the possible solutions, explain their personal way of thinking before they solve the problem and 'write' the solution. This exercise merely involves some of the basic literacy skills like reading, writing and communication. Consequently, it can be argued that when students have effectively and efficiently developed their literacy skills, they can further succeed in every area of learning and development, since they already possess the appropriate basis and foundation. This situation discloses the importance of enabling children, and especially young children, to develop their literacy skills effectively, since with this way, they can flourish in all learning areas. Therefore, the access to literacy and the frequency of this access has a major effect of everyday interactions.

Trying to identify the concept of literacy, it has to be admitted that it is not an easy and straightforward procedure. According to Baynham (1995) every definition of this term can be questioned. Literacy in everyday life can have two different dimensions: the <u>operational dimension</u> and the <u>critical dimension</u> (see table 1). Being more specific, in the operational dimension there is a focus on competency with the language system and the abilities people need in order to be adapted in the social activities e.g. read, write, listen and speak. On the other hand, the critical dimension is focused on the development of critical thinking regarding these activities and the meaning that they might have in different contexts.

Table 1. Dimensions of literacy according to Baynham (1995)

Dimensions	Description
Operational dimension	Important abilities for people's socialization
Critical dimension	Critical thinking in these abilities regarding the context

In people's everyday lives these two different dimensions interact and affect people's use of the language system on their social activities. According to Baynham (1995), operational dimension can be categorized in two further categories: <u>Literacy</u>

as a social practice and literacy as a means of communication. Critical dimension involves critical literacy (ibid). These further categories of literacy interact during people's everyday activities and understanding of literacy (see table 2).

Table 2. Categories of literacy according to Baynham (1995)

Categories	Description
Literacy as a social practice	Literacy as a social activity
Literacy as a means of communication	Abilities regarding communication (e.g. Receptive & productive skills)
Critical literacy	Critical meaning of literacy

In the following sections, there is a need to analyze further these terms in order to understand fully their meaning and content. The focus of this thesis is based on literacy and it examines the operational dimension of literacy. More specifically, it examines literacy as a social practice and literacy as a means of communication and further investigates the ways that they can be developed through an art intervention. The critical dimension of literacy is also really important but it was decided to be examined in a following research study after the completion of this thesis. The basic reason for this decision was to keep focus of this thesis in one dimension in order to be able to examine it thoroughly.

In addition to the above, in the following chapters there will be a discussion of the role of the adult and the role of the setting in the development of literacy as a social practice and literacy as a means of communication, which are also two of the basic parameters of the art intervention of this research project. Also, the concept of emergent literacy and phonological awareness, which can be both linked with the wider concept of social literacy, are discussed in the following chapters as they were considered in the experimental design of the intervention. In this thesis, it is argued that emergent literacy can facilitate phonological awareness. This was highly considered in the framework of the experimental design.

2.1 Literacy as a social practice
The social aspect of literacy has its roots on socio-cultural theories of learning, which gives emphasis on social interactions. This is can be conceptualised on the fact that people develop literacy aspects through their interaction with others in meaningful activities that take place in specific social contexts (Orellana, 1995). During this procedure, the communities of practice that have been developed have a very important role. Being more specific, a community of practice is the relationship that associates people to share collective learning (Wenger, 2004; 1998; 1991). Literacy activities which are taking place in the communities of practice become an integral part of people's lives. Language, literacy and learning are integrated in the people's communities of practice and help people to share their knowledge (Carter, 2006). This knowledge helps people to progress in their social activities. As Papen (2005)

highlights, literacy is not only a summary of certain abilities but it is the perception of literacy as a social practice which defines the relationship among people.

Literacy as a social practice has an emphasis on the usage of literacy in the broad context of people's lives. It is true that the concept of literacy is commonly linked with social activities that can be observed and recorded (Maybin, 2007). Social practices have to do with specific human's reactions in situations in real life e.g. acting, talking etc. (Harste et al., 2004). This leads us to suggest that since experiences are different for every person, then the available social practices are also different.

Following this argument, there is an emphasis on observing this practice as a human practice (Baynham, 1995). Studying literacy as a social practice means that there is an investigation of the human's actions that are related with literacy but also an investigation on human's beliefs regarding these actions. However, the terms beliefs, ideologies and attitudes cover a very broad and vague area which sometimes is very difficult to be determined and located. As Barton (2007) highlights, literacy is a symbolic system that we use for our communication and is linked with other systems that have to do with an exchange of information. From the above discussion it is obvious that literacy can be characterized as a social activity that takes place in many social relationships of humans.

Within literacy as a social practice, two very important aspects are literacy events and literacy practices (see table 3). <u>Literacy events</u> are the various activities that take place regarding literacy, whereas <u>literacy practices</u> are the way people use literacy through literacy events (Barton, 2007). Literacy practices shows the way people interact with each other in literacy and not the literacy knowledge they have, although this can be obvious as well. It has to be acknowledged that literacy practices are influenced by the socio-cultural context that people are living in (Papen, 2005). This is attributed to the fact that cultural values have access to literacy through people's everyday activities (Harste et al., 2004). In order to understand better literacy as a social practice, a clear need is raised to discuss literacy events and literacy practices within people's everyday lives.

Table 3. Literacy as a social practice according to Barton (2007)

Literacy as a social practice	
Literacy events	Activities in everyday life that include literacy
Literacy practices	What exactly people do with literacy, how they do it and why

Literacy events and literacy practices are interacting with each other and during this interaction they form the foundation of literacy as a social practice. Although they both show people's interactions and not people's knowledge, during these interactions there are signs of people's knowledge regarding literacy. Observing

everyday activities, it is obvious that literacy has an important role in people's lives but also in the way that they use this knowledge in order to apply it practically in their activities. Therefore, this importance is attributed to the fact that there is a connection of the cognitive attributes with the social aspect of literacy. Literacy as a social practice is very important as the social power and interactions has a vital role in people's lives.

Transferring these arguments in the early years settings, it is obvious that they are also valid in this area. Children in the early years settings seem that they have an innate tendency to use their social experiences and interactions to develop literacy (Booth et al., 2007). These social experiences and interactions are influenced directly by their cultural background and routines, which are obvious within the communities of practice that are developed in the settings. According to Carter (2006), a successful curriculum should incorporate the knowledge from these communities of practice and put it into practice. Focusing on literacy in the early years, she stresses that this practice will motivate students to focus on literacy as a social practice and on the literacy events that exist in their everyday lives.

Considering these arguments, it is obvious that reading and writing, as part of literacy, have been characterized as social and cultural practices. Children's involvement in these procedures includes two very important social relationships: the relationship between the author and themselves as readers and the relationship among the characters in the story (Bloome & Katz, 1997). However, these arguments are not new in the field of literacy as they derived from the traditional definition of literacy, although this was not always so obvious. According to Evans (2005), the traditional definition of literacy is based on an autonomous learning module that has its roots in the social and cultural interactions. This acknowledgement offers great advantages in people's lives as there is an understanding of the content and construction of literacy (Tett et al., 2006). Also, it gives the opportunity to implement various approaches that empower young children to communicate and exchange literacy information and strategies that give meaning to different settings (Prinsloo, 2005). For example, when practitioners in the early years settings are aware of this fact, they can stimulate young children to focus their attention to the literacy aspects of their everyday lives or to include literacy aspects in the setting so children could use in their free play.

Some years later, Dafermou & Sfyroera (2010) confirmed these arguments in the Greek content and culture. As every social interaction is influenced by the cultural background, this argument is really important especially for the theoretical background of this research project as the experimental design focuses in Greek schools. Dafermou & Sfyroera (2010) stress that writing has a strong social focus. They characterize the beginning of every writing efforts as a procedure to mobilize children's thinking. For this purpose, they highlight that it is of paramount importance

to include the social aspects of literacy in every effort to enable young children to develop literacy otherwise we shift away from its true meaning and purpose. This was taking into serious consideration in the framework of this research project by placing social interaction in the center of the art intervention.

With the changes in the educational system in Greece and the development of a new early years curriculum (ΦΕΚ 304Β/13-03-2003) some years ago, literacy is appeared to be even more important in school activities, which is something that affects children's everyday lives as well. In the new Greek early years curriculum, it is obvious that the purpose of literacy has a communicative and social aspect. This is highly related with literacy as a social practice as social interactions are the center of this term.

Having discussed the content of literacy as a social practice, following there will be discussion of second category of the operational dimension of literacy which is literacy as a means of communication.

2.2 Literacy as a means of communication

Proceeding in the next category of the operational dimension of literacy, it can be argued that literacy as a means of communication is a basic part of literacy as a social practice. This is based on the fact that literacy as a means of communication provides people the necessary skills to interact effectively. In addition to this, it offers the necessary literacy knowledge that people can use in their social interactions. Literacy as a means of communication includes the reading and writing skills. During this procedure, verbal communication is very important as it enforces the listening skills, which is the critical for reading and writing later on.

Reading and writing skills are developed throughout the years and it is wrong to assume that they start developing at a specific age or time period. The development of literacy starts from birth, by which we start to make sense of our reality and to interpret the literacy aspects of the environment that surround us. In other words, this starts when infants start wondering about the meaning of the black symbols in their environment. After a lot of interactions with writing stimuli, they realize that these black symbols give meaning and organize the reality around us.

Literacy as a means of communication includes the skills we develop gradually and we use on our everyday interactions. These skills are <u>listening, talking, discussing, reading and writing</u>. It is very important to stress that these skills are developed throughout the years from the instance we came to this world and not after a specific age.

<u>Listening skills</u> are based on hearing skills that are innate from the time we were born. At this point there should be a distinction between hearing skills and

listening skills. Hearing is a physical ability whereas listening is a skill that we develop and learn and allows us to interpret and understand of what the other people are saying. Being a good listener enables people to create positive relationships with others (Brownell, 2016). Talking skills are the ability to express and articulate our ideas with verbal means of communication. It comes after the listening skills, as infants learn to speak by constant verbal interactions with other people. Discussing is a way of exchanging ideas while using listening and speaking skills. It further helps people to learn and to gather information in a way that interests them (Brookfield & Preskill, 2012).

Reading skills are the ability to give meaning to the black symbols and to decode words, sentences, paragraphs and texts. When children are trying to give meaning to written symbols, they are trying to create relationships among sounds and letters (Whitehead, 2010a) and they build the basis for mastering the alphabet (Kim & Pallante, 2010). Finally, writing skills are the ability to convey ideas by using written symbols. This could be pseudo letters or real letters according to the age of the child. In the first attempts of a young child to use its writing skills, it is very important to comment on the effort and not on the outcome, as this will empower the child to continue its efforts.

All of the above skills are used in children's everyday interactions and they enable them to communicate with others and make sense of their environment. In order to achieve an effective communication, these skills interact with each other and each one contributes to the development of the other one (Berninger et al., 2016). For example, in the attempt of a young child to discuss with someone, it uses its skills and knowledge during listening and talking. In this procedure it is important to realize that language as a means of communication is a developmental process with no pre or/and post periods that is defined by cultural factors (Gillen & Hall, 2003). For example, Eastern and in particular Arabic writing and reading system is completely different from the Western writing and reading system like UK, Italy or Greece as they start write and read from different directions.

Having discussed both categories of the operational dimension of literacy, it is important to proceed and discussed the critical dimension of literacy and more specifically the critical literacy. As it is mentioned earlier, this is not part of the theoretical framework that is being adapted in the experimental design but it is really important to give a holistic view of literacy without excluding important parts.

2.3 Critical literacy
The second dimension of literacy, which is the critical dimension, is concentrated on the development of critical thinking and this is formed with critical literacy. According to Luke (1997), there is a vivid discussion and argument regarding the content of the term critical literacy. He supports that these arguments are nothing

more than an effort to develop an educated society, in which its members use their knowledge for their communication. **Critical literacy** is focused on the active reading of a text, which through constant questioning it develops deeper understanding of the meaning (Baynham, 1995). This questioning is focused on the purpose, the reason and the cultural values of a text or a spoken communication. For example, when a food product is on offer this is written in red color and big size letters because they want people to notice it or the purpose of this letter is to inform us about the amount of money we need to pay on electricity. It starts with the understanding that written text contributes to the development of the critical thinking, apart from its functional purposes (Stamou et al., 2016). Through critical literacy, people, not only young children, gain the necessary skills to interact effectively as they are able to understand the meaning and the purpose of written or spoken words.

This category is a meta-level of understanding language and society (Baynham, 1995). It refers in the questioning and the critical elaboration of different terms that surround literacy and it also includes aspects of critical thinking. Using critical literacy skills, students have the opportunity to examine deeply the meaning of a text, the perceptions and the motives of the author and to discover the techniques of essay writing skills (Androulakis & Chatzimichou, 2009). In addition to this, students who are involved actively in the reading of different texts, they analyze and critique the relationship among them and they transfer the skills they gained in their social practices with the purpose to discover their relationship, values and beliefs (Babalioutas & Papadopoulou, 2007). Critical literacy offers to people even more than a mere understanding and usage of the written symbols of the alphabet. It offers the ability of reflections and the understanding of deeper meanings like power, social conventions etc. (Coffey, 2008) but also a critical evaluation of language (Chatzilouka-Mavri, 2010).

Reviewing the Greek context and literature, Stamou et al. (2016) contributed in this area by providing further knowlege in the development of critical literacy in the early years settings and secondary education. Participating in a research programme and more specifically in 'Thalis programme for the support of interdisciplinary research and innovation', they designed, implemented and evaluated pedagogical resources for the development of students' critical literacy. For this purpose they used popular cultural texts from television shows, movies, newspapers etc. From the dissemination of the outcomes of this research project, it is obvious that there was a very positive contribution of this practice in children's sociolinguistic awareness (see Maroniti et al., 2006).

It can be argued that critical literacy is highly linked with aspects of literacy as a social practice. As Papen (2005) stresses, the literacy users should place great emphasis on the critical aspect of literacy, which underlines incorporates aspects of social

<u>practices</u>. Taking into consideration this argument, critical literacy is highly related to social interactions and culture within the society.

It can be considered as an outcome of social practices and interactions. It is true that through social interactions, people gain and develop knowledge regarding several matters. Thus, in the procedure of using literacy aspects in the everyday interactions, we also investigate the critical meaning of these literacy aspects. Critical literacy is an integral aspect of social practices as it enables people to control these literacy interactions in different aspects of their lives (Barton, 2007).

As has been stated earlier, critical literacy was not part of the research framework of this thesis. The reason that it is included here is to provide a complete review of literacy without omitting any important parts. From the above discussion, the role of the adult and more specifically the role of the practitioner seems fundamental in developing literacy. Therefore, in the next chapter there will be a discussion of this aspect.

2.4 The role of the adult in developing literacy

In this section there will be an analysis about the important role of the adult in developing literacy. More specifically, there will be a discussion about the role of the family and the school in structured and free play activities regarding literacy.

As it has been established in the above chapters, the development of literacy in young students is a social procedure. Understanding the literacy concepts and interpreting a verbal or written message, takes place through children's social interaction with other the people of their surroundings (Koutsouraki, 2006). The role of the adult is very important in children's development of literacy (Booth et al., 2007; Landry et al., 2006) and is much more than just teaching young children to read and write. Adults have a major contribution on children's development of literacy, as they can support them to discover by themselves the literacy aspects in activities that are meaningful for them. As Adams (1995) stresses, young children will be able to read only if adults provide them enough resources and freedom in their activity choices.

Children learn the basic principles of literacy through their interaction with adults and the other children. This procedure begins before their birth, as language experiences start from the womb as a fetus (Hayes, 2016; Anagnostopoulos, 1994). It is very common the partner of the pregnant woman, and people in general, to talk to her belly, pretending they are talking to the fetus. This language experience continues after their birth as newborns take part in the adults' everyday activities (Hayes, 2016; Bochner et al., 1998). For example, parents, and adults in general, usually take their babies with them when they are doing their everyday errands like shopping, cooking, paying a bill, go to the post office etc. During these activities, adults understand the messages their babies are transmitting to them, they decipher them and they reply to

them according to the setting and the situation they are each time. For example, it is very common during a visit to a grocery shop the adult to respond to their baby's sounds by explaining what they are doing, browsing or looking for each time. During interactions like these, there is a constant exchange of messages, which has a substantial contribution in the development of literacy of young children. This practice enables children to understand effectively the literacy rules later in their lives. Therefore, and as it has been also suggested by Bandura (1977), it can be argued that adults are a role model to children and play a substantial part in their efforts to understand the world. This is also valid in children's efforts to develop literary skills.

The role of the family in the lives and school progress of young children cannot be questioned. The family is the first learning agent, who build the foundation of children's learning abilities and attitude (Rapp & Duncan, 2012; Haney & Hill, 2004) and can also serve as real life role models for children. In the development of literacy there are very important aspects that can be found in the family environment. Researchers (see Al-Alwan, 2014; Giallo et al., 2013; Lau et al., 2011; Koutsouraki, 2006) support that it is very important parents to be involved actively in the early years of a child's life, as this has a substantial impact on children's development in literacy and development in general. A successful understanding of literacy is based on the frequency of the literacy events that appear in children's everyday lives in their home environment and with their parents (Giallo et al., 2013; Melhuish et al., 2008; Koutsouraki, 2006). An example of this could be, when children observe their parents to read and write for mere pleasure e.g. read a book or a newspaper, write a letter or an email to friend, type a text to post on their social media account etc. When children experience situations like these in their home environment, they adapt this role model and bring into action such activities as students and adults later in their lives. With situations like these, parents, practitioners and adults in general, serve as a role model for young children and they encourage literacy qualities to children (Melhuish et al., 2008; Booth et al., 2007; Foy & Mann, 2003; Giannikopoulou, 2001).

Investigating even more the role of the family, it has to be acknowledged there are more factors that are related with the family environment and can have a strong impact on children's development of literacy. The socio-economic background of their parents is a major factor that can enhance or inhibit children's development of literacy (Rapp & Duncan, 2012; Melhuish et al., 2008; Foster et al., 2005;). For example, if children come from a very low socio-economic background in most of the situations, they have to contribute and help parents to save money by helping them in the home errands or by taking care of their younger siblings (Wells, 2015; Okyere, 2012). Due to situations like this, parents might not have the opportunity to spend time to read and write for pleasure and to spend time with their children for literacy activities, as their major concern is to provide food and shelter to live. In addition to this, parents' attitude and previous experience with literacy are important factors in children's

progress in literacy (Wild, 2007; Foy & Mann, 2003). For example, if parents do not value activities like read and write or school knowledge in general then their children will imitate this attitude in their lives.

Another reason that family is an important factor in children's development of literacy is that unconsciously it provides meaningful learning activities for children. When an informal literacy activity takes place in the home environment, this is considered as part of their everyday lives and not as specific activities that are designed and implemented only for the development of literacy. A good example for this is when the postman delivers a letter. This activity on its own involves literacy aspects and it is an integral part of people's everyday lives. When this happens, young children develop literacy skills as an important ability for their lives, as it is an event that will trigger their attention. Therefore, it can be argued that the everyday home activities have the opportunity to affect literacy activities in the school environment, as they can make young children excited about literacy.

According to Maybin (2007), the unofficial activities that take place in the family environment can influence the official activities in the school setting. Unofficial activities include the everyday activities that do not have specific rules and structure and can be observed during children's free play. For example, children pretend that they are sick and they need to read the doctor's instructions to take the suggested medicine. On the contrary, official activities include structured activities that can be observed in a school setting. For example, during literacy time the practitioner has prepared a lesson plan in order to teach children rhyming words. The difference in these two activities is that the former activity has not a pedagogical/learning focus, whereas the latter one has.

Apart from family, practitioners also have a substantial contribution in children's learning and development as they are the ones that are qualified to do so during their studies and training. Practitioners are also important role models for children as they are the ones who introduce formal learning to them. Young children consider their teachers as a source of knowledge and thus they imitate their attitude and stance towards learning. Practitioners are responsible to trigger children in the learning activities and to make them eager to learn by showing to them the fun aspect of learning. They need to respect their individuality and cultural values and address to each student different according to their learning style. When this happens, children are motivated to learn and this continues for the rest of their lives in formal learning. It is also very important to have some time in the curriculum for informal activities, as they serve a substantial educational purpose. Maybin (2007) observed a lot of informal activities that take place in a school setting, which could be further utilized from practitioners in the everyday school curriculum.

Effective collaboration among practitioners and parents is the cornerstone of children's school progress. In order to have a successful outcome in the teaching and learning process, it is important all adults who interact with children to follow the same path in their interactions with children. This means to share the same values and attitude regarding teaching and learning activities (Rapp & Duncan, 2012; Giannikopoulou, 2001). Therefore, practitioners should collaborate with parents and discuss with them about their suggested techniques and strategies that could help children to achieve academic success. It is also useful, practitioners to be informed by parents about the child's achievements in literacy in the home environment and about the influencing factors (Kurtulumus, 2016; Rapp & Duncan, 2012; Porpodas, 2002). With such a practice, they will be aware of the children's experiences, knowledge and interests. This will help them to develop and adapt the school activities regarding literacy according to children's needs and desires. As result of this practice, children will feel ownership of the school literacy activities and they will understand the purpose of literacy in their everyday lives. This is also important for children with different language backgrounds or for bilingual children. In the case that the language experiences in the school setting have common aspects with the ones in the home setting then children will have a great school progress in literacy (Kurtulumus, 2016; Anagnostopoulos, 1994).

Having discussed the important role of the adult in children's development of literacy and specifying it in parents' and practitioners' role, in the next section there will be a more specific discussion about the teaching practices. As this thesis focused the research design in the Greek early years settings, in the following section there will be a focus on the Greek empirical and theoretical literature.

2.4.1 Teaching practices in the Greek setting

Focusing the arguments on practitioners' role in children's development in literacy, it is necessary to discuss the influence of their attitude in teaching literacy. In order to reveal the communicative aspect of literacy, practitioners should utilize relevant strategies (Hayes, 2016; Chatzisavvidis, 2002). However, there is a problematic situation when practitioners are unconsciously in favor of a teacher-center approach in literacy, which is translated to practice with a mechanistic reproduction of the alphabet. Several examples can be found in activities such as connect the dots or copy letters and texts. In a relevant research, Athanasiou & Nitsiou (2011), express their concerns regarding this issue, as they observed practitioners who still follow unconsciously a teacher-center approach in literacy in the early years settings.

An unconscious teacher-center approach can be found in everyday interactions during the school day. This is obvious when looking closely to practitioners' attitude and reaction on children's experimentations in the early years

settings. For example, practitioners encourage children in their efforts to reproduce their surroundings through drawing even when their drawings are at a very initial stage. However, this is not the same when it comes to literacy. Practitioners feel that they have the obligation to correct children and stress their mistakes (Giannikopoulou, 2001). Sometimes, this attitude can discourage young children from writing as they can perceive that these activities is only for the elder ones (ibid).

As it is obvious, this approach does not encourage children to develop their literacy skills as they might feel that they will be judged or that they cannot do it right. Therefore, it is crucial the practitioners to be aware of these unconscious incidents and try to avoid them (Farrell, 2016). To enable children to explore their full potentials in literacy and to promote the social aspect of literacy, practitioners should give young children the freedom to experiment with several writing tools like pencils, erasers, pencil sharpeners, rulers etc. and with several reading materials e.g. books, magazines, newspapers, utility bills etc. It has to be acknowledged that these activities should derive from children's interests and should not be imposed to children.

Practitioners should also have in mind that adults utilize literacy in order to meet their everyday needs and this should be the same when they support children to develop literacy. For example, when adults write a birthday card for a friend they do it because they want to communicate a message and not because they want to practice their literacy skills. Consequently, this should be the same approach in the early years settings with young children instead of implementing ready-made literacy activities. Some everyday examples of meaningful resources for literacy activities could be the bulletin board, manual of appliances, recipes, utility bills. Practitioners can take advantage of these resources in order to show children the social aspect of literacy (Giannikopoulou, 2001).

Practitioners who have a supportive role, which facilitates learning in every interaction with children, would be beneficial for children's learning journey. Thus, it is important to set the school environment in the early years settings in a way that offers young children opportunities for learning during their everyday interactions (Koutsouraki, 2006). During this process and interactions, children have the opportunity to internalize the new knowledge according to their individual way of learning and to enrich or adapt their existing knowledge.

This lead us to suggest that the setting of the early years classroom has also an important contribution on developing literacy. Therefore, in the next chapter there will be a discussion of this aspect.

2.5 The role of the setting in developing literacy

As it has been discussed in the previous chapter, adults have a crucial role in the progress of children's literacy. In this, it is also very important the way they set the

classroom in which children interact and play. The role of the adult is related highly with the setting of the classroom and the stimuli that are provided. The resources and activities that can be found and take place in a setting are very important in the development of literacy and especially in reading (Adams, 1995).

The setting of the classroom can influence children's future abilities in literacy as it can provide to children opportunities for active involvement and direct communication (Griffin et al., 2004). A classroom that is equipped with the appropriate language stimuli can create meaningful links with the language experience that children have in their home environment (Byrne et al., 2005). This is based on the argument about informal activities that was discussed at the previous chapter.

Children learn successfully to read and write in a setting which supports them to focus on the ways that written communication is formed in a meaningful way (Hayes, 2016; Dafermou et al., 2006). Literacy aspects should be included in the children's activities and resources in order for them to understand its importance and role in their lives. Children should be able to access by themselves the resources and the language stimuli and not to be dependent on the practitioner to provide them. A very good example for this is to place the resources in shelves and cupboards that children can access on their own instead of placing them in a very high shelf. Playful activities and free access to them are two very important factors in children development in literacy and learning in general. Through play children are involved in real learning situations, in which they can mobilize their thoughts and speech (Whitebread & Jameson, 2010; Whitehead, 2010b; Bochner et al., 1998).

At this point it is important to discuss the term **environmental print** as a key term in the role of the setting on children's development of literacy. Environmental print means the written signs that can be found on the surroundings of children such as billboards, tags, food logos, packaging, signs etc. (Cetin et al., 2015). According to relevant pieces of research (see Neumann, 2014; Neumann et al., 2012), when children use environmental print in their everyday activities, they have an outstanding performance comparing to children who do not have this interaction. This is based on the fact that this interaction leads children in activities that derive from their everyday needs and for this reason they build knowledge successfully and they further learn how to use their literacy skills effectively for the rest of their lives.

When the setting is equipped fully with reading and writing stimuli, children are supported in the process of developing their literacy skills. For example, placing tags at the resources they use every day like boxes with pencils, scissors, markers or in the products of the grocery shop or the hairdresser salon could be meaningful reading and writing opportunities for children. Another good example is to provide free access to reading materials like newspapers, books, posters, calendars or utility

bills as these are some literacy examples that can be found in real life and usually children come across with them in their home environment. Through practices like these, we create a link with the real world and we enable children to include literacy aspects in their free play and understand their use on their everyday lives.

Proceeding with the same argument, classroom libraries and interest corners are one of the most important places in the early years classroom, in which a lot of literacy stimuli can take place (Chlapana, 2011). They provide the opportunity to children to learn the rules of reading a book and the different cultural practices such as turn the pages from right to left, hold the book right and not backwards or upside down, read from the left hand side to the right hand side etc. During such activities, children also familiarize themselves with the structure and the content of written language (Hayes, 2016; Bochner et al., 1998). Such playful activities can trigger children's attention and make them interested towards literacy. However, classroom libraries and interest corners cannot attract children's attention just because they have reading materials. The meticulous and careful design of the early years classroom and especially of the reading corners can have a positive influence on children's desire to read. According to Chlapana (2011), there should be a stylish and elegant organization of the books and the reading materials in order to trigger children to go and play in this area. In addition to this, the reading resources should be renewed continuously in order to provide variety on children's experiences.

From the above discussion, it is obvious that the way we set up the early years classroom is crucial as it can have a positive contribution to children's development of literacy. It has to be acknowledged that the design and the organization of the resources is important in the development of emergent literacy, which is a key term in children's literacy. Emergent literacy is one of the basic pillars of the research design and it is argued that it has the opportunity to facilitate phonological awareness in the early years setting. In the next chapter there will be a discussion of the content and the contribution of emergent literacy to children's development of literacy.

2.6 The concept of emergent literacy

The concept of emergent literacy is a key term in every early years curriculum. This concept can be linked with the wider context of literacy as a social practice, as emergent literacy skills are built through constant social literacy interactions. Focusing on the argument of Piaget (see Piaget, 1930) regarding the construction of knowledge and the arguments of Vygotsky (see Vygotsky, 1978) regarding the social aspect of learning, it is obvious that they provide the framework for the development of emergent literacy.

Emergent literacy accepts that the skills, knowledge and attitude regarding literacy is a developmental procedure that commences at the very early stages of the child and even before the beginning of formal schooling (Hume et al., 2016). It is often

related with the internal motivation of children to literacy aspects which are obvious in their free play. Some everyday examples of emergent literacy in children's free play is when toddlers pretend that they are reading a book to their teddy bear or when young children pretend to be an adult who is writing something. Emergent literacy is the outcome of children's constant experience with verbal and written communication, in which the basic literacy foundations are built (Heppner, 2016). Emergent literacy reveals a process that is being influenced by social and cultural values that exists in children's surroundings (Justice & Pullen, 2003). An important aspect of emergent literacy is its interaction with the characteristics of children's social behavior. In a relevant research, Doctoroff et al. (2006) verified that there is a significant relationship between these two terms. They stress that when children experience difficulties in emergent literacy skills, this was often related with behaviors like loneliness or aggressiveness. Therefore, emergent literacy is built and constructed through children's experiences with literacy stimuli and through social interactions, which are the basic principles of Piaget's and Vygotsky's theory (see Piaget, 1930; Vygotsky, 1978).

According to Koutsouraki (2006:51), emergent literacy is not a mere cognitive skill but it is more like a complex, social, psychological and language activity. Having this explanation in mind, the term emergent literacy includes all the attitudes that can be observed in young children regarding reading and writing before the formal schooling. It further includes attitudes that are related with the decoding and coding the written language and the understanding of its content (Dafermou et al., 2006). Investigating even more the content of emergent literacy, Sénéchal et al. (2001) suggest an alternative interpretation of this term which is slightly different from the above. Being more specific they describe that emergent literacy is children's knowledge regarding reading and their first efforts to read and write. Considering both definitions of emergent literacy, it can be argued that one definition completes the other one as the attitudes derive from knowledge and vice versa.

When children practice emergent literacy skills, basically they are trying to understand the content of verbal and written communication. Play is a very important activity that children can practice their emergent literacy skills (Nitecky & Chung, 2013). During their free play, they experiment with the basic literacy conventions without being judged if there are using them correctly or wrongly. This results in children being interested in literacy aspects which predicts, in turn, reading and writing achievements in schooling (Hume et al., 2016). It seems that there is a strong link between emergent literacy skills and children's first efforts in read and write. According to Welsch et al. (2003), the way young children write their names, mirrors skills that are highly related with emergent literacy. Emergent literacy is the basis for children's literacy performance and achievement in formal schooling. Researchers (see Lonigan et al., 2013; Greenfield-Spira, 2005; Justice & Pullen, 2003) stress the

fundamental contribution of emergent literacy in children's performance and development in literacy. They further highlight that when children did not have the opportunity to practice their emergent literacy skills they often experience difficulties in reading during formal schooling. Hence, it is really important to provide opportunities to children to develop emergent literacy skills through their play. In order to do so, we can set up the early years classroom in a way that facilitates emergent literacy skills. . Children's active involvement in an activity that promotes emergent literacy skills is crucial in the development of their skills in this field (McDonald-Connor et al., 2006). Reviewing the existing literature there are several ways that can be utilized to develop emergent literacy skills in the early years settings.

According to Justice & Pullen (2003), a very interesting way to develop emergent literacy skills is to provide to young students' playful activities that are enriched with literacy aspects. In practice, this is being translated with embedding environmental print (see chapter 2.5), so children could use and include this in their free play. With this way, children use their emergent literacy skills as an important vehicle in their play and they achieve learning in an entertaining way. Another interesting approach that is suggested by Justice & Pullen (2003), is for adults to share reading experiences with young children. This provides a meaningful setting to children that motivates them towards learning. With this approach, children have the opportunity to practice emergent literacy skills and to investigate in a critical way the content of literacy (ibid). As it has been described earlier (see chapter 2.4), adults play an important role in children's development of literacy, as through these interactions children build their knowledge. Thus, with a shared reading experience, we provide to children the opportunity to ask questions and to understand better the aspects that are related with literacy. Family is also an important agent in this process, as according to Roberts et al. (2005) the activities that take place in the home environment are very important in the development of emergent literacy. This is based on the argument, that the frequency of home shared reading experiences can make children interested in reading and writing as it is an activity that they enjoy doing with their parents who represent the first role models for them.

Investigating the content of emergent literacy and studying carefully the existing literature it is obvious that there is an issue on how researchers conceptualize emergent literacy in relation to phonological awareness. However, this discussion is not always clear and most of the arguments are indirectly or sometimes confusing regarding the relationship between these two key terms. There is one school of thought that perceives emergent literacy as a facilitator of phonological awareness and there is the opposite school of thought that perceived phonological awareness as an important vehicle to emergent literacy.

Both sides accept that phonological awareness is an important aspect in emergent literacy but they look at the same aspect from different point of views. According to Suortti & Lipponen (2016), it is very challenging to identify the effects and the relationship among emergent literacy and phonological awareness. They conducted a study in which they resulted that in two-five-year-old children emergent literacy does not require phonological awareness skills but it has the opportunity to affect them significantly. Proceeding with this argument, researchers, like Noe et al. (2013), who embrace the perception of emergent literacy as a facilitator of phonological awareness, argue that phonological awareness is an important emergent literacy skill. One year later, Beattie & Manis (2014) agreed with these arguments highlighting that during emergent literacy, skills like phonological awareness are enhanced and developed further. Noe et al. (2013) put great emphasis on emergent literacy skills, stating that poor performance in this area will result also in poor performance in phonological awareness. They resulted that when children are practicing their emergent literacy skills they embed phonological awareness skills. It is interesting to note that although emergent literacy can be developed spontaneously, without any particular adult guidance, phonological awareness requires clear adult direction in order to be achieved (ibid).

On the other hand, there are researchers who embrace the opposite framework and more specifically that phonological awareness is a cornerstone of literacy skills and especially in the development of emergent literacy. For example, researchers like Justice & Pullen (2003) suggest interesting practical examples in which practitioners can promote emergent literacy skills but they also suggest examples that use phonological awareness as a steering wheel to develop emergent literacy. They suggest that practitioners can build emergent literacy through pre-designed activities of phonological awareness. Some years later Fielding-Barnsely & Hay (2012) agreed with these arguments through the findings of their research. They conducted a comparative analysis of phonological awareness and oral language intervention in six-year-old children with the goal to improve low emergent literacy skills. Their findings suggest that both interventions were beneficial to children's emergent literacy skills. Through this, it is obvious that they embrace the latter school of thought and the arguments that derive from this content.

From the above discussion, the arguments from the former school of thought seem more convincing from the arguments from the latter school of thought. This is based on the argument that, as it has been discussed previously, emergent literacy is something that comes naturally from children as long as they have adequate literacy stimuli. In contrast with phonological awareness, which needs to be emerged and taught from an adult. Therefore, it is only logical that emergent literacy can act as a facilitator in the development of phonological awareness as it is something that pre-exists and comes before adult intervention. Considering this, the framework of this

thesis embraces the fact that emergent literacy is a facilitator agent in the development of phonological awareness.

Having discussed thoroughly the concept of emergent literacy, in the next chapter there will be a discussion of phonological awareness as an important skill within emergent literacy.

2.7 The concept of phonological awareness

As it has been discussed in the previous chapter, phonological awareness is an important skill and relates strongly with emergent literacy. This term has been investigated thoroughly in the empirical literature and all pieces of research agree that it can act as one of the factors that influence children general progress in literacy (Yeong & Liow, 2012; Saunders & DeFulio, 2007; Anthony & Lonigan, 2004; Carroll et al., 2003; Foy & Mann, 2003). During the previous discussion, it has been established that children develop phonological awareness skills through their development of emergent literacy skills. Phonological awareness is an important parameter in children's literacy development as it has to be acknowledged that difficulties in the development of phonological awareness can result in general reading difficulties in formal schooling (Manis et al., 2000).

Phonological awareness is the ability that people have in order to analyse verbal language in smaller parts and units and to use them with the goal to manipulate them in verbal and written language (Yeong & Liow, 2012; Saunders & DeFulio, 2007; Cheung et al., 2001). The term awareness means the in-depth understanding of these abilities and not just a mere segmentation of the phonological parts (Castles & Colthear, 2004). An important aspect in phonological awareness is the segmentation of verbal language into different sounds. Being more specific, it is the ability to understand that the same sound can be found in different parts of the same word or in different words (Saunders & DeFulio, 2004). In other words, phonological awareness is the understanding of the different sounds that can be found in spoken language. People through their phonological awareness skills, understand and manipulate the different units of verbal language in their verbal and written communication (Duff et al., 2008).

Examining the content of phonological awareness, it is obvious that it can be categorised in different levels according to the different knowledge that one should utilize and demonstrate. Each level includes specific tasks in which one has to show a deeper understanding and awareness of their key aspects (Treiman & Zukowski, 2010; McBride-Chang et al., 2004). This understanding and awareness is built by following a hierarchical order of developing key skills from bigger to smaller units that consist the verbal language. Being more specific, phonological awareness is built by developing syllable, onset-rime and phoneme awareness (ibid) (see table 4).

Table 4. Levels of Phonological Awareness

Level	Description	Example: word 'ship'
Syllable awareness	*Understanding that words are consisted of syllables*	/Ship/
Onset-rime awareness	*Understanding that the syllables are consisted of the onset and the rime*	/Sh/, /ip/
Phoneme awareness	*Understanding that syllables are consisted of phoneme, which is the smaller units*	/S/, /h/, /i/, /p/

Following the above hierarchical order, the first level of phonological awareness is <u>syllable awareness</u>, which is the ability to understand that words consist of syllables. With this understanding comes the ability to manipulate and differentiate the syllables within the verbal language (McBride-Chang et al., 2004; Foy & Mann, 2003). With syllable awareness, it is also achieved the ability to identify the same syllables in different words or in the same word (Güldengoğlu, 2016). For example, the word /banana/ is consisted of the following syllables /ba/, /na/, /na/, the syllable /na/ can be found twice in this word and that the syllable /na/ can be found in the word /narrow/ as well. This is the simplest level of phonological awareness but it is the most important as it contains the foundation for the other two levels. Syllable awareness is the first step of achieving phonological awareness as it is the first effort to analyse the verbal language in smaller units.

The next level of phonological awareness is the <u>onset-rime awareness</u>, which is the ability to separate the syllable into smaller units (Soleymani et al., 2016; Wade-Wooley & Heggie, 2016). These smaller units contain the onset and the rime of each syllable, which the former is the first part of the syllable and the rime is the latter part of the syllable (McBride-Chang et al., 2004). For example, in /skip/, which is a one-syllable word, /sk/ is the onset and /ip/ is the rime. In this situation, the onset and the rime are smaller than a syllable but include more than one phoneme. However, there are situations that the units in the syllables are just one phoneme (Treiman & Zukowski, 2010). For example, in the word /mother/ the first syllable /mo/ has as onset and rime single phonemes /m/, /o/, whereas the second syllable /ther/ has as onset and rime more than one phonemes /th/, /er/. This understanding leads to last level of phonological awareness which is the phoneme awareness.

The third and last level of phonological awareness is the <u>phoneme awareness</u>, which includes a very advanced awareness of the verbal language. In the existing literature, it is perceived as a crucial level of phonological awareness which has a strong influence in reading and writing (Yeong & Liow, 2012; Carroll et al., 2003). In order to be able to achieve this level, the previous levels should be accomplished and mastered. Phoneme awareness is the ability to understand, distinguish and

manipulate the phoneme units within words and syllables (Yeh & Connell, 2008; McBride-Chang et al., 2004). For example, the word /dad/ has three different phonemes and more specifically /d/, /a/ and /d/ or if we change the /b/ from /Bill/ with /k/ then we have /kill/ or /skip/ without the /k/ is /sip/.

From the above discussion, it is obvious that phonological awareness has an important role in children's reading and writing skills as children can manipulate the smaller units of the verbal language. However, there are researchers (see Castles & Coltheart, 2004) that question this argument as they highlight that there is no causal relationship between phonological awareness and achievement in reading. It has to be acknowledged that phonological awareness skills enhance reading as children master the necessary skills to decode the verbal language into written symbols. Nevertheless, it is important to realise that although phonological awareness is an important skill in reading and writing, it is also a skill that needs to be taught. In contrast with emergent literacy that comes naturally to children as long as they interact in an environment that is enriched with literacy stimuli (see chapter 2.6). Therefore, it is more important to put emphasis on the development of emergent literacy as a key concept within children's development of literacy, as it can act as a facilitator in phonological awareness and in the general components of literacy.

2.8 Summary of the second chapter

To briefly summarize, in the second chapter there was a discussion of the concept of literacy, as it is the basic topic of this thesis. Within this discussion, there was a thorough analysis of the content of literacy and the different dimensions of literacy, such as operational and critical dimension, that exist in people's everyday lives. These dimensions of literacy were analysed further in the categories that can be found in people's everyday lives such as literacy as a social practice, literacy as a means of communication and critical literacy. Throughout this chapter, it was argued that literacy has a social character which is developed through everyday social interactions and this argument was further supported by the existing literature. The framework of this thesis is based on the first two categories but in order to provide a full overview and understanding of literacy, the latter category was also discussed.

Some key factors that could influence the development of literacy were also discussed and more specifically there was a review of the role of the adult and the setting of the early years classroom in children's literacy performance. Several examples were given of how we can facilitate children's literacy by improving the design of the setting and by improving adults' contribution in children's play. Last but not least, there was a discussion of emergent literacy and phonological awareness as they both are key terms within the literacy context. An analysis of their content and their role on literacy was also provided. An important part of this analysis was the discussion of their relationship. The outcome of this discussion was that emergent

literacy is a key aspect of literacy performance and that it can act as a facilitator of phonological awareness. Based on this, it was argued that there should be an emphasis on emergent literacy, which is the basis of the experimental design of this thesis.

Another basic topic of this thesis if the contribution of the arts and more specifically the influence that can have in children's performance in literacy. For this reason, the next chapter is devoted in this term and provides links with children's literacy.

3. The arts as a concept

It is very difficult to define the arts in conventional formats or meaning, as they have a different rational and logic which cannot be reasoned with relevant theories. One of the basic principles of the arts is that they offer freedom to those who decide to deal with (Matthews, 2008) and they can go beyond the ordinary (Smith, 1987). Through the arts, people have the opportunity to express and capture their inner self, feelings, thoughts and attitude that would have been difficult to do it with conventional verbal or written means of communication. Although they are a natural activity that derive from an innate desire of humans, most of the time they seem like a social activity that derive through social interaction.

The arts have a unique and individual communication code and they have their own language system, which does not obey in any kind of rules. In contrast to written language, the arts can communicate an idea in a better way (Vasudevan, 2014) and it can reach a bigger audience. This is based on the fact that there are no limits in the arts resources or any rules that need to be followed like conventional means of communication. For instance, everyday objects, like clocks, have been represented through the arts in different ways with no right or wrong format like Dali's famous melting clocks or Picasso's famous portraits. This unique framework is utilised in order to produce pieces or artistic work like poems, melodies, sculptures, paintings or performances. Through these pieces of work there is a communication of ideas, feelings and information from the artist to the receivers of the art work. A highlighting example is Picasso's famous Guernica, which is a response to the war cruelty and it is represented by unconventional animal and human faces.

The arts can influence people's expression, as they offer a lot of opportunities for relaxation. They have been used as a tool in major aspects of people's lives. One of these aspects is art therapy, which has been introduced in the recent decades as a therapeutic tool to self-heal from different kind of illnesses (Case & Dalley, 2014). The success of this method is based on the liberal character of the arts, which helps patients to externalise their agony and frustration that they are experiencing their illness (Rubin, 2005). The arts can be a highly engaging means of communication, as it is linked directly with emotions and feelings. Along with the art therapy, art-based research has been introduced. Researchers, were very interested in the fact that through the arts they can gather rich-detailed information, as with this approach the participants can transform their reality (Leavy, 2015). This is based on the argument that the people who are involved in an art-based research can communicate information and beliefs about their inner self or about the dynamics of their group or relationships. This is done more effectively from the typical research methods like interviews or questionnaires, as the participants are acting in a liberal framework with no right or wrong answers and without being afraid that they will judged.

For the above mentioned reasons, the arts have a substantial contribution in building knowledge and in education in general. The arts are a topic of a considerable attention in education in the last few years but they are not a new trend. This topic exists since ancient Greece (Smith, 1987) and it seems that this will continue in the future. Reviewing the pedagogical theories and their supporters, one of the first and basic supporters of the arts is Dewey. He stresses the importance of the arts in people's lives and the liberal character that they have, highlighting that 'the arts break through barriers that divide human beings' (Dewey, 1934:254). These arguments support the fact that the arts release people from the social constrains and conventions that the society imposes and provide them a framework of freedom in which they can communicate.

Examining the advantages of the arts in education, the most common argument is that the arts can promote creativity through their liberal framework. Although this is not completely wrong, there is substantial research that debates this argument, claiming that the arts can do much more than just develop creativity (Fleming, 2008; Eisner, 1973-1974; Trowbridge, 1967). It is true that the purpose of the arts is not to educate or to enhance people to build their knowledge but the real purpose is to communicate ideas among people. The reason that they have the opportunity to build knowledge, is that they set an attractive environment that can be used by practitioners to develop learning goals. Examining the pedagogical value of the arts, Eisner (1998) notes that art activities enable students to justify their way of thinking, to practice their reasoning skills and to articulate clearly the situations they experienced.

These arguments have significant grounds in the early years settings, in which young students can use the arts to express themselves without be afraid that they will be judged or make mistakes. It is true that the arts are an integral part of young children lives and they are the basic form on their free play. For this reason, it is important to discuss the role of the arts in education and specifically in the early years settings. In the next chapters there will be a discussion of the role of the arts in the early years settings and the pedagogical value of the arts through the different pedagogical theories and movements.

3.1 The benefits of the arts in the early years settings

The arts are a pioneering approach in the early years settings. They can contribute to the development of children's social skills as they create a pleasant environment in which young children can act and interact freely. Through the arts, young children get involved in meaningful activities that derive from their intrinsic interests.

The effects of the arts on children's cognitive and social development have been established widely through relevant pieces of research (see Gerry et al., 2012;

Wright, 2007) and has affected the early years curriculum of countries all over the world. The Greek early years curriculum (ΦΕΚ 304Β/13-03-2003) considers the arts as one of the basic learning goals. It highlights that the arts are an alternative approach, as they maintain a pleasant and playful atmosphere within the early years classroom. In the same line, the British early years curriculum (DfE, 2014) also stresses the importance of the arts and includes them as one of the specific areas of learning. It notes that the arts develop a safe environment in which children can explore and experiment with a variety of resources. Examining the European early years curriculums, the Italian Reggio Emilia approach, which was developed by Loris Malaguzzi after the second World war, puts great emphasis on the arts as a vehicle of learning (Rinaldi, 2006). In agreement with the previous European curriculums, it stresses the communicative aspect of the arts. The Reggio Emilia approach builds an innovative culture in which children have a hundred languages to communicate using different kind of the arts like sculpture, shadow play, puppetry, painting, dramatic play, music etc. (Malaguzzi, 1993). Although this approach is suggested some decades ago, its framework is still influencing the nowadays early years curriculum and education in general (Moss, 2016).

Moving to the American continent, it is obvious that these arguments are also valid. The High Scope approach was developed in the United States of America in the 1960s by David Weikart, who was an American Psychologist that was concerned of the poor performance of students from poor neighbourhoods (French, 2012). This approach started with the Ypsilanti Perry Preschool Project with the focus on disadvantaged children (Weikart, 1989). Examining closely the content of this approach, it strives to offer hands-on experience to low-risk children and places the arts as one of the key development indicators (Weikart et al., 1967). Proceeding in another continent but remaining in the same language, Te Whāriki, the New Zealand's early years curriculum, also agrees with the above arguments. It suggests that the arts can be used a valuable means to develop young children's verbal and non-verbal communication, using stories, symbols and arts and craft in the everyday practice (MoE, 1996). Within the framework of Te Whāriki, it is noted that it is the adults' responsibility to use creative arts in the everyday curriculum in order to support children's learning (ibid). Further research has been conducted introducing the beneficial effects of more kinds of the arts like music in the Te Whāriki curriculum (see Klopper & Dachs, 2008).

From the above discussion it is obvious that a significant number of early years curriculums around the world put great emphasis in the use of the arts as a pillar to develop young children's communication. The effect of the arts in children's development seem that it has also affected the eastern culture with countries like Turkey and Slovenia. Researchers, shed light on the beneficial effects of the arts in the Turkish and Slovenian early years curriculum, arguing that more emphasis should be

given on this aspect (see Acer, 2015; Kafor et al., 2015). This means that the arts play an important role in the early years curriculum.

It is true that the arts can have a significant contribution in the effective development of children's imagination comparing to other school activities (Eisner, 1973-1974). Through the arts, children can learn and understand the relevant school subjects with pioneering ways. This is attributed to the fact that the arts are usually activities that derive from children's inborn desires. Due to fact that the arts are not imposed by external factors, children are internally motivated to engage and thus, learning is more effective. The arts offer the opportunity for creative development and mutual collaboration (Cutcher & Boyd, 2016). Children can express and represent their ideas using the one hundred languages they have, as it was suggested in the Reggio Emilia approach.

Beyond this, the arts have also associated with positive outcomes in children cognitive and social development through relevant pieces of research. According to Eckhoff (2013), when children practice art activities there are a lot of informal conversation with their peers, their selves or the adults. This serves as a crucial factor to develop an understanding of the cognitive and social aspects that surround them (ibid). In other words, the arts enable the holistic development of the children without disconnecting the early learning goals. They offer a framework in which cognitive skills are developed at the same time with the social skills.

Art-based research is also associated with the enrichment of children's experiences in terms of formal schooling. The arts can offer a beneficial ground to children with low-performance. They empower at-risk children to develop a better understanding of the basic cognitive concepts and skills in formal schooling (Brown & Sax, 2013; Brown et al., 2010). This seems to be attributed on the fact that the arts offer hands on experience. Hence, at-risk children have the opportunity to practice the school concepts in a safe environment and build their confidence in achieving the relevant learning goals.

Examining the benefits of the arts in the early years settings through the empirical research literature, there are also arguments about the personal development of the children. Hampshire et al. (2010) support this argument by conducting a research which focuses on students' wellbeing. The outcomes of their study show that the arts can influence beneficially the social and emotional wellbeing of students, with different effects according to the individuals' personality and experiences. Some years later, Williams & Lewin (2015) supported these arguments by focusing their research in self-regulation, as an important achievement of personal development. They highlight that self-regulation can be a critical agent for further school and real life success. They suggest that the arts, and more specifically music, can enhance young children to build their self-regulation skills with great success.

Summarizing, it can be argued that the arts have an important role and place in the early years curriculum as a substantial number of these curriculums consider the arts as one of the basic early years goals. The benefits of the arts in children's holistic development are further verified by empirical pieces of research. However, it has to be acknowledged that there is also the counterargument that the arts have not proven their educational outcome in the early years settings. More specifically, researchers like Mehr et al. (2013) question the positive findings of the arts and especially music on children's cognitive development. Although these findings seem valid, the findings from the previous pieces of research seem more convincing considering the liberal character of the arts and their influence on people's communication and expression.

It is a striking fact that the arts are a critical part of young children's lives as they are the basic form of their free play. Considering this fact, it is critical to find ways that we can utilise the arts in a meaningful way without spoiling their liberal and entertaining character. Before discussing this aspect, there is a need to establish the pedagogical value of the arts through the dominant pedagogical theories and movements in the early years settings.

3.2 The pedagogical value of the arts

As it has been discussed thoroughly, the arts have a substantial contribution in the early years settings by supporting the holistic development of children. It offers opportunities for both cognitive and social achievements and support at-risk children to reach their academic potentials. Although these arguments are sufficient, it is important to create a link with the different pedagogical theories and movements that underpin the educational practice in the early years settings. Therefore, in the following chapters, there will be discussion of social constructivism theory, social learning theory and discovery learning theory. There will be also an effort to link the framework of these pedagogical theories with the arts. The discussion will continue by analysing the conflicting movements of *education as a natural development* and *as a formal and structured process* and will associate the arts as a solution to the dilemma of a free or structured methodology.

3.2.1 The arts through the pedagogical theories

It is important to realise that in the development of every curriculum there is a group of pedagogical theories that are used to underpinned the suggested framework. Thus, when suggesting or developing a pioneering approach in any level of education, it is important to support it with the existing pedagogical theories. Although the pedagogical value of the arts has been established through the previous discussion, it is important to create also a link with the pedagogical theories in order to verify fully their significance.

Moving forward from the behaviourist framework, in which the emphasis was on the conditioned behaviour according to the stimuli of the environment, researchers like Bandura, Bruner and Vygotsky start to examine the reasons of people's reactions to the external stimuli. During their research, they support that people are not passive receivers of the stimuli but they respond to the stimuli selecting the appropriate reaction. Cognitive and socio-cognitive theories like social learning theory and discovery learning theory are two examples that fall into this category. They are both interested in the process of people's thinking behind the observed behaviour. Both of these theories can be associated with the arts as they share common values and qualities.

Social learning theory is suggested by Bandura after a series of experiments in investigating the reason of people's reactions and stance. Basic principle of this theory is the people's ability to imitate their surroundings. Bandura (1977) believes that people learn through direct experience or observation of the people who considered as role models. Being more specific, he stresses that people and especially young children respond to external stimuli by imitating the behaviours and the attitudes they have already observed. For example, in a pleasant situation such as receiving a gift or a reward, children will react according to what they have observed in their surroundings from their role models. So they might thank, hug or being shy and do nothing. Another striking example, is when children have a fight and they start using inappropriate language, which is usually an example of what they have observed in their home environment or in the television programmes.

Considering the framework that is provided when practicing art activities, it can be argued that there is a clear link with the social learning theory. Being more specific, the arts provide a framework of a free exchange of ideas in which everyone has the opportunity to express themselves in a way that is best for them. Looking back in the artistic movements, it is obvious that even the art movements themselves serve as a role model to each other (Lorenz, 2016; Atkins, 1997). Highlighting examples are the Impressionism movement, which has a strong influence on Post-Impressionism and Divisionism, in vivid colours and an emphasis on emotions. As it has been established in the previous discussion, people communicate effectively through the arts in an environment of mutual respect and appreciation. Having in mind that imitation is the basic principle of the social learning theory, this brings us nicely to suggest that the arts have the opportunity to provide a role model of free communication and mutual respect among individuals.

Proceeding to the next pedagogical theory, **discovery learning theory** was suggested by Bruner in his effort to understand the process of children's thinking. Bruner in his attempt to understand the routes behind the construction of reality, investigated the process of information systems in children's thinking (see Bruner,

1996; 1991). The basic pillar of this theory is the active involvement of children while they elaborate new information. He supports that when children are able to experiment with the new concepts and gain hands-on experience, the knowledge they gain is permanent and achieved in an effective way (Bruner, 1981;1961). In other words, he puts active involvement in the centre of this pedagogical theory.

Linking this pedagogical theory with the arts, it is true that there are lot of similarities in their framework. All kind of the arts create an environment in which the participants need to experiment with the provided resources such as clay, music notes, markers, paint, papers etc. Through this experimentation they gain a first-hand experience and they can experiment with the possible outcomes. For example, in music they experiment the sequence of notes in order to produce a nice melody, in sculpture they experiment with the appropriate thickness of the clay in order to produce a sculpture, in painting they experiment with the combination of colours and they create new ones etc. With this experience they build their knowledge and they can use it the next time they will practice art activities. As experimentation and active involvement are the basic pillars of discovery learning theory, it can be argued that there is a common ground between this theory and art activities.

Proceeding in the last pedagogical theory of this discussion, **social constructivism** is another important pedagogical theory that is being widely used to support the early years education. It moves forward from cognitive theories, as the emphasis is in the construction of knowledge instead of just examining the reasons that people attain knowledge. Social constructivism theory sheds light to the social aspect of learning, which is dominant in the early years. Vygotsky (1962) is one of the basic supporters of this theory and supports that learning is a social interaction among the learners and the people that surrounds them. He suggests that the achievement of knowledge exists in two different levels: firstly, between people and then inside the individual (Vygotsky, 1978:57). In other words, he stresses that learning takes place within interaction and after this, people use these interactions to internalise the new knowledge.

In an effort to associate the arts with this pedagogical theory, it has to be acknowledged that there are again a lot of similarities in their framework and process of learning. Art activities such as drama play, music, painting, sculpture etc. are usually group activities although most of the time starts as individual activities. A striking example is when a child starts drawing a picture and in a very short period of time other children are doing the same, ending up in discussing and drawing at the same time. In addition to this, people, not only children in particular, use the arts to communicate and express their thoughts. When practicing art activities there is an exchange of opinions, judgements and ideas among the participants in which each one understands them in a different way when they process this information individually.

It is obvious that through this process, people build their knowledge first through social interaction and then through the personal elaboration of the information. As this is the basic principle of social constructivism theory, this guides us smoothly to suggest that there is a clear link between this pedagogical theory and the arts.

Summarising the above discussion, it is very important to link innovative approaches to education with the relevant pedagogical theories. Discussing the content of three pedagogical theories that characterize learning in the early years settings, it was argued that the arts share common grounds with them as they have a lot of similarities in their background. With this discussion, the pedagogical value of the arts in education was verified as a beneficial approach to children's learning and development. Having established the significance of the arts through the pedagogical theories, in the next chapter there will be a discussion of the contradicting movements of education with an effort to suggest the arts as a solution.

3.2.2 The arts through different movements of education

In the field of early years settings, there is a debate of the nature of education activities and how much guidance we should provide to young children. This chapter will discuss this issue, drawing on the different movements of education. The ultimate goal is to suggest that the arts can overcome this dilemma by providing a framework that keeps only the benefits of these movements and eliminate the negative aspects. The purpose of this is to discuss once more the significance of the arts in the early years as a beneficial approach to learning.

Over the years, education has been associated with two contradicting definitions with critical advantages and disadvantages in terms of teaching and learning. One perspective accepts that education should be free from direct teaching and focus more on natural development and the other perspective accepts that education should offer direct guidance to students in order to enable them to reach their academic potentials.

The supporters of **education focusing on natural growth** suggest that children should be free from any form of teaching guidance so that Mother Nature can accomplish her duty in people's development. They strongly believe that any form of direct guidance can hamper children's potentials and therefore children should be free from any adults' guidance or intervention. One of the basic supporters of this approach is Rousseau. He reminds that the initial and true meaning of education is to nourish students and he questions the positive contribution of society to people's development (Rousseau, 1762). He supports his arguments by stating the fact that humans intervene and change everything from their initial shape and purpose (ibid). Thus, any form of adult intervention can have detrimental effects on children's development.

Pestalozzi and Froebel were also two strong supporters of this perspective. They were both concerned about the detrimental effects of adults' intervention on children's learning and they experimented on the ways that this theory could be implemented in practice. Pestalozzi (1894) stresses the harmful impact of instructions to children's learning by linking teaching instructions to a bottomless swamp. Being strongly influenced by Rousseau's arguments, he suggested a pioneering school curriculum in which the adult intervention is absent and children support one another to understand new information and attain knowledge. Froebel (1885), being a student of Pestalozzi for some time, he also supported the perspective of education as a natural growth. He was totally against to any form of instructions, especially in the early years setting (Froebel, 1985). He highlighted that direct intervention does not enable students to achieve their potentials and thus, he stresses the importance of freedom in education. Although the above philosophers did not make direct arguments about a link with the art activities, it is obvious that their methodology has some common aspects with the general context of the arts. One main argument for this is that they both create a liberal environment in teaching and learning in which children can interact and gain new knowledge.

Early years practitioners and researchers, who support this perspective adapt a **free play methodology**. According to this methodology, children's interactions should be based on free play experiences with no adult guidance. Supporters of this approach (see Moyles, 1989) are totally against to any kind of intervention and instructions as they can have detrimental effects on children's development. It has to be acknowledged that a free play methodology offers a lot of advantages on children's learning. Play is the basic form of activity of children in their attempt to understand the world (Veiga et al., 2016). This is an intrinsic desire that comes naturally from children and is associated with no instructions or guidance. It encourages children to discover and experiment with the new concepts and during this they have the opportunity to master their skills without being afraid that they will be judged or make mistakes. A free play methodology is associated highly with children's creative thinking and enable children to develop their own voice (Matthews, 2008; Penn, 2008). Similarly, with above, the supporters of a free play methodology do not always make direct arguments about the link with art activities. However, it is obvious that there is some common ground between a free play methodology and the freedom that is provided during art activities. Therefore, it can be argued that art activities embrace the logic and context of a free play methodology and that a free play methodology provides the freedom for the development of art activities.

However, there are some basic factors that can influence this methodology. According to relevant pieces of research (see Holt et al., 2005; Lee et al., 2005), parents' restrictions and safety concerns are some of the basic factors that can influence children's free play. The safety concerns are basically derived from the

challenging behaviours that can appear without adult supervision. Kennedy-Behr et al. (2013) stresses the fact that free play activities in children with special needs is highly associated with aggressive behaviours. Although this is not completely wrong, it is important to realise and keep in mind that this methodology might have some negative effects as well.

In an effort to link art activities with a free play methodology, it is obvious that there are a lot of similarities with the beneficial side of this methodology and they can overcome the negative outcomes. The basic characteristic of arts activities is that they provide a free environment, in which participants can act without being afraid that they will not reach the right outcome. They support people to express themselves in any way they want and through this they manage to discover their abilities and capabilities. Considering that the basic aspect of a free play methodology is freedom, it can be argued that there is a clear link between this methodology and art activities. In addition to this, the arts can overcome the negative effects of a free play methodology in terms of aggressive behaviours. As it was described earlier, when people practice art activities, they develop a mutual respect to each other which leads to the awareness of the others' wellbeing. Therefore, through the arts the incidents of safety concerns due to violent behaviours can be eliminated as children develop an understanding of the prosperity of the other people.

Proceeding to the opposite side, the opponents of education as a natural growth are the supporters of **education as a formal process**. This seems more of a traditional approach to education which opposes to any kind of non-directed activities. This movement suggests that education should be characterised by formal directions and guidance in order to reach their potentials. The supporters of this movement believe that free play is not adequate to enable children to develop their cognitive skills. Although this is a completely opposite approach with the previous one, when we investigate its content it is obvious that there is also a link with some parts of the art activities in terms of the specific interactions of each art form.

Locke, who was a philosopher in the 17th century, can be said that was an early advocated of this movement. Although he was a supporter of liberalism, which stresses the importance of freedom of speech and in any aspect of life, he supports the positive impact of instructions on children's learning (cited in Aaron, 1973). Locke (1841) believes that children come to this world with no previous knowledge and thus, he characterizes them as tabula rasa, which means a blank table. Due to this and considering the reason that society can impose malicious habits to children, he strongly believes that children should be directed towards learning. However, he highlights that teaching instructions should be not be straightforward in order to be effective.

The same approach is also adapted by Dewey, who was an American philosopher in the 19th century. He was also a supporter of liberalism as Locke, and he was the major advocate of progressive education. However, he was very concerned about the gap that modern society creates from natural life (Dewey, 1916). Thus, he suggests that the only way to cover this gap is through education and direct instructions (ibid). It is important to realise that Dewey agreed with Locke about the form of teaching instructions and he suggested that they should be combined with play in order to be more effective. Considering the liberal character of the arts it seems oxymoron to argue a link with this approach. However, it is true that in order to implement art activities there should be some general guidelines that need to be followed e.g. in pointillism we draw using little dots. Having this in mind, we can see some similarities with the framework that the above philosophers have suggested regarding the instructions and guidelines.

Education as a formal process, has been framed in the early years settings with a **guided play methodology**. Supporters of this approach (see Duff et al., 2008; Lynch, 2008) stress that there is a pitfall with free play, as children might be directed to the wrong conclusions and therefore it is not enough to reach their full potentials. It is argued strongly that instructions will help young children to reach the correct conclusions and develop the necessary skills to contribute to society. Within the guided play methodology, there is an emphasis on the role of the adult as a facilitator to achieve knowledge (Harn et al., 2008; Kamps et al., 2008; Scull & Biance, 2008; Assel et al., 2007). Guided play is perceived as a better and enhanced form of free play in relevant pieces of research. Relevant arguments are that it embraces free play in a more advanced way as adults have the opportunity to intervene indirectly and support children to achieve learning goals in their cognitive and social development (Toub et al., 2016; Weisberg et al., 2015). In addition to this, guided play has been associated strongly with benefits in communication among children, which is something that contradicts with the arguments about the critical impact of free play on children communication. Ramani et al. (2014) supported this argument through the findings of their research. During their investigation of children's talk in guided play, they concluded that there is opportunity for children to develop their communicative skills.

Examining both sides of a guided play methodology, it is interesting to note that adult intervention might also have a negative impact if it does not follow a liberal pattern. There is a danger that when adults implementing guided play in young children, they might intervene before children have the opportunity to develop their own thinking. A relevant study shows that guided play is associated with benefits on children's communication only when the practitioners encourage independent thinking to young children (LaManna, 2015). Although guided play has important benefits in children learning, it is important to realise the influencing factors that might lead to the opposite outcome.

Considering the fact that the arts are strongly linked with a free play methodology, it seems very contradicting to argue a similar link with a guided play methodology. It has to be acknowledged that the supporters of a guided play methodology did not make any arguments about a link with art activities. However, examining the content of this approach and considering the specific interactions that take place in each art form it is obvious that there are some similarities with this approach as well. It is true that the arts are released from any kind of constrains and offer a free environment that people can act and interact. However, within this liberal framework while practicing the arts there are some tips that people need to consider and in a way there are some guidance of the suggested techniques. For example, each kind of the arts falls into a specific category. For example, drawing, painting and crafts are considered as visual arts whereas drama, singing and dance are considered as performing arts. This by itself denotes that there is a very slight structure of the actions and interactions that can take place without eliminating participants' freedom in expression. This very slight structure denotes only the kind of interactions (e.g. gross motor skills in performing arts or fine motor skills in visual arts) and not the quality of this interactions. Considering that guidelines are the basic principle of a guided play methodology, it can be argued that the arts share some common ground with this methodology.

Considering the fact that there are links among the arts and both contradicting play methodologies, it is also worth mentioning that through the arts the negative effects of this methodology could be overcomed. This is based on the fact that the arts also provide a free atmosphere that can balance the role of the adult if they slip in the pitfall of over-directing the young children.

Summarising the above discussion, there was an effort to link the arts with the basic pedagogical theories and movements in education and especially in early years education. During the analysis of the relevant concepts, it was argued that the framework that is provided by art activities has a lot of similarities with the major pedagogical theories of this area. It was further suggested that the arts are linked with the basic features of free play and guided play methodology and they manage to overcome the negative effects of both methodologies.

3.3 Summary of the third chapter

To briefly summarise, in the third chapter there was a discussion of the arts as a concept, as it is also a basic topic of this thesis. Within this discussion there was an acknowledgement of the difficulty to define the arts with typical formats due to their liberal character. Relevant arguments were discussed regarding the framework that is established when practicing art activities. Throughout this chapter, there was an emphasis on the fact that the arts liberate people from the social constrains and this

leads to an effective communication of ideas and thoughts. It was also highlighted that the arts develop a mutual understanding and respect among individuals.

The benefits of the arts were also analysed by looking at the contribution of the arts in early years curriculums around the world. The benefits were also examined by analysing the relevant pieces of research regarding the effects of the arts on children's development. In order to establish fully the significance of the arts, there was also an analysis of the different pedagogical theories that are broadly used in the early years settings to support any kind of activities and teaching and learning techniques. It was argued that the arts are linked strongly with these pedagogical theories and several examples were provided to support this link. Last but not least, there was a description of the opposing movements in the early years settings, explaining their advantages and disadvantages in everyday practice. A strong link was argued with the arts and both movements, highlighting that the arts have the opportunity to overcome the drawbacks due to their liberal character. To support this argument, several examples was discussed as well.

Having discussed both topics of this thesis, literacy and the arts, and analysed their content and importance on children's development, there is now a need to create a link between them in order to support the necessity of conducting this research. For this reason, the next chapter is devoted in the discussion of an interdisciplinary approach which uses the arts to develop literacy performance in the early years.

4. An interdisciplinary approach of arts and literacy: findings and limitations

Interdisciplinarity has become nowadays an important aspect in the educational field, with an increasing numbers of researchers to investigate its value and significance. Although it seems a modern discourse, it made its first appearance in the mid-1920s as a result of trying to change the typical form of education (Moran, 2010). However, the trail leads us further back to Ancient Greece with Plato and Aristotle to introduce interdisciplinary thinking (Klein, 1990). Considering this, it seems that nowadays we rediscover this forgotten term in education. This approach has been considered very highly in this thesis and the findings and limitations of the existing empirical evidence were the steering wheel for this research project.

The term interdisciplinarity seeks to unify the fragmented school knowledge in order to understand in a better way the reality. Looking at our natural environment, it has to be acknowledged that Mother Nature does not separate stimuli according to school disciplines but all stimuli exist in a perfect balance. For example, with a simple visit in the countryside, we receive information about the weather conditions, the water temperature, the habits of the different animals, the general flora and fauna of the area and we further experiment with the colours, numbers and shapes. It is important to realise that with the development of different academic disciplines there is a substantial benefit in gaining more in-depth knowledge but also there is the negative aspect of dividing the reality into different pieces. Having this in mind, interdisciplinarity tries to bridge the gap that is being created with the development of the different disciplines with the goal to promote academic freedom (Nissani, 1997). It accepts the fact that the different disciplines interact with each other (Lattuca, 2001) and in order to understand its true content, there is a need to understand firstly the basic disciplines (Moran, 2010).

Nowadays, there is a great emphasis in interdisciplinary research and practice in all levels of education. This is based on the fact that it creates the ground for in-depth understanding and enable everyone to broad their knowledge (Simeonsdotter-Svensson, 2015). Considering the above arguments regarding the benefits of interdisciplinarity, in this chapter there is a discussion of the advantages of an interdisciplinary approach of the arts and literacy in the early years settings. As it was discussed earlier (see chapter 2), literacy is one of the most important ability of people due to the fact that every area of learning has its own communication code which links back to basic literacy skills. Thus, it is important to find interesting ways to support young children to develop literacy skills and reach their full potentials. The arts seem like a pioneering approach in teaching and learning with a lot of beneficial results. One main argument is that they can combine the benefits of a free play and a guided play methodology, eliminating the negative effects of these two approaches.

Combining these two different disciplines, it is suggested that the arts can be a very interesting and beneficial approach to develop literacy in the early years. One main argument is with this interdisciplinary approach is that there will be a successful outcome in children's development of literacy as art activities come naturally from children. Therefore, finding a way to combine them will result in children being intrinsically motivated to literacy activities. In addition to this, there is a common ground among literacy and art activities as they are both developed through social interactions. Relevant arguments can be found in the literature about the connection of literacy and specific kind of the arts (see Harste et al., 2014; McIntire, 2007).

Having discussed the importance of an interdisciplinary approach in teaching and learning, there is a need to examine the relevant pieces of research that have implemented this approach. In the next chapter there is a discussion regarding this matter with an effort to identify the gaps of the existing literature as a motivation to this thesis.

4.1 Examining the empirical literature of an interdisciplinary approach of arts and literacy

A lot of researchers were triggered by the benefits of the arts in children's learning and have considered them as a pioneering approach to promote literacy in the early year settings. In their research design they utilised different kind of the arts to enable children to develop different aspects of literacy such as emergent literacy, phonological awareness, auditory skills etc. From the following analysis, it is obvious that there is an over emphasis in research in performing arts and more specifically in music in contrast with the rest kind of the arts. It is also noticeable that there is a gap in comparing the effects of different kind of the arts in children's development of literacy, which was a motivating factor of this thesis. Further gaps or limited pieces of research are identified regarding the investigation of the effects of the arts on both literacy and social skills, in literacy as a social practice and in children's involvement which was also a motivating agent in the research design of this thesis.

4.1.1 Examining the empirical literature of music: Findings and limitations

Beginning with **performing arts**, **music** as a kind of the arts has attracted the majority of the researchers who examine its effects on children's literacy. Another important aspect of these pieces of research is that they mostly focus on separated literacy skills like receptive language skills or auditory skills or they focus on the effects on phonological awareness. There is limited, if any, research that embrace a direct focus on **emergent literacy**, but indirect arguments can be found sometimes. The framework of this thesis is based on this gap, trying to provide solutions that can lead to teaching suggestions.

Being more specific, Bolduc (2008) conducted a literature review in order to investigate the link between music instructions and emergent literacy skills. Due to

the limited research in this area, he examines interdisciplinary research about music and literacy in general, trying to identify links with emergent literacy. It has to be acknowledged that although this is an interesting approach, it seems that the theoretical framework that has been adapted is not clear as it looks there is a confusion of the background of emergent literacy with the rest literacy abilities.

Some years later, Runfola et al. (2012) tried to examine this aspect in practice investigating the association of music and emergent literacy achievement. In order to safeguard the validity of their findings, they trained the teachers for one year in music and pedagogical skills before they practice any kind of intervention with preschool students. They compare their findings with a control and experimental groups which is a very good practice in order to verify the beneficial outcomes of a new teaching technique. In their findings they suggest positive outcomes in music and emergent literacy achievement of the experimental group in contrast with the control group. They accept an emergent literacy approach but from the findings it is obvious that they focus on specific literacy skills like verbal language and grammar understanding. Although this is not wrong, as emergent literacy includes the general skills and attitude that have to do with literacy (Hume et al., 2016), it would have been better if they had conceptualised emergent literacy skills as an innate desire of children as it is suggested by Noe et al. (2013).

It is important to realize that the field of the early years settings is challenging and it has many influencing factors that might make researchers skeptical before implementing any kind of investigation. Factors, such as children's age, background, culture, parents' influence and staff ratio, make the everyday practice even more challenging, especially when it comes to measure students' learning, experience and performance (Alvestad & Sharidan, 2015; Bronström et al., 2015). Therefore, it can be argued that the limited pieces of research and the limitations in their findings are attributed to these factors. Considering this aspect and with the goal to contribute to the solution of this, the research methodology of this thesis was based on how the arts can develop emergent literacy based on students' free will and participation.

Proceeding to the next group of pieces of research, there is an over-emphasis on investigating **phonological awareness** and separated literacy skills. Although this thesis argues that emergent literacy is a facilitator of phonological awareness, it also accepts the importance of phonological awareness of children's development of literacy. However, this does not cancel the importance of emergent literacy as a cornerstone of children's literacy. Considering the challenges in the early years settings and the fact that phonological awareness skills and separated literacy skills are easier to be measured, it is understandable why the majority of researcher tilt to this direction.

Gromko (2005) was one of the researchers who was concerned about the influence of music instructions on phoneme awareness, which is the last level of phonological awareness as described earlier (see chapter 2.7). She focused on five-six-year-old children and with a sample of 103 children, in which 60 children were in the control group and 43 children were in the experimental group, she conducted an intervention for three months. In both groups, reading guidance was given and children had free access to books and stories. The only difference between these two groups was that in the experimental group there were a music intervention by music trainees, who were specialised in the early years. The findings of this research, verified the beneficial effects of music instructions on children performance on phoneme awareness. In terms of the research design, it is obvious that there was a robust procedure in the research methods and sampling technique, but it can be argued that the time frame might be limited in order to enable children to show their full potential. It might have been better if the intervention was conducted for a full academic year, which would give sufficient results regarding students' progress. Considering the theoretical background of this piece of research, it is clear that the aspect of emergent literacy as a steering wheel to phoneme awareness is missing but this does not mean that the researcher does not embrace this framework. The researcher adapted the framework from Bruner's methodology which can be linked to the general framework of emergent literacy regarding the discovery of learning.

After a couple of years, Bolduc (2009) enriched Grokmo's (2005) findings by investigating the effects of music in phonological awareness in general and not specified in one particular level like Gromko. It is interesting to note, that although he conducted a literature review examining the link of music to emergent literature (see Bolduc, 2008), he focused this experimental design in phonological awareness. However, this might be due to challenges in the early years settings as they were described above. Bolduc (2009) separated his sample in experimental and control group maintaining a balance in the numbers. Both groups were practicing for 15 weeks a pre-designed music programme with the only difference that the music programme of the experimental group embedded emergent literacy aspects. The findings showed a significant advantage of children in the experimental group in the development of phonological awareness. From this aspect, it can be identified that he has adapted an emergent literacy approach even though this was not the focus of his research. It seems like that the researcher agrees with the argument of this thesis that emergent literacy is a facilitator of phonological awareness, as in his research design the phonological awareness skills were derived from emergent literacy activities. Considering the fact that there was a random allocation of children to intact classroom at the beginning of the school year and that there was a random allocation by the researcher in the control and experimental groups, there was a methodological

strength in the research design. However, it can be argued that a longer intervention would be better in order to enable children to develop their full potentials.

Another group of researchers, who also supported these arguments, were Moritz et al (2012). They also focused their study in the effects of music in phonological awareness with a slightly different view from the previous ones. The researchers were concerned if the amount of music training will have an effect on children's phonological awareness skills and if this can have a long term effect. For this reason, they conducted two different studies. In the first study they used an equal number of five-year-old children in the experimental and control group. Their purpose was to test if the amount of music instructions had an effect to children's phonological awareness. The intervention was implemented in both groups but the experimental group had significant more time in music lessons. In the second study, the researchers included some of the children from the experimental group and some children from the control group from the first study and they examined them in the second grade to see if the intervention had a long-term effect. The findings of both studies verified the positive outcome of music lessons on phonological awareness. Being more specific, it was verified that the amount of musical stimuli had a beneficial effect on phonological awareness and that music facilitate children's phonological awareness over time.

It has to be acknowledged that their methodological design was strong with the comparison of two different groups and the additional investigation for the effects over time. Nevertheless, there are some aspects in the content of teaching interactions that need to be treated carefully. Regarding the pedagogical framework of the researchers, it is very positive that they embedded the emergent literacy in their methodology like Bolduc (2009). It is obvious that the researchers agree with the argument of this thesis about the fact that emergent literacy can facilitate phonological awareness as they embedded emergent literacy activities in their methodology with the goal to develop phonological awareness. However, looking closely the teaching intervention, it seems that there are some differences in the teaching strategies in the control and experimental group. Being more specific, there was a different approach among the two groups regarding emergent literacy, with the experimental group to approach literacy as a separated lesson and the control group to embed literacy in the music lesson. The latter approach is the one that mirrors the framework of interdisciplinary research and thus, it can be argued that this might have influenced the outcomes.

Moving to the last group of researchers that investigated the effects of music on children literacy, is the one that examined **literacy as separated skills**. This framework is not in agreement with this thesis, as in our study we consider literacy as an inseparable people's ability that is being constructed socially. However, there is a

rational to investigate separate literacy skills in an effort to try to identify the specific area that the impact of an intervention is located.

Embracing an emergent literacy approach, Seeman (2008) in a qualitative study tried to prove a link among music intervention and receptive language skills in at-risk preschool children. Implementing music activities for 10 weeks in an intact classroom, she targeted nine three-to-five-year-old students, who were at risk to measure the outcomes of the intervention. It has to be acknowledged that with this practice, the researcher safeguarded the children's rights and wellbeing as children did not perceive the intervention as something different that they should be done because there is a problem with their performance. Although she focused on receptive language skills the effects on phoneme awareness were also investigated. The findings showed that music lessons can contribute as a beneficial agent in children with low performance in literacy. This piece of research is in line with the previous arguments about emergent literacy but it focused on separated literacy skills which is not something ideal regarding the social character of literacy.

4.1.2 Examining the empirical literature of drama: Findings and limitations

Remaining in performing arts but moving forward to another kind of the arts, the second one that has attracted researchers' attention on this aspect is **drama**. It is interesting to note that although drama is the most common free play activity in the early ears setting (see Hanley et al, 2009), the empirical literature is mainly focused on primary school. Therefore, the researchers specialised their research design mainly in reading, writing and articulation of ideas. This gap in the early years settings was basically the reason that this thesis included this kind of the arts in one of the experimental groups.

Conducting a literature review, Anderson & Krakaur (2013) tried to explain the link between drama activities and literacy. Examining the related literature and the suggested methods in using drama to promote literacy learning they concluded in the positive effects of this kind of performing arts in children's literacy. Following a Piagetian and Vygotskian approach, they argued that drama is a facilitator of the development of language and of general cognitive abilities and that drama and literacy follow the same paths in learning. Considering these they suggested this approach to educators especially when it comes to children with special needs. Reviewing the theoretical framework of this literature review, there are no direct arguments about the concept of emergent literacy that is the basic pillar of this thesis. However, links can be identified with the pedagogical framework of Anderson & Krakaur (2013), as emergent literacy enables children to construct knowledge and for doing so it uses the children's social interactions and experiences. As these concepts are the basic pillars of Piaget's and Vygotsky's theory, it is worth indicating an indirect link.

Proceeding in empirical pieces of research, drama was associated with benefits on **verbal language and articulation of ideas**, mainly in the primary school age. Although, the focus of this thesis is the early years settings, these pieces of research can be useful as the first efforts of children's articulation and reasoning can be found in the early years setting in which according to Tymms et al. (2009) the foundation of learning is build.

Greendafer et al. (2014) were some of the researchers who examined the impact of drama on children's oral language. It is important to note that this was the only recent study that was found that included preschool children in addition to first and second grade children. They used data from two consecutive school years and they used a random selection sampling technique maintaining an equal number of school for both school years. An asset in their methodology was that they used a significant large number of participants and that they compare the drama intervention with a control group. Embracing the argument that literacy is a social process, they verified that students who received the treatments had a significant better performance in verbal communication and vocabulary. From the above analysis is obvious that the pedagogical framework of this study is relevant to the arguments of this thesis regarding the social construction of literacy.

The effects of drama on students' oral language have been further investigated by another group of researchers in an older group of children. Anderson & Loughlin (2014) focused their study on 3rd grade children with a slightly equal number in boys and girls. Similar to the previous study, there was also a comparison in treatment and not treatment groups. The only difference was that the group of children was the same but the researched observed them in two different language lessons: one with drama and one without a drama intervention. This practice added extra value to the findings as there were no difference in the sample in terms of socio-economic background or teaching techniques, which are critical issues that might influence the outcomes.

In both observations the lesson plans were based on the same principles and promoted the same kind of interactions. Data analysis from observations to students and interviews to practitioners showed that when drama is used, students reveal a considerable greater and more sophisticated dialogue during language lesson. Although the topic of the lesson plan was pre-decided from the practitioner due to the level of education of the participants, it is obvious that they adopted an emergent literacy approach, as there were a lot of student-led activities with a lot of freedom on students' choice. The practitioner served as a facilitator of knowledge instead of using a teacher-centred approach which might be attributed to the fact that the school used an art-based curriculum and therefore the staff had embraced the liberal character of the arts in all of their teaching techniques and interactions.

Remaining in the same level of education and kind of performing arts, there is also research that links drama with **writing**. Anderson & Berry (2014) were concerned about the influence of drama in students' writing skills. They focused their research in 3rd grade students and used an experimental and control group as the previous studies. The only difference was that they included children with formal diagnosis of learning difficulties and significant low performance. What is worth mentioning is that there was also an investigation of the student's behaviour with the focus on their **engagement** which is something that is missing from all the previous pieces of research. This links directly to this thesis, as the limited pieces of research investigate the cognitive effects of the arts in relation to students' involvement. This gap was also a motivating factor in the research design of this thesis.

The data analysis of their findings showed that drama is associated with achievements in writing skills and greater levels of engagement in children with learning difficulties and low performance. Reviewing the theoretical framework of this study, the researchers acknowledged that language is socially constructed and should not be separated from the rest of the educational stimuli. This also shares common grounds with the pedagogical framework of the previous pieces of research and this thesis, in which there is an emphasis on the social aspect of literacy.

Another important piece of research is by Fleming et al. (2004), who examined the effects of drama play on students' **reading skills** and **social skills**. The investigation of the effects of the arts on both cognitive and social skills is something that is missing from all the previous pieces of research and it was also one of the areas of investigation of this thesis. Moving one grade up, Fleming et al. (2004) focused their research design in children in Year 4 in primary school. In order to verify the outcome of their intervention, they compared it against a control group, which was a practice that added extra value on the results. On a two-year project they matched two schools that implemented the intervention with another two schools from the same geographical area that did not implement any drama intervention. With this practice they tried to eliminate any possible differences in the sample due to differences in students' background. The findings showed that drama was associated with better achievement in reading and social skills. From the description of the intervention activities, it is obvious that the researchers promoted the concept of emergent literacy through social interaction. They accepted the fact that language is social constructed and they argued that drama can enhance this procedure due to its interactive nature and liberal character. Although there was a small sample, it can be argued that this was counterbalanced with a robust research design, which could be used in further research.

4.1.3 Examining the empirical literature of puppetry: Findings and limitations

Moving to another kind of the arts, **puppetry** is also a kind of performing arts that attracted researchers. Adapting a multicultural approach, Vitsou (2011) examined the effects of puppetry on preschool children's **phonological awareness**. Although it was not a direct goal of her research methodology, the researcher argued that with puppetry there was a beneficial introduction to the basic principles of reading and writing. The sample consisted of four different settings with children four-five years old with a balance in gender. The intervention took place for 10 weeks but there was no control group to compare the outcome of the intervention like the previous pieces of research. The findings of this study verified the positive contribution of puppet play on children achievement in phonological awareness and communication skills.

Although the research stated that she supported the theoretical framework of the Piagetian and Vygotskian theory, there are times that this contradicts with the general arguments about literacy of this thesis. There was an emphasis in the social construction of knowledge but there was an equal emphasis on the fact that phonological awareness on its own is very important in the development of literacy in young children. This argument is a little confusing as it contradicts with the social construction of literacy. It also contradicts with the concept that emergent literacy is the cornerstone of any language development. However, from the description of the intervention activities, it is obvious that there was a child centred approach, which tried to emerge literacy knowledge from the children. Considering the above arguments and description, lead us nicely to suggest that there is a need for extra clarification and analysis regarding the pedagogical framework that has been adapted in this study.

4.1.4 Examining the empirical literature of dance: Findings and limitations

Last but not least, **dance** is also linked with positive effects on **reading** but mostly in primary school. Focusing on first grade children, McMahon et al. (2003) investigated the influence of a dance programme on students' reading skills. Similarly, to the previous pieces of research, they compared their findings with a control group. This practice in addition to the significant large number of the participants was a strength in this study. The argued that dance varies from the other forms of the arts as it requires space, time and force and thus, if it is implemented with the focus to develop learning outcomes it can be beneficial to children's reading skills. Data analysis was verified their arguments through their findings and supported a significant impact of dance in children's reading skills.

Although they adapted a child-centre approach, giving great emphasis on students' motivation and social interactions, there are some aspects in their theoretical framework that need to be considered. The researchers investigated reading skills as an outcome of phonological awareness, giving great emphasis on

specific literacy skills like sound segmentation and letter representation. This aspect does not link directly to the social construction of literacy and the importance of social interactions that the researchers admit. Although their argument about specific literacy skills has a substantial justification, it is not in agreement with the importance of emergent literacy in the development of phonological awareness. It is important to note that maybe the researchers embraced this approach but they focused only in specific literacy skills in order to gain an in-depth understanding of the impact of dance on children's reading. Therefore, there is a need for extra clarification and explanation regarding this matter.

4.1.5 Examining the empirical literature of drawing: Findings and limitations

Completing this discussion and moving to **visual arts**, **drawings** was also a kind of the arts that was investigated by researchers. It is interesting to note that although it is among the most common activity of young children in the early years settings, it did not attract the expected attention of researchers during the review of the updated empirical literature. There is an emphasis on pieces of research, in which researchers investigate students' drawing to understand their ways of communication (see Alford, 2015; Rollins, 2005) but there is limited, if any, research that utilized drawing or paintings to develop children's communication. This was basically the reason that this thesis included this kind of the arts in one of the experimental groups.

The study of Chang & Cress (2013) is an updated example of the limited pieces of research that were found in the area. Considering the limited empirical research in this area, they conducted an empirical study in which they investigated the way that children's drawings could be used to develop their **oral language**. Using qualitative methods, they focused their methodology on parents' contribution on this aspect. They included four parents and their three-four-year-old children to implement an intervention of a period of a month, in which parents were using children's drawing as a stimulus to develop their children's verbal language through conversation with them. Mukherji & Albon (2015) note that in qualitative methodologies the emphasis is on understanding a phenomenon rather than measuring it. Therefore, considering the qualitative methods of this study and the limited number of participants, no arguments can be made for generalizing the arguments. A strength of this study was that the research took play a naturalistic setting, which allowed children to reveal their true abilities due to the familiarity of the setting. The findings of this study reveal the beneficial impact of this strategy on children's oral language.

Reviewing the pedagogical framework of this study, it is obvious that the researchers embrace the arguments about the social construction of language. This is based on the fact that they based their research design on children's interactions with their parents through conversations of their work which is by itself a social activity. In addition to this, they included emergent literacy aspects as the basic principle of

parent-child conversations. Considering the pedagogical framework of this thesis as it has been described through the previous chapters, it guides us nicely to suggest a direct link with the theoretical background of this study.

Summarizing the above discussion, there was an analysis of the different pieces of research that investigated the effects of different kind of the arts on children's literacy development (see table 5). During the analysis of these research project, it is obvious that the arts have attracted the attention of researchers as a pioneering approach to children's literacy achievements. However, it is obvious that there is an over-emphasis in the investigation of music in the early years settings and in drama in primary school. Although the majority of them embrace the social construction of literacy and have indirect arguments about importance of emergent literacy, there is limited research that has emergent literacy as a steering wheel of their intervention. This is basically attributed to the fact that these papers discuss the concept of emergent literacy but they investigate other areas of literacy. This was an influencing factor of the research design of this thesis, as we wanted to contribute to the investigation of this relationship. In addition to this, it was noticed that the above research studies investigate individual kinds of the arts on children's literacy development and not the impact of the arts in general. Therefore, it was considered important to conduct an empirical research that seeks an answer to this. Last but not least, the focus of this thesis was also formed considering the fact that that there is also limited, if any, research that investigates the effects of the arts on children's social skills, literacy as a social practice and involvement.

Table 5. Summary of the literature review in literacy and the arts

Summary of the literature review in literacy and the arts				
	Research paper	**Description**	**Findings**	**Limitations**
Music *Emergent literacy*	Bolduc (2008)	Literature review in order to investigate the link between music instructions and emergent literacy skills.	Strong link between music and emergent literacy	Not clear theoretical framework, looks there is a **confusion** of the background of emergent literacy with the rest literacy abilities. No empirical design or direct focus on the early years settings.

Music *Emergent literacy*	Runfola et al. (2012)	Investigate the association of music and emergent literacy achievement in preschool. Trained the practitioners.	Positive outcomes in music and emergent literacy achievement	They accept an emergent literacy approach **but** they focus on specific literacy skills like verbal language and grammar understanding
Music *Phonological awareness*	Gromko (2005)	Examine the influence of music instructions on phoneme awareness in the early years settings. Adapted the framework from Bruner's methodology which can be linked to the general framework of emergent literacy regarding the discovery of learning	Beneficial effects of music instructions on children performance on phoneme awareness	Limited time frame, **focus on instructions**, the aspect of emergent literacy as a steering wheel to phoneme awareness is missing
Music *Phonological awareness*	Bolduc (2009)	Investigate the effects of music in phonological awareness in general, adapted an emergent literacy approach even though this was not the focus of his research	Significant advantage of children in the experimental group	No focus on any particular level, limited period, **pre-designed music activities**.
Music *Phonological awareness*	Moritz et al (2012)	Investigate if the amount of music training will have an effect on children's phonological awareness skills and if this can have a long term effect	Musical stimuli had a beneficial effect on phonological awareness and that music facilitate children's phonological	**Differences** in the teaching strategies between the control and experimental group

		in the early years settings. Longitudinal study (re-examine in the 2nd grade). Embedded the emergent literacy in their methodology	awareness over time.	
Music *Literacy as separated skills*	Seeman (2008)	Prove a link among music intervention and receptive language skills in at-risk preschool children	Music lessons can contribute as a beneficial agent in children with low performance in literacy	Limited period, **no focus on literacy holistically**
Drama	Anderson & Krakaur (2013)	Literature review to explain the link between drama and literacy. Embraces a Piagetian and Vygotskian approach	Drama is a facilitator of the development of language and general cognitive abilities	**No direct arguments** about emergent literacy. Not an empirical research design.
Drama *Verbal language and articulation of ideas*	Greendafer et al. (2014)	Investigate the impact of drama on children's oral language and included preschool children in addition to first and second grade children. Embrace the argument that literacy is a social process.	Students who received the treatments had a significant better performance in verbal communication and vocabulary.	**Not a specific focus on early childhood**, no variety in art forms.
Drama *Verbal language and articulation of ideas*	Anderson & Loughlin (2014)	Investigate the drama on students' oral language on 3rd grade children by observing 2 language lessons. Adopted an	When drama is used, students reveal a considerable greater and more sophisticated	**Lessons plans were pre-decided** by the practitioners, no focus on the early childhood

		emergent literacy approach	dialogue during language lesson.	
Drama *Writing*	Anderson & Berry (2014)	Examined the influence of drama in students' writing skills on 3rd grade students. Examination on students' engagement. Acknowledgement that literacy is socially constructed.	Drama is associated with achievements in writing skills and greater levels of engagement	**No focus on the early childhood**
Drama *Reading skills and social skills*	Fleming et al. (2004)	Investigate the effects of the arts on both cognitive and social skills in Year 4. Embraced the concept of emergent literacy through social interaction and accepted that language is socially constructed	Drama was associated with better achievement in reading and social skills	Small sample size, **no focus on the early years settings**
Puppetry *phonological awareness*	Vitsou (2011)	Examined the effects of puppetry on preschool children's phonological awareness through a multicultural approach. Supported the theoretical framework of the Piagetian and Vygotskian theory.	Positive contribution of puppet play on children achievement in phonological awareness and communication skills	**Contradicting arguments**: emphasis in the social construction of knowledge but there was an equal emphasis on the fact that phonological awareness, no control group
Dance *Reading*	McMahon et al. (2003)	Investigate the influence of a dance programme on students' reading skills at 1st	Significant impact of dance in children's reading skills.	Give great emphasis on specific literacy skills like sound segmentation

		grade. Embrace the concept of emergent literacy		and letter representation, **don't review literacy holistically**, no focus on the early year settings.
Drawings *oral language*	Chang & Cress (2013)	Investigate the way that children's drawings could be used to develop their oral language in preschool. Focused on parental contribution. Embrace social construction of language.	Beneficial impact of using children's drawing as a stimulus to develop their verbal language through conversation with parents on children's oral language	No variety of the art forms, **don't review literacy holistically**

4.2 Summary of the fourth chapter

To briefly summarize, in the fourth chapter there was a discussion of the interdisciplinary research in the education field and the benefits in everyday practice and in the construction of knowledge. During this discussion, there was an acknowledgement of the era that interdisciplinarity was introduced to education and the importance that has nowadays. In an effort to create links with this thesis, there was a discussion about the importance of an interdisciplinary research of the arts and literacy in the early years settings. In order to verify and establish this argument the discussion drew on the relevant empirical and theoretical literature in this field. Within this analysis, the relevant research projects were examined in terms of their research methodology, findings, and pedagogical framework and relevant links were made with the content of this thesis. In order to identify the importance of this thesis, there was a description of the link among the gaps of the empirical literature and this thesis.

Having discussed thoroughly the two major topics of this thesis and justify the importance and the need of an interdisciplinary research that uses the arts to develop literacy in the early years, there is a need to discuss some further topics that are identified as gaps in the existing empirical studies and were also motivating factors of this thesis by forming some of the research questions. For this reason, in the next chapter there will be a discussion of the importance of active involvement in children's

achievements and following this there will be a discussion of the importance of social skills in children's general development.

5. Active involvement as an influencing factor in children's performance

During the previous review of the existing pieces of empirical literature, it was found that there is only one study that included at some point the aspect of children's involvement in their research design. What is interesting to note is that this study focused at primary school and not in the early years settings. Involvement is a very important parameter during the teaching and learning procedure especially in the early years settings. It is also considered as one of the most important factors for academic success (Laevers, 1994). Therefore, it is worth investigating this aspect further, with the goal to try to find ways that will make the educational activities intriguing in order for the children to involve actively. This was one of the motivating factors of this thesis as we wanted contribute in the examination of this relationship and offer empirical findings that will start bridging this gap in the literature. In this chapter there is an analysis of the content and the importance of involvement and the relevant empirical research.

Involvement is a basic element of people's activity by which we can understand the level of concentration during a certain task and their correspondence. When a child is deeply involved in an activity, it is highly unlikely to be distracted by external factors. It is important to note that deeply involved children will persist in fulfilling the activity they started. According to Laevers (1994), **involvement** is a quality of people's activity that is described by motivation, insistence and pleasure. It can be recognized in activities that are within children's abilities and intrinsic interests, which means that these activities are not too easy or too difficult. If the activity is perceived as too simple of too hard, then the levels of their involvement are likely to decrease. Active involvement associates with activities that people are intrinsically motivated to participate in and according to Siraj-Blatchford et al. (2002) they are totally absorbed in.

Researching the existing theoretical and empirical literature, it is obvious that there is a difference between the terms involvement and engagement. According to Ferlazzo (2011), the term **involvement** presumes an action in something whereas the term **engagement** implies an action with someone. However, the term engagement is mostly used in pieces of research that examine the role of parents in children's learning and performance whereas the term involvement is mainly used when examining the action itself. For the purpose of this thesis, the term involvement is used, as the main purpose is to measure children's performance in literacy activities when the arts are used as a means and not children's actions with someone else. It is important to note that sometimes there is a general confusion in the literature between these two terms and the term engagement is used in situations that there is no action with someone.

Reviewing the content and the importance of involvement, it is obvious that it is related highly with people's satisfaction. According to Baroody & Diamond (2013), when children are deeply involved in an activity, there are signs of enthusiasm and enjoyment. Involvement as a concept has been further analyzed in various signs that are obvious during an activity.

<u>Concentration</u> is one of the most important sign of involved children and usually it is the most noticeable one. In literature, it has been characterized as one main characteristic of involvement as it shows people's true contribution in an activity (Ridley et al., 2010). It is obvious that when people are truly concentrated in something, it is extremely difficult to distract them. This applies both for external and internal stimuli. This leads us nicely to suggest that concentration in a task, often results in understanding better the new concepts and attaining more effectively new knowledge (Siraj-Blatchford et al., 2002). One main argument for this is that it reveals people's true interests and thus, they are in charge of their learning.

Another sign of involvement that can be observed is the energy that one invests in an activity. Deeply involved children are often show <u>signs of deep metal energy and effort</u> until they reach their goal (Laevers, 1994). As they are totally responsible of the outcome of an activity, they think really hard in order to find a solution to any upcoming problematic situation (Ridley et al., 2010). In practice, this means that they might experiment a lot with the existing resources until they find the most appropriate one to use or that they will speak really loud and passionate. This brings us nicely to the next obvious signal which is <u>creativity</u>. Creativity is often characterized as producing something new and original or by producing a lot of ideas towards the solution of the problem (Sulaiman, 2011; Lapham, 2007). However, in this framework it is associated with a slightly different meaning. According to Laevers (1994), creativity, as a signal of involvement, means to show signs of your personality and embed them in the outcome of the activity. In other words, this means to go beyond the ordinary and put your individual touch instead of coping the available prototypes.

<u>Non-verbal attitude</u> is also associated with involvement. It is true that non-verbal communication is an important aspect of people's communication as it reveals their true feelings and emotions (Burgoon et al., 2016). It is extremely difficult to hide the way we feel about something or someone through non-verbal signs (Tonc, 2002). In terms of involvement, it is a critical factor in making decisions if a child is truly involved or not in an activity. At this point, it should be reminded that young children are basically communicate through non-verbal signs and therefore, their <u>facial expression and body posture</u> will reveal true signs of their levels of involvement during an activity. Usually, there is a distinction between dreamy eyes and intense eyes as an important factor in making judgements about facial expression and nonverbal attitude

(Laevers, 1994). However, this should be treated very carefully as sometimes children might be absorbed in their thoughts in order to find a solution to the situation that came up. In addition to this, <u>verbal expression</u> is also important in making judgements about involvement. It is very common to observe children who are deeply involved in an activity to talk and discuss about what they have done or what they want to do. A critical sign is when they are eager to repeat the activity and they constantly ask to do so. According to Robson & Rowe (2012), active involvement is linked with children's verbal efforts to analyze deeply what is happening and the ways that can be used to overcome the upcoming problem.

Another sign that is obvious in involvement is the level of <u>persistence</u> and <u>precision</u> in the completion of the task. People who are actively involved in an activity will insist to reach their goals and they do it with pleasure (Laevers, 1994). It is often common that they will try to find ways to make the activity last longer by putting extra goals and small tasks. This is basically attributed to the fact that they enjoy the activity and for this they want it to last as much as possible. According to Burdette et al. (2015), persistence is an important factor of children's participation and fulfillment of a specific task. It is interesting to note that the first impression of the activity is crucial if young children will participate and insist on completing it or not (Cai, 2014). Persistence in reaching the goals often results in precision. Involvement also results in people being extremely attentive to little details and worrying about the outcome of their efforts (Laevers, 1994). This means that they might repeat their actions again and again until they have the outcome they want to the standards they want.

Active involvement will result in an immediate response to the upcoming situations. A quick or a slow <u>reaction time</u> has also being associated with involvement. Involved children are usually alert and aware about anything new that comes up during an activity and they usually find meaningful ways to utilize it (Laevers, 1994). A simple example is the following: children play in the home corner and they pretend to prepare dinner while a new child comes who wants to join their play but is not part of their game. In most of the cases they find immediately a way to include him/her in their play by assigning him/her a role that was not in their initial plans.

Last but not least, a critical sign for involvement is <u>satisfaction</u>. As it is stated earlier, people get involved in an activity because they are motivated internally to do so and because the activity seems very interesting. This will result by itself in being happy and satisfied with their contribution and efforts and for this they achieve learning effectively. According to Robson & Rowe (2012), satisfaction is an integral part of involvement that results in effective teaching and learning. Siraj-Blatchford et al. (2002) support this, by stating that children will participate deeply in an activity only because this activity satisfies them. This brings us smoothly to suggest that involvement is very important in the teaching and learning procedure and that it is of

paramount importance to find ways to make children involve actively in learning activities.

Having discussed the concept of involvement, the difference of involvement and engagement and the signals that can be observed in making judgements about involvement, there is a clear need to discuss the relevant pieces of research. This will enable us to understand fully the importance of this term and to make links with the research design of this thesis. In the next chapter there will be a discussion of this aspect.

5.1 Examining the empirical literature about involvement

Children's involvement is highly related to academic performance which sometimes is linked directly to effective teaching and learning. If the learning activity, or any kind of activity, is really interesting and is relevant to children's needs then this will result in children being involved actively in them (Aboudan, 2011). A teacher-led approach (see chapter 7) can result in very limited creativity and children will not learn to be pioneering and independent thinkers and to use their abilities to solve problems (Phelps et al., 2012). Effective learning can only be achieved when children are motivated and deeply involved in a task or an activity (Baroody & Diamond, 2013; Siraj-Blatchford et al., 2002). These arguments have their roots on Piaget's and Vygotsky's theory as they both put great emphasis on children's experience in the construction of knowledge (see Vygotsky, 1978; Piaget, 1930). Based on these arguments a lot of researchers examine this aspect from different points of view and they all agree and conclude in the importance of children's involvement in their academic and social performance.

However, in a review of the literature, it is obvious that most of the researchers (see Giallo et al., 2013; Ishii-Kuntz, 2013; Meece, 2013a; 2013b; Lau et al., 2011; Gozali-Lee & Mueller, 2010) are examining the effects of parents' engagement in teaching and learning and not children's involvement by itself. Parents' engagement is another important aspect of effective learning but as Siraj-Blatchford et al. (2008) stress, one major aspect of research is to further examine the levels of children's involvement during school hours. One main argument for this gap could be some constrains that can be found in the early years settings. Early years practitioners might find some challenges in their attempt to involve children actively during teaching and learning. Being more specific, factors like children's personality, culture, socio-economic background, parents' attitude, large number of cohorts in the classroom, the demanding and challenging environment of the early years classroom can inhibit early years practitioners to try to involve actively children in learning activities. Another issue that is obvious from the following analysis is that there is limited, if any, research that examine art and literacy involvement in any level of education and especially in the early years settings. Based on this argument and with the goal to

contribute to the investigation of this relationship, this thesis included this part in its research design as one of the research questions.

Researchers that are concerned about the effects of involvement on students' performance mainly focus on the content of **teaching strategies**. This is important because teaching and learning strategies influence the level of children's involvement and this affects the knowledge they will attain. Ridley et al. (2010) focused their research study in the early years classroom and they were concerned of the quality of early childhood programs. They link quality with involvement by focusing mainly on practitioners' interactions with children. They included 17 schools and more specifically 58 early years classrooms with one-three-year-old children, which had to be acknowledged that it was an adequate sample size. Another strength of their research was that there were no differences in the group size in the different classrooms and the staff qualifications. This was a very good practice, as they reduced the factors that might influence the findings. The early childhood centers were categorized according to the license they had and more specifically there was the group of schools that provided four activity areas daily and additional activities once per month and the group of schools that provided five activity areas daily and additional activities once per week.

In terms of data collection, there was a very robust procedure with two standardized test and additional child observations and teacher questionnaires. As triangulation is an important factor that influence validity (Mukherji & Albon, 2015), this practice in the researchers' data collection techniques was also a strength as they implemented various and different measures to collect their data. The researchers concluded that children's involvement was highly related to the quality of practitioners' strategies and interactions with children, identifying that the immediate response of the practitioners was the most important one. Although there were no direct arguments about the pedagogical framework the researchers embraced, it is obvious that they were in favor of the approach that gives great emphasis on the social construction of knowledge. This was clear as they focused on group observations and group interactions with the practitioners in order to define the importance of involvement as a factor of high quality programs. Creating a link with the pedagogical framework of this thesis, it can be argued that there is common ground in terms of the social construction of knowledge.

The same aspect was investigated by Phelps et al. (2012) in a higher level of education with a slight different focus. They were concerned about the effects of teaching strategies in terms of involvement and learning in the primary school. It is true that the way teachers present the school activities is fundamental on the levels of children's participation. If a school activity is not attractive, then children will show low participation and interest and this will also have a serious impact on their learning.

Phelps et al. (2012) shed light on this aspect and they examined the ways in which teaching could be improved. In order to examine this, they interviewed 46 nine-ten-year-old children about their ways of their learning. This was a very good approach in terms of their methodology as they gain first-hand information for the immediate recipients of the teaching procedure. Their findings show that according to children, a variety of teaching strategies and less emphasis on teaching instructions are perceived as some good examples of teaching that promote involvement. These findings are very important to inform the improvement of teaching strategies towards creating motivating activities that children will be actively involved in. In the same line with the previous piece of research, Phelps et al. (2012) did not make direct arguments about the pedagogical framework they adapted, but it is obvious that they embraced the social construction of learning by giving great importance on the group dynamics of the classroom during the interviews. As the basic argument of this thesis is that learning is a socially activity, it can be argued that there is a common ground with this piece of research.

A very important outcome of teaching strategies, is the **type of activities** that take place during the school day. The type of activities will eventually affect the level of children's involvement as children will participate actively only if they find the activity attractive and interesting. An activity has to be motivating and intriguing for children to participate fully in it and this will result in high or poor involvement. This leads us to suggest that the type of activities is an important parameter in children's involvement. Considering these arguments, Robson & Rowe (2012) investigated this aspect in the early years settings. They examined three different types of activities according to adult's intervention by observing 30 three-four-year-old children during the school day. They concluded that the adult's role is very important in promoting children's active involvement and also that children involve more in activities that are initiated by themselves. An asset in their methodology was a very careful organization and categorization of the expected behaviors before the data collection, as this contributed to a robust analysis of the findings. Reviewing the pedagogical framework of the researchers, it has to be acknowledged that there are similarities with the general argument of this thesis about the social construction of knowledge. The researchers embraced a Vygotskian approach as they supported the social context of early learning, putting also emphasis on the cultural experiences of the children. In discussing their findings, they reflected back to this approach and explained the data accordingly.

Proceeding in the next area, children's involvement can also have great effects in the **development of self-regulation**. Self-regulation is an important parameter in the improvement of students' independent learning skills (Shih et al., 2010) and therefore, it should be highly considered. During meaningful interactions, children have the opportunity to establish the appropriate emotional foundation in order to

regulate their learning and behavior. Williford et al. (2013) agreed with these arguments and contributed in this area by researching this aspect in the early years settings. Their purpose was to examine children's involvement in tasks and the effects on their self-regulation. They included 341 preschool children from 100 different early years classrooms with an average age of approximately four years old. The big sample size, the careful ethical procedures and the careful random selection of the participants are factors that contribute in the strengths of their research design. The researchers observed the participants twice in the school year, once at the beginning and once towards the end. Following the observations, children participated in a self-assessment with an adult to facilitate this process. The data was also enriched with teacher reports regarding children's performance. This was another strength of their research design as there was a very thorough procedure with a lot and different measures to collect the data. The findings of this study verified the importance of children's active involvement in the learning tasks in their development of self-regulation. Reviewing the theoretical framework of this research project, it can be concluded that there are similarities with this thesis. The researchers gave great emphasis on Vygotsky's arguments about the importance of social interactions in children's performance and they reflected on this theory on the implications of their findings.

Last but not least, involvement was associated with the **development of literacy** but only in limited pieces of research in the early years settings. In a review of the literature regarding this issue, the research project of Barrody & Diamond (2012) was one of the limited examples. They focused on the examination of children's interest in literacy and their involvement and they used multiple measures to examine this. Being more specific, they seek the perspectives of the parents and the teachers of the children and they further interview and observed the children to gain a first-hand experience of the data. Their sample was consisted of 167 four-five-year-old children. This was an asset of their methodology as they used triangulation techniques to safeguard the validity of their findings. Also, another contributing factor of this was the big sample size. There are no arguments of a random sampling selection but this does not mean that this was not implemented. The findings of this study showed a small but significant effect of children's interest in literacy and their involvement in approximately all the measures that were implemented. Although there are no direct arguments about the pedagogical framework that the researchers embraced, it is obvious that the gave great emphasis on the children's experience in the achievement of knowledge. This was very obvious during the description of their research design and data analysis. As the theoretical framework of this research is highly related with this aspect as well, it can be argued that there is a link in this aspect with Barrody's & Diamond's (2013) study.

Summarizing the above discussion, involvement is a very important aspect of children's social and cognitive performance and this has triggered a great number of researchers. However, most of them focused their research project in parents' engagement and not in children's involvement in itself. Although there is some research in the early years settings that investigates the effects of children's involvement in their performance, there is limited if any research that focus on the effects of the arts on involvement in literacy activities. The pedagogical framework of the above pieces of research has a lot of similarities with the pedagogical framework of this thesis. As the focus of this thesis is an interdisciplinary approach of the arts and literacy there is a need to discuss the empirical pieces of research in this area. Therefore, the next chapter is devoted in this aspect.

5.2 Examining the empirical literature about art involvement

There are a lot of theoretical arguments that the arts offer an environment that contribute to children's great levels of involvement but there are very limited updated pieces of research that examine this aspect in the school settings. When it comes to the early years settings this is every more limited with a great gap in the effects of children's literacy. This thesis in order to contribute in this and do the first step in bridging this gap, included this part in its research design as one of the research questions.

An interdisciplinary research about arts and involvement has been embraced from different researchers using a different angle to examine this topic. The majority of the researchers were focused on the effects of the arts on students' **academic achievement** and most of the time on **cognitive development** in general. Garvis & Klopper (2014) were some of the recent researchers that contributed on this topic by providing four different case studies that use the arts in formal and informal school activities. However, only one of them included a classroom in the early years settings and the rest of them were focused basically on secondary and higher education. In these case studies, the importance of the arts is verified in children's involvement in activities which result in effective learning in general in formal and informal schooling and this is also recognised highly by the teachers of these settings. Therefore, the researchers conclude that the arts have the opportunity to contribute to children involvement and this is not restricted only in the formal schooling. The analysis of these four case studies provided great examples that showed in practice the effects of the arts on this aspect. Practical examples are very important in the educational procedure as they can illuminate the related theory. What is missing from this paper is the thorough description of the research methodology they followed, regarding the sampling and the data collection techniques. However, this does not mean a there was not an ethical and strong research design. Although there are no direct arguments about the adapted pedagogical framework, it is obvious that the researchers supported the direct experience of children's learning which is something that is highly

promoted through the arts. This argument was one of the motivating factors to the development of the argument of this thesis.

Another piece of research that agreed with these arguments was the study of Catterall et al. (2012) but it was again in a higher level of education and not in the early years. The researchers focus on the effects of the arts in teenagers' and young adults' involvement in academic and civic engagement. They examine four different databases that were related to their subject. In their findings they conclude that participants who partook in art activities showed great levels of involvement and better academic outcomes. This active involvement in art projects resulted also in benefits in social awareness, as participants got involved more in civic engagement activities and current affairs. By examining different databased, enabled the researchers to access and evaluate a great number of research projects, which is important to the development of knowledge and understanding in this area. Perhaps, it could be more beneficial if they had conducted an empirical research in order to test in practice their hypothesis. However, it has to be acknowledged that this was not in the intentions of the researchers and this does not mean that they have not used the findings of this study in order to conduct an empirical one later on. Regarding the pedagogical framework there are no obvious direct arguments in their analysis, but in the same line with the previous pieces of research there is a great emphasis in the personal experience of the participants through the arts. This piece of study was an influencing factor in the development of this thesis, by examining this aspect in the early years through an experimental design that was something that was missing.

Moving forward, the effects of art involvement has also been investigated in students' **personal and social development**, with a greater emphasis on the **psychological dimensions of the self**. Jones (2013) investigated this issue by examining the effects of visual and performing arts on the **perceptions** of pre-service teachers **regarding their wellbeing**. The paper presented preliminary findings of a three-year project within a seven-year longitudinal study. The sample was consisted of 139 undergraduate students with a slightly decrease in the numbers with 114 students towards the second year of implementation, which was still a very good and large sample size. The researcher collected the data on a three stage procedure and more specifically on a survey about the participants' beliefs and prior experience in visual and performing arts. They further conducted a practical intervention, in which the pre-service teachers participated on three different two-hour art sessions as part of their program of study. There was also an interview, in a smaller number of participants of the initial number. The findings showed the positive contribution of the arts on pre-service students' perceptions of wellbeing.

The three levels of data collection and the triangulation techniques were some strengths of the research design. However, considering the duration of practical

intervention, it can be argued that a lengthier procedure would be beneficial in order to have a greater experience and provide more in-depth findings regarding the contribution of the arts. Although this study focused on tertiary education, there are indirect links with the early years settings. This is based on the argument that it examined undergraduate students, who were studying to be teachers. Therefore, it can be argued that there is an indirect link, as pre-service students can use this experience to provide the same one during their professional activity with young children. Regarding the pedagogical framework of this study, there are no direct arguments but through the description of the research design and the data analysis is obvious that the researcher gave great emphasis on students' experience which is highly relevant to this thesis.

Some years later, Nichols (2015) focused her arguments in the effects of visual art involvement on the **self-confidence** of high school students. On a four-year period of training in a secondary school, she included 50 students who were at their third year and had completed at least one arts class before. The random selection using a software program and the triangulation techniques were some of the strengths of this study. Participants were asked to complete a survey twice at two random days, one considering an art class and one considering a non-art class. Considering the quantitative approach, it can be argued that a bigger sample size would be preferable. For the qualitative methods, the researcher used a smaller number of the participants, and more specifically 12 students of the original sample and she conducted an interview in order to gain a deeper understanding of their responses and attitudes in the questionnaire. Considering the qualitative approach, it can be argued that the sample size was adequate, as according to Mukherji & Albon (2015) the purpose of qualitative research is to understand and not to prove a fact. The clear definition of the used terms is another strength of this study, which enabled the researcher to describe accurately the conclusion of her study. During the data analysis it was verified that art experiences contribute positively to students' self-confidence and general motivation regarding learning. This piece of research could be benefitted by observations of students during art and not-art course in order to enrich even more the data. This piece of research used a very rich pedagogical framework, embracing approximately all the approaches that have described so far in this thesis. Being more specific, the researcher gave great emphasis on Dewey's and Vygotsky's theory and on authentic learning. She described the benefits of social interactions and first-hand experience in the construction of knowledge and reflected on these aspects throughout analysis of the data.

Last but not least, Gerry et al. (2012) were concerned on the effects of the arts on children's **social development**. In contrast with the previous two studies, Gerry et al. (2012) focused their study in the early years and especially in infants and the effects of music active participation on their communication skills. They included 49 six-

month-old infants to musical experiences for six months and for ethical and safeguarding issues they included the parents of the infants as well. A very good practice was that they categorized their sample in experimental and control group, with an equal number of participants in both groups. The difference between these two groups was that in the former group the participants had an active participation with the musical stimuli whereas in the latter group had a passive contribution during the musical stimuli. The findings showed that active involvement in music resulted in greater gains in social development, revealing also pre-linguistic communicative gestures. In the same line with the previous studies and the theoretical background of this thesis, Gerry et al. (2012) put emphasis on personal experience as an important factor in children's development.

Summarizing the above discussion, although it is widely considered that the arts contribute beneficially to students' involvement with strong benefits in their cognitive and social development, there is limited, if any, research with this focus and especially in the early years. The analysis of the above empirical literature established the positive impact of the arts on students' development and performance mainly in the higher levels of education. However, there is a shared ground with this thesis in terms of the pedagogical framework. A gap of interdisciplinary research in the early years with the focus on literacy was also obvious during the discussion, which was a motivating factor for the development of one research question of this thesis.

5.3 Summary of the fifth chapter

To briefly summarise, in the fifth chapter there was a discussion about the importance of involvement in students' performance. Drawing upon the existing literature, there was an analysis of the content of involvement and the difference of involvement and engagement. The basic signs of involvement were presented in relation to the literature. To establish fully the importance of this aspect, there was analysis of the empirical research regarding involvement and students' performance in general. Relevant links were made with the theoretical framework of this thesis. Considering the interdisciplinary nature of this thesis, there was a further examination of the contribution of active art involvement on students' academic and social performance. Within this analysis, relevant research projects were examined and linked with this thesis. In order to establish the importance of this thesis, a link was identified among the gaps of the existing empirical literature and the research design of this study.

Having discussed thoroughly the major topics of this thesis and justify its importance, there is a need to discuss the last motivating factor, as it was identified by the analysis of the empirical research studies. For this reason, in the next chapter there will be discussion of the importance of social skills in children's general development.

6. The importance of social skills in early years

Social skills are one of the most important competencies in children's development and learning that have a substantial contribution on their lives as professionals and general well-being. Considering the social construction of knowledge that was analysed and discussed thoroughly in the previous chapters, it can be argued that social skills are highly linked with children's cognitive development. A lot of researchers stress the important of social skills on children's lives and they argue important links with others areas of learning. Keeping in mind these arguments and the fact that there is limited research that examines the effects of the arts in children's social skills, in this chapter there will be a discussion of the content of social skills and their importance. Further links will be also made with the arts.

According to Peterson & McConnel (1993), effective social interactions is a very important parameter of children's development and learning and thus, there is a need to enhance young children to develop them. This will be beneficial for children with typical and non-typical development (ibid). Social skills also contribute to **effective adaptation** to the setting, as children have developed the necessary competencies to deal with with new and upcoming situations. In the literature, social skills have been characterized as the cornerstone of effective settling in a new environment (Blandon et al., 2010b). This is based on fact that when young children have developed effective social skills they can deal with upcoming situations successfully as they have the confidence to interact and socialize with people that are not familiar with. The arts can contribute successfully in this, as they offer an environment of freedom in which children can practice their social competencies with the goal to settle in and without being afraid that they will be judged of not doing the right thing.

Considering the importance of the early years, the development of social skills in this level of education has an even better contribution to children's development. Early learning and development of social skills in the early years have a positive impact on children's school behavior later (Schulz et al., 2011). When children have developed effective social skills this will result in successful interactions with their peers and adults. Social competencies are also important as they are interconnected with various other areas of learning. However, there is a misconception that early childhood education should give great emphasis on cognitive skills instead of social skills (Pahl & Barrett, 2007). It is important to remember that knowledge is constructed socially. If children do not have the necessary skills to interact effectively with others this will have a significant impact on their learning as well. Baker (2006) argued that when children show behavioural problems or low level of social skills this is a crucial impact on their school performance in reaching the learning goals. Effective social skills contribute in better **academic achievements** in formal schooling. Children with an advanced level of social competencies often do better in the school activities and achieve efficiently the learning tasks (Durlak et al., 2010; Pahl & Barrett, 2007).

This can be achieved more effectively through the arts, as there is a liberal exchange of ideas which results in meaningful social interaction and knowledge.

Apart from the benefits in cognitive performance, social skills are associated with the general development of children and adults in general. **Wellbeing** is a very important aspect in people's lives. It is true that lately it started to attract a considerable amount of researchers, who investigated this from a different angle (Thomas et al., 2016). In empirical research, social skills have been associated highly with children's wellbeing. One main argument for this is that when people master social qualities, they can deal with the new situations and they can find a way to be a member of the group. This will result in better self-confidence and will eliminate any sign of depression. Choi & Kim (2003) focused their arguments in the early years settings with an effort to link social skills to academic achievements and wellbeing. They concluded that effective social skills will result in peer acceptance, which will result, in turn, in better school performance and wellbeing. What is more interesting, is that they also stressed that the first step in this procedure is effective adjustment to the new settings.

Some years later, Segrin et al. (2007) verified this aspect on undergraduate students. Focusing only on wellbeing, they verified that social skills are highly linked with greater wellbeing which results in lower levels of stress. Segrin & Taylor (2007) were also agreed with this, introducing the aspect of positive relationships. Considering positive relationships as an important aspect of social skills, they concluded that social skills have a beneficial impact on people's wellbeing, justifying this with the aspect of satisfaction. Again, this is associated highly with art activities in the early years settings. The arts are an activity that children do it for pleasure and for personal satisfaction. During this activities, they usually interact naturally with their peers and adults and they utilize this interaction unconsciously to develop their social skills. As most of the time this is happening during leisure time, this results also in benefits in their wellbeing as there is a very strong aspect of personal satisfaction, confidence and achievement.

As it was discussed earlier (see chapter 2.4) the **role of the adult** is very important in children's development in general. Parents play a substantial role in children's attitude and behaviour in general. One main argument for this is that they are the first role model that children will imitate and copy the observed reactions. Focusing on the factors that might influence social skills, Blandon et al. (2010a) agreed with the importance of adults and especially of parents in the development of social behaviour. Examining the links of this issue, they concluded on a strong association between children's social skills and **parental behaviour**. One year later, this was also verified by Ayoub et al. (2010) with a slightly different view point. Examining the developmental pathways of social skills, they investigated the impact of early

intervention and parenting. Including infants and parents in their sample, they concluded on strong bonds between different interactions among parents and children and the development of children's social skills especially in an early intervention.

Proceeding with this argument, it is obvious that there is a need to support young children to develop effective social skills especially in the early years settings. However, **practitioners**, and adults in general, should always have in mind that each child has an individual way of learning, which most of the time is also highly influenced by previous experiences and cultural heritage. Thus, it is very important to find ways that can incorporate all learning styles. Parry (2015) supported this by giving great emphasis on children's personal strategies in order to make social connections and interactions in the early years settings.

There is a lot of research in this area, investigating the importance of **teachers' strategies and understanding** in developing children's social skills. This shows the importance of implementing meaningful techniques to support children towards this direction. What is even more important is for teachers to understand the importance of social skills in children's lives (Jones & Harcourt, 2013). As teachers are the first role model for children in formal learning during their first steps in school, it is crucial for teachers to understand children's needs and support them accordingly. Aubrey & Ward (2013) investigated this issue, focusing on aggressive and challenging behaviour. By examining the perceptions of practitioners, they noted that there is a variety of different strategies that they can use in order to overcome such problems and support children in this area. However, they stressed that there are challenges when it comes to multicultural group. One year later, Davis et al. (2014) agreed with this, investigating the importance of teachers' role from a slightly different perspective. They were very concerned about the educators' knowledge and assurance in developing children's social skills and promoting emotional wellbeing. Although their results are promising and it is clear that there is a very good understanding of this issue, it was also recognized that there are opportunities of important changes in their techniques.

This need was also stressed in the literature by investigating the effects of school based interventions in the early years. It has to be acknowledged that any kind of direct instructions or guidance to children will not have the desired results. Any kind of intervention or guidance should be made in a way that children maintain the leading role in their learning. Considering this framework and arguments, Strain & Hoyson (2000) highlighted the need to include an intervention in the early years settings that will have long term effects on children's social skills. Some years later, Henningham et al. (2009) agreed with this by focusing on teachers' behavior. They concluded that teachers' attitude was a significant factor in greater gains in children's social and

emotional skills in the early year settings. Although, they measured the effects on an early intervention program, they embraced the above arguments about children's freedom. On the contrary, Ashdown & Bernard (2012) supported the importance of direct instructions in this procedure. Supporting explicit instructions that maintain a playful character, stressed the importance of the adult in the learning procedure and the development of social skills as important qualities of children's lives in the future.

However, it has to be acknowledged that there were no arguments about art activities in all the above arguments about the contribution of the adult on children's development of social skills. In an effort to link the above arguments about the importance of teachers' role in the development of social skills with the arts, it is argued that the arts offer an interesting framework. The arts can offer this freedom to children while practitioners can embed indirectly learning goals. This is attributed to the fact that art activities are one of the major form of activities in children's free play. Therefore, in an effort to solve the problem of practitioners' strategies, it is suggested that they can use the arts to enable children to develop and master the necessary social skills in the early years settings.

Summarizing, the above discussion there is a considerable amount of empirical and non-empirical research about the importance of social skills to children and people's lives in general. It was argued that the development of social competencies in the early years have a substantial contribution to children's learning in the later levels of education and it is highly associated with academic achievements. Within this discussion, it was obvious that social skills have a fundamental impact on children's wellbeing apart from cognitive development. The importance of the role of the adult was stressed and relevant links were made regarding the effective contribution of the arts in achieving social skills.

6.1 Summary of the sixth chapter

To briefly summarise, in the sixth chapter there was a discussion about the importance of the development of social skills as an important parameter in children's performance. Drawing upon the relevant literature, there was an analysis of the benefits in learning and cognitive development considering the social character of learning and construction of knowledge. The importance of the arts in terms of other areas of children's lives was also discussed. The discussion was enriched by the importance of the adult in this procedure. Relevant links were made regarding the effectiveness of the arts in this process.

At this point, all of the important pillars and motivating factors of this thesis have been discussed and a link was also provided with the arts considering the gaps in the empirical literature. Before proceeding in the analysis of the research design and the findings there is a need to discuss the different teaching styles and create relevant links with their impact in learning. As the main topic of this thesis is the arts, there is

a need to create a link between with what is considered as an effective learning style and the arts. It has to be acknowledged that teaching styles were not a part of the research design but it is important to discuss them as they have a great impact on children's learning and attitude and to the fact that the teaching intervention was implemented by more than one practitioners.

7. Teaching practices

Teaching styles have been considered as the most important factor in the teaching and learning procedure. According to the stance that each practitioners and teacher will embrace during their interactions with their students, there will be a different effect on the outcomes of students' learning and attitude towards learning in general. Having these arguments in mind there will be an analysis of the different teaching styles and their effects in the daily school interactions with students. There will be also an effort to link the characteristics of an effective teaching style with the general framework that is provided by the arts. It has to be acknowledged that this was not part of the research design or motivation of this thesis, but it was considered important as in the sample there more than one practitioners were included.

Teaching is considered a challenging and sometimes a not straightforward procedure. It includes a process in which there is a constant decision making which is highly influenced by the previous and later situation (Hewitt & Edwards, 2013). It is interesting to note that the majority of the teachers are not completely aware of the teaching style they embrace and how their beliefs impact students' learning (Farrell, 2016). This places great importance of a further investigation of this matter and to find a way to support teachers to embrace a beneficial style for their students.

Nowadays, researchers put great emphasis on the effects of teaching styles in students' school performance. They are very concerned about students' reaction and their links to different teaching styles during every day educational interactions. Tulbure (2011) was one of the researchers that contributed in this area with her research study. She supported that effective learning is highly linked when teaching styles show an awareness to students' learning preferences. Putting students in the center of their learning journey and enabling them to have an active role by responding accordingly to their needs is very important. Effective teaching means being responsible, flexible and creative during the everyday interactions with students and being able to respond to their upcoming needs (Tulbure, 2012).

However, the investigation of the effects of the different teaching styles has started a long time ago, with researchers to put emphasis on the effects of teaching and try to define the meaning of the term style. Bree-Fischer & Fischer (1979) explain that styles are concepts that provide examples that describe the teaching and learning process. In other words, they describe attitudes and behaviors that are obvious during the teaching and learning process. Some years later, Grasha (1994) suggested a model in which he categorized the different teaching styles according to the role of the teacher. Being more specific, he categorizes the teaching styles in expert, formal authority, personal model, facilitator and delegator. According to Grasha (2002) each teaching style is described as follows:

- **Expert**, is when the teacher is perceived as very knowledgeable and provides thorough explanations in students' questions. This style is emphasized on asking questions to students and focusing on understanding of the key concepts. The advantages of this style is that the teacher is qualified with the necessary knowledge and skills but this might not have a positive outcome to less experienced students as they might will be afraid to ask simple questions.
- **Formal authority**, is associated with providing constant summative feedback to students about their performance. Teachers who practice this teaching style have specific expectations from their students and set clear goals and objectives. The advantage of this teaching style relies on the fact that students have a clear understanding of the expectations the teacher has from them. However, this style does not take into consideration the individual learning pace of each student.
- **Personal model** means that the teacher acts as a role model for the students and provide formative feedback for their performance. The teacher is concerned about the ways that can support students to enhance their skills and work in collaboration with the students. An advantage of this teaching style is that the teacher enables students to gain a first-hand experience of the related concepts. On the contrary, a disadvantage is that as the teacher is a role model and thus, there might be an emphasis on an exact imitation of their actions without giving students the opportunity to discover their paths.
- **Facilitator** also provides formative feedback to students and is concerned about the ways that can enhance students' skills. A difference with the previous teaching style is that the teacher is an active listener to students' needs and gives them a leading role in their learning by taking into consideration their ideas in the learning activities. This teaching style shows flexibility and follows a student-centered approach but when it comes to challenging behaviors it might not be as effective as the formal authority one.
- **Delegator** supports students' autonomy and independence and delegates responsibilities to students. It is also in favor of student-center learning but this time the teacher is perceived as a consultant that can provide information when needed. This style has a great positive impact on students' learning as they have a leading role in this procedure. However, the teacher might underestimate or overestimate students' abilities and allocate them tasks that are either too easy or beyond their abilities.

It has to be acknowledged that Grasha (2002) did not make any argument about which teacher style is better comparing with the other ones. He suggested that there should be a combination of them according to students' characteristics and the learning situation. His model had a great effect in the educational field and subsequent research, as a lot of researchers adapted it in their theoretical framework. Ak-Ronald

(2014) is one of the researchers that included this module in his research by investigating the dominant teaching styles and also shedding light on students' preferences. He supported that expert was the most common teaching style that was implemented by teachers following by the personal model and the delegator. Regarding the students' preferences, formal authority was the least favorite one and facilitator was among the top students' preferences. Although, it is better for a teacher to adapt a teaching style according to the upcoming situation, it is worth considering students' preferences regarding this as a good way to follow their interests.

Another dominant categorization of teaching styles is also obvious in the literature which puts emphasis on production and reproduction of knowledge. Teaching styles that focused on **reproduction** of knowledge are associated usually with teacher-led approaches, in which the educator puts emphasis in giving instructions to students in order to discover and achieve knowledge (Hewitt & Edwards, 2013). This approach stress the importance of continuous practice in order to meet the expected outcome. On the contrary, teaching styles that focused on **production** of knowledge are linked with student-center approaches, in which the educator enables students to have an active role on their learning (Chatzipateli et al., 2015). In this approach, students often initiate the learning interactions and have autonomy in their learning journey.

In an effort to create a link with the previous categorization, Grasha's model about teaching styles can be associated with this categorization. A teaching style that is focused on the reproduction of knowledge have a lot of similarities with the formal authority teaching style as they both focus on direct instructions and guidelines. On the other hand, teaching styles that focus on the production of knowledge have common grounds with the facilitator as they both consider students' need and enable them to reach knowledge. It has also similarities with the delegator as they both promote students' autonomy and independency during the teaching and learning procedure.

From the all the above teaching styles, the **facilitator approach** has been considered as the most effective one. Testing the effects of a facilitator teaching style in practice, a lot of researchers conclude on the benefits on teaching and learning. A facilitator approach creates a <u>pleasant environment</u> in which everyone wants to participate in and is accepted by all the members of the team (Farrell, 2016; Won et al., 2015; Schwarz, 2005). It puts great importance to students' needs and this results in high levels of participation within the team. It can be argued that this approach has also a lot of similarities with the framework that is provided by the arts. This is linked strongly with the art activities, as the arts also provide a satisfactory environment, in which everyone wants to participate with their free will. Similar to the facilitator, the

arts manage to bridge the gap that exists among people and to create bonds. Since participants feel comfortable, this will result in better opportunities for learning.

A pleasant environment leads to collaborate learning, which is something that is also linked with the facilitator approach and the arts. The concept of belonging encourages students to learn together in a collaborative way (Farrell, 2016; Won et al., 2015). Students are able to use each other's experiences and ideas in their learning journey and they exchange ideas and thoughts that they would not come up if there were doing this procedure individually. This relates back to social constructivism theory (see chapter 3.2.1) which suggests that social interactions are critical in the construction of knowledge. The arts also offer a collaborative environment in which participants exchange ideas and influence one another in their learning journey. Students when practicing art activities have an impact on other students' thoughts as they convey ideas and individual representations of reality. In this procedure they often influence other people's work. In addition to this, focusing on the education setting art activities are often group activities that derive from students' innate desires and thus, they collaborate in order to reach the desired outcome.

Lastly another benefit that has been associated with the facilitator in relevant pieces of research is that promotes active learning. When teachers embrace a facilitator teaching style, students manage to express themselves more and to initiate meaningful interactions with the focus on learning (Won et al., 2015; Sormunen et al., 2013). This encourage students to construct knowledge through interactions and to become more confident which is again something that is strongly related with the arts. Art activities support the fact that there is not right or wrong and that participants have the freedom to act according to their individuality. This results in greater gains in self-confidence as the participants can try a lot of learning pathways and decide what is best for them.

Summarizing the above discussion, there was a description of the definition of teaching and an analysis of the different teaching styles according to literature. It was argued that teaching is a challenging procedure and that the unconscious beliefs of the educators have a great impact on students' learning. An analysis was provided according to the different categorization of teaching styles with the facilitator approach to be perceived the most beneficial one comparing with the rest ones. Relevant links were made with the arts activities as the main focus of this thesis. After the review of literature about the different teaching styles, the facilitator approach has been highly considered in the research design and more specifically in the suggested interdisciplinary framework. Considering the benefits of this teaching style, the suggested teaching interactions was based on the principals of the facilitator in order to support children's learning journey in literacy while using the arts.

7.1 Summary of the seventh chapter

To briefly summarize, in the seventh chapter there was a discussion of the different teaching styles and their effects in learning. Although this was not one of the topics or a motivating factor of this thesis, it was considered crucial to be analysed as the teaching intervention was implemented by different practitioners. Within this discussion, there was an analysis of the content of teaching and the different teaching styles that have been suggested in the existing literature. In an effort to create meaningful links, the similarities of these different categorizations of teaching styles were discussed. The discussion was further illuminated by the teaching style that has been perceived as the most advantageous one in literature and relevant links were made with the arts.

Having discussed all the necessary theoretical parts of this thesis there is a need to describe the methodology and the ethical considerations of this thesis. The next chapter is devoted in this, explaining the research design and the methodological choices.

8. Methodology

In this chapter there will be an analysis of the research design, the methodological choices and the research methods of this thesis. An analysis of the statement of the problem, the purpose and the research questions, will be provided.

8.1 Problem statement

Based on Eisner's (1998:10) argument that there is not enough research that proves the positive contribution of the arts on students' school performance, a lot of researchers carried out relevant studies. The previous literature review (see chapter 4) showed the benefits of interdisciplinary research and the benefits of the arts in children's literacy performance. Although there is research with this focus there is an over-emphasis on music as a kind of the arts and on phonological awareness (see chapter 4). Usually, researchers examine only one part of literacy and one kind of arts and there is no research that compares the effects of different kinds of the arts in the early years. Gaps were also identified about the association of the arts with social skills, literacy as a social practice and involvement. These gaps formed the problem statement of this thesis. There is a clear need to review the effects of the arts holistically in children's performance and include the aspect of emergent literacy as a steering wheel of every educational intervention.

8.2 Purpose and research questions

The **aim** of this research was to investigate an interdisciplinary approach of the arts and literacy in children's performance in literacy and social skills, involvement and literacy as a social practice in the age group of 5-6 years old. More specifically, it was investigated if there were the arts in general or a specific kind of the arts that could contribute more to children's performance in literacy and social skills, involvement and literacy as a social practice. For this reason, there was a comparison among 3 different forms of the arts in terms of literacy and social skills, of children's involvement and of children's use of literacy as a social practice. It was expected that drama play would contribute more and had better outcomes in children's performance, as according to Sionti & Papadopoulos (2011) and Fleming et al. (2004) it requires more participation and has greater levels of freedom. The **research questions** were:

1. What are the effects on children's literacy skills when they are interacting with the arts?
2. What are the effects on children's use of literacy as a social practice when they are interacting with the arts?
3. What are the effects on children's social skills when they are interacting with the arts?
4. What are the effects on children's involvement when they are interacting with the arts?

8.3 Participants

The participants were selected through a probability sampling technique and more specifically using simple random sampling. According to Cohen et al. (2011), probability samples indicate a random selection from the wider population. In the simple random sampling the researchers select randomly the participants from a list (ibid). In this study, a list was made with all the early years schools in Attica in Greece and there was a random selection of 20 of them. There was a face-to-face meeting with the head of each school and the practitioners to explain the purpose and the content of the study. In the end, the schools that agreed to participate contained the sample of this thesis.

There were 4 early years classrooms, 3 from the private sector and 1 from the public sector from 3 schools in total. One school from the private sector agreed to participate with 2 different early years classrooms. The early years classroom from the public sector agreed to participate in the pilot and the final study. In total, there were 83 students and 4 early childhood teachers, with 22 students in the pilot study and 61 students in the final study. In the final study, there were 3 experimental groups and 1 control group, which was a free choice of the practitioners if they are going to participate in the experimental or in the control group. The first experimental group had 18 students, the second one had 15 students, the third one had 14 students and the control group had 14 students. The background characteristics of each group are further analyzed in chapters 9.1.1 and 9.2.1.

8.4 Procedures/Intervention

A mixed method approach was embraced as the paradigm of this research as both quantitative and qualitative data was gathered. Mixed method research has derived from the fact that the world cannot be divided just to quantitative or qualitative but sometimes there is a need to adapt both methodologies (Cohen et al., 2011; Bryman, 2008). A naturalistic setting was used to all groups, using the setting of their classroom as the place to implement the intervention. This choice was made as there are significant benefits regarding children's familiarity with the setting and there is an effort not to disturb them.

The research approach was based on an experimental design with control and experimental groups. It also embraces some aspects from action research and more specifically the aspect of collaborative work, reflection and feedback of the teaching and learning process. According to Cohen et al. (2011) an important feature of experiments is the manipulation of the variables while introducing an intervention. On the contrary, in action research the staff is working together in order to make improvements in their practice and sometimes an outside researcher is working with them (Mukherji & Ablon, 2015). One of the basic principles of action research is the constant reflection and link with the educational practice (Cohen et al., 2011). Both of the above features of an experimental design and action research were obvious in the

research design of this thesis, as there were experimental and control groups but there were no ready-made solutions to the practitioners as they had to reflect on students' needs to organize their practice.

Linking the theoretical framework of literacy, which was discussed earlier (see chapter 2), with the experimental design of this study, the intervention was based on the argument that emergent literacy is the cornerstone of children's development of literacy. In addition, considering the problem statement there was an effort to examine literacy holistically and not as separated skills. Therefore, literacy was not divided in fragmented skills but it was considered as an area of learning that has different aspects. An interdisciplinary approach was suggested in which the students and the practitioners use the arts as a stimulus to begin literacy activities. There were no ready-made solutions and lesson plans given to the practitioners as this practice is in contrast with the argument of following children's interests. However, general guidelines were given to the practitioners of how this could be implemented in practice. After the pilot study, it was obvious that the practitioner needed more support in the way that she could implement this in practice. Therefore, an interdisciplinary framework was designed with more examples and guidance regarding the practical implementation of the steps.

The suggested interdisciplinary framework embraces the social construction of learning and the benefits of collaborative learning. It is based on the stages of Project method, with an effort to enrich practitioners' practices and not replace them. Students have an active and leading role and they had to collaborate in every step of this framework. Practitioners act as a facilitator of the whole procedure. Emergent literacy skills are the steering wheel in every literacy activity within this framework. The steps in the suggested interdisciplinary framework are not linked directly to a specific kind of the art. Thus, the participants of each setting are free to select one kind of the arts, which will use it in order to develop literacy. Being more specific, the following five steps in Table 6 are suggested on a weekly/monthly basis:

Table 6. Suggested Interdisciplinary Framework

Steps in the suggested Interdisciplinary Framework	
Step	**Description**
1.Let's start	The students with the practitioner select the topic they want to investigate. This might come from children's interests during their play, practitioners' observations, an unexpected event or a daily announcement that triggered the attention of the team.
2.The arts	The students and the practitioner investigate the topic through the selected kind of the arts. For example, discuss relevant paintings, discuss and play puppetry or drama. The practitioner acts as a facilitator of the process.
3.Decide/Emerge literacy	Considering the selected kind of the arts, the students with the practitioner decide the activities they want to do regarding this topic. Children have a leading role and they collaborate to develop their

	thinking. The practitioner acts as a facilitator and supports children to include literacy activities.
4.Prepare/Implement	They allocate roles in order to prepare the necessary materials for the activities and then they implement the decided activities. *This usually is the longest one.*
5.Reflect & move on	Children with the practitioner reflect on the activities and discuss the general process. Some indicative questions could be: • How much did I like them? • How much did I help my friends or did they help me? • What did I learn? • What did I like most? • What could I do better? • What else could we do? The practitioner reflects on the teaching and learning procedure. Some indicative questions could be: • How much did I intervene in their learning? • How much did I support them to use their emergent literacy skills? • Were the activities appropriate for their age and abilities? • What could I do better? • What else could I do? Following this reflection, the team decides if there are more things they want to do with this topic or if they want to move on another topic.

This suggested interdisciplinary framework was embraced by the three experimental groups and it was implemented alongside with their existing practices. The duration and the frequency was depended on the interests of each group with a suggested time schedule of three times per week for 20-30 minutes per time. The intervention took place a full school year, starting from October and ending in May. This time length was selected as students had the opportunity to show their full potentials and benefits from the intervention. This was also beneficial as they had the necessary time to familiarize themselves with this interdisciplinary approach and way of learning. It was considered more beneficial to start the intervention in October and not in September, which is the beginning of the school year, as students need a period to adapt themselves in the school setting and daily routines.

The suggested interdisciplinary framework was implemented by the practitioners as part of their everyday activities and the pedagogical projects that were developed are described in appendix 8. There was an induction period before the implementation of the intervention, in which the practitioners familiarized themselves with the different steps of the suggested interdisciplinary framework. During this training, good examples and best practices were provided. In order to support them fully in this procedure and eliminate any influencing factor of different practices there were several consultation meetings at the beginning and during the intervention. The

purpose of these meetings was to discuss any matters arising, solve possible queries, find extra resources and discuss their progress. In addition to this, all the required art resources were provided to the practitioners according to their needs for example laminated paintings, biography of the artist, information of art movements, music, materials and resources for the puppetry and drama play.

Lastly, in order to eliminate any influencing factors among the experimental and the control groups, the students in the control group participated in art activities that were implemented from an art teacher. This was part of their everyday curriculum. Regarding the literacy activities in the control group, the practitioner was following the guidelines of the Greek Early Years curriculum, which is the expected practice in the Greek early years settings.

8.5 Data collection measures

Several qualitative and quantitative measures were used in order to answer the research questions and meet the aim of this thesis. This chapter analyses the different data collection measures and explains the selection choices.

8.5.1 Observation: Narrative method

Practitioners' teaching styles have the opportunity to influence the learning procedure and performance of the students. One main argument is that they can focus on the authentic production of knowledge or a simple reproduction of knowledge (Chatzipateli et al., 2015; Hewitt & Edwards, 2013) and this will result in different teaching and learning outcomes. Therefore, when implementing a practical intervention with different practitioners, it is crucial to investigate if there is a common ground in their teaching interactions with children. As there were four different practitioners that took part in this research project, there was a clear need to verify that there were no differences among their teaching styles.

A naturalistic, qualitative, non-participant observation was selected to address this issue. Observation is a powerful tool in the hands of researchers as they have the opportunity to gain first-hand experience and a better understanding of the topic under investigation (Papatheodorou et al., 2012). Taking into consideration Farrell's (2016) argument that practitioners most of the time are not aware of their unconscious decisions, observation was considered the best research method to investigate the similarities of the practitioners' teaching styles. The observation used the narrative method and took place in the classroom of each practitioner during the everyday activities. Narrative observation is a descriptive record of what the participant does or say including some contextual information (Mukherji & Ablon, 2015; Papatheodorou et al., 2012). Each practitioner was observed using this method by the researcher for two different days during everyday activities. Being more specific, there was a record of the practitioners' activities, attitude and interactions with children during organized and free play activities during the day. The aim was to

gather data regarding their reactions, stance and support to children in order to understand their teaching style and see if there are any differences that might affect the outcomes of the intervention. This data was used afterwards in the data analysis to examine if there are major differences in their teaching style and to examine with which teaching style of Grasha's model (see chapter 7) can be linked. Due to time and space limitations the full data is not described as an appendix. Instead, some indicative extracts are presented in the data analysis chapter and more specifically in chapter 9.2.2.

8.5.2 First research question: PIPS

In order to answer the **first research question** '*What are the effects on children's literacy skills when they are interacting with the arts?*' the <u>Performance Indicators in Primary Schools (PIPS)</u> was used. PIPS is provided by the Centre for Evaluation and Monitoring (CEM) of Durham University in UK.

PIPS is designed to measure children's performance in literacy and maths, but for the purpose of this study only the first part was used. This part assessed children's performance in literacy and more specifically in writing, picture identification, ideas about writing, rhyming words, repeats and letter/word identification. PIPS is a standardised test that is widely used at all the schools across the UK to measure children's performance in literacy and maths. It has to be acknowledged that is a measurement with a very good structure which focuses on literacy skills and more specifically on literacy as a means of communication. This means that it includes and examines the receptive and productive skills, which are necessary for people's communication in the society. A basic reason for the selection of this test was the fact that it offers data for children's literacy performance from a holistic point of view and does not focus in one particular area of literacy.

As it was argued in chapter 2.2, literacy as a means of communication is a very important factor in the development of literacy as a social practice because it provides the necessary skills to interact effectively during social literacy and more specifically during literacy events and literacy practices. PIPS was considered a useful tool for the purposes of this thesis due to the fact that it does not focus on one specific group of literacy skills but it includes a variety of them providing a complete picture of children's literacy performance in literacy as a means of communication. An essential factor for selecting this test was that it examines literacy holistically and investigates children's literacy performance in a variety of literacy aspects e.g. a mixture of productive and receptive skills. Therefore, this was considered as a great advantage and benefit in selecting this measurement. In addition, another reason for selecting this measurement was the fact that it embraces a positivist paradigm and provides quantitative data regarding literacy performance. This was very useful as it has the

opportunity to provide numeric data and compare very quickly children's literacy performance among the different groups. Quantitative approaches are considered beneficial when there are controlling variables (Mukherji & Albon, 2015). Considering the fact that this thesis used a mixed method approach (see chapter 8.4) with the aim to examine the relationship among the different art forms and children's literacy performance, PIPS was considered as a very good measurement as it is a quantitative measurement and it also provides thorough and comprehensive data regarding the aspect under investigation.

It has to be acknowledged that PIPS has some strong advantages, which were the main reasons for selecting this tool for this project, but there are also some points that need to be considered carefully and review them critically in a future implementation. First of all, it does not include or investigates the social dimension of literacy and more specifically the social activities that embrace literacy e.g. literacy events and literacy practices. PIPS focuses on measuring practical literacy skills e.g. listening, reading, speaking and writing with quantitative methods. As a result of this, it offers good quantitative data which can provide the general picture of children's progress but it does not provide any qualitative information about the reason of this progress. Therefore, in analysing and discussing the results, it is not possible to reflect on the reasons of this progress just by using this test. In addition to this, another point that needs to be considered is the fact that PIPS does not have a direct link with the arts that is the main theme of this research project.

As mentioned before, PIPS is a standardised test in the UK context. For the purpose of this study, the first part of PIPS was translated and adapted in the Greek reality by the researcher (see appendix 3). There was a pilot implementation of the translated version to a small group of students before it was used in the pilot and final study to measure the outcomes of this project. The main reason for this was to identify any confusing areas for the children. However, it has to be acknowledged that it was not standardised in the Greek settings like it was standardised in the UK settings due to time constrains. There was a pre-test and a post-test using PIPS by the researcher in both experimental and control group and in both pilot and final study.

8.5.3 Second research question: AA/P
In order to answer the **second research question** '*What are the effects on children's use of literacy as a social practice when they are interacting with the arts?*' the authentic assessment was used. According to Woolfolk (2007), authentic assessment means the measurement of real abilities, capabilities and knowledge that exist in real situations. It was considered as the best way to measure literacy as a social practice as in both there is an emphasis in real situations and activities that take place in everyday life.

For this purpose, the <u>Authentic Assessment/Portfolio (AA/P)</u> measure was developed that was based on the principles of authentic assessment. It was developed by the researcher and implemented by the practitioners at the beginning and the end of the intervention in both experimental and control group and in both pilot and final study. The design of this measure went through two different stages, considering the practitioner's feedback of the pilot study.

In the initial stage of the AA/P, there were general guidelines that were given to the practitioner of the pilot group in order to help her to guide her thinking during the data collection. It was expected that the practitioner would observe children during the school year in order to gather data regarding the suggested areas (see table 7).

Table 7. Initial stage for AA/P in Pilot Study

Means for gaining knowledge and learning	Team and self-evaluation	Daily logs	Team discussions
For example	For example	For example	For example
• Use the resources from their environment	• Assistant in writing an invitation	• Try to read/write a text/words	• Describe their home activities
• Ask help from the practitioner	• Areas of best performance	• Embed literacy aspects in their play	• Describe the steps of an activity
• Ask help from their peers	• Areas of improvement	• Ask from their peers/practitioner to write	• Explain the reason of a result/action

However, during the consultation meetings, it was obvious that the practitioner needed more support during this process and a more enhanced framework. In order to meet the needs of the practitioner and act on this feedback, the AA/P checklist was designed (see appendix 5). As this feedback came towards the end of the pilot study, the AA/P checklist was used only in the final study. In the design of the AA/P checklist there was an effort to take advantage the benefits of both qualitative and quantitative approach. Therefore, this checklist designed in order to take qualitative data and quantify it about children's use of literacy as a social practice. Being more specific, it was based on practitioners' qualitative observations throughout the year, which enabled them to make an overall judgement of children's performance in this area before they fill out the checklist. The observations were based on the early learning goals of the prime area 'Communication and Language' and the specific area 'Literacy' according to the Greek National Curriculum for the Early Years. The checklist gathered information about children's use of literacy as a social practice in the following areas: listening, participation in discussion, articulation, reading and writing. This measure was implemented by the practitioners at the

beginning and the end of the intervention in both experimental and control group in final study.

8.5.4 Third research question: PSD

In order to answer the **third research question** '*What are the effects on children's social skills when they are interacting with the arts?*' the Personal and Social Development (PSD) was used. PSD is provided by the Centre for Evaluation and Monitoring (CEM) of Durham University in UK.

PSD is designed to evaluate children's social development by examining three different areas: adjustment, personal and social development. In the adjustment section it examines areas such as comfortable and independence. In the personal section, it examines areas such as confidence, concentration on teacher-directed and self-directed activities and action. Finally, in the social section, it examines areas such as relationships to peers and adults, rules, cultural awareness and communication. It is based on practitioners' observations and takes qualitative data and quantifies it by categorizing the data on a 5-point Likert scale. For this scale several examples are provided that capture the expected behaviours in each scale and area. An important factor for choosing this test was that it provides a broad perspective of children's social development, taking into consideration a variety of different areas. It offers quantitative results that can be illuminated and supported by qualitative data. This part was translated in Greek by the researcher (see appendix 4) and there was a pilot implementation of the translated version by the researcher to capture any mistakes. Further feedback was received by a small groups of practitioners. This test was implemented by the practitioners at the beginning and the end of the intervention in both experimental and control group and in both pilot and final study.

8.5.5 Fourth research question: LIS-YC

In order to answer the **fourth research question** '*What are the effects on children's involvement when they are interacting with the arts?*' the Leuven Involvement Scale for Young Children (LIS-YC) was used. LIS-YC is developed by Laevers (1994) to measure the levels of children's involvement during educational activities. It is based on observations and takes qualitative data and quantifies it. It examines holistically children's levels of involvement and seeks to gather data using nine signals such as concentration, energy, complexity/creativity, facial expression/posture, persistence, reaction time, language and satisfaction. It also categorizes the levels of involvement in low activity, frequently interrupted activity, mainly continuous activity, continuous activity with intense moments and sustained intense activity.

A critical factor for selecting this measure was that it examines involvement considering different aspects of children's attitude during an activity. This means that it provides rich and detailed data in order to explain children's involvement and general attitude. Another fundamental factor was that it includes the benefits from

both qualitative and quantitative methods. This test was not translated in Greek as it was used by researcher only (see appendix 6). There was a pilot implementation to a small group of children in order to give the opportunity to the researcher to familiarize herself with this procedure. This test was implemented once at the middle of the intervention in both experimental and control group and in both pilot and final study.

8.5.5 Interview with the practitioners

At the end of the intervention, semi-structured interviews took place with the practitioner of the pilot study and the practitioners of the experimental groups of the final study. The purpose of this interview was to gain feedback and gather supplementary data regarding the implementation of the suggested interdisciplinary framework and children's performance. In addition to this, it was aimed to compare the data from the interviews with the data from the above measures.

An interview was selected, as it is important to know the practitioners' perspectives in any new teaching approach because they can have a strong impact on children's performance. According to Lewis & Ginsburg-Block (2014), it is very important to gather the views of all the participants that contributed in a research project. A semi-structured interview was considered the best choice as according to Mukherji & Albon (2015) it enables the researchers to guide their thinking but it also provides them the necessary flexibility to follow the interviewees' need. The semi-structured interview was designed for the purpose of this study and contained questions from four different areas: <u>Academic and professional achievements</u>, <u>Personal teaching approaches and strategies</u>, <u>Implementation of the interdisciplinary framework</u>, <u>Children's development within the interdisciplinary framework</u> (see appendix 7).

8.6 Reliability

Reliability in research is one of the most important aspects in social sciences. However, it has a different meaning according to the methodology the researchers embrace each time.

In <u>quantitative methodologies</u>, reliability is associated with stability and internal consistency. Considering <u>stability</u>, a reliable quantitative method will give the same results when implemented in the same or a different group of participants in a different period of time (Mukherji & Ablon, 2015). In this occasion an important factor is the memory of the participants because if the test and re-test are implemented in a short period of time then this might affect the outcomes. In the current research, there was an effort to safeguard the stability of the quantitative methods. For this reason, there was an adequate time period between the pre-test and the post-test of the measures in order to avoid any factors that might affect the outcomes. This was one of the reasons that a full school year was selected to implement the intervention.

Internal consistency is the level to which the different items on a measure examine the same thing (Cohen et al., 2011). This gives the opportunity to the researchers to examine whether the items aggregate the participants' responses. Cronbach's Alpha is used to test internal consistency of multiple indicator quantitative methods. The expected result is 0.8 and above, which shows an acceptable level of internal consistency (Bryman, 2008). In the current research there was a good level of internal consistency of the quantitative methods as there was a 0.8 and above score in Cronbach's Alpha test (see chapter 9.2.3).

On the other hand, reliability is slightly different in qualitative methodologies. In these occasions, it is concerned with the researcher's judgement when collecting and analyzing the data (Mukherji & Ablon, 2015). In other words, it is whether the collected data corresponds to the actual data and the previous experience of the observer or the interviewer is very important. In order to safeguard this issue, the practitioners that conducted the observations were qualified teachers with a good level of experience in the early years settings. They were all aware of the importance of observation in making judgements of children's development and were using this tool as an essential tool in their work. This also applies for the interviewer that conducted the interviews at the end of the intervention. She was aware of the importance of informal discussion with the key persons to understand children's development and had relevant experience through her professional experience. Therefore, it can be argued that there was a good effort to safeguard the reliability of the qualitative methods of this piece of research.

8.7 Validity

Validity is also an essential part of research in social sciences. It is generally associated with the truth of their findings and most of the time this can be reached with triangulation techniques (Mukherji & Ablon, 2015). Triangulation is often interpreted with the use of multiple methods during the data collection (Cohen et al., 2011). This will give the opportunity to researchers to gain a holistic view of the topic under investigation. It can be argued that this thesis considered carefully the validity of the findings as both qualitative and quantitative methods were used. In addition to this, all of the measures that were implemented to examine children's progress, were taking qualitative data and quantified it.

Focusing on validity and considering different research paradigms, it is obvious that it has again a different meaning according to the paradigm the researchers will follow. In quantitative research, validity is concerned with the extent of whether the measures examine what they supposed to examine (Mukherji & Ablon, 2015). When examining validity there is a distinction in internal and external validity.

Internal validity is concerned whether there is a causal relationship between the different variables under examination (Bryman, 2008). In other words, researchers need to make sure that there are no influencing factors that might affect the outcomes

of their intervention. In this research, relevant efforts were made to safeguard the internal validity of the quantitative methods. Firstly, there was a pre-test and a post-test which was used to examine children's progress. Secondly, additional data was collected regarding children's background characteristics and complementary tests were conducted to examine if there was a significant impact on the outcomes. Thirdly, there was an examination among control and experimental groups in order to testify the effects of the intervention against a sample that did not implement the suggested approach. External validity is the level that the findings can be generalized to the wider population (Cohen et al, 2011). A critical factor for this is the sample size and the randomized sampling technique. It has to be acknowledged that in this piece of research there was a random selection of the participants and a good overall sample size. However, a bigger sample size would have been preferable.

On the other hand, in qualitative methodologies validity has a slightly different meaning. It is associated with a complete and truthful representation of the reality (Mukherji & Ablon, 2015). The terms internal and external validity are again related with a different content.

Internal validity in qualitative research is viewed as the authenticity of the data. In practice this means giving the opportunity to the participants to express their meaning of the data (Cohen et al., 2011). This is really important as by enabling the participants to express their understanding of the aspect under investigation we can see the true effects on their lives. In an effort to safeguard internal validity of the qualitative methods of the current piece of research, we enriched our data with an interview of the practitioners in the experimental groups. During the interview, practitioners had the opportunity to reflect on their informal discussions with children and on their experience during the intervention. External validity in qualitative research is associated with the comparability and the transferability of the findings. Researchers are often concerned on how the data can be similar in different cultures and settings (Cohen et al., 2011). It has to be acknowledged that the current study included different schools to examine the effects of the arts. In the sample there were also children from different cultural background in the sample. However, more and different cultural background would be preferable.

8.8 Ethical Considerations

Ethics is the most crucial part of a research especially in the field of early childhood considering the issue of the vulnerability of the participants. In relation to research, ethics mean the way the researchers should treat the participants and the collected data (Mukherji & Ablon, 2015). Safeguarding the ethics of a research project contains some important principles that researchers should follow.

Inform consent of the participants is one of the most important principles of ethics. It means that the participants have a good understanding of the content of the research and they give their consent to the researcher to collect data from them (ibid).

Regarding young children, this often takes place by obtaining inform consent of their parents and by not forcing children to participate in the research project. In the current research, this aspect was highly considered. Before conducting any research, the approval of the ethical committee of the Ministry of Education of Greece were obtained (Ref. No. Φ15/703/149971/Γ1). Following this, there was a discussion with the head of each setting and the practitioners in order to explain to them the content and the purpose of the research project. Having their consent, the approval of the children's parents was also sought. There were group and individual meetings with parents in order to explain to them the purpose and the procedures. Consent letters were hand out to participants and parents, explaining in detail the above matters (see appendix 1 & 2). Regarding children's participation, there was no force to them to participate and the whole procedure and tests were implemented with playful activities. It has to be acknowledged that when researchers inform the participants about the content of their research and ask for their permission, the aspect of free participation should be stressed (Cohen et al., 2011). In this research project, during the meetings with all the participants, it was highlighted that their participation was voluntary and that they have the right to refuse or withdraw without giving any explanation.

Anonymity and confidentiality are also two basic principles of ethics. When conducting a research project, it is critical to eliminate any factors that might affect the privacy of the participants (Bryman, 2008). This is really important when analyzing the data and present the findings. In order to respect participants' privacy, the presentation of the findings should be done in a way that it is not possible to identify the participants. In the current research project this was highly considered and the anonymity and confidentiality of the participants were safeguarded carefully. In order to achieve this, the data collection was made with a coding system. In the presentation of the findings and the description of the sample, the true names of the settings and the participants were not used. Instead initial letters and codes were used to describe the general characteristics of the sample and the data. In addition, the confidentiality of the collected data was safeguarded by not sharing any information to third parties.

Avoid any harm to participants is another principle that researchers are very careful about. Maltreatment of the participants in any way is considered unacceptable. Harm can include issues like physical abuse, stress, negative impact in their self-image and self-esteem etc. (Bryman, 2008). This aspect was dealt very carefully in the whole research procedure. Regarding the practitioners, there were constant consultation meetings in order to make sure that they feel supported and that the appropriate assistance was provided to them. Regarding children, the whole intervention and tests took place with playful activities as part of their everyday program in their school setting. Therefore, there was an effort not to upset them or make them feel uncomfortable.

Last but not least, <u>deception</u> is also one major issue that researchers should consider carefully before conducting any research project. It is really important to reveal the truth of the content of the research project to the participant and not to deceive them when seek their permission (Bryman, 2008). However, a counterargument in this could be that the participants might change their behavior in order to fit to the expected behavior that the researchers are investigating (Cohen et al., 2011). In this piece of research, there was no effort to deceive the participants as their informed consent was highly considered. During the group or individual meetings in order to gain their permission, the true content and purpose of the research study was reveal to them and they also had the opportunity to ask questions if there were any areas that they did not understand fully.

9. Data analysis and discussion

The **aim** of this research was to investigate an interdisciplinary approach of the arts and literacy in children's performance in the age group of 5-6 years old. More specifically, it was investigated if there were the arts in general or a specific kind of the arts that could contribute more to children's performance. For this reason, there was a comparison among 3 different forms of the arts in terms of literacy and social skills, of children's involvement and of children's use of literacy as a social practice. It was expected that drama play would contribute more and had better outcomes in children's performance as it requires more participation and has greater levels of freedom. The **research questions** were:

1. What are the effects on children's literacy skills when they are interacting with the arts?
2. What are the effects on children's use of literacy as a social practice when they are interacting with the arts?
3. What are the effects on children's social skills when they are interacting with the arts?
4. What are the effects on children's involvement when they are interacting with the arts?

To meet the aim of this research project and answer the 4 research questions, the interdisciplinary framework that was designed (see section 8.4) was initially implemented in a pilot school using paintings. The outcomes were tested using the following measures: PIPS, PSD and LIS-YC (see section 8.5.2 & 8.5.4) and there were some semi-structured observations to meet the 2nd research question. At the end of the intervention, there was a semi-structured interview with the practitioner to provide further insights regarding the interdisciplinary framework and the intervention. Conducting a pilot implementation of the research procedure, provided us valuable feedback regarding the interdisciplinary framework's content and the assessment methods. It was also served as a valuable practice for the researcher to familiarise herself with the process and correct any upcoming challenging issues.

Following the pilot implementation, the necessary amendments were taken place in the interdisciplinary framework and the whole intervention and then there was the final implementation in order to meet the aim of this research project and answer the 3 research questions. More specifically the interdisciplinary framework was implemented in 3 experimental groups and the outcomes was tested against a control group. Each experimental group was implementing one form of the arts through the interdisciplinary framework. Experimental Group 1 (EG1) used paintings, Experimental Group 2 (EG2) used drama, Experimental Group 3 (EG3) used puppets and Control Group (CG) used the typical teaching methods of the Early Years Curriculum (see table 8).

Table 8. Experimental and control group

Groups	Kind of the arts
Experimental Group 1 (EG1)	Paintings
Experimental Group 2 (EG2)	Drama
Experimental Group 3 (EG3)	Puppets
Control Group (CG)	Typical teaching methods of the Early Years Curriculum

9.1 Pilot study

Before the final implementation of the interdisciplinary framework and the intervention, the research procedure was tested in a pilot case study from an early years setting in Greece. This school was located in a Greek island in Saronikos bay near Attica. This setting was chosen randomly because the head teacher of the school was eager to participate in this study. This teacher had also some artistic experience as she was a volunteer actor in the local theatrical team of the island for some years.

Following the pilot implementation, this school was interested to participate in the final study and was the EG3. For this, the data from the observation regarding the practitioner's teaching practices is analyzed at chapter 9.2.2 in the final study and not in the pilot study to avoid repetition.

9.1.1 Pilot study: Background characteristics

In the pilot case study, in total 25 parents agreed for their children to participate in the study but one of the children changed school in the middle of the school year. The pilot case study was implemented one school year before the final study and more specifically in the school year 2013-2014. From the final cohort two children haven't been included in the measurements as one had a diagnosis of Autism Spectrum Disorder and in the other one there was a suspicion of severe learning difficulties. However, both of them participated fully in the research procedure and activities. The final number of the children who participated and measured in the pilot school was 22 of which the 46% (n=10) was male and the 54% (n=12) was female, which maintains a slightly equal number among **gender** with girls to have a higher percentage from boys (see table 9). The **average age** of all children in the pilot school in total was 57.55 months in the pre-tests, with a minimum age of 46 months and a maximum age of 69 months. In the post-test, the average age of all children was 64.55 months, with a minimum age of 53 months and a maximum age of 76 months (see table 10).

Table 9. Gender distribution in pilot school

Gender			
Boys		Girls	
Frequent	Percent	Frequent	Percent

Pilot school	10	45.5%	12	54%

Table 10. Age in months in pilot school

	Age						
		Age in Pre-Test			**Age in Post-Test**		
	N	**Min**	**Max**	**Mean**	**Min**	**Max**	**Mean**
Pilot school	22	46	69	57.55	53	76	64.55

Further data was gathered in the pilot school regarding some background characteristics of the children and their families such as family status, siblings, order of birth, place of birth, nationality and multilingualism in order to have a holistic view of the participants of the pilot study. This data was also gathered to examine if it influences the outcomes of the intervention.

Regarding the **family status,** in total the 95.5% (n=21) of the children in the pilot school had married parents, the 4.5% (n=1) of the children had divorced parents and there were no children of whom their family status was characterised as other (see table 11). Therefore, the category 'other' as a family status is not considered a variable in the pilot study.

Table 11. Family status in pilot school

	Family Status					
	Married Parents		**Divorced Parents**		**Other**	
	Frequent	**Percent**	**Frequent**	**Percent**	**Frequent**	**Percent**
Pilot school	21	95.5%	1	4.5%	0	0%

Regarding the members of the family and more specific the **siblings** the children have in the pilot school, in total the 4.5% (n=1) of the children had no siblings, the 77.3% (n=17%) of the children had 1 sibling, the 13.6% (n=3) of the children had 2 siblings and the 4.5% (n=1) of the children had 4 siblings and above. There were no children in the pilot school who had 3 siblings (see table 12). Further analysis was conducted in the data in the **order of birth** of the children who had siblings in the pilot school. Values were calculated only to children with siblings and in the case there is a missing value, it is a single child with no siblings. In total, the 4.5% (n=1) of the children were a single child, the 22.7% (n=5) of the children who had siblings were born first, the 59.1% (n=13) of the children who had siblings were born second, the 9.1% (n=2) of the children who had siblings were born third and the 4.5% (n=1) of the children who had siblings were born fourth. There were no twins in the pilot school (see table 13).

Table 12. Siblings in pilot school

	Siblings									
	0 Siblings		1 Sibling		2 Siblings		3 Siblings		4 Siblings	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Pilot school	1	4.5%	17	77.3%	3	13.6%	0	0%	1	4.5%

Table 13. Order of birth in pilot school

	Order of Birth											
	Twins		First Born		Second Born		Third Born		Forth Born		Missing	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Pilot school	0	0%	5	22.7%	13	59.1%	2	9.1%	1	4.5%	1	4.5%

Values were calculated only to children with siblings. Where there is a missing value (not applicable), it is a single child

Data was also analysed regarding the **place of birth** of the children and for this there was a categorization of children who were born in Greece and outside Greece. In total, the 86.4% (n=19) of the children in the pilot school were born in Greece and the 13.6% (n=3) of children were born outside of Greece (see table 14). Regarding the **nationality** of the children included in the sample there was a categorization among Greek and non-Greek nationality. In total, the 77.3% (n=17) of the children in the pilot school had a Greek nationality and the rest 22.7% (n=5) of the children had a non-Greek nationality (see table 15).

Table 14. Place of birth in pilot school

	Place of Birth			
	Greece		Outside Greece	
	Frequent	Percent	Frequent	Percent
Pilot school	19	86.4%	3	13.6%

Table 15. Nationality in pilot school

	Nationality			
	Greek		Non Greek	
	Frequent	Percent	Frequent	Percent
Pilot school	17	77.3%	5	22.7%

Finally, the last data analysis regarding children's background characteristics was regarding if children were **multilingual** or not. In total, the 18.2% (n=4) of the

children were multilingual and the rest 81.8% (n=18) of the children were not multilingual (see table 16).

Table 16. Multilingualism in pilot school

	Multilingual			
	Yes		No	
	Frequent	Percent	Frequent	Percent
Pilot school	4	18.2%	18	81.8%

9.1.2 Pilot study: Performance Indicators in Primary Schools (PIPS)

As it is mentioned above (see chapter 8.5.2), the Performance Indicators in Primary Schools (PIPS) is provided by the Centre for Evaluation and Monitoring (CEM) of Durham University, UK to evaluate children's performance in maths and literacy. For the purpose of this study, we used only the first part of this measure that involves the literacy assessment in writing, ideas about writing, rhyming words, picture identification, repeats and letter/word identification.

In order to examine the effects of the intervention in the students at the pilot school, a pre-test at the beginning of the intervention and a post test at the end of the intervention was implemented using PIPS. Before analyzing this data, there was an examination on the influence of the background characteristics using a mix model analysis (split-plot ANOVA) among the 7 items of PIPS and the background characteristics of the sample. Data analysis showed that overall the background characteristics of the children served as a non-significant factor in their performance as there was no statistical significance difference in the numbers. The only statistical significant difference that was found was in Writing in the factor Gender (p=.029), in Picture Identification/Vocabulary in the factor Family Status (p=.040) and Order of Birth (p=.030) and in Repeats in the factor Order of Birth (p=.003) (see table 17). This shows that the background characteristics overall did not have a major influence in children's literacy skills. There might be a small influence in children's gender and their performance in writing, in children's family status and order of birth and their performance in picture and identification/vocabulary and in children's order of birth and their performance in repeats. This can be attributed to the important role of the family in children literacy development. A lot of researchers (see Hayes, 2016; Al-Alwan, 2014; Giallo et al., 2013; Rapp & Duncan, 2012) stress that the language and writing experiences that take place in the home context have a substantial role in children literacy development. In addition to this, gender has also a very important impact in children's writing performance. According to Ramazan-Berk & Unal (2017) and Jihyun (2013), gender is a significant predictor in writing development and attitude towards writing. Therefore, this statistical significant difference can be attributed to this fact. However, looking closely the descriptive statistics (see table 20)

about the mean, it is obvious that there is a good progression in each item of the measurement. Thus, due to the above and to the fact that there wasn't a statistical significant different at the majority of children's background characteristics, it can be argued that overall there wasn't a major influence in children performance in literacy skills.

Table 17. Influencing factors in all items of PIPS in pilot study

	Gender	Family Status	Siblings	Order of Birth	Place of Birth	Nationality	Multilingual
Influencing factors in Performance Indicators in Primary Schools (PIPS) in pilot study							
Mix model analysis (Split-plot ANOVA)							
Q1: Writing	.029	.553	.868	.051	.109	.491	.281
Q2: Picture Identification/Vocabulary	.713	.040	.653	.030	.279	.827	.812
Q3: Ideas about Writing	.276	.388	.310	.058	1.000	.670	.644
Q4: Repeats	.656	.281	.550	.003	.766	.625	.535
Q5: Rhyming Words	.810	.114	.491	.254	.580	.703	.856
Q6: Letter Identification	.144	.929	.865	.913	.168	.522	.848
Q7: Word Identification	.557	.152	.682	.769	.441	.443	.376

In analyzing the data from PIPS and before conducting any statistical test, there was an examination of the data of PIPS regarding distribution, using Kolmogorov Smirnov test. The data shows that there was a normal distribution in all items of PIPS in the pretest (p=.149, p=.705, p=.419, p=.175, p=.489, p=.126, p=.212) and in the post test (p=.084, p=.076, p=.056, p=.049 (marginal acceptance-normal distribution), p=.431, p=.534, p=.684) (see table 18).

Table 18. Kolmogorov-Smirnov Test in PIPS in the pilot study

Performance Indicators in Primary Schools (PIPS) in pilot study	
One-Sample Kolmogorov-Smirnov Test/ Asymp. Sig (2-sided)	
Pre-test	
Q1: Writing	.149
Q2: Picture Identification/Vocabulary	.705
Q3: Ideas about Writing	.419
Q4: Repeats	.175
Q5: Rhyming Words	.489
Q6: Letter Identification	.126
Q7: Word Identification	.212
Post-test	
Q1: Writing	.084
Q2: Picture Identification/Vocabulary	.076
Q3: Ideas about Writing	.056

Q4: Repeats	.049 (marginal acceptance-normal distribution)
Q5: Rhyming Words	.431
Q6: Letter Identification	.534
Q7: Word Identification	.684

Therefore, since there was a normal distribution and we wanted to compare the outcomes in a paired sample of pre- and post-test, the Paired Sample T-Test was used. The purpose of conducting this test was to examine if the means of literacy performance before and after the intervention were equal. Regarding the differences in the <u>literacy performance</u> in the pilot study, the data analysis showed that there was a significant mean difference between the pre and the post-test in all 7 items of the PIPS (p=.000), which shows the intervention had an impact on children's literacy performance (see table 19).

Table 19. PIPS in pilot study

Performance Indicators in Primary Schools (PIPS) in pilot study	
Paired Sample T-test	
Q1: Writing	.000
Q2: Picture Identification/Vocabulary	.000
Q3: Ideas about Writing	.000
Q4: Repeats	.000
Q5: Rhyming Words	.000
Q6: Letter Identification	.000
Q7: Word Identification	.000

Defining this impact in children's literacy performance and while examining the means in the pre-and post-test, it is obvious that there was a beneficial impact on children's literacy performance. Children displayed a progress in their literacy skills as they scored higher in the post test in all items of PIPS (see table 20). Looking carefully at the numbers before and after the intervention it is obvious that in some parts of PIPS children had a higher score in the post-test than the other parts. For example, in picture identification/vocabulary, rhyming words, letter identification and word identification the increase in children's performance is higher comparing to the rest items. One good and reasonable argument for this might be that the pedagogical projects and the activities that the children suggested while implementing the different steps of the suggested interdisciplinary framework might have included more of these aspects comparing to the other ones. Perhaps children were more interested in activities that included the above and thus there is a greater performance comparing to the rest items of PIPS.

Before reaching any conclusions regarding the impact of the intervention, there are some aspects that have to be taken into consideration. It has to be reminded

that this was a pilot case study and there was no comparison with a control group to compare these findings. In addition, it is expected that children's performance will improve during the school year due to all the activities that take place during the school hours and the time they spend at home or in other settings e.g. playground, visiting friends and relatives. Therefore, this improvement might be attributed in other factors apart from the intervention per se. On the other hand, considering that the intervention aimed to examine the contribution of the arts in children's literacy performance, it can be argued that there was an emphasis on children's development in literacy skills and thus more focused activities were provided towards this learning area. Therefore, it can equally be argued that the intervention is also another reason that facilitated children's progress in literacy skills as there is positive increase in the numbers. This pilot study also helped to identify the areas of improvement before conducting the final study that will include experimental and control groups to answer the research questions. For reasons of consistency and avoiding repetitions, the amendments are analysed in detail in chapter 9.1.7. Thus, for the above reasons this seems promising for continuing in the final study.

Table 20. Means in PIPS in pilot study

Performance Indicators in Primary Schools (PIPS) in pilot study		
Paired Sample T-test		
	Mean	
	Pre-Test	Post-Test
Q1: Writing	2.82	4.09
Q2: Picture Identification/Vocabulary	16.82	21.82
Q3: Ideas about Writing	5.55	8.55
Q4: Repeats	4.50	6.68
Q5: Rhyming Words	2.36	6.45
Q6: Letter Identification	6.41	12.73
Q7: Word Identification	4.00	9.18

9.1.3 Pilot study: Personal and Social Development (PSD)

As it is mentioned above (see chapter 8.5.4), the Personal and Social Development (PSD) is also provided by the Centre for Evaluation and Monitoring (CEM) of Durham University, UK to evaluate children in the areas such as comfortable, independence, confidence, concentration, action, relationship to peers and adults, rules, cultural awareness and communication. This measurement is based on observation and takes qualitative data and quantifies it. For the purpose of this study, the observation for PSD was conducted by the practitioners at the beginning of the school year.

In order to examine the effects of the interdisciplinary framework on students' social skills on the pilot school, a pre-test at the beginning of the intervention and a

post test at the end of the intervention was implemented using PSD. Before analyzing this data, there was an examination on the influence of the background characteristics using a mix model analysis (split-plot ANOVA) among the 11 items of PSD and the background characteristics of the sample. Data analysis showed that overall the <u>background characteristics</u> of the children served as a non-significant factor in their performance as there was no statistical significance difference in the numbers, and a marginal acceptance in the item Comfortable at the factor Family Status (p=.047) and in Independence in the factor Place of Birth (p=.046). The only statistical significant difference that was found was in Independence in the factor Nationality (p=.004) and Multilingual (p=.016), in Relationships with peers in the factor Place of Birth (p=.034), Nationality (p=.002), Multilingual (p=.010) and in Cultural Awareness in the factor Place of Birth (p=.041) and Nationality (p=.010) (see table 21)

Table 21. Influencing factors in all items in PSD in pilot school

Influencing factors in Personal and Social Development measure (PSD) in pilot study						
Mix model analysis (Split-plot ANOVA)						
	Gender	Family Status	Siblings	Order of Birth	Place of Birth	Nationality	Multilingual
Q1: Comfortable	.090	.047	.083	.589	.526	.522	.792
Q2: Independence	.600	.626	.739	.741	.046	.004	.016
Q3: Confidence	.408	.796	.561	.549	.359	.094	.190
Q4: Concentration: Teacher directed activities	.123	.620	.637	.674	.451	.421	.689
Q5: Concentration: Self-directed activities	.538	.423	.827	.804	.853	.976	.792
Q6: Actions	.378	.246	.333	.471	.209	.131	.079
Q7: Relationship to peers	.210	.806	.974	.877	.034	.002	.010
Q8: Relationship to adults	.824	.257	.381	.723	.416	.186	.452
Q9: Rules	.388	.423	.565	.817	.488	.910	.759
Q10: Cultural awareness	.501	1.000	.818	.502	.041	.010	.072
Q11: Communication	.957	.896	.630	.472	.811	.744	.777

Looking carefully the above results, it is obvious that the majority of the factors under investigation did not influence children's performance in the items of PSD measure. However, it has to be admitted that there might be a small influence in the factors place of birth, nationality and multilingual in the items independence, relationship to peers and cultural awareness. This can be attributed to the sense of belonging when there are differences in the cultural background (Major et al., 2014). However, considering the fact that in the above examination the majority of children's background characteristics did not reveal a significant statistical difference, it can be argued that the in overall there wasn't a major influence in children's social skills.

In analyzing the data from PSD and before conducting any statistical test, there was an examination of the data of PSD regarding distribution, using Kolmogorov Smirnov test. The data shows that there was a normal distribution in all items of PSD in the pretest (p=.195, p=.080, p=.310, p=.110, p=.254, p=.160, p=.107, p=.051, p=.242, p=.083, p=.242,) and in the post test (p=.105, p=.109, p=.058, p=.059, p=.059, p=.086, p=.206, p=.157, p=.065, p=.206, p=.050, (see table 22).

Table 22. Kolmogorov-Smirnov Test in PSD in the pilot study

Personal and Social Development measure (PSD) in pilot study	
One-Sample Kolmogorov-Smirnov Test/ Asymp. Sig (2-sided)	
Pre-test	
Q1: Comfortable	.195
Q2: Independence	.080
Q3: Confidence	.310
Q4: Concentration: Teacher directed activities	.110
Q5: Concentration: Self-directed activities	.254
Q6: Actions	.160
Q7: Relationship to peers	.107
Q8: Relationship to adults	.051
Q9: Rules	.242
Q10: Cultural awareness	.083
Q11: Communication	.242
Post-test	
Q1: Comfortable	.105
Q2: Independence	.109
Q3: Confidence	.058
Q4: Concentration: Teacher directed activities	.059
Q5: Concentration: Self-directed activities	.059
Q6: Actions	.086
Q7: Relationship to peers	.206
Q8: Relationship to adults	.157
Q9: Rules	.065
Q10: Cultural awareness	.206
Q11: Communication	.050

Therefore, since there was a normal distribution and we wanted to compare the outcomes in a paired sample of pre- and post-test, the Paired Sample T-Test was used. The purpose of conducting this test was to examine if the means of children's social skills before and after the intervention were equal. Regarding the differences in the children's social skills in the pilot study, the data analysis showed that there was a significant mean difference between the pre- and the post-test in all 11 items of the

PSD (p=.000), which shows positive results on children's social performance after the intervention (see table 23).

Table 23. PSD in pilot school

Personal and Social Development measure (PSD) in pilot study	
Paired Sample T-test	
Q1: Comfortable	.000
Q2: Independence	.000
Q3: Confidence	.000
Q4: Concentration: Teacher directed activities	.000
Q5: Concentration: Self-directed activities	.000
Q6: Actions	.000
Q7: Relationship to peers	.000
Q8: Relationship to adults	.000
Q9: Rules	.000
Q10: Cultural awareness	.000
Q11: Communication	.000

Defining this impact in children's social skills and while examining the means in the pre- and post-test, it is obvious that there was a beneficial impact on children's social performance. Children displayed a progress in their social attitude as they scored higher in the post test in all items of PSD (see table 24). Looking closely the numbers before and after the intervention it is obvious that children had approximately the same progress in all items of PSD with no major differences. In an effort to explain these results, it is important to consider some aspects before reaching any conclusions. It has to be reminded that this was a pilot case study and there was no comparison with a control group to compare these findings. In addition, it is reasonable to argue that during the school year there will be some progress in children's social skills. This development might be attributed to the general school activities or to other factors that take place in children's lives outside school e.g. parents' social lives, after school social activities etc. Therefore, the intervention might not be the only reason for this improvement. On the other hand, during the suggested interdisciplinary framework, there was a great emphasis on collaboration and team work among children and thus there were more opportunities to children to develop their social skills. Therefore, it can be equally being argued that the intervention was also another reason that facilitated the development of children's social skills as there is a positive increase in the numbers. The pilot study and this examination was also very useful for the researcher to familiarize with the process and this measurement and to identify the areas of improvement before the final implementation. For reasons of consistency and avoiding repetitions, the amendments are analysed in detail in

chapter 9.1.7. Thus, for the above reasons this seems promising for continuing in the final study.

Table 24. Means in PSD in pilot schools

Personal and Social Development measure (PSD) in pilot study		
Paired Sample T-test		
	Mean	
	Pre-Test	Post-Test
Q1: Comfortable	1.68	3.27
Q2: Independence	1.55	3.23
Q3: Confidence	1.45	3.23
Q4: Concentration: Teacher directed activities	1.64	3.27
Q5: Concentration: Self-directed activities	1.68	3.27
Q6: Actions	1.36	3.23
Q7: Relationship to peers	1.18	3.00
Q8: Relationship to adults	1.14	3.18
Q9: Rules	1.45	3.09
Q10: Cultural awareness	1.00	3.00
Q11: Communication	1.09	3.18

Analysing the data with a qualitative approach and debriefing the comments that were written by the practitioners in the PSD in order to make an overall judgement of the social skills of each child, there were also positive results in the post test comparing with the pre-test. As it mentioned above, there might be other factors apart from the intervention that might be responsible for this progress. However, considering the collaborative aspect of this intervention and the constant opportunities for team work and feedback, it can be argued that this intervention could be responsible as well for this improvement.

It has to be acknowledged that social skills are a very important parameter in children's development as through effective interaction they gain information that eventually will become knowledge. This argument has its roots on Vygotsky's (1978) social constructivist theory and Bandura's (1977) social learning which stresses the importance of social interaction in the process of learning. In the early years settings this is even more important, as this area can influence children's performance in the later levels of education (Tymms et al., 2009; Yan & Yuejuan, 2008).

Adjustment in the environment that interactions take place is the basis of developing social skills (Schultz et al., 2011). This is based on the grounds that when people feel comfortable and relaxed they can interact socially in a better and effective way when they are tense and anxious. In practice, adjustment can be translated as being comfortable and independent. Focusing this argument on the early years settings, it can be argued that young children can manage effectively the daily school

routines when they are settled in their classroom environment and they show signs of independence and feel comfortable (Jones & Harcourt, 2013). The evidence from the data analysis in the pilot schools is highly linked with the above arguments as there was a positive progress in children's social competencies in the post test. Data shows that children were more comfortable and independent during personal activities, transitions and routines after the intervention, which can be attributed to the expected children's progress over time but also to the fact that the art intervention provided a liberal environment in which children could interact according to their will.

> *Child 2: Pre-test: During the whole day in the school, he insists to wear this jacket all the time. He is very reluctant to take it off although the heater is on and it is really warm inside the classroom. However, most of time he seems independent but he needs extra help with this clothing.*
>
> *Post-test: There is great progress in this area! He wears his jacket only at the beginning of the day and after a couple of minutes he takes it off without anyone to encourage him to act so. He looks very eager to try new things as long as they look familiar with something else he already knows. He is totally independent especially with clothing and personal activities, and he will ask for extra help when something is extremely complicated.*
>
> *Child 11: Pre-test: Most of the time she does not get upset during separation with the caregiver in the morning and she seems comfortable during activities. She seems independent but half of the times she needs extra support especially with clothing and personal activities.*
>
> *Post-test: She never gets upset in the morning while saying goodbye to the caregiver. The moment she enters the school door she is looking for her friends to play with and she discusses with what she did the previous day. She makes plans for the day with her friends. She is also totally independent and she will ask for extra support in very rare occasions and only when the activity is very complicated.*

Successful adjustment to the school settings, will allow young children to develop strong personal skills, such as self-confidence, which eventually will result in new knowledge (Durlak et al., 2010; Pahl & Barrett, 2007). This can be supported by the argument that when people, not only young children, feel confident they will try and experiment with new things and through this interaction they will gain new knowledge. Developing personal skills such as self-confidence, concentration and action is fundamental in developing social skills. People use their personal skills in order to interact effectively with other people.

Confidence is the basis of all interactions as this will result in successful social competencies (Parry, 2015). It is true that developing confidence will empower people to interact and share their ideas without feel embraced. This practice is the first step

of social interactions, as people use this as a stepping stone to develop their social skills. Data from the pilot study, shows that children had a positive development in this area in the post test. In the same line, it has to be taken into consideration that this improvement is also expected in due course. However, considering the fact that the art intervention provided opportunities for a liberal expression with no right or wrong answers, it can be argued that more opportunities for this improvement were provided during the suggested interdisciplinary framework.

> *Child 2:* <u>*Pre-test*</u>*: He likes to participate in group discussions and activities but he needs to be triggered to do so. He feels more comfortable to do activities that do not involve interaction with other children. He spends most of his time in the arts and crafts area, drawing on his own.*
>
> <u>*Post-test*</u>*: There is great progress in this area! He does not need any more to be triggered in order to participate in team discussions and activities and there are times that he initiates them. During free time play he interacts very much with his friends and plays with them. Most of the time he explains the rules of the game.*
>
> *Child 10:* <u>*Pre-test*</u>*: She does not seem very comfortable to interact with other children. It seems that she wants to approach other children to play with but when she does, she feels that she is not wanted or feels welcome and steps back.*
>
> <u>*Post-test*</u>*: Great progress is obvious! She seems bold and courageous and she is not afraid to express and support her ideas. She has self-confidence in almost every activity and approaches children with confidence.*

Another important personal skill that contributes to the development of social skills is the level of <u>concentration</u> in self-lead and teacher-lead activities. Concentration is fundamental in learning in every school and social activity (Ashdown & Bernard, 2012). When children have the ability to concentrate effectively they can participate in a conversation or in a group activity without being left out. During observations for the PSD measure in the pilot study, there is evidence that supports the above arguments. Children showed great progress in concentration during self-initiated and teacher-initiated activities in the post-test. It was obvious that nothing could distract them, even minor external stimuli. This can be attributed to the fact that during the art intervention, children had a very leading role during the teaching and learning process deciding and designing the learning activities in collaboration with their classmates and the practitioner.

> *Child 4:* <u>*Pre-test*</u>*: In teacher-directed activities, usually he is distracted all the time from his final goal. For example, he constantly asks irrelevant questions the children who sit next to him or he looks all the time the other children. This makes him rushing to finish his activities in the end. In self-*

directed activities, he is a little better but still he is very distracted with other children's actions. He tries to finish quickly if something else seems more interesting.

Post-test: The level of his concentration has been increased dramatically! He is very concentrated in teacher-directed activities and always meets his goals. There are times that he might stop to discuss with this friends, but he will utilize the information he will gain in finalizing his activity. The same applies in self-directed activities. He is very concentrated and nothing can distract him from his final goal.

Child 7: Pre-test: Regarding the teacher-led activities, she can only be concentrated for a specific period of time and she is constantly distracted by external stimuli e.g. if someone touches her accidentally or messes with her hair. The same applies in self-led activities and she can only concentrate for a limited period of time. Most of the time she leaves her work unfinished.

Post-test: Progress is clear! She is very concentrated in teacher-led activities and she will meet her goal in a reasonable time. She is very aware of other children's actions but this does not affect her in finishing the activity. Regarding the self-directed activities, she is exactly the same. She is totally concentrated in her goal. It does not take her a lot of time to meet her goal. Sometimes she stops to check what the other children are doing but this is only a couple of seconds.

Being aware of other people's welfare is also a very important personal skill which is highly associated with the development of social skills (Segrin et al., 2007; Segrin & Taylor, 2007). When someone is able to understand and respect the other people's feelings this leads to better communication and thus effective social interaction (Choi & Kim, 2003). Children's actions have a strong influence on their interactions and on the acceptance or exclusion of the group. The data from the PSD measure in the pilot study is linked with this and evidence of these arguments is obvious. It seems that the arts influenced children's actions, as in the post test there was evidence that children were more careful and aware of the wellbeing of their peers. Although this can be also attributed in the expected development in course of time, it can be argued that the arts also supported this progress as during the intervention every voice could be heard and taken into serious consideration. Also, there was a very supportive environment in which children provided and received feedback constantly in a constructive environment. Thus, under this framework they had more opportunities to develop such awareness and empathy towards their friends and classmates.

Child 5: Pre-test: Most of the time she has the appropriate behavior and attitude towards other children and shows that she respects the well-being

of the other children. However, this is not always the case as very often she will exclude a child from a team activity just because it is not doing as she says.

Post-test: There is a great progress in this area. She always considers the well-being of the other children and try not to exclude anyone from the team. When a child is not performing well, she tries to help it and support it. She reacts very well to the daily routines.

Child 9: Pre-test: Usually she has the appropriate behavior during interactions with other children. However, very often she does the gesture 'You are not my friend' to other children when she wants to get rid of them.

Post-test: Now she never does the gesture 'You are not my friend' and when she sees another children doing so, she will go and try to influence them not to do so. She participates in team activities and is very aware of the other children's well-being.

Having discussed the important contribution of adjustment and personal competencies in the development of social skills, now there will be a discussion of the content of social skills. Relationship with others and communication with others are among the important social skills that contribute to effective interactions (Ashdown & Bernard, 2012).

Positive relationships with peers and adults is an important parameter of every effective social interaction. This is based on the argument that a positive basis enables the interaction with other people. Positive relationships with adults and peers can influence the school performance as in this way students are eager to interact and gain new knowledge (Durlak, 2010). The qualitative data from PSD shows these arguments in practice. Children showed an improved quality of relationships with their peers and adults during the post test. Similarly, as above, other factors apart from the intervention might be the reason for this development. Although this has a great element of true, it has to be taken into consideration that children during the art intervention were involved constantly in team work, making decisions about the nature and the content of the learning activities they want to implement. This collaboration was among the children and between the children and the practitioner. Therefore, it can be argued that this practice also helped and contributed in this improvement in this area.

Child 9: Pre-test: Half of the times she communicates easily with the other children and plays with them. However, she prefers to play only with specific children. If this is not the case, then she will not interact with someone. Regarding her relationship with adults, is very similar. When there is a need she communicates with them but usually she avoids of doing so. She needs to be triggered to interact with adults.

Post-test: There is progress in this area. She got over the fact that she wants to play only with specific children and now she is very sociable and enjoys the company of all the children. Her relationship with adults is also developed positively. She approaches the adults with confidence and interacts with them appropriately. When there is a new adult in the classroom she will go and try to socialize with them.

Child 11: Pre-test: Her relationship with the other children is mediocre. She interacts with them but not always in the appropriate way. She is not always aware of their feelings. There are times that she might prefer to play on her own because the other children don't want to follow her lead. The same is obvious with the adults. She is reluctant to interact with them and she needs to be triggered very much to do so.

Post-test: Her relationship with the other children has been very much improved. She is very aware of their feelings and interacts appropriately every time. She likes to participate in team activities and she is happy to discuss and make plans in collaboration with the other children. A great improvement is obvious during her interaction with the adults. Now, she is very confident to approach them and she always makes them laugh.

The final characteristics of effective social skills is the way people communicate with each other. Effective communication results in effective and successful social skills (Segrin et al., 2007). This means that when people are able to transfer their ideas effectively or to listen to the other people's ideas effectively, they are also able to interact effectively with others and set a two-way interaction. In the early years, this is even more important as effective communication influence children's social skills because through this they can gain important information (Pahl & Barrett, 2007). The data analysis shows great improvements in the way young children communicated with each other in the post test. Again, a development in children's communication is expected at the end of the school year as children grow older and build more and more knowledge and skills as the time goes by. However, it is also true that during the art activities children were involved in meaningful discussions that derived from their interests from the paintings they were working on. As a result, they had constant and meaningful opportunities to progress in this area and thus it can be argued that the art activities could be an equal reason for this improvement.

Child 2: Pre-test: When he speaks he tries to use arguments to support his ideas but he usually quits half-way. He makes a lot of grammar and syntax mistakes when he is expressing his ideas.

Post-test: There is a great development. When he is expressing his ideas he uses the correct argument and he does not do a lot of grammar and syntax mistakes anymore. He is able to make himself understood and when he does not understand something or finds a difficulty he asks questions.

Child 8: Pre-test: Her verbal communication is very simplistic and she will not try to make herself understood when her peers are not so sure of what she is saying. She is more concerned to understand what other people are saying rather than the others to understand her.

Post-test: There is a progress in this area! Her speech is correct and she is very talkative. She always conveys the message she wants and transfers effectively her ideas to others.

To briefly **summarize**, the above data analysis from PIPS and PSD measures reveals evidence of the beneficial impact of the arts on children's literacy and social skills. Both quantitative data from PIPS and PSD measures and additional qualitative data from PSD measure supports this argument and shows the progress children had in the post-test. This data is in agreement with the existing literature that verifies the effects of the arts in children's literacy skills in the early years (see Moritz et al., 2015; Greenfader et al., 2014; Change & Cress, 2013; Vitsou, 2011) and further provide evidence of using a different kind of the arts, which was paintings. The data from this pilot study supplements these pieces of research for one more reason. It supports the beneficial contribution of the arts in children social skills apart from literacy skills which was something that was investigated only by Fleming et al. (2004) in the latter levels of education.

Before reaching any conclusions there are some elements that need to be considered. The evidence from this study relies on a case study in which there were no experimental groups to compare with. Moreover, children's progress in their social and literacy skills might be an outcome of the time that passed in which it is expected children to have some progress. Therefore, the art intervention might not be the only reason for this improvement in the data. On the other hand, looking closely the steps of the suggested interdisciplinary framework (see chapter 8.4) and the pedagogical projects that were developed by children during the intervention (see appendix 8) it is obvious that children had been constantly involved in activities that required collaborative work and reflection and they had to provide and receive constant feedback in order to meet their goals. Therefore, it is obvious there were a lot of opportunities to children to develop their social skills in a liberal environment with no judgement or external expectations about their performance.

Looking closely the pedagogical projects that were developed during the suggested interdisciplinary framework (see appendix 8) it is obvious that the arts were used as a stimulus for literacy activities,. Thus, it can be argued that the above data answers the **first and third research question** and shows the positive contribution in children's literacy and social skills. This seems promising for the final implementation of this research project to a bigger sample with control and experimental groups. One main argument is that it shows that the arts, a central means of the suggested

interdisciplinary framework, facilitate young children's literacy and social skills as it provided more opportunities for the development of these skills.

9.1.4 Pilot study: Authentic Assessment/Portfolio(AA/P)

During the pilot study, the data for the Authentic Assessment/Portfolio (AA/P) was gathered during observations from the practitioner throughout the school year. For this purpose, there were some general guidelines with suggested questions/hints that would help the practitioner to guide her thinking (see table 6, chapter 8.5.3 section). The general guidelines were developed and amended during the final study, as the feedback from the practitioner during the consultation meetings was that she needed a more enhanced framework and focused guidelines. Therefore, for this purpose the AA/P checklist was designed for the final study (see chapter 8.5.3). As this feedback came towards the end of the intervention, in this section the data analysis is only from the initial guidelines for the AA/P.

Using the initial framework and analysing the data from the observation notes and debriefing the comments that were written in order to make an overall judgement, we can further verify the positive impact of the intervention in the pilot study when arts are used as a means to promote literacy as a social practice.

As it was discussed previously (see chapter 2), the term literacy as a social practice embeds the everyday interactions of people with the literacy aspects. Being more specific, it includes the content of their activities, the person they interact with, the reason and the place of these activities (Appleby & Hamilton, 2008). Literacy as a social practice is often related with literacy events and literacy practices.

According to Barton (2007), literacy events, are the activities that people are involved regarding literacy, for example, reading a utility bill, write an email or participating in a conversation and explaining their ideas. He also highlights, that literacy practices, are more focused-specific to the content of these activities and are the way that people utilise literacy during the literacy events for example, the way that they read the utility bill could be skim reading, careful reading, read just the first line or the total amount of money. In other words, literacy practices are more focused on the human's behavior and the meaning in reading, writing and speaking. Literacy practices interact with literacy events and through this interaction they form literacy as a social practice (Evans, 2005).

During the data analysis of the teacher's observation for the AA/P, it is obvious that during the intervention period in the pilot study, children embedded a lot of literacy events in their free time activities. This practice was derived by their free will as the practitioner did not intervene in children's choices of play during their free time. This shows that the arts, as the basic concept of the interdisciplinary framework, have

the opportunity to influence children to use literacy as a social practice, as this was incorporated in children's free play time.

Incident 1: A group of children are in the arts and crafts area and they are discussing the materials they will use in order to draw a picture for their mums. They are expressing their ideas and support their arguments:
-I think we should use markers as they have vivid colors. The other crayons are very pale.
-So, in this case it is better to use finger paints. They are more vivid.
They decide to use markers and they start to draw. When they finish their drawing, they write their names and they decide what else they could write for example 'I love you mummy', 'To my mum with love'.

Incident 2: A group of children sits on a table and reads books. They decide that they don't like these books and they want to make their own book. They decide the theme of the book and then the plot of the book. They draw the pictures but they seem more fascinated that they will write the story as well.

Incident 3: A group of children plays in the grocery shop corner. They pretend they are selling and buying products and they negotiate the prices. Some of them pretend they need to check the catalogue with the products to decide but they cannot find any. All of them decide to pause their game in order to create a new catalogue that will include the products of the grocery shop. They allocate roles and decide the materials they will use. They draw the pictures and try to write the names and the price of the products.

Incident 4: A child tells a story to her friends about a party she went yesterday and she is commenting on the invitation she received. They all look excited and they start preparing invitations in order to use them afterwards in their play. They try to write the invitation and decorate it with stamps and stickers.

In addition to this, the above events revealed different forms of <u>literacy practices</u> that also derived from children's free play. These literacy practices demonstrated an in-depth engagement with social literacy, as most of the time students experimented with the different practices that they could use literacy during their self-directed activities or during their team activities in their free time.

Incident 1: A group of children is in the arts and crafts area and they are trying to make a picture for their mum. They are experimenting with their names and they try to write in different ways. For example, they try only

capital letters, only lower case letters, big size letters, small size letters, vertical, horizontal, upside down etc. They discuss with each other about which one seems better.

Incident 2: A group of children are trying to create a book of their own. They decide collaboratively the story and they take turns to say their ideas. When they agree the next scene of their story, they write it straight away instead of finalising the story and then write it. The way they write is different every time. Sometimes, there is one child who acts as a scribe and the other children tell the next letter that needs to be written. Some other times, they discuss what they need to write and whoever says that he/she knows writes them.

Incident 3: A group of children is trying to create a catalogue with the grocery's products. They check the products they want to include in the catalogue and they make first their pictures. Children take turns in this and they decide who will draw each product. Afterwards, they want to write the name of the products and the price. They pronounce each word out loud and they decide which one is the next phoneme and they look for it in their name tags and the alphabet boards. When they find it they take turns to write it.

Incident 4: A group of children are trying to make invitations in order to use them afterwards in their play. They discuss the materials and the decoration of the invitation. They decide that each invitation would be different according to whom they want to give it. They also decide the same for the content of the invitation. They try to find clever poems or rhymes for the writing part of each invitation. In their writing, they use their name tags to write the name of the recipient and for the content of the invitation they decided to copy some rhymes from a book.

To **summarise**, the above data analysis from AA/P measure reveals evidence of the positive contribution of the arts on children's use of literacy as a social practice. During observations from the practitioner throughout the school year in the pilot study, students engaged with literacy events and in-depth literacy practices in their free time play. Reviewing the existing empirical evidence regarding literacy as a social practice in the early years, it is clear that there are no pieces of research that examine the impact of the arts in children's use of literacy as a social practice. It has to be acknowledged that there are theoretical arguments that agree with the fact that the arts can develop literacy as a social practice but there is no related empirical research that verifies this aspect. Being more specific, Wright (2007) supported that children communicate their ideas through their drawing and this can be considered as a first form of writing. Linking this to the early years setting, it is obvious that drawing is one

of the basic form of activities that children engage during their free time. Some years later, Maniaci & Olcotte (2010) agreed with these arguments by stressing the communicative aspects of children's drawings in the early years settings. The evidence of this pilot study can contribute as the first step in producing relevant knowledge in this area.

Reviewing closely the activities that were developed during the suggested interdisciplinary framework (see appendix 8), it is clear that children during art activities were using literacy as a social tool and resource in order to meet their goals. During the examination of each painting, children had the opportunity to express their views about the content of the paintings, the feelings of the painter and possibilities of using each painting or the themes that were emerged in activities that they were designed. From the above data it was obvious that during all these interactions, children felt the need to embed literacy aspects as a necessary tool to enhance their play e.g. try to write the price of each product and use the paintings as a token to pay.

Considering the fact that the arts were used as a stimulus for literacy activities, as it is obvious from the pedagogical projects that were developed during the suggested interdisciplinary framework (see appendix 8), it can be argued that this data answers the **second research question** and shows the positive contribution of the arts in children's use of literacy as social practice. This seems promising for the final implementation of this research project to a bigger sample with control and experimental groups as it shows that the arts, which was a central mean to the interdisciplinary framework that was used, facilitate young children's use of literacy as a social practice by providing more and meaningful opportunities to children to use literacy spontaneously in their free play and art interactions. This also seems promising as this is the first step of providing arguments from an experimental research design regarding the contribution of the arts in the use of literacy as a social practice in the early years, which is something that is missing from the empirical literature.

9.1.5 Pilot study: Leuven Involvement Scale for Young Children (LIS-YC)

The Leuven Involvement Scale for Young Children (LIS-YC) is a measurement that is developed by Laevers (1994) to measure children's involvement during activities. It uses qualitative data and quantifies it and focuses in 9 signals such as concentration, energy, complexity/creativity, facial expression/posture, persistence, reaction time, language and satisfaction. LIS-YC further describes the levels of involvement as: low activity, frequently interrupted activity, mainly continuous activity, continuous activity with intense moments and sustained intense activity. It is based on observations, in which the observer should make an overall judgement of each child's level of involvement using the levels of involvement in conjunction with the signals.

This test was implemented once in the middle of the intervention. As this was a pilot study and there was no other group to compare the outcomes, children's performance in the 9 signals of LIS-YC is analyzed with descriptive statistics instead of inferential analysis. The data was also tested against the background characteristics of the sample to verify if they will act as influencing factors to the outcomes.

Although the sample in the pilot school was consisted of 22 children, on the days of the measurements for LIS-YC there were 18 children present of which the 39% (n=7) was male and the 61% (n=11) was female, which still maintains a slightly equal number among gender with girls to have a slightly higher percentage from boys (see table 25).

Table 25. Gender distribution at LIS-YC in pilot school

| | Gender in LIS-YC | | | |
| | Boys | | Girls | |
	Frequent	Percent	Frequent	Percent
Pilot school	7	38.9%	11	61.1%

Before conducting any test regarding the <u>background characteristics</u>, there was an examination of the data of the LIS-YS regarding the distribution, using Kolmogorov Smirnov. The data shows that there was no normal distribution (p=.027, p=.011, p=.030, p=.013, p=.006, p=.001, p=.002, p=.000, p=.000) in all signals of LIS-YS (see table 26). Therefore, since there was not a normal distribution and the values gender, place of birth, nationality and multilingual are binary values the Mann-Whitney U was used. The Kruskai-Wallis H was used for the value order of birth as it is a nominal value with more than two values and finally the Spearman test was used for the value siblings as it was a scale value with no normal distribution (p=.005) (see table 27). The value family status was not tested as there were values only from the group married parents, so it cannot be considered as an influencing factor.

Table 26. Kolmogorov-Smirnov Test in LIS-YC in Pilot Study

Leuven's Involvement Scale for Young Children (LIS-YC)	
	One-Sample Kolmogorov-Smirnov Test/ Asymp. Sig (2-sided)
Q1: Concentration	.027
Q2: Energy	.011
Q3: Complexity and Creativity	.030
Q4: Facial Expression and Posture	.013
Q5: Persistence	.006
Q6: Precision	.001
Q7: Reaction time	.002
Q8: Language	.000
Q9: Satisfaction	.000

Table 27. Kolmogorov-Smirnov Test in Siblings in Pilot Study

Distribution of the value Sibling	
Siblings	
N	18
One-Sample Kolmogorov-Smirnov Test/ Asymp. Sig (2-sided)	.005

Data analysis showed that overall the <u>background characteristics</u> of the children served as a non-significant factor in their performance as there was no statistical significance difference in the numbers. The only statistical significant difference that was found was in Precision in the factor Gender (p=.006), in Reaction time in the factor Gender (p=.028) and in Satisfaction in the factor Place of Birth (p=.005) and Multilingual (p=.025) (see table 28). Therefore, this shows that the background characteristics overall did not have a major influence in children's involvement during art with literacy activities. There might be a small influence in children's gender and their precision and reaction, children's satisfaction and their place of birth and if they are multilingual. This can be attributed to the impact of gender in the school activities and the possible cultural differences. Being more specific, according to Gershenson & Holt (2015) there are gender gaps in student's involvement in school activities with females to outperform males. In addition, as it was argued before cultural difference can play an important role in the sense of belonging and thus in satisfaction (Major et al., 2014). Therefore, it can be argued that the above significant difference was attributed to these factors. Looking closely the descriptive statistics (see table 29), it is obvious that there are no major issues in children's involvement in all items of LIS-YC. Thus, due to the above and the fact that the majority of children's background characteristics did not reveal a statistical significant difference, it can be argued that overall there wasn't a major influence in children's involvement in art with literacy activities.

Table 28. Influencing factors in all items of LIS-YC in Pilot Study

Leuven's Involvement Scale for Young Children (LIS-YC)					
Influencing factors					
	Gender*	Siblings ***	Order of Birth**	Place of Birth*	Nationality*	Multilingual*
Q1: Concentration	.158	.782	.396	.159	.906	.843
Q2: Energy	.105	.863	.352	.627	.624	.946
Q3: Complexity and Creativity	.227	.818	.414	.118	.288	.429

Q4: Facial Expression and Posture	.069	.901	.523	.090	.670	1.000
Q5: Persistence	.104	.795	.535	.449	.849	.831
Q6: Precision	.006	.842	.774	.208	.714	.462
Q7: Reaction time	.028	.995	.621	.282	.892	.597
Q8: Language	.293	.614	.494	.192	.622	.410
Q9: Satisfaction	.210	.725	.873	.005	.061	.025

*SPSS tests: *Mann-Whitney U, **Kruskai-Wallis H, ***Spearman*

Regarding children's involvement in the pilot school during the intervention, the data analysis shows that children had high levels of involvement during the literacy activities within the interdisciplinary framework. In a 5-point Likert scale with Level 1 being the lowest and Level 5 being the highest, the numbers were gathered mainly in Level 4 and Level 5 and some in the Level 3 (see table 29). Looking closely the numbers of children's involvement in each item of LIS-YC, it is obvious that some parts had higher percentage than others. For example, Language and Satisfaction gather a higher percentage in the sustained intense activity comparing with the rest items of LIS-YC. One good and reasonable example for this could be that the pedagogical projects and activities were emerged from children's interests and desires and thus it was around topic and areas that they were excited. This by itself results in pleasant feelings and satisfaction. On top of that, in each step of the suggested interdisciplinary framework children were discussing in order to decide and design the activities they want to implement. Therefore, it can be argued that during the whole process children familiarized themselves with expressing their ideas and feelings with no pressure and they transferred this aspect in their activities as well.

Before reaching any conclusions regarding the impact of the intervention there are some aspects that have to be taken into consideration. It has to be acknowledged that this data derived from a case study and thus there was no control group to compare the outcomes. In addition, it is only reasonable to argue that children might be also involved in literacy activities that were not emerged from their interaction with the arts. However, considering the argument that children use spontaneously art activities in the free play (see Hanley et al, 2009) and the fact that the art with literacy activities were emerged, decided and designed by them it can be equally argued that the arts was a good reason that resulted in high levels of involvement. This pilot study was a very good opportunity to practice the whole procedure and the selected test before the final implementation in order to familiarize ourselves with the process and identify the areas of improvement. In order to maintain consistency and a smooth transition and structure, the amendments are analysed in detail in chapter 9.1.7.

Table 29. Levels of involvement in LIS-YC among groups in Pilot Study

	Leuven's Involvement Scale for Young Children (LIS-YC)									
	Level 1: Low Activity		Level 2: A Frequent Interrupted Activity		Level 3: Mainly Continuous Activity		Level 4: Continuous Activity with Intense Moments		Level 5: Sustained Intense Activity	
	N	%	N	%	N	%	N	%	N	%
Q1: Concentration	0	0%	0	0%	5	27.8%	3	16.7%	10	55.6%
Q2: Energy	0	0%	0	0%	5	27.8%	2	11.1%	11	61.1%
Q3: Complexity and Creativity	0	0%	0	0%	4	22.2%	4	22.2%	10	55.6%
Q4: Facial Expression and Posture	0	0%	0	0%	4	22.2%	3	16.7%	11	61.1%
Q5: Persistence	0	0%	0	0%	3	16.7%	3	16.7%	12	66.7%
Q6: Precision	0	0%	0	0%	1	5.6%	3	16.7%	14	77.8%
Q7: Reaction time	0	0%	0	0%	1	5.6%	4	22.2%	13	72.2%
Q8: Language	0	0%	0	0%	0	0%	3	16.7%	15	83.3%
5Q9: Satisfaction	0	0%	0	0%	0	0%	1	5.6%	17	94.4%

Analyzing the data with a qualitative approach and debriefing the comments that were written in the LIS-YC in order to make an overall judgement of the level of involvement of each child, we can further verify the positive outcomes of the intervention towards children's involvement especially when the arts are used as a means to promote literacy.

According to Laevers (1994), involvement can be defined as people's <u>concentration</u> and <u>persistence</u> towards a certain activity. However, activities should derive from their internal desires and interests and people should be able to accomplish them without being too simple or unachievable. Some years later, Siraj-Blatchford et al. (2002) agreed with this argument and supplemented that when people are involved in an activity they are focused and absorbed totally on the task and insist on fulfilling it. They also mentioned that involved adults and children show signs of excitement and internal motivation.

The data from the present study is highly linked with these arguments and evidence of these attributes can be detected. It shows that during art with literacy activities, the majority of the children were involved actively, were totally concentrated, showed signs of sustained intense activity and nothing could distract

their attention. Similar as above, children might be concentrated and persistent in literacy activities that were not derived from the arts. However, considering the fact that during the suggested interdisciplinary framework children had a leading role during the activities and that the arts are a basic part of their spontaneous free play, it can be argued that the intervention contributed positively to these results.

> *Child 3: He is very concentrated in the activity and he looks absorbed in his writings. He is not interested in the noise around him. The child next to him often speaks loudly but he is not turning his head to him. Nothing can distract his attention. Sometimes he raises his head and look to the ceiling, as he is thinking of his next step.*
>
> *Child 7: She sets goals and tries to fulfill them. She seems to be in an advanced level regarding literacy and tries to write a full sentence. She is not disturbed by external factors and when other children asked for her help, she first finishes her work and then helps the others.*
>
> *Child 9: The teacher asked her 'What are you writing?' but she seems so absorbed that she does not reply. She repeats the word she wants to write many times in order to find the next phoneme. She will first fulfill her goal, e.g. write the word she wants, and afterwards she will notice the external stimuli.*

Observed children also showed signs of <u>determination</u> towards the goals of the literacy activities that were initiated from the selected paintings. They did not leave the tasks effortlessly and they showed eagerness to continue until they met a satisfactory outcome. Sometimes, they also found ways to extend the activity by setting new goals. Considering the playful character of the arts and the fact children were totally responsible for these activities it can be argued that the arts contributed positively in these results.

> *Child 17: She insists to write with a good handwriting and make no mistakes. When she writes something that she thinks it is wrong she erases it and tries to think of the correct way of doing it.*
>
> *Child 15: He tries to fulfill his goals and continues to the next one. He observes his drawing and he writes underneath what he has drawn. When he finishes his writing he adds more things on each of his drawings and writes underneath what he added.*

The existing data is further linked with these arguments as there are signs of <u>satisfaction</u> and internal desire during the literacy activities of the interdisciplinary framework. Children showed that they enjoyed the procedure as they demonstrated feelings of excitement with their achievements and they were very proud of their outcomes. This can be also attributed to the fact that children had the freedom to

interact according to their free will and thus they were involving in activities that excited them.

> *Child 1: He looks very happy with the words he managed to write and shows them to his friends.*
> *Child 4: When she finishes her writings, she looks at them and smiles.*
> *Child 3: He looks very proud about his writing and he is seeking the teacher to show his output. He states 'Look miss what I managed to write for Picasso!'*

Researching the literature, a little further, it is obvious that another attribute of involvement is the effort that children make in order to meet the goals of the activity. Ridley et al. (2010) state in their research that involvement can be defined as an activity that children show concentration or <u>active contribution</u>. Active participation is one of the most important aspects of involvement as it shows that children are truly interested in the specific activity and they are stimulated. In addition to these attributes, involved children are conceptualized as independent thinkers that take responsibility of their own learning. From the following data, it is evident that the arts can trigger children to participate deeply in order to write.

The evidence from the data is associated with this argument as children were not passive followers in literacy activities but they had an active role in the procedure and outcome. This can be attributed to the fact that children during the suggested interdisciplinary framework developed ownership of the activities as they had a leading role of the whole procedure. Children were devoting much effort in the activity and they showed responsibility to find ways to solve the upcoming problems. It has to be mentioned that these literacy activities were derived from their interaction with the arts.

> *Child 11: She is very quiet during the literacy activity but she shows signs of mental energy in her face as she is trying to find the next phoneme of the word she wants to write.*
> *Child 13: She shows a lot of energy when she is participating in the activity. She often speaks very loud about what she is going to write next and she presses the marker very hard to the paper.*

Another fundamental characteristic of involved children is the expression of their ideas and emotions during the activity. This can be located in <u>verbal or non-verbal signs</u> that show if they are truly interested in the content of the activity or if they are just participating for external factors and reasons. Robson & Rowe (2012) define and further categorize involvement as an effort that children make during an activity while they analyze and speculate ideas and solutions.

During observations, there was evidence of children's verbal and non-verbal signs that revealed the levels of their deep involvement. Data from these observations can be further linked with these arguments as children were constantly stating their positive emotions regarding the procedure and nonverbal signs and posture were apparent during the whole art with literacy activity.

> *Child 7: She shows constant nonverbal signs of deep involvement in her writing. She is not participating in any other conversation until she finishes her letter.*
> *Child 8: Non-verbal signs of hard thinking are apparent during the activity. She stops to think about the next phoneme and she put the crayon in her mouth. Her eyes show hard, mental activity while she tries to find a solution to the upcoming difficulties.*
> *Child 1: In his effort to write a letter, he stated that he wants to do his best and trying to think what the receiver of this letter would like.*
> *Child 5: When he finishes his writing, he shows it to the teacher with enthusiasm and asks 'Miss could we play again this game?'*

To **summarize**, evidence from the quantitative and qualitative data with LIS-YC is highly linked with the attributes of involvement as they are described through empirical literature (see Robson & Rowe, 2012; Ridley et al., 2010; Siraj-Blatchford et al., 2002; Laevers, 1994). On a 5-point scale, which measures levels of involvement, data showed that the majority of children were highly involved and exhibited sustained intense activity. There were no data from the lowest levels of the scale. Through the additional qualitative analysis of the comments that were noted for LIS-YC, it is obvious that the research procedure was well received towards children's involvement. This data is in agreement with the relevant interdisciplinary research which examines the contribution of the arts in children's involvement (see Nichols, 2015; Carvis & Klopper, 2014; Catteral et al., 2012). However, it has to be acknowledged that the existing empirical findings in this area are mainly focused in the higher levels of education. There is limited, if any, research that focuses in the early years settings and examines the effects of the arts in children's involvement in literacy activities (Barrody & Diamond, 2013; Gerry et al., 2012). Therefore, the evidence of this pilot study contributes in examining this aspect and offers relevant knowledge, which could be a motivating factor for further research.

Before reaching any conclusions, there are some aspects that need to be taken into consideration. It is important to remember that this data is derived from a case study and that this was a pilot implementation of the whole intervention. Thus, there was no control group to compare the outcomes and make confident judgements. Furthermore, it has to be acknowledged that children might have a good response and involvement in other literacy activities that were not linked with an art intervention.

A counterargument for this is that the arts are part of children's free play activities and this result by itself in higher levels of involvement. Looking closely the suggested interdisciplinary framework (see chapter 8.4) and the pedagogical projects that were developed by the children during the art intervention (see appendix 8) it is obvious that children were free to design and implement the activities they wanted without feeling that they have to meet specific requirements or standards. This created the ground to develop ownership of the whole procedure and make them responsible for the outcome. Therefore, it can be argued that the arts intervention has the opportunity to increase the levels of children's involvement during literacy activities.

As the arts were the stimulus for literacy activities, it can be argued that data analysis answered the **third research question**. The arts, a central means to the suggested interdisciplinary framework, facilitate young children to involve deeply in early literacy activities in all involvement signals. Children were totally concentrated and persistent during the activities and revealed very positive verbal and nonverbal sings of involvement during arts with literacy activities. This was supplemented with great levels of satisfaction of their efforts and outcomes and strong determination to meet their goals with the best outcome. These findings from the pilot study seems promising for the final implementation of this research project with a control and experimental group in order to answer fully this research question.

9.1.6 Pilot study: Data from the teacher's interview

At the end of the suggested interdisciplinary framework and after conducting all the above measures, a semi-structured interview with the head teacher of the setting was conducted. The purpose of the interview was to compare the practitioner's views with the outcomes and gain further insights regarding the intervention before conducting the final research project. Semi-structured interviews provide a good opportunity to investigate further the views and the opinions of the participants through the flexibility that they offer (Bryman, 2008). The interviewer can investigate thoroughly the interviewees' opinions. Especially in practical applications in education, it is very important to seek the practitioners' opinions, as according to Farell (2016), personal perspectives have the opportunity to have a very strong impact in the practical implementation of a new teaching technique.

The semi-structured interview was designed for the purpose of this piece of research. The interview questions were categorised in 4 areas: <u>Academic and professional achievements</u>, <u>Personal teaching approaches and strategies</u>, <u>Implementation of the interdisciplinary framework</u>, <u>Children's development during the interdisciplinary framework</u>. Data from the interview with the practitioner of the setting in the pilot study also verifies the positive outcomes of the intervention towards children's involvement. Overall, the practitioner stated that the interdisciplinary framework is a good opportunity to promote levels of involvement

during literacy activities in the early years as it combines learning with pleasure through the constant interaction with the arts. She added very positive comments regarding the contribution of the interdisciplinary framework in children literacy and social skills and in children's use of literacy as a social practice. Finally, she commented on the benefits she and her students gained through the freedom the intervention offered them.

Regarding the <u>academic and professional achievements</u>, the practitioner holds a Bachelor Degree in Early Childhood Education and a Master degree in Human's Rights with a focus in Special Education. Her work experience involves approximately 8 years of teaching in both private and public early years settings and 1 year as a mentor in Higher Education. She has also some experience in the arts as she is a volunteer actor in the local theatrical team of the island.

To avoid repetition, the 2nd area of the interview '<u>personal teaching approaches and strategies</u>' is only analyzed in section 9.2.8. in the final study. Proceeding to the next area of the interview schedule, the practitioner gave us her views regarding the <u>implementation of the interdisciplinary framework</u>. As it is mentioned earlier, it is of paramount importance the practitioners to embrace a new teaching technique, in order to see its true outcomes. This is based on the fact that personal beliefs can determine the outcome and the quality of people's actions (Hall & Higgins, 2002).

The data analysis of the interview, is highly linked with this argument, as the practitioner made very positive comments regarding the implementation of the interdisciplinary framework. She stressed how excited she was, in terms of the outcomes and the procedure. The practitioner also mentioned that she could not believe that such an intervention could contribute so much on children's development. It was obvious that the intervention had a very strong impact in her teaching techniques, as she stated that she was very eager to participate in the final study as well and try another form of the arts next time.

Q: How was your participation? How do you feel about it?
P: At the beginning, I couldn't understand how this procedure will work, how I can teach the arts and literacy together. I could not image that they are so closely related. I was thinking that we could do an art project and in a parallel mode we could do a literacy project. As the time went by, I saw this amazing link with my own eyes. I realised that learning is not a straightforward process. This framework enabled me to teach arts and literacy together and to realise the different paths we can use to learn something. It was amazing!! I could not think of any part that made the procedure difficult. On the contrary, there was an amazing freedom, in which everyone was benefited. I could see that my students had made a

great progress in terms of literacy and especially the younger ones. We had such a great time and definitely we would like to join the programme next year in the final study.

Trying to create and to establish a productive team is a very important aspect during the educational process. In order for this team to be productive and successful, there should be a provision for a shared support and collaboration among the members of the team (Keating, 2015). This argument is even more important in introducing a new teaching approach, as practitioners need to feel supported in the process of implementing something new. Prior and during the implementation of the intervention there were continuous consultation meetings with the practitioner to discuss the development of the procedure, any upcoming issues or questions and to decide if any new resources are need. In addition to this, there was an initial period of training in the content of the intervention providing best practices that could be used.

Data analysis from the interview, showed that the pilot implementation was in agreement with the above arguments. The practitioner noted that she was satisfied with the provided support and the resources during the implementation of the interdisciplinary framework. She also commented on the discreteness of the mentor, which enable her to experiment and use the framework according to the traits and characteristics of her personality.

> *Q: Did you have the support and resources you needed when you needed?*
> *P: I have to admit that it was more than enough. It was amazing how quick the response was to the things we needed. For example, in the activity with the universe, we send the letter to the sun asking for books. I said if the 'sun' does not reply… worst case scenario I will go and buy some books. It was amazing how quick we received the books from…. the sun (laughing) and I am really grateful to this. I liked the fact that in the whole procedure there was a discrete role in the mentoring and consulting process, which enabled me to include and develop my ideas.*

Following the practitioner's views of the pilot school regarding the implementation of the interdisciplinary framework, the next area in the interview schedule was about students' development during the interdisciplinary framework. This area of the interview schedule was extremely advantageous as there was the opportunity to gain further insights of the effects of the intervention. Furthermore, this provided a good opportunity to create a link with the findings of the measures regarding children's progress.

The practitioner stressed the positive effects of the intervention on children's cognitive development throughout the interview. She also noted that she observed a lot of incidents in which children embedded literacy aspects in their free play activities

and she attributed this to the involvement of the arts as a means to develop literacy. Her arguments are in the same line with the existing evidence of relevant pieces of research (see Moritz et al., 2015; Change & Cress, 2013; Runfola et al., 2012; Vitsou, 2011) that verify the beneficial contribution of the arts in children literacy and they are also linked with the findings of this study. Regarding the effects of the arts on the use of literacy as a social practice it has to be argued that there are only indirect arguments about this (see Maniaci & Olcott, 2010; Hopperstad, 2008). However, these findings seem promising as they reveal some preliminary findings from an experimental design and through the practitioner's views.

> *Q: How did you observe children's progress in regards to children's development during the interdisciplinary framework?*
> *P: I would say that their progress was very impressive! I could see that they were developing cognitively and socially throughout this framework. What I found the most exciting was that they actually had a purpose to write and they decided it themselves. I didn't intervene at all! They didn't just do it for the shake of doing it and I saw loads of times that they were embedding literacy activities in their free time. I remember a couple of months ago that they were trying to create a poster with the paintings we have used so far and put some writing as well!! This lasted for approximately a couple of days.*

Another important factor in children development throughout school activities is their level of involvement. It has to be acknowledged that children are mostly involved in activities that are initiated by themselves (Robson & Rowe, 2012). This should be highly considered in every teaching method, as according to Phelps et al. (2012) this can result in students' autonomy and taking the responsibility of their own learning. These arguments are linked with the data from the teacher's interview, as she highlights the contribution of the intervention in children's involvement. She stressed that this was attributed to a unique kind of freedom and self-direction in which everyone could make their contribution with no right or wrong answers. She clearly stated that the research procedure is based on unique teaching methods that combine different roots of learning. She also thinks that the success of the intervention was the interdisciplinary teaching methods that was used.

> *Q: How did you observe children's involvement in literacy activities during the interdisciplinary framework?*
> *P: They responded to all of the arts and literacy stimuli and I could see that it was something that they were really interested in. They were actually playing within this interdisciplinary framework. Everyone was so relaxed! There was a part of freedom and spontaneity that everyone could see what they wanted to see and commented on what made to them the biggest*

impression. They were also thrilled to suggest their own ideas to design literacy activities. This does not exist with other teaching methods in which sometimes we stress children to meet a specific outcome that was decided from the beginning by the practitioner and not by them. Definitely a stricter and more guided approach would not have the same outcome.

Finalizing the interview, it was really important to identify the impact of the intervention in the school's routines. According to Cope (2013), the impact of a research project can be found in the effects on everyday life such as society, routines and services beyond academia. In educational practical interventions, the impact can be identified in teachers', students' and parents' beliefs and routines, thus it is crucial to consider this in any further plans after the completion of a research project (Jones & Grant, 2013). The practitioner mentioned a lot of times this impact during the interview and there was clear evidence that this intervention had a positive contribution on their routines. She also mentioned that she will definitely continue with this approach and that she wants to participate in the final study as well.

Q: What differences do you see in your teaching methods now on? How would you use this experience in the future?
P: It was amazing how we could mix arts with literacy! For me there were 2 completely different things and it was very impressive to see we could teach them together. The intervention respected the individual progress and needs of every child and everyone could contribute in the level they wanted and felt comfortable. Once you go one step forward there is no need to go one step back again! Now that I saw the beneficial outcomes and the things that I can achieve with this framework, I will definitely continue with this and I would like also to continue to the final study as well. I would like to use another form of the art like puppetry that I have never used them before and see the outcomes of this as well.

To briefly **summarise**, the above data from the practitioner's interview shows that the intervention was very well received in the pilot implementation. The practitioner verified that the intervention was successful in terms of children involvement during early literacy activities, children's cognitive and socially development and children's use of literacy as a social practice. She commented on the beneficial outcome of the intervention and on the great support she had during the implementation of the programme. She also highlighted the great impact that the intervention had on their routines and the ways she could utilize this experience in the future. Her views were in line with the findings from the qualitative and quantitate data from the different measure that were used to monitor students' progress. Overall, the findings from the pilot implementation of this research project seems

promising for the implementation of the final study to a bigger sample with control and experimental groups in order to answer the research questions.

9.1.7 Pilot study: Amendments before the final study

The purpose of the pilot study was to provide feedback regarding the research design and the content of the interdisciplinary framework before the final implementation. In addition to this, it was a good opportunity for me, as a researcher, to familiarise myself with this process and to amend any mistakes or unforeseen problematic situations that might arise during the implementation.

The pilot implementation ran very smoothly and there were no serious matters arising. During the whole process, I had the opportunity to see in practice the interdisciplinary framework I suggested and also to develop my skills as a researcher during the data collection and data analysis. It was also an excellent opportunity to adapt the interdisciplinary framework and the research project to the needs of the practitioner as there were a lot of opportunities to listen to the practitioner's and students' views and to observe their needs and desires.

The first amendment that took place was in the steps of the interdisciplinary framework. During the pilot implementation, I found out that the practitioner needed more support and practical examples in the different steps of the interdisciplinary framework. This was obvious during our discussion in the consultation meetings as she was asking for more clarification. Acting on this, I added more guidelines in the steps of the interdisciplinary framework that made the content of each step clear. Discussing with the practitioner, she commented that after this amendment the content was clear and provided the necessary details in order to facilitate her role in the intervention. Secondly, during the data collection of the PIPS, I realized that some students found it difficult to understand the content of some words in the last part of the measure or some guidelines of certain activities. Perhaps one good reason for this was the absence of a direct focus on meaning making as this test focuses on the measurement of practical skills. This was obvious as a number of children keep asking for extra clarification on these parts or they were looking at me with vague eyes. Acting on this, I experimented on the different wording that I could use before I make the necessary and final amendment and tried to find similar words that children are more familiar with in order to overcome this difficulty.

Thirdly, during the observation for the authentic assessment/portfolio, it was obvious that the practitioner needed more specific guidelines in order to conduct the observations. At the beginning, I designed a general framework with suggested questions/hints that would guide her thinking in order to gather the related data during her observations. However, she reflected back to me that she needed a more enhanced one. Acting on this again, I designed a checklist that was based on the early learning goals for the prime area 'Communication and Language' and the specific area

'Literacy' according to the Greek National Curriculum for the Early Years. The purpose of this checklist was to guide the practitioner's thinking in order to collect the necessary data for the students' portfolio regarding literacy as a social practice. After a consultation meeting before the implementation of the final study she confirmed that this checklist met her needs.

Finally, the PSD measure, the observation for the LIS-YC and the interview did not reveal any areas that needed improvement. Implementing them in the pilot study, was an excellent opportunity for me to develop my skills as a researcher and to familiarise myself with this process before the final implementation of my research project. It has to be acknowledged that to avoid repetition, I included only the final measurements after the necessary amendments of the pilot implementation of this research project (see chapter 8.5).

9.2 Final study

The outcomes of the pilot study were used to amend some areas in the research design and the steps of the interdisciplinary framework. Following this, there was the final implementation of the research project in which there were 3 experimental groups and one control group.

9.2.1 Final study: Background characteristics

In the final study, there were 61 students in total in the 4 groups and there was an approximately equal distribution in the **numbers** among each group with 18 students in EG1, 15 students in EG2, 14 students in EG3 and 14 students in CG (see table 30). There was also an approximately equal distribution in **gender** among boys and girls in total and within each group. There was a slightly bigger percentage in female students in general and only in EG2 this difference was bigger. In total the 42.6% (n=26) was boys and the 57.4% (n=35) was girls. Analysing this percentage in each group, in EG1 the 38.9% (n=7) was boys and the 61.1% (n=11) was girls, in EG2 the 26.7% (n=4) was boys and the 73.3% (n=11) was girls, in EG3 the 57.1% (n=8) was boys and the 42.9% (n=6) was girls and in CG the 50% (n=7) was boys and the 50% (n=7) was girls (see table 31). The **average age** of children in total was 63.55 months in the pre-tests and 70.62 in the post-tests and children in each group had the same average age with no big difference (see table 32).

Table 30. Participants among groups

	Number of Participants	
	Frequency	**Percent**
EG1	18	29.5%
EG2	15	24.6%
EG3	14	23%
CG	14	23%
Total	61	100%

Table 31. Gender distribution among groups

	Gender			
	Boys		**Girls**	
	Frequent	**Percent**	**Frequent**	**Percent**
EG1	7	38.9%	11	61.1%
EG2	4	26.7%	11	73.3%
EG3	8	57.1%	6	42.9%
CG	7	50%	7	50%
Total in all Groups	26	42.6%	35	57.4%

Table 32. Age in months among groups

	Age						
		Age in Pre-Test			Age in Post-Test		
	N	Min	Max	Mean	Min	Max	Mean
EG1	18	59	70	63.83	66	77	70.83
EG2	15	58	67	63.07	65	74	69.93
EG3	14	59	69	64.21	66	76	71.21
CG	14	58	69	63.50	65	76	70.50
Total in all Groups	61	58	70	63.66	65	77	70.62

Further data was gathered regarding some background characteristics of the children and their families such as family status, siblings, order of birth, place of birth, nationality and multilingualism in order to have a holistic view of the participants.

Regarding **family status,** in total the 93.4% (n=57) of the children had married parents, the 4.9% (n=3) of the children had divorced parents and the 1.6% (n=1) of the family status was characterised as other. In EG1 and EG3 the 100% (n=18, n=14) of the children had married parents. In EG2 the 93.3% (n=14) had married parents and the rest 6.7% (n=1) had divorced parents. In CG the 78.6% (n=11) of the children had married parents, the 14.3% (n=3) had divorced parents and the 7.1% (n=1) was characterised as other (see table 33).

Table 33. Family status among the groups

	Family Status					
	Married Parents		Divorced Parents		Other	
	Frequent	Percent	Frequent	Percent	Frequent	Percent
EG1	18	100%	0	0%	0	0%
EG2	14	93.3%	1	6.7%	0	0%
EG3	14	100%	0	0%	0	0%
CG	11	78.6%	2	14.3%	1	7.1%
Total in all Groups	57	93.4%	3	4.9%	1	1.6%

Regarding the members of the family and more specific the **siblings** the children have, in total the 26.2% (n=16) of the children had no siblings, the 59% (n=36%) of the children had 1 sibling, the 9.8% (n=6) of the children had 2 siblings, the 3.3% (n=2) had 3 siblings and the 1.6% (n=1) of the children had 4 siblings and above. Only in EG3 there were children with 4 siblings and above and only in EG2 there were children with 3 siblings. In the EG1 and CG the numbers were distributed among the categories of no siblings, 1 sibling and 2 siblings (see table 34).

Table 34. Siblings among groups

Siblings

	0 Siblings		1 Sibling		2 Siblings		3 Siblings		4 Siblings	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
EG1	4	22.2%	13	72.2%	1	5.6%	0	0%	0	0%
EG2	7	46.7%	4	26.7%	2	13.3%	2	13.3%	0	0%
EG3	1	7.1%	10	71.4%	2	14.3%	0	0%	1	7.1%
CG	4	28.6%	9	64.3%	1	7.1%	0	0%	0	0%
Total in all Groups	16	26.2%	36	59%	6	9.8%	2	3.3%	1	1.6%

Further analysis was conducted in the data in the **order of birth** of the children who had siblings. Values were calculated only to children with siblings and in the cases there is a missing value, it is a single child with no siblings. In total, the 26.2% (n=16) of the children were a single child, the 3.3% (n=2) of the children were twins, the 24.6% (n=15) of the children who had siblings were born first, the 37.7% (n=23) of the children who had siblings were born second, the 4.9% (n=3) of the children who had siblings were born third and the 3.3% (n=2) of the children who had siblings were born fourth. In EG3 and CG there were no twins or third born children and in EG1, EG2 and CG there were no fourth born children. In the rest groups the numbers were distributed among the categories of twins, first born, second born, third born, fourth born and missing which is the children with no siblings (see table 35).

Table 35. Order of birth among groups

	Order of Birth											
	Twins		First Born		Second Born		Third Born		Fourth Born		Missing	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
EG1	2	11.1%	6	33.3%	5	27.8%	1	5.6%	0	0%	4	22.2%
EG2	3	20%	2	13.3%	2	13.3%	1	6.7%	0	0%	7	46.7%
EG3	0	0%	1	7.1%	11	78.6%	0	0%	1	7.1%	1	7.1%
CG	0	0%	5	35.7%	5	35.7%	0	0%	0	0%	4	28.6%
Total in all Groups	2	3.3%	15	24.6%	23	37.7%	3	4.9%	2	3.3%	16	26.2%

Values were calculated only to children with siblings. Where there is a missing value (not applicable) it is a single child

Data was also analysed regarding the **place of birth** of the children and for this there was a categorisation of children who were born in Greece and outside Greece. In total, the 95.1% (n=58) of the children were born in Greece and the 4.9% (n=3) of children were born outside of Greece. In EG1, EG2 and CG all children were born in Greece whereas in EG3 the 78.6% (n=11) of the children were born in Greece and the rest 21.4% (n=3) were born outside Greece (see table 36).

Table 36. Place of birth among groups

Place of Birth

	Greece		Outside Greece	
	Frequent	**Percent**	**Frequent**	**Percent**
EG1	18	100%	0	0%
EG2	15	100%	0	0%
EG3	11	78.6%	3	21.4%
CG	14	100%	0	0%
Total in all Groups	58	95.1%	3	4.9%

Regarding the **nationality** of the children included in the sample there was a categorisation among Greek and non-Greek nationality. In total, the 93.4% (n=54) of the children had a Greek nationality and the rest 6.6% (n=4) of the children had a non-Greek nationality. In EG1, EG2 and CG, all children had a Greek nationality, whereas in EG3 the 71.4% (n=10) of the children had a Greek nationality and the rest 28.6% (n=4) of the children had a non-Greek nationality (see table 37).

Table 37. Nationality among groups

	Nationality			
	Greek		**Non Greek**	
	Frequent	**Percent**	**Frequent**	**Percent**
EG1	18	100%	0	0%
EG2	15	100%	0	0%
EG3	10	71.4%	4	28.6%
CG	14	100%	0	0%
Total in all Groups	57	93.4%	4	6.6%

Finally, the last data analysis regarding children's background characteristics was regarding if children were **multilingual** or not. In total the 11.5% (n=7) of the children were multilingual and the rest 88.5% (n=54) of the children were not multilingual. In EG1 all children were not multilingual. In EG2 the 6.7% (n=1) of the children were multilingual and the rest 93.3% (n=14) of the children were not multilingual. In EG3 the 28.6% (n=4) of the children were multilingual and the rest 71.4% (n=10) of the children were not multilingual. In CG the 14.3% (n=2) of the children were multilingual and the rest 85.7% (n=12) of the children were not multilingual (see table 38).

Table 38. Multilingualism among groups

	Multilingual			
	Yes		**No**	
	Frequent	**Percent**	**Frequent**	**Percent**
EG1	0	0%	18	100%
EG2	1	6.7%	14	93.3%
EG3	4	28.6%	10	71.4%
CG	2	14.3%	12	85.7%

Total in all Groups	7	11.5%	54	88.5%

The above analysis is useful in order to have a holistic picture of the background characteristics of the students in all experimental and control groups. The data from the background characteristics is used in the data analysis below in order to examine if it was an influencing factor that might affect or not the outcomes.

9.2.2 Final study: Observation regarding practitioners' teaching styles

Before the implementation of the interdisciplinary framework, there was a need to examine any differences in the practitioners' teaching styles, as this might influence the outcomes. Practitioners have a very strong effect on children and especially on their attitude to learning and life in general. What is even more important is that most of the time they are not consciously aware of the impact of their beliefs and stance in children's learning (Farrell, 2016). Different teaching styles contribute strongly to children's performance. This is based on the argument that there are teaching styles that focus on reproduction of knowledge and teaching styles that focus or the production of new knowledge (Chatzipanteli et al, 2015; Hewitt & Edwards, 2005). According to the different teaching style that a practitioner is adapting, there will be different results and influence in the students' learning journey.

Proceeding with this argument and based on Bandura's (1977) theory about social learning and imitation, it can be argued that children tend to copy the reactions, responses and attitude of the important others. In a school setting the important others could be the practitioner and their peers. In terms of teaching and learning, a practitioner, who embraces the role of the facilitator (see chapter 7), will empower children to raise their own voice, to express themselves without afraid to make mistakes and to develop their creativity. On the other hand, a practitioner, who embraces a formal authority teaching style (see chapter 7), will not allow much interaction within the group, as their purpose is just to give knowledge with a focus on the content. As a result, students are only receivers of the knowledge without having the freedom to follow their needs like in the facilitator approach. Therefore, when conducting a practical intervention with different practitioners, it is very important to verify at the beginning that there are no significant differences in their teaching styles, as this will have an impact on children's performance.

They way that practitioners react and respond to children's needs and stimuli is mostly based on the judgments they have made a long time ago (Farrell, 2016). The art of teaching itself is a result of a judgement that has been made in a previous circumstance (Hewitt & Edwards, 2013). As a result, most of the time, practitioners are not aware of these unconscious decisions. Therefore, to examine this issue, the method of the observation was selected. According to Papatheodorou et al. (2012), this research method is a powerful tool, which provides the researcher the

opportunity to understand and gain further knowledge about a specific situation. The data was collected through a qualitative observation in a naturalistic setting, which was their classroom in the school they were working. A non-participant style was used. Each practitioner was observed for 2 whole days with the narrative method. Practitioner 1 (P1) was in experimental group 1 which was using paintings, practitioner 2 (P2) was in experimental group 2 which was using drama, practitioner 3 (P3) was in experimental group 3 which was using puppets and practitioner 4 (P4) was in the control group which was using the typical teaching methods to develop literacy according the Greek early years curriculum (see table 39).

Table 39. Practitioners in experimental/control groups

Practitioners	Experimental groups
P1	Experimental group 1-paintings
P2	Experimental group 2-drama
P3	Experimental group 3-puppets
P4	Control group-typical methods

Initially each observation of each practitioner was transcribed and was analysed individually. This observation was based on qualitative methods and more specifically in the narrative method according the framework that is described from Papatheodorou et al. (2012). Thus, there was a focus on a detailed account of the practitioners' actions and the contextual information (e.g. if they supported children and the ways they supported children) and not a focus on the quantity of these actions (e.g. how many times they supported children). One main reason for selecting this practice was because there was an effort to identify the characteristics of their teaching styles and see if there are any major differences among the different practitioners. At this stage, there were no pre-decided types of behaviour that we were trying to identify but there was an effort to describe their interactions with children in abstract terms e.g. positive role model, empower children to find solution etc. Following this analysis there was a comparison with the characteristics of the other practitioners to find similarities and a further comparison with the characteristics of the different teaching styles as described in chapter 7. This categorization and analysis was made on the total observation and not on specific events. As it is obvious from the extracts that are presented below, the data analysis from all observations in experimental and control groups shows that all 4 practitioners embrace the same values in teaching and learning with no particular difference in their teaching style. One good and reasonable factor for this might be that all practitioners were very eager to participate in this research project either in the experimental or control group. This might lead to the fact that they were open in such interactions and comfortable in such procedures during their teaching. It has to be acknowledged that there were some small differences, as it comes to different human beings. It is

definitely not possible to argue that they were totally similar as this is not realistic. However, there were a lot of similarities in their teaching styles and therefore, it can be argued that there were no issues raised that could affect the outcomes due to different teaching styles. All of them showed signs of the facilitator approach, who enabled children to construct their own knowledge.

One of the basic characteristics of a facilitator approach is to provide opportunities to students to hands-on experiences that will enable them to have an <u>active role in their learning</u>. Practitioners, who act as facilitators to students' learning, are always strive to make them active learners who never stop to experiment with new constructs (Won et al., 2015). The teacher does not get involved directly to student's decisions but gives them the opportunity to come up with their own solutions (Schward, 2005). This enables students to develop good thinking skills and to develop a general strategy that they can use later in their lives, in order to solve any upcoming challenging situation. Encouraging students' active involvement in their learning journey has a very strong impact on the production of new knowledge more effectively from a formal authority approach (Hewitt & Edwards, 2013). When students have an active role in the decision making they have ownership of the situation and consequently of the knowledge they gained.

The data analysis of the observation at the 4 different practitioners reveals signs that are linked with the above arguments. All 4 practitioners during their interactions with their students encouraged active learning experiences and gave the leading role to the students. This was obvious during the organised activities and during children's free play. They further gave opportunities to children to develop their own way of thinking instead of giving them ready made solutions. Some extracts that show the active role of the practitioners in children's learning are as follows:

> *<u>P1</u>: <u>Incident 1</u>: She sits in the house corner and plays with the children. The children ask her about the weather outside and about the leafs on the trees. They are wondering why they are falling from the trees. P1 asks them back "Why do you think this is happening?" Children discuss with each other about this. P1 goes outside and takes a couple of leafs and gives them to students. She focuses their attention to their differences.*
>
> *<u>Incident 2</u>: She is in the discussion corner and discuss with the students about their news. She seems really interested in children's stories and asks them a lot of questions. Based on their stories they design the activities of the day.*
>
> *<u>P2</u>: <u>Incident 1</u>: She sits with the children on the library corner and browses books. A child asks her to read a fairy tale and she does it happily. After the reading of the book she starts telling how much she liked the book and the content. She does not ask or force children to tell her the same. The children*

around her do the same and focus on the fairies of the book. A child wants to play with the fairies. P2 seems really interested and they all organise an activity with fairies and knights. They all go to the cloak room to select their costumes. P2 does not intervene in children's choices. She asks them how the costume they selected will match with their role. When a child does not know what costume to wear she encourages them to improvise. She rewards them verbally.

Incident 2: They are playing a story that seems like the beauty and the beast. Children are wearing name tags that they found in the cloak room or made by themselves. P2 is participating in their game and she pretends she is sleeping. She pretends she wakes up and forgot her role. She asks for clarification about her role from the other children. The children laugh and guide her what to do.

Incident 3: Children want to go to a museum and P2 discusses with them. She gathers information about the type of the museum and the activities they want to do. They design a histogram with these ideas and they allocate roles in order to fulfil this visit.

P3: Incident 1: Children are discussing what they did last night with their families. They are discussing about coca cola and worms. P3 participates in their discussion and she seems very interested about their stories. A child said she went for coffee at her auntie. P3 asks them "Why do we say we are going for coffee when we don't drink coffee?" Children laugh and start talking about coffee and drinks. P3 suggests them to write down their ideas.

Incident 2: During the discussion time, there is an argument among 3 children. They start pushing at each other and make inappropriate comments. P3 sees this and explain that if they push each other they will not make them understand why they are all upset. She suggests to go somewhere quiet to discuss and resolve this situation.

Incident 3: There is a visitor today in the setting. The visitor sits with the children in the discussion corner next to the practitioner. After the good morning song, P3 introduces the visitor but she does not reveal the purpose of her visit. She asks children to think who is she and what is the purpose of her visit in their school. The children say their ideas and instead of correcting them she is asking how they came to this conclusion.

Incident 4: They are about to make a ship using a hard paper. P3 discusses with the children how they want to make it and what they will use to paint it. Children discuss. Some of them want to use paintbrush and some others want to use markers. Instead of giving a solution, P3 asks them to try which

one would be better and decide. They experiment with both resources and decide that paintbrush is a better choice.

P4: Incident 1: They are having a discussion about the upcoming Bank Holiday and the history behind it. She is very interested in their views about this and she asks them for clarification. Children start to discuss about guns, war and poverty. A child says that they were wearing different clothes at that time due to poverty. She stimulates them to think what caused poverty and she write down their ideas. They design activities based on this discussion.

A facilitator approach is basically linked to a student-centred approach to learning, in which students not only have an active role in their learning but teachers are playing with them as an equal member. This can be implemented by socialising with the students as one of their friends in their everyday interactions (Won et al., 2015). With this practice a facilitator teacher can convey messages and learning goals more effectively as students see them as one of their friends (Farrell, 2016). This does not mean that the practitioners lose their power or authority in the classroom, but it means that they empower children to raise their own voice and gain self-confidence. Through this practice they engage children to the teaching and learning procedure even more, as they develop a community of trust with a very friendly environment (Won et al, 2015). With this, students are not depended on the teacher to supply them with a ready-made knowledge but they have the opportunity to lead their own learning progress. Students feel free to engage more and this results in effective learning and construction of knowledge.

During the observation of the different practitioners of the groups, it was obvious that all of them embraced the above arguments. During their interaction with children, and especially during free time activities, they played as an equal member of the group with children and they delegate their role to the children and follow their guidelines. There could be sometimes that they guided students indirectly when children needed help but they kept their role as equal play partners. With this practice, children in all groups were very engaged with the activities and they seemed very satisfied with this. Some extracts that show that the practitioners maintained an equal role with the children during their interactions are as follows:

P1: Incident 1: She sits in the carpet area among the children and discusses with them about their day. She does not sit on the higher chair but she sits in the carpet among them. […] children pretend they are in a meadow and are flowers. P1 asks them if she can play with them and pretends to be a flower. She is following the children's lead and acts as other children.

P2: Incident 1: She is in the cloak corner with the children and they are selecting clothes for their play. Children ask her to take off her shoes as they will go a walk on the beach and her shoes will get wet. P2 asks them in what beach they will go and pretends she is cold. Children laugh and reply to her that it is a surprise. She pretends that she is wearing more clothes and follows them to the surprise beach.

Incident 2: Children are trying to write a letter to a friend and she is sitting next to them. P2 wants to write a letter to her friend in UK and asks children what she should do. Children laugh and advise her that she should use nice colours and markers to write the letter to her friend.

Incident 3: A group of children cannot decide what to play and they are between two different ideas. They seek advice from P2 and she discusses with them about the content of the play. They decide to combine both ideas. She plays with the children and receives instructions from them about her role.

P3: Incident 1: She sits in the hairdresser salon corner and says she wants to make her hair. She says that her child was upset this morning and she didn't have time to make her hair and that is why it looks messy and fluffy. She sits there and waits for someone to come. She pretends she is waiting for the hairdresser, who is late. A group of children go there after a while. They said that there is no appointment available but they will their best. After a while M. comes and says she will do her hair. P3 let M. to improvise with her hair.

Incident 2: She sits with some children in the music corner. She is playing the tabor and children say good morning in a way they want. She hands out the tabor to the children and make them the teacher.

Incident 3: Children are playing a board game. There are two groups of 3 children each and they take turns to throw the dice. One child stands up to go to the toilet and the other children are upset as they don't want to wait. P3 suggests to take her place until their friend comes back. Children have made up their own rules of the game and P3 follows them and asks for clarification when she does not understand something.

P4: Incident 1: She is sitting in the carpet with the children and they are playing with the letter cards. Children are making nonsense words and they are laughing. P4 is laughing with them and reads the funny words they create. They all decide of the meaning of the new words.

A very important quality of the facilitator approach, is to provide <u>positive role models</u> to students instead of demanding children to act in a particular way. It is very important to show students the way we expect from them to interact and especially

during the learning process. When this is happening, there is a better impact on students' performance (Sormunen et al., 2013). Non-verbal attitude can convey stronger messages to the recipient from verbal communication (Burgoon et al., 2016). This means, that when we are asking from children to behave on a particular way, we need to embrace this behaviour first ourselves. By providing positive role models, we show to students the attitude we expect them to have and eventually they will imitate us. A very good example of this is a situation when children are very noisy and upset, and the practitioner is shouting at them to be quiet. This will result in the opposite outcome every time this situation is repeated as children will mirror the practitioner's reaction and start screaming even more to other children to calm down. This leads us to suggest that a better approach to this is when the practitioner remains calm and explain with lower voice the benefits of staying calm. Eventually children will lower their voice as they would not listen to the practitioners. Based on Bandura's (1977) theory of social learning and imitation, in a similar situation, children will imitate the practitioner and will act in the same way during their interaction with other children. As it is stated earlier in this chapter, children tend to imitate the behaviour of the important others and especially the behaviour of the practitioner, which is an important role model for them. They have a tendency to mirror almost everything the practitioners do or say. This has a bigger impact on their attitudes instead of just asking them to react in a particular way.

Data analysis from the observations, shows evidence that is linked with the above comments. Practitioners from both experimental and control groups revealed signs of positive role models during their interactions with their students. They embraced and practiced the expected behaviour from children instead of just reminding them the way they should behave. This took place in both free and organised activities during the day. All of the practitioners were showing children the appropriate way to develop positive relationships with each other and through this, children imitated their attitude and embraced this themselves. Some extracts that show that practitioners provided positive role models are as follows:

P1: Incident 1: She sits in the table with the children and they all make a drawing in a big flipchart. There is disagreement among two children as they both want to use the same marker. P1 is observing the situation but does not intervene immediately. After a while she asks them with a very gently voice what is the problem. The children are still intense but she replies in a calm voice that she cannot understand what they are saying as they are screaming. Eventually, children get calmer and start discussing the issue that made them upset.
Incident 2: A group of children are playing in the home corner. M. is talking to his friends but no one listens to him. M. starts poking some of the

children, which seems that irritate them. P1 touches their head gently and says: 'Let's listen what M. has just said. It seems very interesting!

P2: Incident 1: She is discussing with the children about their news. When P2 is talking, she makes a mistake and confuses her words. She laughs with herself and explains to children that everyone makes mistakes and so did she.
Incident 2: She sits in the discussion corner with the children and they are discussing about what activities they want to do. Everyone is so excited and there is a noisy environment. She raises her hand when she wants to speaks and reminds to the children that they need to do the same.

P3: Incident 1: She is in the discussion corner with a group of children and they are signing songs. When they finish a song, they discuss what they will sing next. They decide all together. A child starts on its own and some other follow him. There is a lot of noise with this. P3 is not shouting at them to stop this but she starts singing the 'Miss quiet song'. Children follow her lead and laugh. She closes her ears and children stop immediately and ask her why she is doing this. P3 explains to them that there was a lot of noise and she does not like to shout at them and this is why she closed her ears. She said that if she shouts she is will have a very tight face and asks them if they will like this.
Incident 2: P3 puts some music and she dances with the children. There is one child who seems shy and is not dancing. The other children are pushing at her and she seems sad. P3 makes a gesture to the child that proposes to dance with her. The child accepts the invitation and dances with P3 and she seems happy. The other children are doing the same.
Incident 3: Children are trying to write something and they are having a discussion about what letter they need to write next. Some elder children are making fun of the younger ones and saying that they don't know and they are making smudges in the paper. P3 sits next to them and observes this discussion. She says that her daughter, who is very young, started to do smudges but now she is an excellent scribe. Children are surprised and they mellowed to the young ones.

P4: Incident 1: She sits in the discussion corner with some children. They tell their news from the weekend. She seems very interesting about their stories. There is one child who looks absorbed in his thoughts and when it is his turn to speak he does not realize it and remains silent. Another child is tweaking him. P4 says with gently voice 'I am sure K. is thinking of this story right now and he will tell us in a minute.' The child who tweaked him apologizes to his friend after this.

Providing positive role models, is strongly linked with a general positive and respectful attitude to children. It is very important to respect children, to recognise their efforts and to encourage them to continue. Farrell (2016) links this with the facilitator role of the teacher. He states that practitioners who embrace this role are always concerned about the progress of their students and their emotional well-being. Thus, they always try to encourage them to reach their goals. With this approach, practitioners empower them to try new things that eventually will result in building new knowledge. People, not only young children, might stop try to solve a problem if their first attempt was unsuccessful, especially, when it comes to a shy child, who does not have strong self-confidence. Facilitator practitioners are always aware that participation in every activity embraces an equal distribution of the roles, so no one left behind (Won et al., 2015). It has to be acknowledged, that this trial and error procedure is very useful in learning as through mistakes we learn what to avoid for the next time. Understanding children's individual style of learning have a great impact on their performance, as this means that we provide them the appropriate opportunities to construct knowledge affectively. This automatically results in identifying their achievements which will help them to build their self-confidence and continue to try. This feature is very important during interactions with students as this might determine their future attitude to learning in general.

The data analysis from observations in all 4 different practitioners, shows that there is evidence that is linked with the above arguments. All 4 practitioners from experimental and control groups showed that they respected children's individual way of thinking and learning and further stimulated other children to do the same. They all provided opportunities for experimentation and a safe environment that making mistakes was normal and expected. Some extracts that shows that the practitioners respected and recognized children's efforts are as follows:

P1: Incident 1: She is in the library corner with a group of children and browses books. They focus their attention on a book with very vague pictures. She participates in a discussion about the pictures of this book. They are trying to understand what the picture is about. Children as saying completely opposite things. She welcomes every ideas and reward verbally the children for their creative thinking. There is a child who seems stuck and cannot think anything to say. The practitioner encourages this child without putting any pressure on him. She smiles at him and tries to give him hints to help him.
Incident 2: She is in the carpet area with all of the class and they all decide who will be the leader for today. […] The leader stands up and goes to the day board and tries to think what day is today. P1 encourages her to think

the poem with the days to remember and stimulates the rest of the group to sing this song.

P2: Incident 1: She is playing a game with a group of children, in which they are detectives who should discover something that is hidden in the classroom. The children are very excited and look enthusiastically for the hidden objects. She congratulates every child who reached the goal and asks the other children to do the same. Some children are not so quick and they left behind. She encourages them and reassures them that they will find something very soon.

P3: Incident 1: A group of children sits on the art corner and tries to draw little hearts. Some of them are better than the other ones. When P3 approaches their table they all show her their outcomes. She congratulates them all and smiles. She gives encouraging comments to every one individually.

Incident 2: There is a discussion that the dentist will visit soon the setting to examine their teeth. There is a child who bursts into tears and says that she is afraid. P3 reassures her that if she does not want the dentist to examine her then this is what is going to happen. She hugs her and explains that the dentist is her friend and his children are friends with her children. She adds that the dentist has nice and funny teddy bear and a very small flash light. P3 starts a story about the giggle thief and the child is laughing.

P4: Incident 1: Children are in the library corner and select the book they want to loan. There are some children who do not seem to know exactly which book they want to borrow and they stand there for a long time. P4 let them to decide at their own time with no pressure. After a while she discusses with them about their favourite features in each book and helps them to make a decision.

Finally, a very important and desirable skill of the practitioners, is to <u>capture children's attention toward the learning activities</u>. It is very important for the practitioners to find ways and to embrace features in their teaching that will trigger and sustain students' attention during the school activities (Aboudan, 2011). Practitioners who act as facilitators are very concerned to find ways that will capture students' attention, as with this practice they will support their students in their learning journey (Farrell, 2016). The way that we will introduce a new activity to the children is really crucial as in most of the time this is a critical factor if they will participate actively or not. Usually, the first impression of something new will define if we will continue of participating or not. For example, if children consider an activity as unattractive they will either not participate at all or they will participate reluctantly.

Therefore, it is really important when interacting with children to find interesting ways to introduce new learning activities as this will determine their engagement. Practitioners who embrace the facilitator role are very much concerned about their students' engagement and for this reason they will try to find ways to stimulate students in the learning process, whereas on the contrary practitioners who embrace a formal authority approach are very much concerned on delivering the knowledge without focusing on students' interaction.

Data analysis from observations in all 4 practitioners shows that they were very much concerned about children's interaction and feelings about the activities. They all tried to find interesting ways to introduce the new learning activities and try to maintain children's interest as much as they could. Most of the time in order to fulfil this, they either included children in this process or included external factors from mother nature that will excite them. Some extracts that show the practitioners' effort to motive children are as follows:

P1: Incident 1: She is sitting with the children in the discussion area and she welcomes all the children. They sing the good morning song and after this she triggers their attention to the picture on the almond tree in the bulletin board near the window. She focuses their attention on its roots. Children are very excited as they observe something new there. One of the children is going there to check and comes back with a letter. They open this letter and there are some instructions of a funny activity from a little pigeon. The children are very excited and want to do this activity.

P2: Incident 1: Children are discussing about how much they liked the visit they did last week to the children's museum. They ask P2 to repeat again this visit. P2 discusses with the children in what other museums they can go. There is a very active discussion about the archaeological museum and the sculptures. They decide to make a new museum in their classroom. They design an activity in which they will transform their classroom into this museum.

P3: Incident 1: She is in the discussion area and plays the game 'What's your name?' with a group of children. In this game they pretend to play the drums and each child individually has to say their name. B. does not say his name but he replies 'deer'. All of them are laughing. P3 is taking advantage of this and askes children if they want to say funny names instead of their real names. The children are very excited with this and they play this activity.
Incident 2: Children are wondering why the chalk is getting smaller but the markers stay the same in size. P3 is taking advantage of this and stimulates children to search in the internet to find a solution.

P4: Incident 1: She discusses with children about what they see outside the window. Children focus their attention on the brown colour of the leafs in the trees and start wondering about the reason. They all go outside to gather some of the leafs and they experiment with the texture, smell, sound. Children want to disguised into brown leaves and they organise this with P4, who facilitates the discussion.

To briefly **summarise**, the purpose of the observation was to investigate if there were any inconsistencies among the practitioners' teaching styles in the 4 different settings. This was based on the argument that different teaching styles have a different impact on students learning and attitude towards learning (Farrell, 2016). The above analysed extracts show that there were no significant differences among all 4 practitioners in their teaching styles. However, it has to be acknowledged that there were not exactly similar as it comes to different human beings and it is impossible to argue something like this. The extracts that have been presented above highlight that all the practitioners adopted very similar teaching techniques that link with the qualities of the facilitator approach. These qualities are in line with the existing literature that describes the facilitator approach in teaching and learning (see Farrell, 2016; Won et al, 2015; Sormunen et al., 2013; Schwarz, 2005; Grasha, 2002). They were very sensitive to children's needs and desires and they tried to provide them opportunities to have an active role during the teaching and learning process and to find interesting ways to introduce new activities. During their interactions with children, all practitioners from experimental and control groups enabled positive relationships among the team and promoted positive role models that children imitated. Finally, they were all respectful of children's different learning styles and encouraged them to continue by recognising their efforts. All of these findings leads us to suggest that there were no issues raised regarding the practitioners' teaching styles that could eventually have an impact on children performance.

9.2.3 Final study: Cronbach's alpha reliability test

In order to answer the research questions several measures were used. Reliability of all the quantitative measures, and more specifically internal consistency was tested using Cronbach's alpha. The analysis shows that all the items of each measure had a good level of internal consistency as the result was above 0.8. More specifically, internal consistency of the 9 items of LIS-YC was α=.992, internal consistency of the 14 items of pre- and post-test of PIPS was α=.831, internal consistency of the 22 items of pre- and post-test of PSD was α=.941 and internal consistency of the 10 items of pre- and post-test of Authentic assessment/portfolio was α=.861 (see table 40).

Table 40. Reliability analysis of all measures

Reliability Analysis

	Cronbach's Alpha	N of Items
Leuven Involvement Scale for Young Children (LIS-YC)	.994	9
Performance Indicators in Primary Schools (PIPS)	.831	14
Personal and Social Development measure (PSD)	.941	22
Authentic Assessment/Portfolio (AA/P)	.861	10

The measures that was used to answer the 1st research question were the PIPS, for the literacy skills and the PSD, for the social skills. There was one pre-test and one post-test for both measures at the beginning and at the end of the intervention. The pre- and post-test were implemented to all experimental groups (EG1, EG2, EG3) and to the control group (CG) at the same period of time.

9.2.4 Final study: Performance Indicators in Primary Schools (PIPS)

In order to examine the levels of significance among the children's performance in literacy in the different groups a mix model analysis (split-plot ANOVA) was used. There was a comparison between the pre- and post-test of each of the 7 items of PIPS among the control group and each experimental group individually and among all the experimental groups. The data also tested using a mix model analysis (split-plot ANOVA) among the 7 items of PIPS and the background characteristics of the sample to verify if they will act as influencing factors to the outcomes.

Data analysis showed that overall the background characteristics of the children served as a non-significant factor in their performance as there was no statistical significant difference in the numbers. The only statistical significant difference that was found was in Writing in the factor Siblings and Order of Birth (p=.029, p=.003) (see table 41). This shows that the background characteristics overall did not influence significantly children's literacy skills. There might be a small influence in children's performance in writing and siblings and order of birth. This can be attributed to the importance of family in children's literacy development according to researchers (see Hayes, 2016; Al-Alwan, 2014; Giallo et al., 2013; Rapp & Duncan, 2012). However, looking closely the data it is obvious that the majority of the items of PIPS did not show a statistical significant difference. Having this in mind, it can be argued that overall there wasn't a major influence in children's performance in literacy skills.

Table 41. Influencing factors in all items of PIPS

Influencing factors in Performance Indicators in Primary Schools (PIPS)						
Mix model analysis (Split-plot ANOVA)						
Gender	Family Status	Siblings	Order of Birth	Place of Birth	Nationality	Multilingual

Q1: Writing	.858	.413	.029	.003	.534	.750	.609
Q2: Picture Identification/Vocabulary	.157	.743	.289	.322	.327	.424	.822
Q3: Ideas about Writing	.706	.431	.071	.465	1.000	.706	.240
Q4: Repeats	.365	.172	.058	.138	.832	.804	.457
Q5: Rhyming Words	.196	.221	.507	.358	.507	.323	.274
Q6: Letter Identification	.065	.605	.156	.990	.892	.687	.823
Q7: Word Identification	.687	.081	.620	.209	.518	.910	.566

Regarding the differences in literacy performance among groups, the data analysis showed that overall and in most items there was a statistical significant difference between the control group and the experimental groups. However, there were some items in which the data analysis showed that there was no statistical significant difference between the control group and the experimental groups. There was an effect on children's literacy skills among the control group and the experimental groups as there was a statistical significant difference in Picture Identification/Vocabulary (p=.001, p=.002, p=.001), in Repeats (p=.001, p=.002, p=.000), in Rhyming Words (p=.000, p=.000, p=.000), in Letter Identification (p=.000, p=.000, p=.000) and in Word Identification (p=.000, p=.000, p=.000). In the only items that the data shows that there was no effect among the control group and the experimental groups are in Writing (p=.522, p=.847, p.=719) and in Ideas about Writing (p.=039, p=.039, p=.037, p=.604) as the numbers show that there was no statistical significant difference (see table 42). In other words, this means that the intervention might not have an effect in children's performance in writing and ideas about writing as the numbers reveal that there was no different effect. However, the numbers overall revealed that in the majority of the items that measured children's literacy skills there was a strong significant difference and thus it can be argued that the intervention in total made a difference. It has to be acknowledged that the intervention did not focus on these areas, but it was mainly empowering children to emerge literacy activities. However, looking closely the pedagogical projects that was suggested and implemented during the intervention (see appendix 8), there were a lot of such opportunities. Being more specific, in the pedagogical project 'The flowers' at EG 1, children received a letter from Mone (the painter), which was the motivation to discuss the different ways of writing according to cultural differences. This was a very good opportunity to discuss and develop ideas about writing and seek the proper response. This was also a good call in order to make the motivated to write back to the painter and reply to this letter.In the comparison among the three different experimental groups, the data analysis shows that there is no different effect in children's performance between the EG1 and EG2 in all items apart from Letter Identification that the numbers show that there is a statistical significant difference (p=.014). This difference can be explained by looking at the numbers in the mean in these two groups (see table 43). It is obvious that children in EG2 had a greater

progress in this area. One good and reasonable explanation might be the fact that children in this group were more interested in activities towards this area and thus they had more opportunities to develop these skills. Looking closely the pedagogical projects that were suggested and implemented during the intervention (see appendix 8), it is obvious that in EG 2 there was a constant effort to include more writing aspects in their drama play in order to facilitate their interactions. For example, in the pedagogical project 'Travel in the Universe' children created alien name tags with pseudo letters in order to help them find their way, created an invitation to their favourite alien, created a list with the dangers they need to be aware during their journey. Whereas in the EG1, there were more opportunities for verbal communication which was enriched by written communication. For example, in the pedagogical project 'Butterflies' children engage in meaningful discussion about the reason why these butterflies are so weird and the practitioner act as a scribe in their ideas.

In the comparison between EG1 and EG3, the data analysis shows that there was no different effect in children's performance in Writing (p=.681), in Picture Identification/Vocabulary (p=.539), in Repeats (p=.407), in Letter Identification (p=.502) and in Word Identification (p=.310). An effect on children's performance was in Ideas about Writing (p=.008) and in Rhyming Words (p=.002). This difference can be explained with a closer examination of the mean in these two groups (see table 43). It is clear that children in EG1 had a greater progress in this area comparing children in EG3. A solid reason for this might be that children in EG1 included more activities with rhyming words and writing and this might have resulted in higher results in these areas. For example, in the pedagogical project 'The butterflies' children are trying to create little poems with rhyming words in their question and answer game for the specific parts of the paintings. Last but not least, in the comparison between EG2 and EG3 the data analysis shows that children's performance is divided in approximately half with no effect in half of the items and with an effect on the other half. There was a statistical significant difference in Writing (p=.030), in Ideas about Writing (p=.002), in Rhyming Words (p=.013) and in Letter Identification (p=.005) and there was no effect in Picture Identification/Vocabulary (p=.683), in Repeats (p=.108) and in Word Identification (p=.066) (see table 42). Similarly, as above, looking closely the numbers in the mean of these two groups, it can be argued that children in EG2 had a slightly greater improvement in these areas. Again, this might have resulted in more opportunities to develop these skills during the activities that were suggested by children. It is important to realise that the suggested interdisciplinary framework did not aim to develop these skills but it aimed to empower children to emerge literacy activities. Looking closely the pedagogical projects at appendix 8, it seems that children in EG2 were constantly including a lot of writing aspects in their drama play in order to facilitate their actions. For example, they were very creative in producing

alien forms of writing (pseudo letters) and real signs to remember their journey during their trip to universe. Whereas in EG 3, children participated more in discussion in which the practitioner was acting as a scribe in their ideas. For example, at the pedagogical project about Zeus and Mythology children were discussing the user guide of the time machine and the practitioner were writing down their ideas.

Table 42. PIPS among groups

Performance Indicators in Primary Schools (PIPS)						
Mix model analysis (Split-plot ANOVA)						
	EG1/CG	**EG2/CG**	**EG3/CG**	**EG1/EG2**	**EG1/EG3**	**EG2/EG3**
Q1: Writing	.522	.847	.719	.615	.681	.030
Q2: Picture Identification/Vocabulary	.001	.002	.001	.869	.539	.683
Q3: Ideas about Writing	.039	.037	.604	.842	.008	.002
Q4: Repeats	.001	.002	.000	.357	.407	.108
Q5: Rhyming Words	.000	.000	.000	.823	.002	.013
Q6: Letter Identification	.000	.000	.000	.014	.502	.005
Q7: Word Identification	.000	.000	.000	.920	.310	.066

Although there might be some differences in children improvement in the different items of PIPS, children in all 3 experimental groups displayed significantly greater gains in all items comparing the performance in children in the control group who did not receive the treatment. As it was argued above, comparing the 3 experimental groups there were some cases that children from one group had a slightly better improvement than children from the other group. However, in general terms, children's performance in the pre-test was approximately in the same levels in all experimental groups and in the control group. Comparing the numbers in the post test, it is clear that children from the experimental groups had better performance in all items of PIPS. In addition, in the control group the numbers show that in Repeats (M=5.5) and in Rhyming Words (M=2.71) children's performance remained the same and in Picture Identification/Vocabulary (M=17.93, M=17.00) there was a slight decrease in the numbers (see table 43).

Before reaching any conclusions regarding the intervention, it is important to consider some elements. It is very positive that children in the pre-test had approximately the same performance with no major difference, which safeguards the examination of the intervention in terms of the results in the post-test as children had approximately the same starting point in terms of their literacy skills. However, it is also true that there are other external factors that might have a contribution in children's learning and attitude towards learning e.g. parents' values and beliefs, important others etc. Thus, it is only reasonable to argue that this improvement might be attributed to other factors apart from the intervention per se. On the other hand, considering the fact that the art intervention aimed to improve children's literacy

skills, it is clear that during their interactions with the arts there was an emphasis in the literacy aspects of these activities. Therefore, it can be equally argued that children in the experimental groups had more opportunities to practice and develop these skills. Having in mind the liberal character of the arts and children's role in the suggested interdisciplinary framework, children were not forced in such activities but they participated with their free will.

Table 43. Mean average in PIPS among groups

Performance Indicators in Primary Schools (PIPS)								
Mix model analysis (Split-plot ANOVA)								
	EG1 Mean		EG2 Mean		EG3 Mean		CG Mean	
	Pre test	Post test	Pre test	Post test	Pre test	Post test	Pre test	Post test
Q1: Writing	3.00	4.83	2.87	4.93	2.29	3.93	2.07	3.43
Q2: Picture Identification/Vocabulary	19.61	22.78	19.13	22.4	18.29	21.79	17.93	17.00
Q3: Ideas about Writing	5.11	9.06	5.13	9.20	6.07	8.21	5.00	6.5
Q4: Repeats	5.89	7.78	6.40	7.80	4.50	6.93	5.50	5.50
Q5: Rhyming Words	1.61	7.11	1.20	6.47	2.64	5.36	2.71	2.71
Q6: Letter Identification	7.44	18.44	3.93	20.47	5.00	14.86	3.36	5.79
Q7: Word Identification	2.17	13.89	2.87	14.4	2.50	10.29	3.00	4.43

9.2.5 Final study: Personal and Social Development (PSD)

In order to examine children's development in their personal and social skills in the different groups a mix model analysis (split-plot ANOVA) was used. There was a comparison between the pre- and post-test of each of the 11 items of PSD among the control group and each experimental group individually and among all the experimental groups. The data also tested using a mix model analysis (split-plot ANOVA) among the 11 items of PSD and the background characteristics of the sample to verify if they will act as influencing factors to the outcomes.

Data analysis showed that overall the <u>background characteristics</u> of the children served as a non-significant factor in their performance as there was no statistical significant difference in the numbers. The only statistical significant difference that was found was in Confidence in the factor Order of Birth (p=.024) and in Communication in the factor Place of Birth (p=.048) (see table 44). This means that there might be an influence in children confidence and their order of birth and children's communication and their place of birth. This can be attributed to the fact that siblings' interactions and more specifically elder sibling interactions results to greater gains in social interactions according to a variety of researchers (see Howe et al., 2016; Palacios et al., 2016; Harrist et al., 2014). In addition to this, the place of birth might imply cultural differences in which might affect children's communication (Baker, 2011). However, it had to be acknowledged that there wasn't a statistical

significant difference in the majority of children's background characteristics and their social skills in the different items of PSD. Thus, it can be argued that overall there was no major influence that might have affected the outcomes.

Table 44. Influencing factors in all items of PSD

Influencing factors in Personal and Social Development measure (PSD)						
Mix model analysis (Split-plot ANOVA)						
	Gender	Family Status	Siblings	Order of Birth	Place of Birth	Nationality	Multilingual
Q1: Comfortable	.081	.345	.845	.903	.457	.509	.131
Q2: Independence	.160	.996	.285	.924	.454	.529	.318
Q3: Confidence	.657	.263	.307	.024	.835	.809	.074
Q4: Concentration: Teacher directed activities	.290	.547	.668	.630	.142	.209	.820
Q5: Concentration: Self-directed activities	.676	.347	.857	.807	.114	.191	.973
Q6: Actions	.204	.948	.781	.970	.255	.333	.786
Q7: Relationship to peers	.705	.194	.414	.254	.550	.724	.186
Q8: Relationship to adults	.826	.226	.229	.261	.303	.423	.596
Q9: Rules	.381	.071	.802	.691	.272	.355	.548
Q10: Cultural awareness	.833	.117	.563	.573	.253	.435	.917
Q11: Communication	.332	.219	.518	.722	.048	.100	.272

Comparing the differences in social skills among groups, the data analysis showed that in total and in almost every item there was a statistical significant difference between the <u>control group and all the experimental groups</u>. It is obvious that there was an effect on children's personal and social skills as there was a statistical significant difference in Comfortable (p=.016, p=.012, p=.000), in Confidence (p=.000, p=.000, p=.000), in Concentration (p=.000, p=.000, p=.000), in Actions (p=.000, p=.000, p=.000), in Relationship to Peers (p=.002, p=.000, p=.000), in Relationship to Adults (p=.000, p=.000, p=.000), in Rules (p=.000, p=.000, p=.000), in Cultural Awareness (p=.000, p=.000, p=.000) and in Communication (p=.000, p=.000, p=.000). In the item Independence the data shows that there was effect only in the EG3 (p=.011) with statistical significance in the numbers but there was no effect on EG1 (p=.016) and EG2 (p=.012) with no statistical significance in the numbers (see table 45). In other words, this means that the intervention might not have an effect in children's performance in the item independence in EG1 and EG2 comparing with EG3. Looking at the numbers in the mean of the different groups (see table 46), it is obvious that children in EG3 had a greater development in this item comparing to all other experimental groups and the control group. Comparing this result with the results from PIPS (see chapter 9.2.4), it can be argued that EG3 perhaps focused more in the social aspect of their activities comparing to the other groups. A good explanation for this might be that perhaps children embedded more aspects in their activities that

boost up their independence comparing to the other groups. Reflecting on the quality of interactions during a puppet show and especially the form of interactions that took place in EG3, there are some good reasons that can explain this difference. For example, in the pedagogical project 'The hens of the farm', children were motivated by a hen puppet to participate and begin this project. This resulted in children organising their own puppet show, which included a lot of opportunities of independent and creative thinking as they were responsible of a variety of different activities such as deciding the puppet making techniques, the actors of the story, the plot and roles of each one.

In the comparison among the different three experimental groups, the data analysis shows that there is no different effect in children's performance between the EG1 and EG2 in all items apart from Cultural Awareness that the numbers show that there is a statistical significant difference (p=.012). In the comparison between EG1 and EG3 the data analysis shows that there was no different effect in children's performance in all items except from the item Rules (p=.037) and the item Communication (p=.009) that there is a statistical significant difference. Looking at the mean of these two groups (see table 46) shows that children in EG3 had a greater performance in these areas comparing to children in EG1. In an effort to explain this, a good reason might be the fact there was an emphasis on these aspects during the suggested interdisciplinary framework as an outcome of children's preferences. In addition, a strong link can be argued among puppetry as an art form and these two items of PSD. Being more specifically, children in EG3 were deciding and following unconsciously rules and were participating in discussions with the puppets at the beginning of each project. Being more specific. In the pedagogical project 'The Hens of the Farm' children engage with a Hen puppet at the beginning, which was a motivating factor to begin and start discussing their activities. In addition, they decided to carry out a series of different puppet shows in which they were discussing about the rules, plot, actors and sequence of their actions. This by itself might explain the difference in the numbers. Finally, in the comparison between EG2 and EG3 the data shows that there is no different effect in children performance in all items except from the item Comfortable (p=.006), the item Relationship to Peers (p=.005), the item Cultural awareness (p=.000) and the item Communication (p=.010) where there is a statistical significant difference (see table 45). Again, the mean of these two groups in these areas shows that children in EG3 had a slightly higher score in these areas, which might be a result of the activities that took place during the interdisciplinary framework. Considering the background characteristics of each group (see table 36-38), it is clear that in EG3 was a slightly bigger diversity in terms of cultural diversity. This by itself might have lead the practitioner unconsciously to give greater emphasis on the cultural awareness of the children in this group with the ultimate goal to enable them to adapt in the society later. Another good reason for this, rests also on the

different art forms and their content. For example, it can be argued that children through puppetry disengage emotionally from the current situation and are able to express their ideas, emotions and feelings through a puppet that might be considered as a safe artefact as it is an external object. In addition, puppetry as an art form, indicates more focused verbal communication in contrast with the drama play which is focused in the expression of ideas and feelings through movements. In drama play children express their ideas through the relevant roles they want to adapt every time. Therefore, the above differences might be attributed to these arguments. In an effort to link these arguments with the pedagogical projects that took place during the intervention (see appendix 8), there are some good examples that can be found. For example, in the pedagogical project 'The Zeus and the Mythology' children start to mix and match the 12 different gods and goddesses and their abilities and give their own interpretations of their efforts to remember who they are. This activity demands a lot of verbal interactions with their peers, which are taking place through an external object and more specifically a puppet.

Table 45. PSD among groups

Personal and Social Development measure (PSD)					
Mix model analysis (Split-plot ANOVA)					
	EG1/CG	**EG2/CG**	**EG3/CG**	**EG1/EG2**	**EG1/EG3**	**EG2/EG3**
Q1: Comfortable	.016	.012	.000	.272	.231	.006
Q2: Independence	.170	.166	.011	.798	.320	.163
Q3: Confidence	.000	.000	.000	.820	.254	.319
Q4: Concentration: Teacher directed activities	.000	.000	.000	.650	.407	.185
Q5: Concentration: Self-directed activities	.000	.000	.000	.510	.460	.107
Q6: Actions	.000	.000	.000	.119	.053	.529
Q7: Relationship to peers	.002	.000	.000	.507	.225	.005
Q8: Relationship to adults	.000	.000	.000	1.000	.188	.074
Q9: Rules	.000	.000	.000	.394	.037	.142
Q10: Cultural awareness	.000	.000	.000	.012	.217	.000
Q11: Communication	.000	.000	.000	.909	.009	.010

Looking the data from the mean average in all 3 experimental groups, although there might be some differences in children improvement in the different items of PSD, it is obvious that children displayed significantly better development in their social skills in all items comparing the data from the mean average in the control group. As it was argued above, comparing the 3 experimental groups there were some cases that children from one group had a slightly better improvement than children from the other group. However, in general terms, in the pre-test children performance was approximately the same in all groups but in the post-test the numbers show a better performance in the experimental groups. On the contrary in the control group the data shows that in the item Action (M=2.64) children's performance remained the

same and in items Concentration: Teacher directed activities (M=2.43, M=1.86), Concentration: Self-directed activities (M=2.43, M=2.29) and Rules (M=3.00, M=2.86) there was a decrease in the numbers (see table 46).

Before reaching any conclusions regarding the intervention, it is important to consider some elements. The fact that children in all experimental and control groups had approximately the same social performance is very positive as we can make safer claims regarding their improvement in the post-test. However, it is also true that the development in children's social skills might be an outcome of other external factors e.g. parents' social lives, after school activities. It might also be an outcome of the practitioners' approach and interactions during the intervention. This is reasonable to argue that these factors might be the reason for this improvement. On the other hand, it is also true that the suggested interdisciplinary framework provided constant opportunities for meaningful social interactions among the children and between the children and the practitioner. On top of that, looking at the pedagogical projects that were designed during the intervention (see appendix 8), it is clear that there was an emphasis on collaboration and team work in every activity. Therefore, it can be equally argued that the intervention was also an important factor for this improvement as children had more opportunities to practice and develop these skills in a liberal environment.

Table 46. Mean average in PSD among groups

Personal and Social Development measure (PSD)								
Mix model analysis (Split-plot ANOVA)								
	EG1 Mean		EG2 Mean		EG3 Mean		CG Mean	
	Pre test	Post test	Pre test	Post test	Pre test	Post test	Pre test	Post test
Q1: Comfortable	2.78	3.94	3.00	3.94	2.36	3.93	2.93	3.36
Q2: Independence	3.00	4.00	2.67	3.60	2.43	3.71	2.57	3.21
Q3: Confidence	2.50	3.78	2.13	3.47	1.17	3.29	2.43	2.57
Q4: Concentration: Teacher directed activities	2.33	3.83	2.00	3.40	1.93	3.64	2.43	1.86
Q5: Concentration: Self-directed activities	2.38	3.83	2.07	3.40	1.93	3.64	2.43	2.29
Q6: Actions	2.83	3.89	1.80	3.27	1.71	3.36	2.64	2.64
Q7: Relationship to peers	2.39	3.94	2.20	3.53	1.36	3.36	2.29	2.64
Q8: Relationship to adults	2.56	3.89	2.20	3.53	1.79	3.50	2.43	2.64
Q9: Rules	2.56	3.78	2.07	3.47	1.64	3.36	3.00	2.86
Q10: Cultural awareness	2.06	3.89	2.07	3.33	1.29	3.43	1.93	2.14
Q11: Communication	2.72	3.94	2.00	3.20	1.79	3.57	2.21	2.43

Analysing the data with a qualitative approach and debriefing the comments that were written in the PSD in order to make an overall judgement of the social skills

of each child, we can further verify the positive outcomes of the intervention in contrast with the control group.

Social skills are very important in children's development and learning. They have a substantial contribution to their lives as professionals and their general well-being (Segrin et al., 2007; Segrin & Taylor, 2007). They are further linked to cognitive development, as according to social constructivist and social learning theories (see Vygotsky, 1978; Bandura, 1977) children achieve knowledge more effectively through their social interactions. This argument has a significant importance in the early years settings, as this level of education is a very important ground that children start to develop the fundamental social competencies (Parry, 2015; Schultz et al., 2011).

The first step in developing social skills is successful <u>adjustment</u> in the surroundings (Schultz et al., 2011). The general scenery of the classroom can contribute to the emotional adjustment of the children especially upon their first contact with the school setting (Baker-Henningham et al., 2009; Baker, 2006). This means that when children are adapted to the settings they are able to interact with their peers, with the adults and with the significant others. This has an important impact in effective learning as it is true that when people do not feel comfortable, they are stressed and are nervous and thus, they cannot attain the information that is given to them or the knowledge they are striving to accomplish. In addition to this, being adjusted to the surroundings will enable children to manage successfully transitions that will happen inevitably during the day and in their lives in general. According to Jones & Harcourt (2013), children who are socially competent, also accomplish effectively the changes in their daily routine. Therefore, being <u>comfortable and independent</u> are two of the very important parameters is social competencies.

The evidence from the data analysis further supports these arguments and it is obvious that children from the experimental groups were more benefited in this area comparing with children from the experimental groups. Data shows that when arts are used as a stimulus to promote literacy, children by the end of the school year were more comfortable during the daily routines, managed transitions effectively and were independent with their personal activities. Some extracts that show children's performance in these areas area as follows:

EG1

Child 9: *Pre-test*: *She is fairly settled during the day. Sometimes she finds it difficult to settle down during transitions. She mentions her mum a lot of times during the day and asks when she will come and to take her home. She wants to do things on her own way but she does not always manage them successfully and will give up or leave them unfinished.*
Post-test: *There is progress in this. She is comfortable for most of the time during transitions and copes well. When she is bored there is a possibility*

to start nagging but this ends up soon. She is very independent and rarely seeks assistance. She manages to fulfill successfully her personal activities and rarely asks for help.

Child 10: Pre-test: It is the first time that he is in a different class from his sister. For this reason, there are times that he feels uncomfortable and finds it difficult to cope with transitions. There are times that he needs help with his personal activities, e.g. he cannot take off his coat, but he does not ask for. For most of the time he seems independent.

Post-test: He is managing very well the transitions from one activity to the other and is comfortable during the day. He rarely asks to go and check his sister. There is progress in this area! He manages well with his personal activities and rarely needs help. He is independent and asks for help only when he is experiencing something difficult.

Child 13: Pre-test: He finds it very difficult to settle down. When he comes to school he is very upset upon separation and cries very much. He asks constantly about the time that he will go back to his home. Although he is capable of coping with his personal belongings, the fact that he is insecure does not allow him to be independent. He seeks for help or wait for someone to help him.

Post-test: There is great improvement in this area!! He is very comfortable upon separation and among transitions during the day. He seems to enjoy his time in the school and he wants to prolong his stay in the school. He is independent and manages well with his personal belongings. He will ask for help only in a very difficult dressing and after loads of unsuccessful attempts.

EG2

Child 2: Pre-test: He settles down for most of the day and looks comfortable during transitions. He might be upset if something unexpected happened during the day and changes the usual routines (e.g. music lesson at a different time and day that it used to). He is independent but there are times that needs help in his personal activities (e.g. fasten or unfasten his coat, put on and get off his coat).

Post-test: He comes smiley to school and he looks forward to doing so. He is never upset upon separation with the caregiver and copes well during the day. He needs occasionally help with his clothing after some unsuccessful attempts. He is independent for most of these activities.

Child 3: Pre-test: When she enters the classroom she is upset and crying. After a while she gets over it and copes well but there are times during the day that she will ask for her mum and the time her mum will come to pick her up. She is independent with her clothing and personal activities.

However, the fact that she is sensitive upon separation with the mum in the morning might result in not trying and asking for help even though she can manage doing on her own.

<u>Post-test</u>: She is smiley when she comes to school and upon separation with her mum. There are limited times that she will mention that she wants her mum to come and pick her up. She is coping well with her personal activities and rarely will ask for my help. She is trying to put on and fasten her coat and only after some unsuccessful attempts will ask for help.

<u>Child 11</u>: <u>Pre-test</u>: She is comfortable when she comes to school every morning and copes well with the different routines of the day. There might be some times that she is upset but she gets over this soon. She is independent during the day but she might need occasionally support with her clothing. She can fasten and unfasten her coat.

<u>Post-test</u>: She is happy and smiley every time she comes to school and this remains until the time she leaves in the afternoon. She is happy with the transitions in the daily routine. She is very independent and never needs extra support or help in her personal activities.

<u>EG3</u>

<u>Child 2</u>: <u>Pre-test</u>: During the day he asks constantly if his mum will come to pick him up. He wants to have this confirmation in order to settle down during transitions. He seems very insecure and wants confirmation for everything. He asks for permission in every personal activity (e.g. Can I open my bag now? Can I wear my coat?).

<u>Post-test</u>: He is very comfortable during the day. He does not want the confirmation that his mum will come to pick him up in order to be comfortable. He copes well with transitions during the day. There is progress in this area! He manages quite well his personal activities. He seems more secure in doing this. He might need some support in some clothing but he will try first.

<u>Child 3</u>: <u>Pre-test</u>: She never expresses that she does not feel comfortable but her non-verbal signals show that sometimes she feels insecure especially among transitions of the activities. She copes well with most of her personal belongings. There are times that she will need extra help but will not ask for it. She will wait passively for an adult to understand that she needs help.

<u>Post-test</u>: She is more comfortable now and copes well with transitions and every day routines. She is not upset upon separation with the caregiver in the morning and her non-verbal signs shows she is comfortable. She is better in this area! She manages well with her personal activities and

belongings and she will try to do even if something is difficult. Rarely she will need help and ask from an adult to help her.

Child 6: Pre-test: He is rarely upset upon separation with the caregiver but he is upset during the daily routines and cannot settle down easily. He finds hard to cope with transitions and usually he is doing his own things and not following the group. There are personal activities that he needs extra support as he cannot cope well e.g. put on his coat, change his shirt. He usually asks for help.

Post-test: There is progress in this area as now he can cope well with transitions and follow the group. He seems very comfortable during the day and the routines. There are very limited times that he needs guidance on how to carry out his personal activities but even then he does not need help as he manages to do them.

CG

Child 5: Pre-test: She is usually comfortable and not upset during the separation with her mum in the morning but after a while she seems really uncomfortable during transitions. She keeps asking when her mum will come to pick her up. She seems very dependent on someone else to help her and she rarely tries to do something on her own. She always asks for help with her personal activities and clothing and she never makes the effort.

Post-test: She is basically in the same level and exhibits the same characteristics in this area. She is very concerned when her mum will come and pick her up. There is very little progress in this area as she is still dependent on someone else to help her in her personal activities. There are some minor times that she will make an effort to wear her coat. Usually she asks for help.

Child 6: Pre-test: She comes to school very happy and say goodbye to her mum very cheerfully. During the day she is most of the time comfortable when it comes to transitions. However, there are times that she seems really upset if something does not go as planned or if she has to follow the group in the next activity and she hasn't finished. Most of the time she is independent and she can cope well with her personal activities. There are times that she needs support when it comes to clothing.

Post-test: Very little progress in this area. There are still some times that she finds it very difficult to cope with transitions. However, most of the day she seems very comfortable. She is independent and she rarely asks for help regarding her personal activities. She will need some support when it comes to a difficult clothing.

Child 7: Pre-test: Most of the time he is comfortable during the separation with the caregiver in the morning and he rarely cries. He is fairly settled during the day but there are sometimes he needs his security blanket with him. However, he is very dependent on others to guide him during the day. He will not do anything on his own. He always waits for someone to prompt him to follow the routines.

Post-test: There are minor times that he is upset during separation with the caregiver in the morning and most of the time he comes happily in the classroom. He still needs his security blanket with him during some activities but this has decreased slightly. However, he is still dependent on adults or on other children to help him finish or even to start an activity.

Looking closely the above extracts it is obvious that children in the experimental groups exhibited higher levels of independence and were more comfortable in the post-test comparing with the children in the post group. As there might be several reasons for this increase, it can also be argued that the arts contributed in this improvement. One main argument for this is that children during art intervention had the opportunity to interact in whatever way they wanted without being judged. This by itself results in greater opportunities of feeling comfortable and independent.

Being successfully adapted to the school setting, empower people, not only children, to build their confidence (Pahl & Barrett, 2007). Self-assurance will result eventually in gaining new knowledge as they will have the courage and the resolution to try to do new things. The argument of the significance of personal experience in learning is based on the discovery learning theory (see Bruner, 1981; 1961) which describes the importance of experimenting and gaining a first-hand experience during learning. It can be argued that personal skills such as confidence, concentration and actions are also very important to build social skills. This can be justified with the fact that in order to interact with other people, we should first develop skills such as being able to focus on the content and the sequence of a discussion, have the courage to initiate or continue a discussion, understand others people's feelings and respect their wellbeing.

As Parry (2015) verifies, developing confidence in the school settings and especially in the early years settings will result in effective social development. Self-confidence is the key to every social interaction in every level of education and age of people. This helps particularly young children to feel capable to participate in group activities and exchange ideas. It can be further characterised as a key social skill when young children are in school (Ashdown & Bernard, 2012).

The data from the final study is highly linked with these arguments and evidence of these attributes can be detected. Comparing children's development

between experimental and control groups, it is noticeable that when the arts are used as a stimulus children show great signs of self-assurance to participate in group activities. Generally, in the pre-test children's performance was approximately in the same level in the experimental and the control groups. However, in the post test children from the experimental groups were benefited more in this area. Some extracts that show children's performance in this area are as follows:

EG1

Child 8: Pre-test: He seems confident to participate in team discussions but when he experiences a difficulty he gives up and starts crying. This sometimes may hinder him and act as a barrier in his participation.

Post-test: He is very eager to engage in team activities and discussions and sometimes he expresses his opinion by showing deep thinking. There are some very limited times that he might need to be prompted.

Child 10: Pre-test: He is over reacting when he is prompted to join the group. He is very hesitant and shy regarding this and prefers to stay and play alone.

Post-test: There is great progress in this area!! He will join the group activities and will always participate in group discussions. There is no need for stimulating him to join the group as he usually leads the activities.

Child 11: Pre-test: She is not confident to join group activities. During the circle time, in which there is group discussion, she does not speak very much and when she does she speaks with a very low voice that children barely can hear her.

Post-test: Although she is shy, there is a great progress in this. She seems confident to participate in group activities but she will not choose to have a leading role.

EG2

Child 2: Pre-test: It is obvious that he lacks of confidence, although he is really interested to join group work. He needs a lot of support and most of the time he will not respond to the invitations from other children or from the adults to join the group.

Post-test: There is progress in this area as he seems more confident to join group activities and discussion. There are times that he will not follow the group work until the end as he seems absorbed in his thoughts.

Child 3: Pre-test: She wants to participate in group activities but she needs to be prompted to do so. Sometimes she feels insecure when she thinks the morning separation and this keeps her back from participating.

Post-test: She still needs some occasional support in participating in group activities but most of the time she participates without being prompt to do

so. She will not take a leading role but she is always happy to say interesting ideas.

Child 10: Pre-test: It is obvious that she is used to not to try and thus she lacks confidence in participating in group activities. She needs to be prompted. However, even when she is prompted, she might ignore this call and continue to stay passive.

Post-test: There is a great progress in this area. She got over the shyness she had and now she has the courage to try new things and join group activities. There might be still some minor times she needs to be prompted.

EG3

Child 2: Pre-test: He lacks confidence and do not have the courage to join group activities. No matter how much he is prompted to join, he will not return this call and he will prefer to play alone.

Post-test: He seems more confident now and has the courage to participate to group work. He tries to be an active member and to share his ideas with the rest of the group in order to move forward. There are still times he needs to be prompted.

Child 6: Pre-test: He lacks confidence and he needs support and confirmation that he is doing well. He usually does not prefer to join group activities and when he does he needs to be prompted a lot and the activity needs to be very attractive.

Post-test: There is progress in this as now he is more confident and he rarely needs confirmation about his progress. He usually joins group activities with his free will and participates with confidence.

Child 8: Pre-test: He needs confirmation of this achievements or actions in order to proceed and to join a group activity. Sometimes he seems a little shy to approach a group of children and waits until they call him first.

Post-test: He is confident about his actions and achievements and do not need confirmation to proceed. He joins team activities with no particular constrain to do so and have an active role in the procedures during the team play.

CG

Child 1: Pre-test: He seems confident but his non-verbal attitude reveals signs of the opposite. He usually plays alone. He will only join a group activity or a group of children when he is prompted and when he does so, he will not participate actively.

Post-test: He is pretty much in the same level. He needs to be encouraged in order to join the group and he often does it very reluctantly. He seems shy to do so.

Child 5: Pre-test: She hesitates to join the rest of the children while they are playing or talking to them. She usually sits on the table and observes the other children from distance. When the other children address to her, she turns her head on the other side and pretends she does not listen to them.

Post-test: She is pretty much in the same level. She is still very shy and usually she is lonely. She is usually reluctant to speak to other children or play with them.

Child 7: Pre-test: He is very reluctant to join the rest of the class in an activity during free or guided play. He rarely speaks or interacts with anyone. Most of the time, he prefers to play alone. His non-verbal attitude shows that he lacks of confidence and that he is extremely shy.

Post-test: Small progress in this area. He is still very shy and lacks of confidence to interact with other children. He does not return their calls when they prompt him to go and play with them.

As stated earlier, <u>concentration</u> is also a very important ability that has an important role in children's social skills. According to Ashdown & Bernard (2012), concentration is a key social skill at the first steps of children during formal learning in school. However, it is true that children in order to concentrate to an activity, the activity itself should be interesting and trigger their attention to participate. Concentration to teacher-led activities and self-led activities are of equal importance as they both have a fundamental role in children's learning process. It was argued in a previous publication (see Theodotou, 2010), during this process children need the adult support to guide them indirectly and to embed learning goals but they equally need to be free to guide their own activities.

During observations for the PSD measure, it was obvious that, by end of the school year, children in the experimental groups were totally concentrated during teacher-directed and self-directed activities and there were limited, if any, distraction that could affect them. Comparing this to the control group, children did not have the same improvement in this area and as it is obvious at the below extracts there were instances that children left the activity unfinished or left the activity half way.

EG1

Child 7: Pre-test: In teacher-directed activities, she can concentrate but she is usually running late and then she loses her attention. Usually she asks to finish the activity the next day as she sees her peers doing other things and she does not like to be left back. In self-directed activities, her concentration span is also very low and she cannot settle in one thing. She seems absent-minded and most of time she leaves her activity unfinished with the excuse that she will finish it the next day.

Post-test: There is a great progress in this! In teacher-led activities, she manages to sustain her attention for a long period of time. She succeeds to finish her goal within a reasonable period of time. The same applies for the self-led activities. She is focused and eager to reach her goal. She is concentrated for long period and is not distracted.

Child 9: Pre-test: In teacher-led activities, she is distracted very easily and loses her attention and goal of the activity. She finds it very difficult to finish her work within a reasonable time and usually she initiates irrelevant discussions with the children that are sitting next to her. In self-led activities, it is also very difficult for her to settle in one thing and she is distracted most of the time. She likes to talk with her classmates about irrelevant things and rarely manages to reach her goal regarding the activity she initiated.

Post-test: There is great progress in this area! In teacher-led activities, she is focused most of the time and she is distracted only sometimes from mild stimuli. She might browse her surroundings but she manages to fulfill the goal of the activity. This is also obvious in self-led activities. She manages to fulfill her goal and rarely initiates irrelevant discussions with her friends. There are times that she stares her surroundings but she manages to finish the activity she has initiated.

Child 17: Pre-test: In teacher-initiated activities, she is concentrated towards the goal of the activity. There are times that she might lose her focus as she wants to help other children. This might result not to come back to her activity or finish it in a rush. She initiates activities that are derived from her personal interests and tries to attract other children to play with her. If she cannot find someone to join her she might lose her interest.

Post-test: In teacher-initiated activities, she is very concentrated and manages to finish her activity within a reasonable time. She still likes to help other children when they are having a problem but she does not leave her activity unfinished. She still initiates activities and enjoys when other children are participating in them but she will not let the activity go just because no one of her friends came to play with her.

EG2

Child 1: Pre-test: He is concentrated during teacher-directed activities but sometimes he might lose his attention due to the fact that his friends are doing something else. Sometimes he needs to be prompted to come back. He likes to initiate activities and to make his friends a part of this. He can lose this focus if his friends finish earlier than him.

Post-test: In teacher-directed activities, he is totally concentrated and is not distracted by external factors. He is aware of what his friends are doing but he will not leave his activity unfinished. The same applies in self-directed activities as he is very focused. He is not distracted by his friends' actions and try to find ways to prolong the activity by inserting new goals.

Child 1: Pre-test: In teacher-guided activities, it is very difficult for him to concentrate and he always gives up from the very beginning. He is distracted easily by other children's actions or discussions and he is reluctant to come back to the original activity. He rarely initiates any activity but there are times that he will voluntarily participates in other children's activities. However, he quits from the very beginning and spends the rest of the time to just look what the other children are doing.

Post-test: There is a great progress in this area! In teacher-guided activities, now in half of the times he is concentrated and manages to finish his activity but with loads of breaks in the meantime. He can be distracted by external stimuli and finds it difficult to come back. The same applies in the self-guided activities. Now, there are times that he initiates an activity and tries to fulfill his goal. There are distractions in the meantime but he comes back eventually and most of the time he finishes his activity.

Child 11: Pre-test: During teacher-directed activities, she is concentrated only for a limited period and only at the beginning. She gets distracted very easily and leaves the activity unfinished. During self-directed activities she also loses her interest and attention and leaves her activity unfinished. She is usually wandering around the classroom observing other children's actions.

Post-test: There is progress in this area! During teacher-directed activities, now, she can concentrate and stay focused for a reasonable period. There are moments in which can be distracted but she comes back on her own and finishes the activity. The same applies for self-directed activities. Now, she can stay focused for a reasonable period. She wants to be aware of the actions of her friends but she manages to finish her activity and reaches her goals.

EG3

Child 1: Pre-test: During teacher-guided activities, it is very difficult for him to concentrate as he can be distracted easily. He likes to disturb his friends and discusses about irrelevant things. Most of the time, he leaves the activity unfinished. He finds it very difficult to concentrate for more than a few minutes in an activity that he will initiate. He likes to be aware of what his friends are doing that this will result in him not finishing the activity he has initiated.

Post-test: During teacher-guided activities, now he is totally concentrated and focused for a long period. He still likes to discuss with this friends, but he will finish first his activity and then he will discuss. The same applies for the self-guided activities. Now he is focused for a long period and nothing can distract him. He will interact with his friends but this will not distract him from the activity or not finish it.

Child 5: Pre-test: She is concentrated in teacher-directed activities but she needs some time to start. She seems really distracted at the beginning and she likes to stare what other children are doing. She initiates activities and usually these activities have to do with action games. During this, there are a lot of breaks as she is distracted by external factors and there are times she might leave the activity she initiated unfinished.

Post-test: In teacher-directed activities, she is very concentrated and starts immediately the activity when the guidelines are given. She is rarely distracted and when she is, this lasts only for a few seconds. The same is obvious in the self-directed activities. She is very concentrated and careful to every little detail. She still likes action games but now she is totally concentrated to her goal and nothing can distract her. She always finishes her activity.

Child 10: Pre-test: During teacher-lead activities, usually he is distracted by the children who are sitting next to him. He needs individual instructions to fulfill his work and even in this case he leaves his work unfinished or he finishes it in a rush. He initiates an activity but usually he never reaches his goal as he is distracted by his friends to do something else.

Post-test: During teacher-led activities, he is very careful in details and to the given guidelines. He still can be distracted but he comes back easily and stays focused for a long period. The same is obvious in the self-led activities. He is concentrated and focused for a long period. He manages to reach his goals in a reasonable time and he tries to prolong his activity by inserting new goals and explains them to the children who are sitting next to him.

CG

Child 3: Pre-test: In teacher-directed activities, he can concentrate but only for a limited period of time. He is distracted by his surrounding and most of the time he asks for help in order to finish his activities. He usually leaves his activity unfinished. In self-directed activities, he initiates an activity that derives by his own interests but he will not reach his goal as he is usually distracted by the actions of this friends. He settles down for a period of time but this will not last long.

Post-test: In teacher-directed activities, he is in the same level as before. He can be distracted as he is very concerned of what is happing around him. This result in not finishing his activity. The same is obvious in student-directed activities. He is still initiating activities but he will not fulfil his goal. He will usually get distracted by this friends to do something else.

Child 4: Pre-test: Very short attention span during teacher-directed activities. He needs extra support and guidance to begin the activity but he easily let it go. He seems very absorbed by his thoughts and he usually has dreamy eyes during these activities. The same applies for the self-directed activities. He usually does not initiate an activity on his own and he needs to be prompted to do so. He finds it very difficult to reach the activity to the end and he is very easily distracted.

Post-test: He is in the same level as before. His concentration span is still very limited during teacher-directed activities. Although he is prompted many times, he still finds it difficult to begin the activity and fulfil its goal. The same applies for the self-directed activities. He needs to be prompted to initiate an activity on his own but he usually leaves it unfinished. He stares his surroundings to think and this distracts him very much as he rarely comes back.

Child 9: Pre-test: She has a very short concentration span when it comes to teacher-guided activities. She has a difficulty to settle down and after a while she is distracted by her thoughts. When it comes to self-directed activities, her level of concentration is better. She is able to maintain her focus longer and usually she manages to reach her goal. However, there are times that she might get distracted if her friends are doing something else.

Post-test: There is a little progress in this area. In teacher-guided activities, she is able to sustain her focus for a longer period than before. However, she still gets distracted by her thoughts. In the self-directed activities, her performance remained the same as before. She manages to fulfil her goal but she is also distracted by her peers.

Looking closely the above extracts, it is clear that children in the experimental groups revealed higher levels of concentration and confidence in the post-test comparing to the children in the control group. These incidents took place in a liberal environment without any intervention from external stimuli that were irrelevant to the activities. Although there might be several reasons that are responsible for this improvement, it can be argued that the contribution of the arts was also beneficial to this outcome. One main argument is that the arts are part of their free play activities

(see Hanley et al., 2009) and thus there are high changes that children consider the intervention as a familiar process that derive from their true desires.

Respecting other people's well-being is another important factor that contributes strongly to successful social competency. Researchers (see Segrin et al., 2007; Segrin & Taylor, 2007; Choi & Kim, 2003), point out that there is a strong association between social skills and well-being, which further leads to the understanding of other people's well-being. People's actions and especially young children's actions, have a substantial impact on their inclusion or exclusion of the group and their approval of the important others. This has its grounds on the patterns of prosocial behaviour in which children should be able to cope with social interactions in a respectful way (Lindon, 2012). Being sensitive to other people's needs, being sympathetic to others and protect their safety are important qualities that anyone should have. These characteristics enable people, not only young children, to interact socially with others in a successful way and gain further knowledge through this interaction.

The qualitative data from the PSD measure is strongly linked with the previous arguments especially with the findings of the experimental groups. It seems that the art intervention enabled these children to act in a thoughtful way and respect the other children's well-being and feelings. On the contrary, children that did not receive any intervention seemed that they had a lower progress in understanding other children's well-being and most of the time they acted impulsively. Some extracts that show children's performance in this area are as follows:

EG1

Child 9: Pre-test: She has a very dynamic personality and fights for what she wants. Most of the time, this results in not considering the wellbeing of other children as she will do everything she can to get what she wants. However, her intentions are not bad. There are sometimes that she considers the wellbeing of others.

Post-test: There is great progress in this area! She considers the wellbeing of other children and try to think before she acts. She has still a very dynamic personality but in a reasonable manner. She tries to discuss and to find a solution when there is a problem.

Child 13: Pre-test: His intentions are good but he usually acts impulsively without thinking the others children's wellbeing. Most of the time the other children find it very difficult to interact with him because of his improper attitude.

Post-test: There is great progress in this area!! He is very thoughtful of the other people's feelings and always considers their wellbeing. He thinks carefully before he acts.

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Child 14: *Pre-test*: *He usually acts impulsively and says things that will make his friends sad (e.g. you are fat, you are a baby). There are times that he might be aggressive to other children and as a result they afraid of him and do not want to play with him.*

Post-test: *His intentions are good and he does not want to harm anyone. If he does harm someone, he apologizes straight away and tries to behave. Most of the time, he thinks of the others children's wellbeing.*

EG2

Child 2: Pre-test: He is passive and usually ignores the other children when they try to approach him. If something makes him uncomfortable he will act very impulsively and sometimes he can even be aggressive.

Post-test: He is still passive but now he is thoughtful of the wellbeing of other children and he will not act in an aggressive way. There are times that he will ignore children when they are trying to approach him.

Child 12: Pre-test: She can be influenced by her friends and she needs to be reminded how to behave. There are times that she acts impulsively and hurts other children's feelings. However, her intentions are not bad.

Post-test: She is thoughtful of the wellbeing of the other children and most of the time, she thinks before she acts.

Child 15: Pre-test: She is thoughtful of the others and their wellbeing. If she sees a child to be unhappy, she is very sensitive and tries to comfort it. In this case she might react impulsively to other child.

Post-test: There is progress in this area. She is very sensitive and she always thinks very carefully before she acts. She wants everyone to be happy and she will advise other children to do the same.

EG3

Child 2: Pre-test: Most of the time he cannot realize that his actions might hurt the other children and he acts impulsively. It is obvious that it is difficult for him to think before he acts and sometimes he hurts other children by mistake.

Post-test: He is now careful and thoughtful about others. Most of the time, he considers the wellbeing of other children and tries to influence the rest of the group to do the same.

Child 5: Pre-test: She knows what behavior is acceptable and what behavior can distract and annoy the other children and affect their wellbeing. However, there are times that she annoys other children on purpose just because she is bored.

Post-test: There is progress in this area. Usually she considers the other children's wellbeing but sometimes her ego is stronger than their wellbeing so she might react inappropriately.

Child 6: Pre-test: It seems that he cannot realize the outcome of his actions and most of the time he reacts in an immature or impulsive way. He finds it very difficult to wait for his turn and usually he pushes the other children to move forward in the queue.

Post-test: There is a great progress in this area. He is careful about his actions and considers the other children's wellbeing. He tries to influence other children to do the same.

CG

Child 2: Pre-test: It is very difficult for her to consider the other children's wellbeing. She reacts occasionally inappropriately and only sometimes she thinks before she reacts. When she wants to do something, she behaves impulsively and she might make the other children sad with her attitude.

Post-test: There is little progress in this area. She still finds it difficult to consider the wellbeing of the other children but now in half of the times she thinks before she reacts during their play. However, she still reacts impulsively in certain occasions.

Child 10: Pre-test: Frequently he reacts impulsively during his interactions with the other children. When he cannot get what he wants he might start pushing and tweaking the other children until they give him what he is requesting.

Post-test: He is at the same level as before. He shows very little understanding of the other children's wellbeing and he still reacts impulsively. He can be aggressive if he cannot get what he is asking for.

Child 13: Pre-test: In half of the times he shows an awareness of the other children's wellbeing and emotions. He usually avoids contact with the rest of the children and when they approach him, he either ignores them or he might be aggressive towards them in the case they insist to play with him.

Post-test: There is no progress in this area. He is still lonely and ignores the other children when they approach him to play. In half of the times he does not consider the wellbeing of the other children.

Looking closely the above extracts, it is clear that children in the experimental groups reveals higher levels of empathy towards their peers and their actions shows that they were very concerned about their wellbeing. One main argument for this might be the expected improvement in due course and the influence of external factors. However, considering the fact that during the steps of the suggested interdisciplinary framework there were constant opportunities to give and receive constructive feedback, it can be argued that the intervention played an important role in this improvement. This can be justified with the fact that children through the art intervention had the opportunity to develop an emotional awareness of the people around them by this constant indirect reflection of their actions.

Having discussed and established the important contribution of adjustment and personal skills in social competencies, following there will be an investigation and discussion on the content of social skills. Some of the basic and crucial social skills that contribute to people's every day interactions are the ability to form healthy <u>relationship with others</u> and to <u>communicate</u> effectively their ideas (Ashdown & Bernard, 2012). These qualities enable adults and young children to interact with others successfully and adapt in the society in general.

Creating and maintaining good and positive relationship with peers and with the people that surrounds you, is the cornerstone of every social interaction. According to Pahl & Barrette (2007), students with good social skills have also good relationships with others. Positive <u>relationship with peers</u> are of equal importance with positive <u>relationship with adults</u>. Both of them contribute to children's success to the school in their cognitive and social development (Durlak et al., 2010; Baker, 2007). Through positive relationships children have the opportunity to interact effectively and gain new information that will eventually transform into new knowledge. It is true that we communicate better with people that we have established first a common way of dealing things and this is based on the good relationship we have built upon our initial interactions.

The data analysis from the final study regarding children's social skills shows that there are plenty of evidence that can be linked with the above arguments. It is obvious that when the arts are used as a stimulus, children were able to form positive relationships with their peers and the adults in a much higher level from the children at the control group that did not receive any treatment. Some extracts that show children's performance in these areas are as follows:

<u>EG1</u>

<u>Child 9</u>: <u>Pre-test</u>: She communicates easily with the other children and is able to form friendships. Because of her dynamic personality there are times that there is a conflict with the other children. However, there is the possibility that she will end up playing alone. Sometimes she will overreact during interactions with adults and might not interact in the appropriate way. She is able to ask what she wants and approach them easily.

<u>Post-test</u>: She is very sociable and forms friendships with other children very easily. She approaches children in the appropriate way and interacts with them appropriately. She is still very dynamic but when there is a conflict she usually discusses with the other child in order to find a solution. She approaches adults in the appropriate way and most of the time she interacts with them in an appropriate manner. She expresses her feelings to them but sometimes she might be shy and not do this. However, this might occur only in minor times.

Child 11: <u>Pre-test</u>: *She is a little shy and sometimes she might be reluctant to approach other children and to make friendships. She needs some time to feel comfortable and after this she is usually sociable. She approaches adults only when it is absolutely needed, and especially the ones that she does not know very well. She needs time to familiarize herself and be comfortable to interact with them.*

<u>Post-test</u>: *There is great progress in this area! She approaches other children very easily and makes friendships. When there is a child that is hesitating to do so, she will approach it and will make it a member of the group. Regarding her relationship with adults, she is very confident to approach them and is able to participate in a mature conversation with them.*

Child 15: <u>Pre-test</u>: *She only interacts with one girl that she knows from last year. She rarely approaches anyone else and when other children approach her, she ignores them. Her relationship with adults is different in a good way. She is pleasant but she approaches adults only when it is necessary. When it comes to new member of staff, she needs first to observe them carefully and then she will approach them.*

<u>Post-test</u>: *There is a huge progress in this area!! Regarding her relationship with peers, she is very sociable and has a lot of friends who love her very much. She is always an active member of every group activity. Regarding her relationship with adults, she is able to form very good relationships with them and even with the adults she has just met. She is polite and interacts appropriately with them.*

<u>*EG2*</u>

Child 10: <u>Pre-test</u>: *She finds very difficult to approach other children and to make friends. There are only 1 or 2 children who approached her and she interacts only with them. There are many times that she sits on her own and ponder. She blocks all the communication windows with the others. The same applies for her relationship with adults. She finds very difficult to approach adults and speaks to them. Usually she stays passive when they call her or try to interact with her. She seems very shy in this area.*

<u>Post-test</u>: *There is a great progress in this area! She is approachable and she approaches other children and plays with everyone. She is polite and sociable. There are still some times in which she will demand her privacy. The same applies for her relationship with adults. She is approaching adults when needed and asks them questions that will help her in her activities. Most of the time she responds to their call.*

Child 11: <u>Pre-test</u>: *She likes the company of other children but most of the time she annoys them and push them just for fun. As a result, children do*

not want to play with her. Her relationship with adults is not so good but for a different reason. She is reluctant to approach adults and there are times that she ignores their call. Most of the time she does not interact appropriately with them.

Post-test: There is progress in this area and she manages not to annoy the children that she is playing with. She is more sociable and most of the time she interacts with them appropriately. The same applies for her relationship with adults. She is better in this area and now most of the time she approaches adults with confidence and with the right attitude and behavior.

Child 14: Pre-test: He needs to work a lot in the relationship with his peers. He is very reluctant to approach other children and to make friends. Usually he plays on his own and ignores the children that try to approach him. His relationship with adults is similar. He hesitates to approach adults even when he knows them. He prefers to observe them from a distance and usually he ignores their calls.

Post-test: His relationship with peers is improving every day. He is more sociable now and with no particular difficulties. He has the courage to approach other children and asks them to play with them. Regarding his relationship with adults, he is more sociable than he used to be but still he is shy half of the times. He responds after a while to their calls and interacts appropriately with them.

EG3

Child 2: Pre-test: He is not that sociable. He interacts with specific children but not all the times. Most of the time he likes to play alone and will not interact with other children. His relationship with adults needs improvement as well. Most of the time he is very shy to approach an adult and he will do it only if it is absolutely needed and necessary. He usually tries to avoid this interaction and he observes them from distance. When he realizes that the adult is looking at him, he looks down and turns his back on them.

Post-test: There is a huge progress in his social skills. He is more sociable now and he has friends. He interacts with almost every child and plays with them in an appropriate way. The same is obvious in his relationship with adults. He feels very secure when an adult is around and he will try to make contact with him. He is very sociable and relates well with them.

Child 6: Pre-test: He develops relationships with other children only when there is a leading framework e.g. one had to give guidelines and the other one has to follow. He cannot play in any other way. He will approach adults only to ask confirmation about his achievements or clarification about an

activity. This interaction is usually limited and when he gets the information he wants he just leaves immediately.

Post-test: There is a development here. He got over his initial attitude of leading relationships with his peers. Now he can form friendships and most of the time they play with equals roles. Regarding his relationship with adults, it is obvious that there is a progress as well. He feels more confident to form relationships with adults and to approach them. He interacts with them with the appropriate way and usually he is polite.

Child 12: Pre-test: She needs to work a lot in her relationship with other children. She rarely interacts with the other children and she generally avoids any contact with them. She has only one friend and plays only with her. She never approaches adults even when she is extremely familiar with them. In order to approach them she needs a lot of support and there should be her friend with her. She is reluctant in any kind of interaction with other children or adults.

Post-test: There is a great progress in this and she is now very sociable. She communicates well with the other children and plays with them in an appropriate manner. Regarding her relationship with adults, she improved her communication with them. She approaches them and asks them for clarification about something that she did not understand. She does not need any company during these interactions as previously.

CG

Child 1: Pre-test: It is easy for him to communicate with other children and to make friendships but half of the times he is shy to do so and prefers to play alone. Because of this, he might hurt the other children's feelings by ignoring them. His relationship with adults is ok. He approaches them with some difficulty only when he needs something from them (e.g. a toy that cannot reach). This interaction is most of the time appropriate.

Post-test: There is a decrease in his relationship with peers. He often finds difficult to speak to other children and prefers to play on his own. It is difficult for him to make friendships and to interact with other children. Regarding his relationship with adults it is obvious that there is no progress or decrease in this area. His attitude remained the same as before. He still approaches the adults with some difficulty and only when it is necessary to do so.

Child 2: Pre-test: Most of the time, she communicates quite easily with her peers and plays with them in an appropriate manner. However, there are times that she does not take notice of their feelings and she might hurt them or push them in order to get what she wants. After this circumstance, she prefers to play alone. She approaches adults with some difficulty. She

needs some time at the beginning to make herself familiar with them by observing them from a distance. Most of the time she will not initiate an interaction with them.

Post-test: There is no progress in this area. Her relationship with peers remained the same. There are times that she is still unaware of the other children's feelings and as a result she tends to annoy them. The same applies for her relationship with the adults. There is not progress in this area and she still finds it difficult to initiate a discussion with them.

Child 10: Pre-test: He needs to work on his relationship with peers. Very often he exhibits a difficulty to approach other children and he seems extremely shy. He avoids any contact with them and refrains from interacting with them. He prefers to play alone. The same is obvious in his relationship with adults. He finds it very difficult to interact with them and often he needs to be triggered to do so. However, when this happens he interacts with the appropriate way.

Post-test: There is a little progress in this area. He can communicate quite easily with his peers but still seems shy most of the time. Usually, it is the other children who initiate this interaction and not him. On the contrary, his relationship with adults remained the same. He is still reluctant to initiate a discussion or any kind of interaction with them. Usually he waits from them to do so.

Looking closely the above extracts, it is obvious that children's attitude in the experimental groups revealed more positive relationships with adults and peers comparing with children in the control groups. In both groups there was an improvement in this area as it is expected in due course but in the experimental groups the extracts were related with more positive examples. One main argument for this might be the fact that during the art intervention there were constant opportunities for team and collaborative work in which children had to decide and design the pedagogical activities. It seems that the way the arts were utilised during the suggested interdisciplinary framework contributed beneficially in children's relationships. Being more specific, children had to collaborate in every step and decide as a group their next steps, which requires high levels of social skills and especially constant interactions with others. Therefore, it can be argued that the way the arts were utilised during the intervention, enabled children to develop and form good relationships with other.

The final characteristic of successful social skills that will be examined is effective communication. Researchers (see Segrin et al., 2007; Hargie et al., 2000) stressed that the ability to communicate successfully leads to successful social interactions and consequently social skills. People with excellent communication skills have also excellent social skills as they are able to convey the correct messages to their

recipients and make themselves understood. This gives them extra social support during their interaction and make them successful in their actions. There arguments have been further verified in the early years settings by Pahl & Barrett (2007), who contribute to this discussion by stressing the influence of good communication skills to social competencies.

During the data analysis from the qualitative section of the PSD measure, it was obvious that there is evidence that supports the above arguments. Especially, data shows that children from the experimental group were benefited more comparing with children in the control group. Children in both groups had an approximately similar performance in the pre-test but when arts were used as a stimulus children had better outcomes in contrast with children from the control group. Some extracts that show children's performance in this area are as follows:

EG1

Child 9: *Pre-test*: *Her communication skills are okay but sometimes it is not clear what the message is. She talks and expresses her ideas but she is in constant move and this might result in confusing messages.*

Post-test: *There is a hug progress in her communication skills during free and structured play. Her verbal communication skills are very good and she manages to transfer her thoughts and ideas successfully to others.*

Child 11: *Pre-test*: *She is polite when she speaks and asks simple questions. Her vocabulary is pretty simple. She is not going to support her arguments and her ideas further. Mostly, she will state what she wants or thinks with no further explanation.*

Post-test: *There is a huge progress in her communication skills. She is very talkative and changes her facial expressions accordingly when she is telling a story. She supports her ideas with clever arguments and tries to explain everything that is happening or had happened with every detail.*

Child 14: *Pre-test*: *He is expressing his ideas and make himself understandable but there are times that he speaks too loud and fast that we cannot understand him. This results in a communication break.*

Post-test: *There is a progress in his communication skills. He speaks and uses the appropriate words to explain his ideas. He stresses the parts that are important in a story e.g. during reading a book in the library or during a conversation with his peers or the practitioners.*

EG2

Child 2: *Pre-test*: *He is a little behind in his communication skills but this might be attributed to his low self-esteem. He rarely speaks and communicates verbally. When he does his voice is very low and passive that he cannot make himself understood.*

Post-test: There is an improvement in his communication skills. He asks specific and challenging questions but this happens in limited times. His speech is grammatically correct though. He manages to make himself understood and convey the message he wants to.

Child 5: Pre-test: His communication skills are good but there is a problem in his pronunciation. His speech is good but there are some consonants /r/, /l/ that he cannot pronounce well and thus there are sometimes that he avoids talking or expressing his ideas.

Post-test: There is progress in this area and in his pronunciation. He manages to pronounce /r/ but he still has some difficulty in pronouncing /l/. However, he can communicate his ideas successfully and he rarely refrains from talking and expressing his ideas.

Child 8: Pre-test: She tries to communicates and to express her opinion. She makes a lot of mistakes and this keeps her back in discussing with other children as it seems that she does not want to be embarrassed.

Post-test: She participates in team discussions and is very eager to talk and to express her views. She does this successfully. She just started to explain more her ideas.

EG3

Child 3: Pre-test: She is a little bit behind in her communication skills and this seems to be attributed in her lack of confidence. She barely talks and when she does most of the time it is difficult to make herself understood as she does not complete the sentence.

Post-test: There is progress in this area. She still has some difficulties to speak properly as she cannot pronounce some consonants. However, she can make herself understood and she always participates in the group discussion and states her position.

Child 5: Pre-test: She can communicate and transfer her ideas. Sometimes she makes mistakes and get confused. This does not enable her to continue the discussion as she forgets what she wanted to say.

Post-test: It is obvious that there is a progress in this area. She communicates very well and makes herself understood always. She is supporting her ideas with arguments and explains her thoughts eloquently.

Child 7: Pre-test: There are times that he might have some problems in the verbalization of his ideas mostly in the content of his message. He tries to participate in group discussions but when he cannot convey the message he wants he stops trying.

Post-test: He got over the obstacles he had and he keeps trying to communicate his ideas. He can express his thoughts eloquently and he got over the problems he has with the articulation.

CG

Child 3: <u>Pre-test</u>: *When he speaks he uses very simple statements and words. Most of the time he does grammar and syntax errors. He prefers not to talk at all if it is not necessary.*

<u>Post-test</u>: *There is no progress in his communication skills. He still uses simple words and sentences and he refrains from any conversation if he can do it. His speech contains a lot of syntax and grammar errors.*

Child 5: <u>Pre-test</u>: *She rarely speaks with her peers during free and structured activities. When she does, she uses very simple words and she does not make an effort to explain further her thoughts.*

<u>Post-test</u>: *There is no progress in this area and her communication skills have not been improved that much to go to the next level. She still prefers to remain silent and she speaks only when it is necessary. She will not give any further explanation even if she has not been asked to.*

Child 7: <u>Pre-test</u>: *His communications skills need improvement as he is very behind for his age. He communicates mostly with non-verbal signals (e.g. gestures or facial expressions) rather than words and statements.*

<u>Post-test</u>: *There is little progress in his communication skills. Now, there are times that he will use simple words and statements to convey the message he wants. However, he still prefers to not talk at all if he can.*

Looking closely the above extracts, it is obvious that children in the experimental groups revealed more positive improvements in this area in the post-test. As there might be other reasons that contributed in this improvement, it can be argued that the art intervention was also responsible as children had to communicate and collaborate in every step of the art intervention in order to reach their goals. Thus, it is only reasonable to argue that there were more opportunities for them to involve in meaningful discussions and practice their communicative skills.

To briefly **summarize**, the above data analysis from PIPS and PSD measures shows the beneficial impact of the arts on children's social and literacy skills. This is in agreement with the related empirical literature about the beneficial effects of the arts on children's literacy and social skills. The data from this research project enriches the findings of the existing empirical studies about the effects of the arts in children's literacy performance in various levels of education (see Moritz et al., 2015; Anderson & Loughilin, 2014; Greenfader et al., 2014; Chang & Cress, 2013; Vitsou, 2011; Bolduc, 2009, Seeman, 2008; Gromko, 2005). The data from our piece of research is in agreement with these findings regarding the beneficial impact of the arts in literacy performance. It also supplements them by providing extra evidence of more kinds of the arts and also by adding the beneficial impact on social skills, which was something that investigated by Anderson & Berry (2014) and by Fleming et al. (2014) in the later levels of education.

Quantitative analysis from the current final study confirms that in general, when the arts are used a stimulus, children were more benefited and had better outcomes in both areas. In most of the items of both measurements, there was an effect among the control group and the experimental groups and in most of the items there was no effect among all 3 different experimental groups. There were only limited instances that the opposite occasion was the case. Therefore, this leads us to suggest that overall there was an effect in children's performance as a result of the intervention. Analyzing further the data and comparing the mean of the pre and post-test in both measures, it is obvious that children from the experimental groups had a better progress in both literacy and social skills comparing the performance of children in the control groups. Although there might be some differences in children's performance among the experimental groups with some groups to have a slightly better score than the others, children in all experimental groups outperformed children in the control group in general. Extra evidence to support the beneficial impact of the arts on children's social skills, can be found in the qualitative analysis of the current study at the PSD measure. As it was documented above, children who received the treatment had better performance in the post-test in all items of the PSD measure in contrast with the control group.

Before reaching any conclusions regarding the impact of the art intervention, it is important to consider some elements. It is true that it is expected children to have some kind of progress in due course and this might be attributed in a number of factors such as after school activities, parental interactions, social activities etc. In addition to this, different teaching strategies might lead to differences in children performance and attitude towards learning. Therefore, one might argue that children in the experimental groups had a better performance due to these factors. Although this has some important elements of truth there is a solid counterargument. One main argument is that the practitioners shared the same values and there were a lot of similarities in their teaching approach to children (see chapter 9.2.2). Of course it is not reasonable to argue that they were totally similar as they are human beings and it is expected to have some differences. However, there were no major difference in their attitude that might influence the outcomes. In addition, looking closely the steps of the suggested interdisciplinary framework (see chapter 8.4) and some of the pedagogical projects that took place during the intervention (appendix 8), it is obvious that children had more opportunities to practice these skills in a liberal environment. Being more specific, children embedded spontaneously literacy aspects as an important and fundamental part in the activities they suggested. In addition to this, they were collaborating in the design and implementation of the activities and they were also exchanging meaningful feedback for improvement. Therefore, it can be argued that there were a lot of opportunities to children to practice these skills and as a result this can explain this improvement.

Therefore, considering the findings of these two measures and to **answer to the first and third research question**, it can be argued that the arts have a beneficial impact to children's literacy and social skills. The findings are further supported by the existing literature and supplement it by investigating the effects of more kinds of the arts in both cognitive and social development that is was something that was missing in the previous pieces of research. In contrast to our expectation, that the drama group will have better outcomes, there was no different effect in children's performance comparing with the other experimental groups. This might be explained with the fact that each different art form shares the same values and provide the same liberal environment with rest ones. For example, paintings, drama and puppetry provide a liberal environment that children can interact without being judged or following specific requirements. Although the interactions and the resources might be different in each art form (e.g. puppetry and paintings require tactile modes of communication whereas drama requires kinesthetic modes of communication) they all allow a free communication of ideas and develop mutual respect of the differences among the group. This leads us to suggest that the arts as a whole contribute to children's performance in literacy and social skills and there is no specific kind of the arts that can have better outcomes in contrast with the other.

The measure that was used <u>to answer the 2nd research question</u> was the <u>Authentic Assessment/Portfolio</u>. A pre-test and a post-test was implemented to all experimental groups (EG1, EG2, EG3) and to the control group (CG) at the same period of time. In the next chapter, there will be an analysis and discussion of these findings.

9.2.6 Final study: Authentic Assessment/Portfolio (AA/P)

The measure that was used for the <u>Authentic Assessment/Portfolio (AA/P)</u> was a checklist that was designed for this purpose. This checklist was created after the pilot test to meet the practitioner's needs (see chapter 8.5.3). This checklist was based on the practitioners' observations in order to make an overall judgement. It takes qualitative data and quantifies it, in order to examine children's use of literacy as a social practice. This measure is based on the early learning goals of the prime area 'Communication and Language' and the specific area 'Literacy' according to the Greek National Curriculum for the Early Years. More specifically, the practitioner observed the children in order to gather information for listening, participation in discussion, articulation, reading and writing. To examine the quantitative data from the AA/P in the different groups we used a mix model analysis (split-plot ANOVA). There was a comparison between the pre-and-post-test of each of the 5 items of AA/P among the control group and each experimental groups individually and among all the experimental groups. The data also tested using a mix model analysis (split-plot ANOVA) among the 5 items of AA/P and the background characteristics of the sample to verify if they will act as influencing factors to the outcomes.

Data analysis showed that in total the <u>background characteristics</u> did not influence children's performance in the AA/P as there was no statistical significant difference in the numbers. The only factor that reveals a statistical significant difference is in the 'Family Status' in the item Listening (p=.039) and in the item Writing (p.=037) (see table 47). This might reveal a small influence in children's family status and their performance in listening and writing. This can be attributed to the importance of family and family literacy experiences in children's learning journey and development in literacy (Hayes, 2016). However, due to the fact that there wasn't a statistical significant difference at the majority of the children's background, it can be argued that overall they didn't have a major influence in children's performance in literacy as a social practice.

Table 47. Influencing factors in all items of AA/P

	Gender	Family Status	Siblings	Order of Birth	Place of Birth	Nationality	Multilingual
Influencing factors in Authentic Assessment/Portfolio							
Mix model analysis (Split-plot ANOVA)							
Q1: Listening	.658	.039	.440	.445	.820	.358	.239
Q2: Participation in Discussion	.687	.079	.584	.871	.659	.777	.774
Q3: Articulation	.840	.381	.944	.391	.865	.939	.503
Q4: Reading	.362	.233	.946	.911	.406	.707	.900
Q5: Writing	.883	.037	.917	.329	.438	.477	.965

Regarding the differences in data from the AA/P among groups the analysis showed that there was an effect in children's performance. There was a statistical significant difference (p=.000) in every item (Listening, Participation in Discussion, Articulation, Reading and Writing) between <u>the control group and all the experimental groups</u> in the pre-and-post-test (see table 48). This means that there was a strong impact of the intervention in all items of the AA/P comparing with the control group.

Comparing the data among the <u>different three experimental groups</u>, the analysis shows that in most of the items there was no different effect in children's performance. In the comparison of EG1 and EG2 there was no different effect in Listening (p=.382), in Reading (p=.522) and in Writing (p=.870) and there was a statistical significant difference in Participation in Discussion (p=.043) and in Articulation (p=.009). This implies that there might be a different effect in these two areas which can be explained with the content of the different art form. Being more specific, with the way the arts were used in the suggested interdisciplinary framework the interactions with the paintings required more verbal interactions comparing with the drama play which by nature requires more kinaesthetic interaction without excluding any verbal forms of communication. In the comparison of EG1 and EG3 the data shows that there was no statistical significant difference in all items of the AA/P

and more specifically in Listening (p=.386), in Participation in Discussion (p=.507), in Articulation (p=.812), in Reading (p=.247) and in Writing (p=.860). This might be explained with some similarities in the content of these two different art forms comparing with drama during the suggested interdisciplinary framework. Being more specific, during the intervention the interactions with paintings and puppets provided tactile objects to interact with and more opportunities for verbal communication while drama was more focused on the nonverbal communication of ideas without excluding verbal communications among the group. Finally, in the comparison between EG2 and EG3 there was no different effect in Listening (p=.167), in Reading (p=.568) and in Writing (p=.678) and there was a statistical significant difference in Participation in Discussion (p=.033) and in Articulation (p=.029) (see table 48). This implies that there might be a different effect in these two groups which again it can be explained with the quality of interactions of each art form during the suggested interdisciplinary framework. One main argument is that during puppetry children focused more in the verbalization of their ideas through the puppets by creating their own puppet shows, deciding their roles and puppet making techniques. In addition, the motivation of the pedagogical projects was based on verbal modes of communication and more specifically on a discussion with a puppet. Although verbal interactions were also obvious in the drama play as well, the steering wheel of the pedagogical project was based on a free exploration of ideas through spontaneous movement. For example, in the pedagogical project 'Travel in the Universe' (see appendix 8), children explored their ideas through a drama play in which there were free movements and actions and everyone was free to improvise. Following this, there was a discussion from their experience but it is obvious that the beginning did not rely on verbal interactions like the puppetry. Therefore, it can be argued that during the intervention children used drama in order to show their ideas through kinaesthetic actions without excluding the verbal modes of communication. Despite these differences, when we look closely the numbers in the mean of each different art form, it is obvious that there was a good and very positive improvement in all of the experimental groups without raising any issues of discrepancies.

Table 48. AA/P among groups

	EG1/CG	EG2/CG	EG3/CG	EG1/EG2	EG1/EG3	EG2/EG3
Authentic Assessment/Portfolio						
Mix model analysis (Split-plot ANOVA)						
Q1: Listening	.000	.000	.000	.382	.386	.167
Q2: Participation in Discussion	.000	.000	.000	.043	.507	.033
Q3: Articulation	.000	.000	.000	.009	.812	.029
Q4: Reading	.000	.000	.000	.522	.247	.568
Q5: Writing	.000	.000	.000	.870	.860	.678

The data analysis from the mean average in all 3 experimental groups shows that children had better outcomes in all items of the AA/P in contrast with children from the control group. Although the numbers were not of course totally the same, there was a similar positive improvement in all experimental groups, in contrast with the control group in which the improvement was slightly lower. In the pre-test children's performance was approximately the same in all groups but it is obvious that in the post test children from the experimental groups had better performance. In Listening there was a high increase in the students' performance in the EG1 (M=2.67, M=5.00), in the EG2 (M=2.93, M=5.00) and in the EG3 (M=2.36, M=5.00) in contrast with the CG (M=3.21, M=3.36) that the increase was lower. In Participation in Discussion there was a high increase in the students' performance in the EG1 (M=2.89, M=5.94), in the EG2 (M=2.93, M=5.33) and in the EG3 (M=2.50, M=5.79) in contrast with the CG (M=3.14 M=3.36) that the increase was lower. In Articulation there was a high increase in the students' performance in the EG1 (M=3.00, M=6.00), in the EG2 (M=2.93, M=5.33) and in the EG3 (M=2.57, M=5.64) in contrast with the CG (M=3.21 M=3.29) that the increase was lower. In Reading there was a high increase in the students' performance in the EG1 (M=3.83, M=7.83), in the EG2 (M=3.80, M=8.07) and in the EG3 (M=3.64, M=8.21) in contrast with the CG (M=3.86 M=4.29) that the increase was lower. Finally, in Writing there was a high increase in the students' performance in the EG1 (M=3.72, M=7.44), in the EG2 (M=3.40, M=7.07) and in the EG3 (M=3.29, M=7.07) in contrast with the CG (M=3.50 M=3.57) that the increase was lower (see table 49).

Table 49. Mean average in AA/P among groups

	EG1 Mean		EG2 Mean		EG3 Mean		CG Mean	
Authentic Assessment/Portfolio								
Mix model analysis (Split-plot ANOVA)								
	Pre test	Post test	Pre test	Post test	Pre test	Post test	Pre test	Post test
Q1: Listening	2.67	5.00	2.93	5.00	2.36	5.00	3.21	3.36
Q2: Participation in Discussion	2.89	5.94	2.93	5.33	2.50	5.79	3.14	3.36
Q3: Articulation	3.00	6.00	2.93	5.33	2.57	5.64	3.21	3.29
Q4: Reading	3.83	7.83	3.80	8.07	3.64	8.21	3.86	4.29
Q5: Writing	3.72	7.44	3.40	7.07	3.29	7.07	3.50	3.57

Analysing the data from the observation notes and debriefing the comments that were written in order to make an overall judgement, we can further verify the positive impact of the intervention when arts are used as a means to promote literacy as a social practice comparing to the control group.

As it was discussed earlier (see chapter 2.1), literacy as a social practice is highlighting the use of literacy in people's everyday actions. It is basically what people

do with literacy, with whom they do it, what is exactly they do it, where they do it and why they do it (Appleby & Hamilton, 2008). It embeds the terms of literacy events and literacy practices which are translated with the several activities that have to do with literacy and with the way people utilize literacy through literacy events respectively. Listening, participation in discussion, articulation of ideas, reading and writing are some of the very important activities that can be found while examining literacy as a social practice.

Listening is a very important ability which can be characterized as the Alpha and the Omega of every human activity. When it comes to literacy as a social practice, this ability can enhance literacy events as it establishes a good interaction and communication. According to Booth et al. (2007), providing opportunities to young children to listen, to imitate and to practice, can contribute as important factors to language development especially when it takes the form of social literacy. Listening, in literacy as a social practice, often offers opportunities for further inspiration to ideas which eventually will result in effective reading and writing activities that are emerged from children (Cressy, 2006).

During the data analysis of the observations for the AA/P measure, there were signs that the arts empower children to listen to each other during free play activities and act accordingly to their play. In contrast with the control group this aspect was rarely obvious as the practitioner had to intervene most of the time to resolve conflicts because of children's lack of listening skills. Some extracts that show children's performance in this area are as follows:

> *EG1: Incident 1: A group of children sits in the library corner and read books. They look at the pictures and focus their attention to specific images and laugh all the time. They listen to each other's funny comments and reply with a funnier comment about the pictures… Now they discuss what is happing in the book and how the story ends according to the book. There is an active discussion that no one is left behind. They exchange ideas of what might happen next and they listen to each other very carefully.*
> *Incident 2: There is a new letter in the mail box this morning and a group of children are trying to guess what the letter is about. They open the envelop and try to read it. One child tries to decipher the letters but she cannot do it on her own. She asks for help from the other children and they do so. They manage to read some of the it but they are unable to read it all. They are discussing what they can do and who could help them. It is a very passionate discussion and everyone is so engaged. They reply to each other's ideas and comment constructively. They exchange ideas and decide to go to the elder children from Year 2 to help them.*

EG2: Incident 1: A group of children is in the cloakroom and looks at the funny clothes. They want to play a funny story. They try to decide about the content of the story. They discuss about the theme of their play. There is a very active discussion about this and everyone is listening very carefully and responds.

Incident 2: A group of children is in the bulletin board and try to read in turns the different name tags. They discuss how they will set up the turn taking and there is an intense discussion but only for a few seconds. Immediately they stop and they listen to each other ideas and comment appropriately.

EG3: Incident 1: It is early in the morning and children are arriving in the school. A group of girls discusses about what they did in the weekend with their parents. When a child is talking the rest of the children are listening carefully and ask questions. They all laugh and decide to draw a picture about these activities.

Incident 2: It is the free play time and children are playing in the interest corners. There is a group of children that pretends to be the police, which is running after a group of bad dogs. As this game is pretty intense there is a conflict among them and two children had a fight. They are both very sad about this. Instead of continuing fighting, they listen actively to each other and they explain why the felt upset.

CG: Incident 1: It is early in the morning and a group of children sits in the library and reads books. The talk about the content of the book but they just say what they see without commenting on each other's ideas. It seems that they do not listen to each other. A child is describing one picture and he turns the page without waiting the other child to speak. They are having an argument and soon they are having a fight. The practitioner intervenes and reminds that they need to behave and be friends. After this the children are playing on their own.

Incident 2: A couple of children sit in the carpet area with some Lego bricks. Once in while they say random words or statements but they do not listen to each other. One of them runs out of blue bricks and takes some from the other child's construction. The other child hit her back and they are having an argument. They do not talk to solve the problem and they do not listen to each other while they are explaining the purpose of their actions. The practitioner intervenes to solve the conflict.

Looking closely the above extracts it is obvious that children in the experimental groups were listening to each other and were discussing in order to proceed with their ideas and to understand the other's point of view. This might be

attributed to the fact that during the suggested interdisciplinary framework, children had to show mutual respect to each other's ideas and listen carefully to each other in order to finalize the activities. For example, after the introduction of each art stimulus, children were listening to each other's ideas and commenting constructively. It can be argued that this might helped them to develop such skills that they embraced and extended them in their free play as well.

Another important aspect of social literacy is the opportunity for <u>participation in discussion</u> and <u>articulation of ideas</u>. Oral language is a fundamental part of social literacy and it coexists with the written aspect of literacy as a social practice (Cook-Gumperz, 2006). This is based on the argument that children need first to develop their speech in order to start the writing process. Since they have developed their oral skills and speech, then they are able to express their ideas and take part in a discussion with others. A very simple example is that children often try to write what they want to say verbally. With giving them the opportunity to participate in discussions and to express their ideas, we enable them to use literacy in a meaningful way in their social environment.

The data from the final study can be linked strongly with the above arguments. When the arts were used as a means to promote literacy, children showed higher levels of participation in discussion and of articulating their ideas during their free play literacy activities comparing to the control group. They were further more capable to express their ideas and make themselves understood during literacy events. Some extracts that show children's performance in this area are as follows:

> *<u>EG1</u>: <u>Incident 1</u>: They are in the carpet area and get ready to start the day. Children notice that there is something behind the picture of the almond tree that looks like a white envelope. They are expressing their ideas of what this could be without any particular intervention from the practitioner. They are having a conversation about this and they explain their thoughts.*
> *<u>Incident 2</u>: A group of children sits in the arts and crafts area and observes the paintings. They discuss about the resources and materials, the colours, the painter and the reason that the painter made this painting. While they express their ideas they explain their way of thinking e.g. 'I think Mone made this painting because he was feeling lonely and missed his mum. This lady is his mum.'*

> *<u>EG2</u>: <u>Incident 1</u>: They are getting ready to perform a drama play about a Greek Myth and they want to include fairies in it. The Myth does not include fairies itself. They try to find a way to include them but they do not ask the help of the practitioner. They are engage actively in this discussion and support their arguments with examples:*

M.: I think we need to include the fairies because the queen is in the valley. This is where fairies live.

K.: Yes, but they also live in the up in the mountain, so we can include them when she is in the castle. The castle it is on the mountain.

M.: Ok, we can have two kind of fairies then. The valley fairies and the mountain fairies.

<u>EG3</u>: <u>Incident 1</u>: They are in the playground and a group of children wants to play a tag game. They are trying to decide the rules of this game. They discussed and explain why they suggest the specific tag game. They decide to play the freeze tag game and they are counting-out with odds and even and they select the unstucker. A child was tagged and pretends she is dead. Immediately they change the game and discuss what they can do to make her feel better. They explain their ideas with arguments:

A.: I think we need to give her a medicine. I was sick once and my mum gave me a pink medicine and I got well. It tastes like strawberries.

I.: Yes, but she needs to eat as well. Do you remember the story we read yesterday? The little boy was sick and his mum prepared him some chicken soup.

<u>CG</u>: <u>Incident 1</u>: They sit in the carpet area and discuss about the weekly topic and news. Children look reluctant to talk and bored. The practitioner has to ask them a lot of questions in order for the children to express their ideas and to support their arguments. Some children are playing with their shoe laces.

<u>Incident 2</u>: A group of children are in the sitting area and they are drawing a picture all together with paint brushes and paint pallets. They are very quiet and when they talk they use one or two words to explain their way of thinking and how they can proceed further:

R.: I want to use blue colour of the dress.

T.: Why?

N.: ... I like blue.

A closer examination of the above extracts gives further insights of the benefits of the intervention in this area. It can be argued that these positive results might be attributed to practitioners' practices or to other external factors. However, a counterargument of this would be that the examination of the practitioners' practices (see chapter 9.2.2) did not reveal any major differences. In addition, the fact that the arts set a liberal environment in which everyone can contribute and express their ideas without being judged, is also a strong argument that might explain these positive results. During the suggested interdisciplinary framework, children had to involve in constant meaningful discussions in order to decide the content of the activities. In this

procedure, they had to articulate their ideas and to respect each other's opinions. Therefore, it is only reasonable to argue that the art intervention provided more opportunities for articulating their ideas and participating in meaningful discussions.

Understanding written symbols and texts is very critical in the development of literacy and especially when it takes the form of social literacy. This competency will provide children the opportunity to interpret the information from their surroundings and use it further in their activities. According to Griffin et al. (2004), <u>reading</u> as an activity is very important, as through this people can understand the written content and gather different types of information. Children, during free play, often initiate literacy events in which they include reading activities. A very common example is when children pretend that are reading a recipe while they are preparing food for the grandmother of Red Riding Hood who is sick. The social context that reading takes place is very important in the meaning making (Diaz, 2007) as it will enable children to take the information they want and further use it in their play. Regarding the previous example, children will look for a recipe in a recipe magazine or a recipe book and not in the pages of a fairy tale story, a newspaper or utility bill.

During observations for the AA/P, the data shows that the arts contribute to this aspect with a very positive impact. Being more specific, it is evident that the arts stimulated children to produce literacy events in which they embedded reading as the core activity. They were also able to look in the appropriate resources considering the social context. However, this was not so common in the free play of children from the control group. Some extracts that show children's performance in this area are as follows:

> *EG1: Incident 1: It is free play time and children can select if they can play inside or outside. A group of children are playing a game in which someone is been kidnaped and they are trying to find the bad guys. They pretend they are reading the hidden letters and follow the path to the shelter of the bad ones… Now they found it but the room is empty and there is a note in the chair [the note is a piece of paper with some writing in it]. They read the note and the follow the guidelines to rescue their friend.*
> *Incident 2: A group of children are in the library and they are browsing some books. A couple of them focus their attention to the typed letters in the bottom of the page and they point out the ones that are in their name. They bring their name tags and compare them. When they found one they are very happy and the applaud.*

> *EG2: Incident 1: Some children are in the sitting area and they browsing a couple of books. They pretend they read them and then they point out a specific word that they think is linked with the picture (e.g. the picture is about a landscape with a young boy named Nick and they point the words*

that start with N). One of them hides the book behind its back and try to describe the word he has seen. The rest of the children are trying to guess.
<u>Incident 2</u>: A group of children are browsing some book covers. They recognise the book of Evgenios Trivisas and they point out the title and the name of the writer. They pretend they read it. They are having a discussion about the content of the book and after this they try to find some other books of this writer. They compare the title with the other titles but they cannot find a similar one. After they compare the name of the author and when they find some other they are very happy and hug.

<u>EG3</u>: <u>Incident 1</u>: It is a free play time and children are playing at the front yard of the school. They chase each other and they stop at the front door and discuss. There is a written announcement for their parents. They are trying to read it and in the meantime they recognise the letters they know from their name. They play a game and they create funny words with this sounds and they laugh.

<u>CG</u>: <u>Incident 1</u>: It is early in the morning and children can go and play wherever they want. A group of children is sitting in the library and they are looking at the book covers. They discuss about the colours and the pictures of the book and only one time they refer to the writing part. Another group of children is sitting in the arts and crafts area and they are making a picture. When they finish they put it in their drawer and they start making another one. They discuss with each other about the content of their drawing of about their parents.

Looking closely the above extracts it is obvious that children during the suggested interdisciplinary framework were involved more often in reading activities and that these activities were meaningful to them. Although this can be attributed to other external factors that are closely related to their home environment (e.g. shared reading practices with parents), there are also some strong links with the art intervention. One main argument for this rests on the steps of the suggested interdisciplinary framework. Being more specific, step 3 'Decide/Emerge Literacy' aims to empower children to decide and design the activities they want to do as an outcome of the art stimulus. In this step the practitioner acts as a facilitator to include and emerge the literacy aspects of these activities. Therefore, children got familiarize with this process and this might be attributed to the fact that they further embedded this practice in their free play.

Finally, <u>writing</u> is one of the equal important factors in literacy as a social practice as it takes place in many different forms during literacy events. When children are not forced to follow or meet the formal expectations of school regarding literacy, they feel free to use their writing skills in a very productive way. Most of the time, this

activity is more beneficial from the formal literacy activities as they set their own goals and the way they will meet them. In addition, there is no external expectation to meet specific goals or penalties attached in order to correct their mistakes, so they feel free to try and learn from this procedure. According to Cope & Kalantzis (2012) and to Kress (2012), the written texts have by themselves a social purpose and aim to convey messages for different social purpose every time.

The data from the final study is again highly linked with these arguments and evidence of these attributes can be detected. It seems that the arts empower children to use literacy as a social practice and especially in embedding writing activities without being prompted. This was very much obvious in all groups but it was more often in the groups that received the intervention. Some extracts that show children's performance in this area are as follows:

EG1: Incident 1: A group of children is in the sitting area and draw a picture. They decide to give this picture to the practitioner as a surprise. When they finish their drawing, they put them in an envelope and they write a letter to explain the purpose of this. They discuss about what they are going to write and what letters they need to use. They seek advice from their name tags and the announcement board.

EG2: Incident 1: A group of children are in the cloakroom and they are preparing a drama play. They discuss the content of the story and they allocate roles. They decide to create name tags of the roles in order to remember who they will be in the play. They do it as a group task and every child who knows the letter is responsible to write it. After making their name tags, they make tags of the important places of their story e.g. home of the bad stepmother, cave of the bear etc. They also do it as a team effort. This time they write with different colour markers. They decide the colour of the next letter and the child who holds this colour writes the letter with the help of the others if he/she does not know it.

EG3: Incident 1: During their free time play in the morning, a group of children wants to make a story book. They decide the pictures of the book and they draw them. When they finish the picture they are writing the story underneath and they discuss:
E.: I will make a cave and then I will write the P of Panos and then I will make the door. Panos is older and goes to the big school so the door should be big and the P as well.
L.: I will make the animals… I like the gorillas and the lions and they are doing this AWWWW [she hits her chest and open her mouth widely]. I can write /lion/, it is the same as my name.

When they finish, they gather all the pictures together and put them in the order they want. They write even more underneath the pictures. A girl is holding the marker and she is writing what the other children are telling her.

CG: Incident 1: It is free play time after lunch and a group of children sits in the arts and craft area and draws a picture. Most of the time they sit quietly without exchanging ideas of the content of their pictures. The practitioner comes and discusses with them about the content of their drawing. The children explain to her. She suggests to them to write their names and to write what they have made so far. Children continue what they started but only a few of them write just their name.

A closer examination of the above extracts gives further insights of the benefits of the intervention in this area. Although other external factors might be responsible for this improvement, some credits should also give given to the intervention. Similarly, as above, considering the steps of the suggested interdisciplinary framework, it is obvious that step 3 'Decide/Emerge literacy' empower children to identify and recognize the literacy aspects of the activities they suggested and implemented. Therefore, this improvement might be explained with the fact that children got familiarized with this process in a liberal environment and they further extended this practice in their free play.

To briefly **summarise**, the above data from AA/P shows that the arts have a very positive impact on children's use of literacy as a social practice. Quantitative analysis from the current final study verifies that when arts are used as a starting point of the teaching and learning process, there is a very beneficial impact on children's performance in terms of using literacy as a social practice. Although there might be some differences in children's performance among the experimental groups with some groups to have a slightly better score than the others, children in all experimental groups had a better performance overall than children in the control group. Data analysis shows that there was an effect in all items of AA/P among the control group and all the experimental groups, with a very strong significant difference in the numbers, and in most of the cases there was no different effect among all 3 different experimental groups. Some differences in the numbers can be explained with similarities or differences that can be found while investigating carefully the content of each art form, but in an effort to define the effect it is obvious that there are no major differences in the progress of children in all 3 experimental groups. Being more specific, comparing the mean of the pre- and post-test of the measure, it is obvious that children from all 3 experimental groups had a better progress in this area in contrast with children from control group. Additional evidence that supports this argument, is provided by the qualitative analysis, which offers a rich detail of this

record. Therefore, as it was recorded above, children who received the treatment had a better progress comparing with children in the control group that did not receive any treatment.

Reviewing the existing empirical evidence regarding literacy as a social practice in the early years settings it is obvious that there are no pieces of research that examine the contribution of the arts in the use of literacy as a social practice. There are general theoretical arguments that support the fact that the arts can act as a facilitator in this process but there is no research that investigates this aspect. In an effort to support the findings with the existing literature, it is obvious that there is common ground with some pedagogical theories.

Vygotsky (1978) and Piaget (see Piaget & Inhelder, 2000) link the arts as the first efforts of children to write. Literacy as a social practice is obvious during people's every day activities and in children's free play in the early years settings. Considering these arguments regarding the arts as the first step of trying to write, it has to be acknowledged that this is happening during children's free play. Therefore, it can be identified as using literacy as a social practice. Another important aspect of literacy as a social practice is effective communication, which is something that was argued by Dewey (1934) when he stated the communicative aspect of the arts and the fact that the arts liberate students from their social constrains in order to communicate freely. This occasion again can be found during children's free art play activities. For example, children often talk and discuss with each other when they draw something and explain to their peers what they are going to do. Another example is that children during a free drama play activities participate in active discussions about their next steps. For these reasons, this can be linked again with the social aspects of literacy as these activities are mainly happening during their free time and not during organized activities by the practitioners.

Researchers, also link the arts with the social aspects of literacy in an indirect way. Wright (2007) agreed with Vygotsky (1978) and Piaget (see Piaget & Inhelder, 2000) regarding the link of drawing with writing and focused her arguments in the early years. One year later, Hopperstad (2008) agreed with Dewey (1934) regarding the communicative aspect of the arts and especially of children's drawing and also focused his arguments in the early years settings. Continue in the same argument, another example of this indirect link can be found in the existing literature in the work of Maniaci & Olcott (2010), who argued again about the communicative aspect of the arts. All of the above arguments are taking place during children's free play, which as stated earlier, is highly linked with the social aspect of literacy. The findings of this piece of research are in agreement with the above indirect arguments. They enrich the literature by offering empirical evidence of the positive impact of the arts in

children's social literacy. They can be considered as one step in producing relevant knowledge in this area.

Before reaching any kind of conclusions regarding the positive or neutral impact of the intervention, it is important to think some aspects. It is only reasonable to argue that children in due course have some kind of improvement and this might have attributed to practitioners' practices or to other factors in their home environment and/or social lives. Having this in mind it can be argued that children's improvement in the experimental groups might be attributed to one of the above factors. On the other hand, it has to be reminded that the examination of practitioners' practices (see chapter 9.2.2) did not reveal any major differences in their teaching styles. In addition, considering the liberal character of the arts and the different steps of the suggested interdisciplinary framework, we can see some strong links with this progress. One main argument is that during their art interactions children familiarized themselves with the practice of identifying the literacy aspects of their activities and this happened in a liberal environment without any external pressure. Some very good examples that illuminate this argument are 'The museum of noise' and 'The museum of quietness' (see appendix 8). In the former, children wanted to design a museum in which it was not acceptable to remain quite in contrast with the real museums and for this they decided to write down the exhibits and the rules. In the latter, they wanted to design a museum which would include thing that cannot make a noise e.g. cotton, fabric, paper etc. but in the end they decided spontaneously to change the rules and start making noise again. In the parts that the practitioner facilitated this process, this took place as suggestions from the practitioners who maintained an equal role with the children. For example, in the activity 'Butterflies in the mirror', the practitioner suggested children to use a different drawing technique to form their butterflies (see appendix 8). Therefore, it can be argued that children had a lot of opportunities to use literacy as a social practice in their activities and thus they embedded this in their free play activities as well. This by itself can explain children's positive results in this area.

The findings of the current piece of research contribute to this discussion and offer evidence as an answer to these indirect arguments. **To answer the second research question**, the arts can offer opportunities for social literacy activities and have a very positive impact in children's performance in this area. As it was documented earlier, there is a gap in the existing empirical evidence regarding the influence of the arts in literacy as a social practice. This piece of research contributes in this by offering empirical evidence that is derived from an experimental design. It has to be acknowledged that in contrast with our expectation, that the drama group would have a better performance than the other art groups, there was no different effect in children's performance when the arts are used as a stimulus. Trying to explain this outcome it is worth looking at the content of each different art form with an effort

to find similarities and differences. It is true that although different art forms demand different types of interactions e.g. in drama play there is emphasis in non-verbal interactions whereas in paintings and puppetry there is an emphasis in verbal interactions, all of them promote a liberal environment in which everyone can contribute with their free will. The most important common aspect in all art forms is that participants are free from any social constraints and there are no external milestones that they need to meet. Therefore, this leads us to suggest that due to these similarities, children can be benefited from the arts in general in their social literacy activities and not from a specific kind of the arts.

The measure that was used to answer to the 4rd research question was the Leuven Involvement Scale for Young Children (LIS-YC). A pre-test and a post-test was implemented to all experimental groups (EG1, EG2, EG3) and to the control group (CG) at the same period of time. In the next chapter, there will be an analysis and discussion of these findings.

9.2.7 Final study: Leuven Involvement Scale for Young Children (LIS-YC)

This test was implemented once in the middle of the intervention at the same period of time in all groups in order to examine the level of children's involvement. For the quantitative data of this measure, the Fisher's Exact Test was used as the conditions of Chi-square test were not satisfied. Fisher's Exact Test was implemented among the control group and each experimental group individually and among all the experimental groups. The data was also tested against the background characteristics of the sample to verify if they will act as influencing factors to the outcomes.

Before conducting any test regarding the background characteristics, there was an examination of the data of the LIS-YS regarding the distribution, using Kolmogorov Smirnov. The data shows that there was no normal distribution (p=.000) in all signals of LIS-YS (see table 50). Therefore, since there was a not normal distribution and the values gender, place of birth, nationality and multilingual are binary values the Mann-Whitney U was used. The Kruskai-Wallis H was used for the value order of birth and the value family status as they are nominal values with more than two values and finally the Spearman test was used for the value siblings as it was a scale value with no normal distribution (see table 51).

Table 50. Kolmogorov-Smirnov Test in LIS-YC

Leuven's Involvement Scale for Young Children (LIS-YC)	
	One-Sample Kolmogorov-Smirnov Test/ Asymp. Sig (2-sided)
Q1: Concentration	.000
Q2: Energy	.000
Q3: Complexity and Creativity	.000
Q4: Facial Expression and Posture	.000

Q5: Persistence	.000
Q6: Precision	.000
Q7: Reaction time	.000
Q8: Language	.000
Q9: Satisfaction	.000

Table 51. Kolmogorov-Smirnov Test in Siblings

Distribution of the value Sibling	
	Siblings
N	61
One-Sample Kolmogorov-Smirnov Test/ Asymp. Sig (2-sided)	.000

Data analysis showed that the <u>background characteristics</u> of the children had no effect in children's performance regarding involvement. There was no statistical significant difference (p>0.05) in the numbers in all of the 9 signals of LIS-YS comparing with children's gender, family status, siblings, order of birth, place of birth, nationality and multilingualism (see table 52). This shows that the background characteristics did not have a major influence in children's involvement during art with literacy activities.

Table 52. Influencing factors in all items of LIS-YC

Leuven's Involvement Scale for Young Children (LIS-YC)						
Influencing factors						
	Gender*	Family Status**	Siblings***	Order of Birth**	Place of Birth*	Nationality*	Multilingual*
Q1: Concentration	.401	.176	.520	.493	.127	.111	.578
Q2: Energy	.693	.185	.943	.852	.199	.127	.511
Q3: Complexity and Creativity	.672	.165	.240	.360	.241	.165	.683
Q4: Facial Expression and Posture	.368	.199	.334	.421	.140	.083	.465
Q5: Persistence	.470	.223	.640	.553	.213	.145	.561
Q6: Precision	.520	.104	.586	.630	.241	.165	.702
Q7: Reaction time	.564	.201	.834	.691	.140	.083	.435
Q8: Language	.623	.169	.434	.723	.241	.165	.702
Q9: Satisfaction	.540	.134	.392	.825	.306	.234	.872

*SPSS tests: *Mann-Whitney U, **Kruskai-Wallis H, ***Spearman*

Comparing the data regarding children's involvement among groups, the analysis showed that there was an effect in children's performance among the <u>control</u>

group and all the experimental groups. There was a statistical significant relationship (p=.000) in all of the 9 signals of LIS-YC during this comparison. This means that the intervention had an impact on children's levels of involvement comparing to the control group. In order to define this impact a closer look should be given to descriptive statistics (see table 54). In the comparison among the different three experimental groups, the data analysis shows that there is no different effect in children's performance. There was no statistical significant relationship (p>0.05) in the numbers in all the 9 signals of LIS-YC during this examination (see table 53). This means that there was no different effect or any major differences among the experimental groups and the different art forms. This might be explained with the fact that all the different art forms develop a very engaging environment for the young children as it is a major form of their play during their free interactions.

Table 53. LIS-YC among groups

Leuven's Involvement Scale for Young Children (LIS-YC)					
Fisher's Exact Test/ Asymp. Sig (2-sided)					
	EG1/CG	EG2/CG	EG3/CG	EG1/EG2	EG1/EG3	EG2/EG3
Q1: Concentration	.000	.000	.000	.667	.418	1.00
Q2: Energy	.000	.000	.000	1.00	.688	.831
Q3: Complexity and Creativity	.000	.000	.000	1.00	.792	.786
Q4: Facial Expression and Posture	.000	.000	.000	.155	.418	1.00
Q5: Persistence	.000	.000	.000	.800	.328	1.00
Q6: Precision	.000	.000	.000	.632	.596	1.00
Q7: Reaction time	.000	.000	.000	.827	.211	.638
Q8: Language	.000	.000	.000	.364	.759	.324
Q9: Satisfaction	.000	.000	.000	.573	.560	1.00

Analysing the data further into to the 5 levels of involvement it is obvious that children had higher levels of involvement in literacy activities during the intervention in contrast with children from the control group. In a 5-point Likert scale with Level 1 being the lowest and Level 5 being the highest, in EG1 the numbers were gathered mainly in Level 4 and Level 5 with only a 6.3% (n=1) in the level 3 in energy and reaction time. In EG2 the numbers were gathered mainly in Level 4 and Level 5 with only a 7.7% (n=1) in the level 3 in energy, in facial expression/posture and in persistence and only a 15.4% (n=2) in reaction time. In EG3 the numbers were gathered mainly in Level 4 and Level 5 with only an 8.3% (n=1) in the level 3 in complexity/creativity, in precision, and in language and only a 16.7% (n=2) in energy, in persistence and in reaction time. On the contrary in the CG the numbers were gathered only in Level 1, Level 2 and Level 3 and there were no entries in Level 4 and Level 5 (see table 54). This might be attributed to the highly engaging character of the arts but also to the way the arts

were used in the suggested interdisciplinary framework. Being more specific, children in all experimental groups used the arts to emerge literacy activities in contrast with the control group. For example, during the intervention, children in all experimental group, used different art forms to design and implement literacy activities e.g. discuss a painting, play a drama play to explore a particular topic, participate in a puppet show and discuss with the puppets. Following the steps of the suggested interdisciplinary framework, children had a leading role in the whole procedure by explaining their thoughts, deciding the next step and reflecting on their and their peers' actions and support. Having in mind that the arts are the most common activity in their free time play (see Hanley et al., 2009), this might have contributed to the high levels of involvement during the suggested interdisciplinary framework. It can be argued that children saw this intervention as a playful activity that is highly related to the activities that they will do for pleasure at their own time.

Table 54. Levels of involvement in LIS-YC among groups

	Level 1: Low Activity		Level 2: A Frequent Interrupted Activity		Level 3: Mainly Continuous Activity		Level 4: Continuous Activity with Intense Moments		Level 5: Sustained Intense Activity	
Leuven's Involvement Scale for Young Children (LIS-YC)										
Fisher's Exact Test										
Control Group										
	N	%	N	%	N	%	N	%	N	%
Q1: Concentration	6	42.9%	4	28.6%	4	28.6%	0	0%	0	0%
Q2: Energy	4	28.6%	7	50%	3	21.4%	0	0%	0	0%
Q3: Complexity and Creativity	7	50%	4	28.6%	3	21.4%	0	0%	0	0%
Q4: Facial Expression and Posture	9	64.3%	2	14.3%	3	21.4%	0	0%	0	0%
Q5: Persistence	5	35.7%	5	35.7%	4	28.6%	0	0%	0	0%
Q6: Precision	6	42.9%	5	35.7%	3	21.4%	0	0%	0	0%
Q7: Reaction time	9	64.3%	2	14.3%	3	21.4%	0	0%	0	0%
Q8: Language	10	71.4%	2	14.3%	1	7.1%	0	0%	0	0%
Q9: Satisfaction	9	64.3%	2	14.3%	1	7.1%	0	0%	0	0%
Experimental Group 1- Paintings										
Q1: Concentration	0	0%	0	0%	0	0%	3	18.8%	13	81.3%
Q2: Energy	0	0%	0	0%	1	6.3%	2	12.5%	13	81.3%

Q3: Complexity and Creativity	0	0%	0	0%	0	0%	3	18.8%	13	81.3%
Q4: Facial Expression and Posture	0	0%	0	0%	0	0%	3	18.8%	13	81.3%
Q5: Persistence	0	0%	0	0%	0	0%	3	18.8%	13	81.3%
Q6: Precision	0	0%	0	0%	0	0%	2	12.5%	14	87.5%
Q7: Reaction time	0	0%	0	0%	1	6.3%	2	12.5%	13	81.3%
Q8: Language	0	0%	0	0%	0	0%	2	12.5%	14	87.5%
Q9: Satisfaction	0	0%	0	0%	0	0%	1	6.3%	15	93.8%
Experimental Group 2- Drama										
Q1: Concentration	0	0%	0	0%	0	0%	4	30.8%	13	81.3%
Q2: Energy	0	0%	0	0%	1	7.7%	2	15.4%	10	76.9%
Q3: Complexity and Creativity	0	0%	0	0%	0	0%	2	15.4%	11	84.6%
Q4: Facial Expression and Posture	0	0%	0	0%	1	7.7%	5	38.5%	7	53.8%
Q5: Persistence	0	0%	0	0%	1	7.7%	2	15.4%	10	76.9%
Q6: Precision	0	0%	0	0%	0	0%	3	23.1%	10	76.9%
Q7: Reaction time	0	0%	0	0%	2	15.4%	2	15.4%	9	69.2%
Q8: Language	0	0%	0	0%	0	0%	4	30.8%	9	69.2%
Q9: Satisfaction	0	0%	0	0%	0	0%	2	15.4%	11	84.6%
Experimental Group 3- Puppets										
Q1: Concentration	0	0%	0	0%	0	0%	4	33.3%	8	66.7%
Q2: Energy	0	0%	0	0%	2	16.7%	2	16.7%	8	66.7%
Q3: Complexity and Creativity	0	0%	0	0%	1	8.3%	2	16.7%	9	75%
Q4: Facial Expression and Posture	0	0%	0	0%	0	0%	4	33.3%	8	66.7%
Q5: Persistence	0	0%	0	0%	2	16.7%	1	8.3%	9	75%
Q6: Precision	0	0%	0	0%	1	8.3%	2	16.7%	9	75%
Q7: Reaction time	0	0%	0	0%	2	16.7%	4	33.3%	6	50%
Q8: Language	0	0%	0	0%	1	8.3%	1	8.3%	10	83.3%

Q9: Satisfaction	0	0%	0	0%	0	0%	2	16.7%	10	83.3%

Before reaching any conclusions regarding the impact of the intervention about children's levels of involvement in literacy activities, there are some elements that need to be considered. It is true that children's involvement can be attributed to a variety of factors that are related with teachers' practices, children's attitude and emotions on the day, home shared activities etc. Therefore, it can be argued that the positive results in children's levels of involvement in the experimental groups might be attributed to these factors and not to the intervention per se. A counterargument for this might rely on several factors. To begin with, it is true that children's most favorite activity during free play time is art activities like drama, painting, puppetry etc. (Hanley et al., 2009). Considering this and the fact that in the experimental groups there was an art intervention, there are some strong links with the high levels of involvement in children at the experimental groups. A good explanation for this might be that children perceived the intervention as a pleasant activity that they do in their free time and thus they were involved in. Last but not least, during the suggested interdisciplinary framework, children had a very active and leading role in every step and thus they develop ownership of the activities. This by itself results in high levels of involvement.

Analyzing the data with a qualitative approach and debriefing the comments that were written in the LIS-YC in order to make an overall judgement of the level of involvement of each child, more evidence can be provided. We can further verify the positive outcomes of the intervention towards children's involvement especially when the arts are used as a means to promote literacy in contrast with the control group.

According to Laevers (1994), involvement is an activity of people, which is strongly characterized by high levels of motivation, intensity and enjoyment. People in general, not only young children, are usually involved deeply in activities that are interesting, stimulating, challenging but not too simple or too difficult to fulfill them. Young children can be involved longer in activities that trigger their attention and include the aspect of satisfaction (Baroody & Diamond, 2013). Involvement as a human's quality can be further analyzed in several signals, which enable the observer to get a holistic idea of the levels of people's involvement in an activity.

Concentration can be characterized as one of the most important signal of involvement and usually is the most obvious one. The term itself reveals the level of people's attention and focus towards the activity (Laevers, 1994). When someone is totally concentrated, there is no external or internal stimuli that can distract them. Concentration is a crucial agent in the successful completion of the activity (Siraj-

Blatchford et al., 2002) which also results in a better and deep understanding of the given information.

The data from the final study is highly linked with the above arguments. It is obvious that the majority of children in all experimental groups where highly concentrated in literacy activities when the arts were used as a stimulus. During these activities, there are signs that nothing could distract them or make them stop being concentrated. On the contrary, children from the control group had lower levels of concentration during literacy activities, in which the arts were not used as a stimulus. Some extracts that show children's performance in this area are as follows:

EG1:

Child 7: Her attention is totally directed towards the whole procedure and nothing can distract her to reach her goals. She does not pay attention to other children and irrelevant stimuli or distractions do not affect her. She is waiting patiently for her turn to describe the painting or go to the writing table to write a letter to the painter.

Child 8: He is very focused during the discussion of the painting and the literacy activity and does not let external factors influence him. He is aware of what is happening and of what other children are doing and he is observing them very carefully. He looks the paintings very closely and turns them upside down.

Child 17: She observes very carefully the discussion about the paintings and the introduction of the activity. She is very eager to participate in the discussion, she shares her ideas and gives solution to the arising queries (e.g. the pigeon brought the paintings). She is very concentrated on her work. She does not care about anything else apart her activity until she reaches her goal.

EG2

Child 1: He is deeply concentrated during the drama play and the literacy activities. Nothing can distract him although many times other children accidentally bump into him. He looks very carefully the Bulletin Board and writes the words he wants.

Child 4: She is paying attention very carefully to the drama play and the literacy activity and she is not distracted by her surroundings. She participates in discussions and suggests solutions and ideas to prolong the drama play and to combine it with a literacy activity.

Child 9: Nothing can distract her from the activity until she reaches her goal. She is very concentrated even to the small details and is very eager to participate. She makes assumptions with her friends about her role or

the outcome of the activity (e.g. you are my daughter now, your handwriting looks like mine).

EG3
Child 4: She is fully concentrated during the puppet play and the literacy activity. Nothing can distract her. She participates, responds to all stimuli and produces new stimuli (e.g. she is suggesting new things to the puppet).
Child 6: He is watching very carefully the puppet play and is very concentrated during the literacy activity. Nothing can distract him from the activity although sometimes his friends accidently poke him. He is participating in the puppet play and suggests solutions to the upcoming problems that the puppets might experience.
Child 10: He is very concentrated to the puppet play and to the literacy activity. He participates and creates new stimuli (e.g. talks to the puppets during the play, offering solutions, giving hints to solve the mystery). Nothing can distract him from this activity.

CG
Child 1: He is in constant move and does not pay attention to the teacher or the activity. He is looking at the furniture of the classroom and at his classmates. His attention is directed to other things and not to the activity he is doing. He looks at his friends and tries to imitate them in order to finish the activity and play with other things.
Child 2: She is concentrated only at the introduction of the activity and the discussion but this is frequently interrupted by other things. She is looking sometimes at her surroundings or she is staring at her shoes.
Child 14: There are some moments that she is concentrated and participates but this lasts only for a few minutes. She usually looks at her surroundings and observes the reactions of other children than the activity itself.

Looking closely the above extracts it is obvious that children in the experimental groups had higher levels of concentration comparing with the children in the control group. A strong link with the way the arts were used during the intervention can be argued. One main argument for this is that children during the suggested interdisciplinary framework, used the arts as a steering wheel to facilitate the process of decision making regarding the activities they want to do. During this process they had a very leading role which resulted in taking full responsibility of their actions and activities. Therefore, this might have resulted in high levels of concentration as an effort to meet their goals with success.

Active involvement is also linked with signs of deep effort and deep mental energy during the activity. Children that are involved in an activity, usually are very

energetic and disclose efforts of hard thinking during the whole process. This energy can be described as the way they manipulate the available recourses, the intensity of their voice and speaking and their passionate expression (Ridley et al., 2010). This attitude reveals signs of great involvement, as it is true that children put great efforts only in something that interests them and triggers their attention. This deep mental thinking results in introducing an individual touch in the outcome, which is highly linked with creativity. In terms of measuring involvement, creativity does not equal with making something new and totally original. It is more associated in displaying and embedding in the activity features of our individual personality (Laevers, 1994).

The data analysis, from the final study, shows that the arts can stimulate children to participate actively and reveal great levels of mental energy and creativity. There are signs that children in the experimental groups were not just passive followers of the instructions but independent thinkers that took the activity one step further according to their individual ideas. When the arts were not used as a stimulus, children exhibited lower levels of effort and responsibility to solve the upcoming problems and they easily left the activity in order to do something else. Some extracts that show children's performance in this area are as follows:

EG1

Child 9: She is very interested in the whole procedure and she invests too much effort in order to reach her goal. She presses the crayon very hard in order to create what she wants and she moves her body according to what she is drawing or writing.

Child 14: He invests a lot of effort to reach his goals and elements of hard thinking are obvious throughout the discussion and the literacy activity. He uses quantity words to describe the painting (e.g. little pink, too many rocks) and makes judgements of what he sees (e.g. A boy is sitting. He might play or watch the pretty lady on the boat).

Child 17: There are signs of deep mental energy. While she is looking at the paintings she makes facial expressions which shows sentiments and emotions. She moves her head while she is drawing or painting. She points to the handwriting of the painter's letter and make judgements.

EG2

Child 4: She is energetic and invests a lot of effort during the whole procedure. This is obvious through signs of hard thinking of her next step or when she has a difficulty and she tries to find ways to solve it.

Child 5: He is hopping, running and laughing during the drama play and he is very energetic during the literacy activity. He tries to think of new rules that are funny in order to implement them into his play.

Child 15: She invests too much effort during the whole procedure and thinks very hard about her next step considering the resources she has. She verbalizes her thoughts and explains them in detail. She is very active during the drama play and during the literacy activity.

EG3
Child 4: She shows full mental activity during both the puppet play and the literacy activity. She seems that she is feeling the story and the emotions of the puppets as she is doing relevant facial expressions.
Child 6: He puts too much effort in the activity and thinks very hard of his next step. There are signs that he is eager and stimulated towards this procedure and that he tries to do one step further at his own time.
Child 7: He is very energetic and invests too much effort during the whole procedure. He is talking loud and participating in every discussion relevant to the puppet play and the literacy activity. He is having a conversation with the puppets during the puppet play.

CG
Child 1: He does not talk that much during the literacy activity. He seems absorbed in other things but there are some times that seemed focused on what he is doing. He seems that he wants to finish the activity quickly in order to do something else.
Child 3: There is no energy at the activity he is doing. He triggers his classmates to finish early in order to go and play in the home corner.
Child 14: She does not invest much effort in the activity. She is constantly looking for someone to help her and do the difficult job for her.

Looking carefully the above extracts, it is obvious that during the art intervention children showed full mental activity and continuous effort to meet their goals. One main argument for this could be that the art intervention had very similar aspects with the activities in their free play due to the fact that children get involved in art activities spontaneously. Therefore, this practice seems familiar with the activities they do for pleasure in their free time and thus they revealed great levels of mental energy.

Non-verbal attitude also reveals the levels of children's involvement in an activity. According to Laevers (1994), nonverbal signs are of paramount importance in making judgements about the level of someone's involvement. The expression of people's real emotions and ideas is obvious more effectively through non-verbal signs than through verbal expressions. Nonverbal communication is usually characterized as the truthful way of convey messages because it is extremely difficult not to disclose them through facial expression, responses, gestures etc. (Tonc, 2002). Observing carefully someone's body language, can disclose their true feelings which could be

different from the ones they are expressing verbally. This is even more obvious to young children as their main way of communication is through non-verbal signs until they master the verbal way of communication. Students' disengagement from the learning process can be revealed though their <u>facial expression or posture</u>. To avoid this disengagement, the learning situation should include interesting resources and relevant to their needs (Aboudan, 2011). An interesting activity, which will result in deeply involved students, will also include quick responses from the participants. <u>Reaction time</u> is one of the main characteristics of involved people as when they exhibit quick reactions to new stimuli are deeply involved in the activity. In such situations, students are most of the time alert of the new incidents that are introduced in the activity and respond very quickly (Laevers, 1994).

The evidence from the data analysis is associated with these arguments as signs of nonverbal attitude and reaction time to stimuli were obvious in experimental and control groups. When arts were used as a stimulus, children revealed high levels of involvement considering their nonverbal signs and attitude. These children exposed very positive emotions during the literacy activities and they reacted very quickly to almost every occasion. However, this was not obvious in the same high level in the control group that the stimulus for the literacy activities was not the arts. Some extracts that show children's performance in this area are as follows:

EG1

Child 6: *Nonverbal signs show deep concentration and involvement. When he looks at the painting or try to write the letter to the painter he has very intense eyes. Even in the moments with no activity it is obvious that he is thinking very hard.*

Child 7: *Her body posture exhibits that she cannot be more involved in the whole procedure. She has intense eyes constantly which reveal deep thinking of her next step. Her body posture shows that she is deeply concentrated. She puts the pencil in her mouth when she wants to think.*

Child 12: *She is totally concentrated and this is obvious by her body language. There are moments that she stops to think. She puts her hand in her cheek or she puts her tongue out of her mouth. Her eyes reveal intense thinking during the whole procedure and her posture shows deep involvement.*

EG2

Child 6: *Her facial expression reveals signs of hard thinking and concentration. When she is thinking about her next steps, usually she turns her eyes to the ceiling.*

Child 7: Her facial expression and posture show intrinsic motivation to participate and to perform the tasks. She is very attentive to everything and her eyes show deep concentration.

Child 9: Nonverbal signs show deep concentration during the whole procedure. She tries to think the next letter she wants to write, she closes her eyes and she puts her fingers in her mouth. She has intense eyes during the literacy activity that reveal her deep thinking.

EG3

Child 4: Nonverbal signs and her facial expression show deep involvement and hard thinking. There are signs of high and intense concentration and thinking throughout the whole puppet play and the literacy activity.

Child 6: Nonverbal sings show that he is fully concentrated and stimulated towards the whole procedure. His posture reveals high concentration and he does not let any irrelevant stimuli to distract him.

Child 7: There are signs from his body language that he is eager to participate and that he is involved deeply. He shows deep concentration and satisfaction during the whole procedure.

CG

Child 6: Her nonverbal posture shows boredom and a passive attitude. She has dreamy eyes during most of the time of the activity and discussion.

Child 8: There are sometimes that judging by the nonverbal signs he seems interested in the activity but this lasts only for a few seconds. He seems helpless in most of the time during the literacy activity and the discussion.

Child 9: Her nonverbal signals and attitude are mostly vague as she is preoccupied by something else and not by the activity itself.

Another important signal for making judgements for the levels of someone's involvement is the level of persistence and precision during an activity. Both of these signals contribute to the general outcome of involvement and performance in school activities. The first time that the practitioner will introduce a new activity to the students is the most crucial moment, as this is a determining factor for students to decide if they will participate or not. According to Cai (2014), persistence is highly linked with academic performance and involvement and it is mainly influenced upon the first impression of the students. High levels of participation are mainly attributed on children's persistence in completing an activity (Burdette et al., 2015). Persistence in fulfilling an activity will result in precision during the whole process. When children insist to reach their goal, they are also very precise in doing every step right, avoid mistakes and pay particular attention in details (Laevers, 1994). Accuracy in their work can only been seen in deeply involved children because in the opposite situation they are often very careless and they don't worry about the outcome.

During observations for the LIS-YC and the data analysis, there were signs of different levels of children's persistence and precision during literacy activities. Children from all the experimental groups showed high levels of both persistence and precision during literacy activities. The majority of them were very tentative to details and did not let go the activity easily when they experienced difficulties until they reach their goal. When arts were not used as a motivating factor to the literacy activities, the level of persistence and precision was lower during the whole activity. Some extracts that show children's performance in this area are as follows:

EG1

Child 4: She is very persistent to her work. She insists to finish her work and tries to find ways to prolong it (e.g. by writing more words that the painter will like, reading the letter from the painter, looking his name and try to write it). She does not let go easily and she continues her work even when the teacher announces that it is free play time. She is also very precise. She is very careful in the writing part and does not want to make mistakes. She advices the word wall when she has a doubt of something. She corrects the mistakes of other children's work.

Child 9: She insists to reach her goal. She does not let go easily and try to write as many words as she can. She asks for permission to write whatever she wants and starts creating pseudo letters and words. She is going to another table and wait to get the color she wants. She is very attentive to details. She is trying to do as small letters as she can and she paints very lightly the 4 corners of her paper. She makes a mistake in the beginning and she turns over her paper to start again. She uses the back of her paper to test first the crayon.

Child 17: She is extremely persistent. She is advising the Bulletin Board and copy only one word. Then she tries to write on her own. She is trying to find ways to prolong the activity. She discusses about her work with the friends and compare it with her friends' work to find similarities or differences. She wants to be sure that she is not doing any mistakes. She asks for clarifications regarding the new guidelines. She asks the teacher about a particular letter she wants to write and shows it with her fingers. She thinks very much before she chooses a color to write and she uses different colors.

EG2

Child 4: She insists to reach her goals and discusses with her friend which letter cards they will take to create the words they want. When they cannot find them they discuss of ways they can resolve this (e.g. ask kindly their friends to borrow them the letter card they want). She is very precise to the details. She looks very carefully the letter cards she has and tries to understand what is missing. She is very careful when she chooses the letter

cards and considers the color of the card. She wants to write a nice word (as she states).

Child 7: She insists to perform the activity and asks kindly for some space and privacy in her team. When she cannot find the letter card she wants, she goes to the other tables and asks nicely other children to give her one. She collects the cards and pronounces the sound of each letter on the cards to make sure she has got the correct one. She is very careful in the way she will create the word with the letter cards. She looks the cards very carefully before she asks for the letter cards she wants.

Child 9: She insists to reach her goals and do not let go easily. She tries to find ways to prolong the literacy activity (e.g. suggests new rules, count the letters) and shares them with her friends. She is very careful when she writes a word or when she creates a word with the letter cards. She looks at the Bulletin Board to correct her mistakes or when she has a difficulty.

EG3

Child 4: She is very persistent to her work. She is thinking hard her next step and utilizes her surroundings to find the next letter she wants to write. She is reading what she has already wrote and stops in the letter she wants to write next. She helps also her friend and shows her the correct way to write the letters. During this she is attentive to details. She selects very carefully the color of the marker she wants to write with. She tries to find things that she has forgot to do regarding the activity. She writes a whole sentence.

Child 10: He invests too much effort in the literacy activity and participates in a discussion with the teacher and his friends to find the next phoneme. He shows with his fingers the phonemes and looks at the alphabet board for help. He wants to be precise to his work. He looks at his outcome for mistakes and tries to find the best way to amend them. He discusses with his friends about the correct way to write the letters and helps them to amend their mistakes.

Child 11: She puts effort in order to achieve her goal and she tries to utilize the hints that are provided by her surroundings (e.g. name tags, books, word wall etc.). She does not let go easily. She is trying to find ways to improve her outcome and to prolong the activity (e.g. she is discussing with her classmates what else they could do). She is looking very carefully her outcome in order to find what she forgot to do. She adds the parts that she thinks are important and selects very carefully the color of the marker.

CG

Child 2: There are some times that she insists to finish her goal but this is only for a few minutes. She is constantly interrupting her activity to discuss

with her friends about irrelevant things. Sometimes she is attentive to details but this is only for a short period of time which is frequently interrupted.

<u>Child 3</u>: He does not persist to fulfill his goal but he states that he wants to finish. His handwriting is not careful and does not care if he makes some mistakes. He is careful in order to follow the guidelines but he is not so careful in the details of the activity.

<u>Child 4</u>: There is no persistence in the activity by his side. When he realizes that he had to do something that needs effort he tries to copy the outcome of his classmates. He is very careful when he is copying the words from his friends but this is frequently interrupted by irrelevant conversations.

A closer examination of the above extracts gives further insights of the benefits of the intervention. Although it can be argued that these positive results might be attributed to other factors (e.g. children's attitude and emotions on the day) apart from the intervention, it can also equally have argued that there are strong links with the suggested interdisciplinary framework. One main argument for this is the highly motivational environment that were created during the intervention due to the fact that children were responsible for the outcome of the activities and that they had the freedom to suggest the ones they want e.g. invite an alien to their party, rescue the butterflies in danger or invent a time machine (see appendix 8). The fact that different art forms were used to develop literacy activities during the intervention contributed in this as according to Hanley et al. (2009) the arts are the most common activity in children's free play time. Therefore, children might not have seen the intervention as an external expectation set by the practitioners but they might have seen it as smooth transition from their free play time in which they can have a leading role in the whole process.

Finally, the term involvement itself includes the aspect of motivation and <u>satisfaction</u>. Children and adults get involved in a specific activity, only because they are internally stimulated to do it and they find this activity fascinating (Siraj-Blatchford et al., 2002). Robson & Rowe (2012), in their research design, linked involvement with enjoyment and perceived that they are two interrelated terms in teaching and learning. It is obvious that involved people enjoy their achievements and the whole process, when they are trying to reach their goal. Satisfaction is also linked with <u>language</u> and verbal expression. When we are enjoying an activity that we are deeply involved, we also express it verbally and we are eager to repeat this activity many times again. This can be also obvious by a wide range of comments which shows that the activity is important to the individual (Laevers 1994).

Data analysis is highly linked with these arguments regarding satisfaction and language, as there is evidence of these signals in both experimental and control

groups. Data shows that the majority of children involved in the literacy activities in the experimental groups were very much pleased with the whole procedure and they were further expressed their desire to repeat the same activity again in the near future. On the contrary, there were times that children from the control group were satisfied because they have finished the literacy activity and they could go and play with something else. Some extracts that show children's performance in this area are as follows:

EG1

Child 4: *She is very excited and this is obvious through her verbal communication with her friends. She is stating that she likes the whole procedure and discusses about her outcome with her friends. She asks the practitioner to repeat the activity again tomorrow. She looks very satisfied and proud about her work. She shows it to everyone.*

Child 7: *She is talking regarding the activity. She keeps stating that she likes this activity to her friends and to the teacher. She is very satisfied with the whole procedure and she is very proud of her outcome and shows it to the teacher.*

Child 9: *She discusses with her friends about their goals and about the outcome of the activity they are doing. She explains to them what she has created and states she is happy. She looks very satisfied with her work and shows it to the teacher and smiles.*

EG2

Child 1: *He states out loud that this was an EXCELLENT activity and he wants to repeat it again and again. He asks from the practitioner if this is possible. He looks very happy with the whole procedure and he is having a great time with his friends during the activity.*

Child 7: *She discusses with her friends of possible ways to play more literacy games like the ones they just played. When they finish this discussion, they inform the practitioner about the literacy games they want to play. She is very happy and smiling throughout the whole procedure.*

Child 15: *She is discussing with the friends about how excited they were during the whole procedure. She states she can't wait to play this again. She is laughing and seems very pleased with the procedure. She looks very unhappy when it is over.*

EG3

Child 4: *During the whole puppet play and literacy activity, she is laughing with her friends and states she is enjoying it. She seems very satisfied by the whole procedure. She reads to the teacher what she wrote and seems very proud.*

Child 7: He participates in discussions with his friends that have to do with the activity and asks the teacher to repeat the activity. He is totally satisfied by the whole procedure. He is smiling, laughing and seemed very pleased.

Child 11: She is discussing with her friends about the ways they can improve their work. She seems very satisfied with the whole procedure and shows her achievement to everyone.

CG

Child 7: He clearly explains that he does not want to continue the activity to its end. He doesn't seem satisfied when he has to do the writing part of the activity but he tries it reluctantly.

Child 11: She discusses with her friend about their actions but she does not state anything about the activity and if she is pleased or not. She seems happier to collaborate with him rather than to do the activity itself.

Child 12: She does not speak at all and she avoids any discussions with other children. Her friends try to begin a conversation with her but she not looking at them or she does not answer. No emotions are expressed but she seems relieved that the activity is over.

A closely examination of the above abstracts gives further insights about the benefits of the art intervention in children's level of involvement and more specifically in satisfaction. Amusement is a very important element of the teaching and learning process as it results in deep thinking (Shusterman, 2003). According to Fleming (2008) the arts give a great emphasis on personal amusement rather than on specific learning outcomes. Having the above arguments in mind and considering that children in the experimental groups used art activities as a stimulus to emerge literacy activities, a strong link can be argued. Being more specific, children during the art intervention might reveal these positive results due to the fact that the arts offer great opportunities for personal pleasure.

To briefly **summarize**, the above data from LIS-YC shows that the arts have a beneficial effect on the levels of children's involvement during literacy activities. Quantitative analysis from the current final study verifies that when the arts are used as a stimulus to literacy activities, there is a very positive impact in children's levels of involvement. Data analysis shows that there was a significant effect in all items of LIS-YC among the control group and all the experimental groups, with a very strong significant difference and there was no different effect in children's involvement in all of the items among all 3 experimental groups. Defining this effect and analysing the data using descriptive statistics, it is obvious that children from all 3 experimental groups had higher levels of involvement in contrast with the children from the control group that they were frequently distracted by other factors. Additional evidence that

supports this argument, is offered by the qualitative analysis of this measure. This analysis enriches the data and provides us a detailed and descriptive record of the positive impact of the arts in children's involvement during literacy activities. Therefore, as it was argued above, children who used the arts as a starting point of the literacy activities had higher levels of involvement in contrast with children from the control group who did not used the arts for this purpose.

It has to be acknowledged that there might be other factors that are responsible for this fact e.g. practitioners' practices, children's previous knowledge etc. A strong counterargument relies on the fact that the observations of the practitioners in all experimental and control groups did not reveal any major differences in their teaching styles. Of course it is not possible to argue that they were totally similar is this cannot be true. However, strong similarities and links were found with the facilitator approach (see chapter 9.2.2) as they all shared the same values and reacted in a similar way in the upcoming situations. In addition, analysis of children's previous literacy skills (see chapter 9.2.4) did not reveal any major difference, as children shared the same level of literacy performance in the pre-test. On the other hand, strong links can be found among children's great levels of involvement and the art intervention that was implemented in all experimental groups.

It is true that the arts are the main kind of activity during children's free play. This by itself reveals great levels of involvement as this activity derives by children's internal needs and embeds the aspect of amusement which is also vital. It was argued previously that the amusement is one of the basic signals of involvement. The arts, and especially drama play, is associated strongly with entertainment and motivation (Fleming, 2008) which results in deep involvement. This theoretical argument is in agreement with the findings of the current study, as it supports the fact of the contribution of the arts in children's involvement. It has to be acknowledged that this theoretical argument is about children's involvement in general. Therefore, the findings of our research enrich this in three ways. Our data focuses especially on the early year settings, on literacy activities and also support this through an experimental design.

To proceed with this argument, further researchers, investigated the impact of the arts in students' involvement in learning. Catterall et al. (2012) examine four longitudinal studies and concluded that art experiences can contribute in a very positive way to better school achievement in at risk teenagers and young adult. They further made indirect arguments that this is attributed to the fact that the arts promote students' involvement in the learning process. A couple of years later, Garvis & Klopper (2014) agreed with this and made direct arguments regarding the contribution of the arts in students' involvement in learning. By investigating four case studies of formal and informal schooling, they stressed that art experiences result in

better levels of involvement in learning and further contribute in students' amusement and empathy. An empirical study by Nichols (2015) also verifies this by focusing in high school students. She expressed and concluded clearly that the arts have the opportunity to play an important role in students' involvement in school activities and also to maintain this interest for a long period of time. All of these findings are in agreement with the findings of our study as they both support the contribution of the arts in children's involvement in learning through an experimental design. Our study supplements these arguments by focusing in the early years settings and especially in literacy activities.

Examining further the empirical literature, an indirect focus on the wider concept of literacy while measuring the levels of involvement during art activities was studied by Rydzik et al. (2013). They concluded that the arts can have a significant effect on adult students' involvement and that they will further empower them to express themselves in several verbal and nonverbal ways. The data from our research is also in agreement with their findings regarding the beneficial impact of the arts in this area and it also supplements them by providing extra and more specific evidence in the early years settings and in literacy.

The above examination of the empirical literature regarding the arts and involvement shows that are limited, if any, pieces of research which investigated the contribution of the arts on students' involvement and especially in literacy activities. When we limit our focus in the early years settings the pieces of research are even more limited, if any. There are many theoretical or indirect arguments that the arts can promote students' involvement in the learning process but it is very difficult to find an empirical piece of research with this focus especially in the early years settings.

The findings of the current piece for research contribute to this discussion and offer empirical evidence in the early years settings. To **answer the fourth research question**, the arts have a very positive impact in children's involvement during literacy activities in the early years settings. The findings are further supported by the existing empirical literature and enrich them by offering additional evidence in the early years setting and by focusing on literacy activities that was something that was missing in the previous pieces of research. In contrast with our expectation, that the drama group would have a better performance than the other experimental groups, there was no different effect in children's performance among the groups. In an effort to explain this outcome, it is worth revisiting the content of each different art from in order to identify similarities and differences. It is important to realise that each art form demands different types of interactions from the participants. For example, when creating a new painting or performing a puppetry play a lot of tangible interactions are required. On the contrary, according to Fleming (2008) and Fleming et al. (2004), when performing a drama play there is an emphasis on action and self-

expression which is basically through kinaesthetic interactions. Although there are some strong differences, it had to acknowledged that there are some strong similarities as well. Being more specifically, irrespectively of the above differences, all the art forms have the opportunity to develop a liberal environment which is free from any social constrains and formal requirements and standards. Therefore, the fact that there were no major differences in children's levels of involvement among the different art form, might be attributed to the fact that children felt comfortable to get involved in the activities as there was no external expectations and they were able to interact in an environment of freedom. This leads us to suggest that due to these similarities the arts as a whole have a beneficial impact on children's involvement and that there no specific kind of the arts that have a better impact comparing to the others.

Upon the end of the research project, an interview was conducted to the practitioners who implemented the intervention. This practice was used in order investigated their views and link them to the outcomes of this study. In the next chapter, there will be an analysis and discussion of these findings.

9.2.8 Final study: Data from teachers' interviews

At the end of the intervention and after conducting all the above measures, there was also a semi-structured interview with the practitioners that implemented the suggested interdisciplinary framework. The purpose of this interview was to investigate their views regarding the intervention and correlate them with the outcomes of students' performance. In any practical application is very crucial to investigate the practitioners' perspectives who implemented the intervention apart from measuring only children's progress. In evaluating an intervention, it seems very important to gather the views from everyone who is involved and especially the practitioners' views (Lewis & Ginsburg-Block, 2014). Practitioners' strategies are basically relied on their personal perspectives (Farrell, 2016) and this can have a very strong impact in the outcomes of a new teaching method.

The selection of the semi-structured interview was based on the fact that, as it is suggested by Mukherji & Albon (2015), there is a freedom to adapt the questions during the process in order to accommodate the needs of the interviewees. The semi-structured interview was designed for the purpose of this piece of research and it was also implemented during the pilot study. The interview questions were categorised in 4 areas: <u>Academic and professional achievements</u>, <u>Personal teaching approaches and strategies</u>, <u>Implementation of the interdisciplinary framework</u>, <u>Children's development within the interdisciplinary framework</u>.

The data from the interview from all the 3 practitioners of the experimental groups, verifies the positive outcomes of the intervention regarding children's literacy and social skills, children's use of literacy as a social practice and children's

involvement during literacy activities. They all commented on the beneficial impact of the arts in children's performance in the early years as through the suggested interdisciplinary framework there was a focus during the entertaining aspect of learning.

Practitioner 1 (P1) was in experimental group 1 which was using paintings, Practitioner 2 (P2) was in experimental group 2 which was using drama and practitioner 3 (P3) was in experimental group 3 which was using puppets. The practitioners had the freedom to select the art form they wanted to use during the interdisciplinary project. All of them had attended some art seminars and workshops about teaching and learning in the early years settings but none of them was a qualified art teacher or had relevant training for becoming an art teacher. They decided to select the art form that found the most interesting and didn't have a previous experience. For example P1 and P3 had never used the art form they selected in their teaching before and they saw this project as an opportunity to learn and see the outcomes of this approach. On the contrary, a long time ago before the project, P2 had a previous experience in using drama in her teaching but it was not a successful one. Therefore, she decided to use drama in this project to enhance her teaching skills and try it one more time.

Regarding their academic and professional achievements, practitioners from all experimental groups hold a 1st class Bachelor Degree in Early Childhood Education from a public Greek University. They all attended loads of seminars regarding early childhood development, areas of learning in the early years, arts and crafts, contemporary teaching strategies in the early years and special educational needs. All of them had a professional level in speaking English as an additional language. P2 has attended some Spanish lessons and had a basic command of the Spanish language. Regarding their further academic qualifications, P3 holds a Master degree in Human's Right with the focus in Special Education.

All practitioners had a good level of experience in teaching in the early years settings in the age group of 5-6-year-old (Greek reception class) in both public and private sectors in Greece for 8-10 years. P2 has also worked as a primary school teacher for approximately one year and P3 had also worked as a mentor in Higher Education for approximately one year. None of them had an extra academic or professional qualification in the arts but they all attended seminars regarding the use of the arts in education. P3 has some experience in the arts as she was a volunteer actor in the local theatrical team for some years.

Regarding their personal teaching approaches and strategies, they all stated that they always try to follow children's needs and to empower them to make their own choices. This is linked with the features of the facilitator teaching style, in which the practitioners stimulate the students to have an active role in their learning journey

(Won et al., 2015). It is also consistent with the data analysis of the observation (see chapter 9.2.2), in which it was verified that all practitioners embrace a facilitator approach in teaching and learning and give opportunities to students to have a leading role in the everyday activities. In support of this view and focusing on the curriculum aspects, researchers (see Luke et al., 2013; Richards, 2013) stress that a syllabus should not suggest a strict pedagogy, but it should give the freedom to the practitioners to adapt the daily programme according to children's desires and interests.

These arguments link directly with the data from the interviews. All practitioners stated that they tried to be flexible regarding the daily routines and the programme they have prepared in advance, as they were more concerned about their students' needs and their desires on the day. It is also linked with the data from the observations (see chapter 9.2.2), in which it was also verified this practice.

Q: How would you describe a typical every day in the early years classroom?

P1: What do you mean typical? (laughing) There is no such a thing. Of course I have a plan in my mind but this changes according to children's needs. Generally, at the beginning of the day there are free play activities and sometimes they prefer to play in the interest corners. Afterwards, we have a discussion and we select the topic we want to investigate. I try to find what they know about this topic in order to adapt my teaching methods. Then, we search for resources and we decide together the activities we will do.

P2: Typical day… in our profession there is no typical day. There are some general guidelines that we follow but this might change in the blink of an eye, if we see that children want to do something else. There are some free play activities in which we try to promote group work and collaboration. However, if children want to play on their own then they are free to do so.

P3: That's a good one (laughing)… Unlike to other professions we do not have the privilege of a typical day. I have a schedule in my mind but this changes frequently as I am eager to follow my students' needs. I try to listen to children and adjust myself accordingly. I might have a specific project in my mind but children might focus in different things that I have thought of.

Proceeding to the next argument and considering the practical application of the everyday curriculum, there should be a framework in which practitioners can rely on when design educational activities (Luke et al., 2013). This framework denotes the process and the methodology they need to follow in teaching and learning (Richards, 2013). This does not cancel or reduce the freedom that was discussed earlier, but it is

like a stepping stone that they can use in their interactions. In practice, this framework is the learning and developmental theories, which seem to be a basic component of every national curriculum, as they serve as the foundation of every teaching approach and technique. They also give us a framework which we can use when making lesson plans and activities for every level of education.

This was very obvious during the interview of all the practitioners as they all stated directly or indirectly that during their interaction with children or during their preparation of the activities they use the framework of the contemporary theories in education. All of them stressed the importance of giving children the freedom to have a leading role in teaching and learning and to construct the knowledge according to their pace.

Q: Before you started using this framework, what were the teaching methods you were using up to now?

P1: Well, every school year I try to change the way we approach every topic. However, this might happen also within the year as I was very eager to try new things. Especially, if I attended an interesting seminar about a new teaching technique. I try to include an interesting stimulus to trigger children's attention to the learning activities. The stimulus could also be produced by a child that brought something to show us in our school e.g. a dry leaf, a seed etc. Following this we started a project that was based on their interests. I believe that topics which might come spontaneously are very important to include them in the teaching and learning process.

P2: I always followed the guidelines of the national curriculum and there was always a very good collaboration with my colleague in the next door classroom. We prepared the weekly and monthly activities considering the children's needs and desires and we modified our lessons plans according to children's suggestions.

P3: As the national curriculum suggests, we rely on Piaget's and Vygotsky's theory. I always have this in mind when I am interacting with children. In my class there is always a mixed group with 4-5-year-old children. I was very excited when I saw Vygotsky's theory to be put to practice with the older ones to help the younger ones and vice versa.

Proceeding to the next area of the interview, practitioners gave us their views regarding the implementation of the interdisciplinary framework. It is very important the practitioner to embrace and accept a new teaching method if we want to have a successful outcome. This is based on the theory of the macro, meso and micro system that was suggested by Bronfenbrenner (1977; 1976) as contextual factors have a very strong impact on everyday educational practice. Macro level links to cultural, national and political issues, meso level surrounds the culture of the local communities like

schools and neighbourhoods and micro level represents the individuals' opinions (Hall & Higgins, 2002). These elements can enhance or inhibit a change in the early years settings with the micro level to have the strongest impact (Theodotou, 2010). This is based on the fact that if practitioners are not convinced of the benefits of a new teaching technique, they are not going to try it.

The data analysis of the interviews is linked with the arguments about the micro level and it shows that the intervention was very well received by the practitioners. All of them were very pleased with their participation and they commented that it was their decision to participate as there was no force from the Head of the school. They commented that they learned a lot from this opportunity and that they found the intervention very interesting. It is obvious that this intervention had a very strong positive impact in their teaching techniques as they noted that they are still using this framework and they are trying to find way to prolong this.

Q: How was your participation? How do you feel about it?

P1: I liked it very much and I am excited about this. I was always attracted by the arts and especially by paintings but I never have the opportunity to do something like this. I felt that this was very familiar and relevant to me and when I was offered this opportunity I was more than happy to be a part of this. There was no pressure to do this and the Head of the school stressed that it will be our decision. I am very happy that I did it. It provided me the framework for using the arts for literacy activities and I am still using it. I also discussed about this with my friends and they are very interested to try it as well.

P2: It was our decision! No one forces us to do so. To tell you the truth, I tried in the past to use drama play but with no successful outcome and I was very disappointed. When I was offered this opportunity, I thought that I could give it a try. I was a little afraid at the beginning considering my previous failure but I am very glad that I succeed it. I think a basic reason for this success is that I was given a good framework that I could rely on. I was very excited that children had the opportunity to have an active role in the everyday programme and activities. I think this was a great factor in this success. Now, that the intervention is over, we still continue to implement it, as both me and my students are so excited. There are a lot of things I have in mind and I want to implement them before my maternity leave.

P3: I am very excited! I felt relaxed with the procedure and when I saw my students' progress and especially after the post-test I was very happy. There was no pressure to participate and I liked that I was offered this opportunity. I was always intrigued by the arts and this framework offered

me a good framework and I can use to develop literacy skills. This year I used puppets and I am thinking next year to continue with another kind of the arts.

In every curriculum development there is a crucial need for a productive collaboration and mutual support of all the members that are being involved (Keating, 2015). This practice is even more crucial, when introducing a new teaching strategy. It is very important to provide to the practitioners all the support and assistance they need in order to do their work effectively. Supporting practitioners in teaching design is a well-established practice which results in enhancing the quality of teaching and learning (Huizinga et al., 2014). In this way they will feel more secure and eager to continue and this will result in better outcomes. Before the beginning of the intervention and during its implementation there were constant consultation meetings with the practitioners to discuss any matters arising, resolve possible queries, find the extra resources they need and discuss their progress. There was also a period of time for training in the different steps of the suggested interdisciplinary framework and provide them good examples that they could use.

Data analysis from the interviews from all the practitioners who implemented this framework is in agreement with the above arguments. They all indicated that that were are very happy with the provided support and provided resources during the intervention. They mentioned that this practice enabled them to implement the intervention effectively and to gain self-confidence as it was a new teaching method.

Q: Did you have the support and resources you needed when you needed?
P1: I had more that I was asking for!! (laughing) Yes! I felt very comfortable to talk and contact my mentor whenever I needed but I like also the fact that my mentor was also in constant contact with me. Regarding the resources, she provided me more than enough and from a great variety!
P2: Yes, of course!! My mentor gave me more than enough materials and resources. The support I had was amazing. I was anxious at the beginning considering my previous failure but she helped me to overcome this and gave me ideas that I could use and general techniques that I could implement in every situation. It was amazing that I was able to include my personal aspects in this according to my personality and the collaboration was very good.
P3: Yes, I had access to the materials I needed when I needed and I am very happy about it! My mentor offered me loads of support and I really appreciated it! I really enjoyed that children manage to write their own stories based on our puppet play.

When implementing a new teaching approach, it is important to acknowledge the difficulties the practitioners might have experienced and also the benefits they

have gained. In this way we can gain a holistic approach of the new intervention. The best way to gain this knowledge is discussing with the practitioners who implemented the new teaching approach. Involving practitioners in the design and the evaluation of a new approach is very important as in this way they develop ownership of the content (Huizinga et al., 2014). For this, there is a need for first-hand information and the most appropriate ones to provide this information are the practitioners who implemented this approach (Keating, 2015). This can be used as a valuable feedback for improvement, by amending the difficult parts for a future implementation. Also, by acknowledging the positives parts can enable the instructors to focus more on them for a future successful implementation.

In the data analysis from the interviews, practitioners commented on different issues that troubled them but they all noted that these issues decreased over the time. The common idea behind all of them had to do with the different dynamics of the group of the children and with personal issues that have to do with their previous experiences. All 3 practitioners commented that the most exciting part of the intervention was the progress they saw in students' performance in all areas of learning and development. They further commented that the interdisciplinary framework was the main reason for this great progress.

Q: Did you find any challenges during the implementation of the interdisciplinary framework?

P1: Mmmm (thinking)… not really. Well, there were some difficulties at the beginning but this had to do with the group of the children and not with the intervention itself. Children was making fun with each other when they made a drawing that was not so good. During the intervention, we saw different artists and the way they draw and children realized that there is no right or wrong answer when it comes to drawing as each one of us expresses themselves in a different way.

P2: Well, as I said the very first time I implemented this, I was very anxious as I was thinking about my previous unsuccessful attempt of drama play. Nevertheless, with my mentor's help I tried to enrich my teaching techniques and to use new things and this anxiety was quickly disappeared.

P3: Let me think… Yes, we discussed this before. The group of my student this year was very difficult and their progress was very slow but this has nothing to do with the intervention. I think my mistake was that I compared them with the group I had last year which was very different. However, after a while I let it go and the activities went very good and we enjoyed it very much!

Q: What was the most exciting part during the implementation of the interdisciplinary framework?

P1: I was very impressed by the children's quick responses to the paintings. There were children that they were very slow at the beginning but they started to express themselves so quickly. Everyone had something to say about the paintings and everyone accepted each other's views. […] They remembered a specific topic and painting that we did in the first month. I was also very excited when I saw children who had limited attention span to be very concentrated, to want to participate, to wait for their turn and to speak about the paintings. I strongly believed that this cannot be done with another teaching approach. This framework combines theory with practice. I have seen this through my experience and I can tell that paintings are a very attractive approach. But with this framework we could combine literacy activities as well. Children could touch the paintings and there was a freedom to replicate them as they wanted.

P2: I think the most exciting thing was that children were involved deeply in this with their free will. I could see that they were actually enjoying it and they were always very excited when it was time to do drama play. Children were asking me to do the same activities for a long period of time. I was very impressed by their ideas… I couldn't believe that they could think in this way and come to these conclusions. I don't believe that we could achieve this with another teaching approach.

P3: I saw that everyone wanted to write after a while. They wanted to write a story that we could play with our puppets. Of course at the beginning it was just one or two words but this was constantly increased as the time went by. I also had a constant positive feedback from their parents. I could see that children were very excited and they wanted to present their story in the rest of the class. I think the intervention played a very important role in this! I haven't seen children to be so eager to write before.

Following their views about the implementation of the interdisciplinary framework, practitioners were also asked about their views regarding <u>students' development during the interdisciplinary framework</u>. This was very useful as we got a better understanding of the effects and the impact of the intervention through their views. Furthermore, this gave us the opportunity to link their views with the findings of the measures we used to monitor children's progress.

In agreement with the existing literature and the findings of this study, practitioners commented on the positive effects of the arts, and especially of the intervention, on children's cognitive and social development. As stated earlier, researchers (see Moritz et al., 2015; Greenfader et al., 2014; Chang & Cress, 2013; Runfola et al., 2012; Vitsou, 2011; Bolduc, 2009) verified the positive effects of different kind of the arts on children literacy and social skills. The findings of this study (see chapters 9.1.2-9.1.3; 9.2.4-9.2.5) are in agreement with the empirical literature

by verifying this argument in the early years. During the interview, it was obvious that the practitioners also agreed with this argument as they observed this progress during the intervention. They spoke about their students' progress and they further attributed this progress to the utilization of the arts.

Regarding the effects of the arts on the use of literacy as a social practice, as it was discussed earlier (see chapter 9.1.4 & 9.2.6), there are only indirect arguments about this (see Maniaci & Olcott, 2010; Hopperstad, 2008; Wright, 2007). Our findings enrich this literature by providing direct arguments from an experimental design. Practitioners' views were also in agreement with our findings as they commented to the fact that children found a reason to include literacy aspects in their everyday activities.

Q: How did you observe children's progress in regards to children's development during the interdisciplinary framework?
P1: Children have always a progress through the school year but I think this framework helped me a lot to see their progress from one painting to the other gradually. I could see that they keep reminding me things that I forgot to do with the paintings and that they respected everyone's opinion. I realise that it was part of their lives and they tried to include literacy in every activity during their free play. I believe children had a better progress in all areas of development now that we used this framework and this was attributed to the use of the arts. For example, at the beginning of the school year, shy children were reluctant to participate or intense children could not wait their turn. This changed radically during the school year and there was a huge improvement.
P2: I believe that drama play helped them a lot. I could see that they were communicating and collaborating all the time to reach their goals. There were also trying constantly to include literacy activities using the resources they had. I could see that they were trying to write for every purpose they could think of! For example, they wanted to produce a dictionary with new words. I think that drama play enabled them to love reading and writing and understand that this is a fundamental part of their lives that they cannot distinguish or separate it.
P3: Puppets helped them a lot! I saw children that were very shy and not eager to participate in any school activity. This changed through this intervention. There were even occasions of bulling and through puppet play children gained self-confidence and decided to do something about it. The first step for this was to make a puppet in which they could express their feelings and after this they found the courage to step away from this unpleasant situation and talk to the other child who was aggressive towards them. They didn't want to lose him as a friend but they didn't want

to experience this either. There was also an increased interest to create stories and to write them!

In line with the existing empirical literature and the findings of this study, all 3 practitioners highlighted the beneficial effects of the arts on children's involvement during the teaching and learning process. As stated earlier, researchers (see Nichols, 2015; Garvis & Klopper, 2014; Catterall et al., 2012) stressed directly or indirectly the positive effects of the arts on children's students' involvement. The findings of this study (see chapters 9.1.5 & 9.2.7) support these arguments and further enrich them by focusing in the early years settings and especially in literacy activities. The data analysis from the interviews, shows that practitioners also support these arguments by stating that children through their interactions with the arts were very much involved during literacy activities.

Q: How did you observe children's involvement in literacy activities during the interdisciplinary framework?

P1: There were sooooo much involved! Of course, I understand that this had to do with the fact that I love paintings and I might influence them. However, I could see that by using this interdisciplinary framework, children were very much eager to suggest literacy activities and participate in them. It was their favourite time of the day and they liked to experiment with the paintings and literacy activities. I could see that they included these activities in their free play and they were very much involved. I didn't observe any child to be reluctant to participate.

P2: I saw that they responded to everything that had to do with drama and literacy. They were expressing their ideas all the time and seemed very eager to participate. I could see that they were expecting every time these activities and they were extremely happy. There were even more excited with their roles during the drama play.

P3: Of course they were involved! Puppet play is a very interesting activity by itself and stimulate everyone to create, participate, comment… Children wanted to participate with their free will and they were very creative during this framework. I think the reason for this was that there was a direct interaction with puppets and literacy. For example, they created the puppets and straight after they used them to perform their play. The activity emerged from them and used their imagination. It was very easy for them!

The impact of every piece of research is a very important parameter when considering if the intervention was successful. By definition, impact of a research study is the effects of the findings on the society, economy and services in general beyond academia (Cope, 2013). However, measuring the impact of a research is not a

straightforward process and it needs to take into consideration many factors (Carter, 2013). In social sciences, and especially in practical interventions, before we come to any conclusion it is very important to measure the impact of the intervention to practitioners', students' and parents' lives and to schools in general. When arguing about a very strong impact, then it is expected that the practitioners have embraced this intervention and that this will change their approach to teaching and learning in the future. Thus, it is crucial to seek their views about this and their future plans after the research project is over (Jones & Grant, 2013).

Data analysis from the interviews shows that the research project was very well received by the practitioners and had a great impact on their teaching strategies. They all commented that it was a very pioneering approach and they were thinking of ways to use the interdisciplinary framework in the next school year and perhaps with a different the kind of the arts.

Q: What differences do you see in your teaching methods now on? How would you use this experience in the future?

P1: Yes, I can see a difference!! I was using the paintings before but I couldn't think that they could have such a great educational outcome especially in literacy. I will definitely continue to use it as I really enjoyed it and I can see that my students were very excited. Next school year I think I can focus on different painting techniques alongside with the biography of each painter.

P2: This was something different from what I was doing so far. I was trying to involve children but maybe I was not so ready to do it or I didn't have the appropriate resources or support in this. What I liked was that they tried to include everyone in their drama play and they were trying to take their drama play one step further. This framework was something that helped me as a person and a professional. I like performing arts but I am afraid to let myself go and enjoy this. This was a very good opportunity for me and I am thinking to continue this after my maternity leave and use paintings.

P3: I tried to relax a little bit and I manage to reach my goal in a good percentage! I was a volunteer actor for some years and I totally enjoy using the arts in my teaching. I could see that with this framework, children had the freedom to suggest activities and transfer their knowledge in their free play. I would like next year to implement drama play considering my experience in the local theatre. I found very easy to express myself through movement and I am very curious to see the response of the children.

To briefly **summarise**, the above data from practitioners' interviews shows that the intervention was very well received from all of them and from the children as

well. All practitioners had a similar educational background, level of experience and attitudes towards teaching and learning. They all commented on the benefits they gained from this intervention and the great support they had when they needed. They all experienced difficulties that had to do with the group of children and some personal issues. All of the practitioners agreed that the arts had a fundamental contribution to children's learning and that there was a great progress in their performance in literacy and social skills. They further agreed about the great impact of the arts on children's involvement in the school activities and about the fact the arts enable children to use reading and writing as a fundamental part of their lives. Their views were in line with the quantitative and qualitative findings from this study that were used in order to examine students' performance and progress.

As it is mentioned earlier, it is very important to investigate the practitioners' views regarding the outcomes of a practical application in addition to the findings of children's performance. This practice provided us further insights of the general effects of the intervention. Finally, evidence from the interviews shows the great impact of the intervention on practitioners' teaching techniques as they were all eager to continue using the interdisciplinary framework in their teaching. The above arguments lead us to suggest that it was a successful intervention as there were positive effects on children's performance that was further verified by the practitioners and had a vital impact on their lives from now on.

The findings of the current piece of research contribute to the discussion about the benefits of the arts in children learning and offer empirical evidence in the early years settings. To **answer all 3 research questions**, as it is stated in the previous sections, the arts offer a very positive impact in children's literacy and social skills, children's use of literacy as a social practice and children's involvement in school activities. This is verified by the outcomes of the different measures on children's performance and by practitioners' views during interviews. It is also obvious that the intervention had a very positive impact on practitioners as they all stated that they will continue using this in the future. Our expectation that the drama group would have a better progress comparing with the other groups did not verified even from the teachers' interviews as there were no differences in their comments during the interview. This leads us to suggest that the arts as a whole contribute positively to children's performance with no particular difference in any different kind.

10. Conclusion

The focus of this PhD thesis was early years education and more specifically the effects of the arts on children's literacy. Through the review of the literature, it was established that literacy is constructed through social interactions and that the role of the adult and the setting are critical in literacy development. Investigating deeply the content of literacy, it was argued that emergent literacy is an important aspect in the development of literacy in general. However, it was found that there was a debate on how researchers translate this importance in real life situations in the early years settings. There is a discussion on the role of emergent literacy comparing with phonological awareness and sometimes the arguments are little confusing. Trying to clarify this discussion and translate it in abstract terms, it was argued that there is the school of thought which supports that emergent literacy acts as a facilitator of phonological awareness and there is the opposite school of thought which supports that phonological awareness is an important vehicle to emergent literacy. It has to be acknowledged that both sides highlight the important role of phonological awareness in emergent literacy but they look at the same aspect from a different point of view. After the examination of the existing literature on this topic the former approach seemed more convincing. One main argument for this was that emergent literacy is something that comes naturally as long as they are sufficient literacy stimuli, whereas phonological awareness needs to be emerged and taught from an adult. This was highly considered in the research design of the PhD thesis and in the suggested interdisciplinary framework. Having this in mind, there was an effort to empower children through the arts to emerge literacy activities according to their will and desires.

The concept of the arts was discussed and great emphasis was given in their liberal and communicative character. Through the examination of the empirical and theoretical literature, it was argued that the arts liberate humans, not only young children, from the social constrains and allow them to be themselves. Although the purpose of the arts is to promote a free communication among individuals and not to educate them, there is a variety of pedagogical benefits by using the arts in the teaching and learning process. One main argument is the fact that according to Hanley et al. (2009) the arts are the most common activity during children's free play time. This means that children conceptualize the arts a pleasant activity with no formal external expectation and this results in true learning experiences and great levels of involvement. The pedagogical value of the arts was established by examining the early years curriculums of all over the world and by linking them with major pedagogical theories. The importance of active involvement and social skills was also discussed through the examination of the relevant literature in relation to the arts. Relevant empirical literature was presented and analyzed regarding the importance of interdisciplinary research regarding arts and literacy. During this analysis and

examination, an area of investigation was identified in the holistic examination of the effects of the arts in children's literacy. It was obvious that there was an over-emphasis in the investigation of the effects of music on phonological awareness in relation to the other kinds of the arts and literacy areas. At this point an inquiry was born to examine this aspect using more art forms and investigate the possible outcomes. Considering the plethora of pieces of research with music intervention, it was decided to avoid this art form and focus more on other art forms that haven't been used widely in a research study. In addition to this, the examination of the existing literature also revealed limited, if any, pieces of research regarding the effects of the arts in children's social skills, literacy as a social practice and involvement. With an effort to investigate the holistic impact of the arts, these aspects were also included in the research design.

Considering all the above, the purpose of this research was formed. More specifically, the aim of this research was to investigate an interdisciplinary approach of the arts and literacy in children's performance in literacy and social skills, involvement and literacy as a social practice in the age group of 5-6 years old. More specifically, it was investigated if there were the arts in general or a specific kind of the arts that could contribute more to children's performance in literacy and social skills, involvement and literacy as a social practice. For this reason, there was a comparison among 3 different forms of the arts in terms of literacy and social skills, of children's involvement and of children's use of literacy as a social practice. Reflecting on the above statement about the plethora of empirical papers about music, it was decided to include different art forms and more specifically paintings, drama play and puppetry. A basic reason for selecting these art forms relies on the fact that there is very limited empirical literature including these art forms and thus I was curious to see the results. Reviewing the content of each art form, we can find similarities and differences. For example, while creating a painting there is an emphasis in experimenting with different colors and in tangible forms of interaction (Hicks, 2011). Similarly, puppetry includes more tangible forms of interaction but also emphasizes verbal modes of interactions (Wohlwend, 2015; Stephens, 2008). On the contrary, drama play might include all the above aspects but it focuses more on self-expression and action which is facilitated through physical movement (Fleming, 2008; Fleming et al., 2004).

Informal observations during my professional practice as an early childhood practitioner showed that children during their free play prefer activities that include a lot of physical activities e.g. running, jumping, climbing etc. Considering the features of drama play, I could see strongly links with this. Having this in mind and the fact that the purpose of my research was to use the arts in order to facilitate literacy development, I expected that drama play would have a greater contribution comparing to the other forms of the arts because of the strongly links with children's free play activities. As this was not based on scientific evidence but on personal

reflections, I tried to find arguments that support my belief. A review of the literature shows that Siont & Papadopoulos (2001) and Fleming et al. (2004) argue that drama play requires more participation and provides greater levels of freedom during children's interaction. In addition, it is stated that the arts are the most preferable activity during children's free play with a particular interest in drama play (Hanley et al., 2009). Therefore, based on the above, it was expected the children that utilize drama during the different steps of the suggested interdisciplinary framework would have a greater contribution in the activities, which eventually will result in better outcomes in children's performance in literacy and social skills, involvement and literacy as a social practice.

In order to examine the above in practice, there was a need to formulate in abstract terms the art intervention that will support children's literacy performance. An interdisciplinary framework was suggested in the experimental groups, which placed great emphasis on children's autonomy and emergent literacy skills. As a novice researcher it was considered very important to test this in practice in order to gain the appropriate confidence and familiarise myself with the process and with collecting data. A pilot implementation of the suggested art intervention was also considered very useful and important in order to identify the areas of improvement before the final implementation. During the pilot implementation, I was able to develop my skills as a researcher and reflect on the whole process. It was also enabled me to gain self-confidence as a researcher as this was the first time that I designed and implemented such a big research project.

Both the pilot and the final study lasted for one full school year. The implementation of the pilot study was a very good opportunity to familiarise myself with the procedure and measurements and develop the necessary confidence as a novice researcher. Moreover, it also enabled me to identify the areas of improvement before I proceed in the find study. It was also very positive that the findings of the pilot study showed positive outcomes of the intervention. These outcomes were considered carefully in terms of making arguments regarding the general impact of the intervention. One main argument for this was that the data from the pilot study derived from a case study that there was no control group to compare the findings. Also, children's improvement might have attributed in other reasons apart from the intervention per se. One main argument is that it is expected that children will have some development in due course as a result of the external factors such as practitioners' practices, home environment, social interactions, after school activities. Therefore, it can be argued that the positive results of the pilot study might be attributed in one or a mixture of these factors. On the other hand, a counterargument for this might be the playful and liberal character of the arts. It is true that children select spontaneously art activities during their free play (Hanley et al., 2009). Thus, it can be equally argued that children perceived the intervention as a pleasant activity

and they contributed deeply in every step. The pilot study was of paramount importance for self-improvement and more specifically to enable me to identify some amendments in whole procedure. Reflecting on this, the necessary improvements were made before the final study.

In the final study, the findings were compared with a control group which implemented the guidelines of the Greek Early Years curriculum, which is the expected practice in the Greek early years settings. In order to eliminate any influencing factors, the control group also implemented art activities by an art teacher, with the difference that they did not use the art to emerge literacy as in the experimental groups. The findings of the final study showed again a positive impact of the arts in children's performance in literacy and social skills, involvement and literacy as a social practice. This was in agreement with the existing literature in the early years settings (see Moritz et al., 2015; Greenfader et al., 2014; Chang & Cress, 2013; Vitsou, 2011; Runfola et al., 2012; Bolduc, 2009; Seeman, 2008; Gromko, 2005) but it offered a richer data. One main argument for this is that in this piece of research there was a holistic examination of literacy and not an emphasis in one literacy area like phonological awareness that was common in most of the existing pieces of research. In addition to this, there was also a holistic examination of the arts and not in a specific kind of the arts as was the common practice in the relevant empirical literature. To investigate deeply the effects of the arts on literacy and considering the social construction of literacy, there was an additional investigation of the effects of literacy as a social practice. Although there are theoretical arguments about the benefits of the arts in this area (see Maniaci & Olcott, 2010; Hopperstad, 2008), there is no research with this focus. As there is a gap in this area, the findings of this study contribute to the examination of this relationship by providing relevant knowledge. The findings of the research project showed that when using the arts there is a better performance in children's use of literacy as a social practice.

The findings also enriched the existing literature by verifying the benefits of the arts in children's social development which was also something that was missing from the empirical literature in the early years settings. Although there are arguments about the importance of social skills in children's cognitive development (see Durlak et al., 2010; Pahl & Barreett, 2007; Baker, 2006) and about the benefits of the arts in people's communication as an important part of their social skills (see Vasudevan, 2014; Matthews, 2008) there is limited, if any, research with this focus especially in the early years. Considering this gap in the early years settings, the findings of this PhD project contribute in this area by offering relevant knowledge.

Last but not least, the findings showed a positive influence of the arts on children's active involvement in literacy activities. Similarly, with the previous areas of investigation there is a gap of empirical findings in this area. The aspect of children's

involvement has been investigated in the early years (see Robson & Rowe, 2012; Wiliford et al., 2013; Ridely et al., 2010) but pieces of research that focus on the effects of literacy and the contribution of the arts (see Barrody & Diamond, 2013; Gerry et al., 2012) are very limited. Hence, the findings of this research provide insights regarding this area and enrich the existing literature.

Before reaching any conclusions about the impact of the art intervention in children's performance in literacy and social skills, involvement and literacy as a social practice, there are some important elements that need to be taken into serious consideration. First of all, it had to be acknowledged that research in social sciences and especially in early years education is not a straightforward process. One main argument for this is that there are a lot of factors that might influence children's progress. Being more specific, factors like the expected progress of children in due course, practitioners' practices, children's previous knowledge, social activities, home environment etc. Therefore, one might argue that although there was a greater improvement in children in all experimental groups comparing children in the control group, this improvement might be a result of one or a mixture of the above factors.

On the other hand, there are several valid reasons that can act as a counterargument in this. It is worth indicating that examination and analysis of the practitioners' practices did not reveal any major differences in all experimental groups. All practitioners shared the same values and reacted in the same way in any upcoming situation with the children. However, it is not possible to argue that they were totally the same as there are human beings and it is expected to include aspects of their personality. Overall, there were no major differences and they all shared aspects of the facilitator approach as a teaching style. In the same line, an examination of children's background characteristics and previous knowledge did not reveal any major concerns. All children were approximately in the same level of previous knowledge and overall their background characteristics did not have any major influence on the outcomes. Having all the above in mind, it is important to realise that there is high chance that the external factors that were argued before might not have a significant impact on the positive results of the intervention.

In addition to the above, the content of the art intervention reveals several solid arguments that can support the positive results of the intervention comparing to the results in the control group. A closer examination of the suggested interdisciplinary framework shows that children had a very high leading role in every step. This is also very obvious in the pedagogical projects that were designed in which children suggested and changed the activities according to their will with no adult intervention. What is more is that the intervention uses the arts as an approach to emerge literacy activities. It should be reminded that the arts are the most common form of children's free play and thus it results in great levels of involvement and

satisfaction (Hanley et al., 2009). It is true that when we are intrinsically motivated to participate in an activity, there are better opportunities for true learning as this is derived from our true desires and needs. Therefore, since the arts is a substantial part of children free play, it can be argued that children were intrinsically motivated to participate in the art intervention and this leads in greater results. In addition to this, children had a leading role in every step of the intervention which resulted in developing ownership and in a continuous effort to meet their goals. Considering all the above, it can be argued that the arts enabled children to gain greater results comparing with children in the control group.

In contrast with the hypothesis that drama would have a greater impact in children's development, the findings of this study showed that no significant difference was identified among the different kind of the arts. Students in all of the experimental groups had approximately the same progress and performance in all of the examined areas with no significant difference in their performance in literacy and social skills, involvement and literacy as a social practice. Looking closely the hypothesis and the rationale behind this it seems that although drama requires more physical actions, which is strongly related with children's free choice in activities, it does not lead necessarily in better outcomes comparing with the other art forms. A good explanation for this might rely on the general similarities of the different art forms. It should be reminded that children in all experimental group had very positive results in all areas of investigation with no particular difference. Although the selected art forms have some differences in the quality of the interactions they provide, they also have some very strong similarities in the general environment they create. One main and solid argument is that all art forms have the opportunity to liberate people from the social constrains, the formal expectations and the external requirements. They also allow participants to create their own reality and give different meaning. This by itself can explain the fact that there were no differences in the outcomes of each different art form as they all enable children to feel confident and comfortable and trigger their curiosity to participate. This leads us to suggest that due to above similarities the arts as whole contribute positively to children's performance in literacy and social skills, involvement and literacy as a social practice and thus, **emphasis should not be given to one kind of the arts over the other ones**. This has great importance in the early years research field, as researchers tend to focus in the effects of music and not in the rest kinds of the arts.

Another argument that supplements the above has to do with practitioners' practices while they were implementing the art activities to promote literacy development. It is true that every art form promotes the same values and opportunitites for meaningful communication. However, it is also true that the way we introduce, practice and follow a teaching intervention has also an important outcome in students' performance. Considering this, we can result that a reason for

the absence of any difference in children's performance in the different experimental groups could be the fact that all the practitioners followed the suggested interdisciplinary framework. This means that there was a similar approach in using the different art forms in teaching and emerging literacy in their everyday activities with children. Therefore, it can be argued that the interdisciplinary way that we used the arts and the fact that arts and literacy co-excisted in the whole project is a strong reason for the absence of differences among the different art groups. This leads us to suggest that the **arts as a whole can offer positive outcomes in the early years while they are used in an intersdisciplinary way with the different learning areas**.

Every piece of research has some <u>limitations</u> that should be considered and analysed. In the current study, some the basic limitations should be taken into consideration. Firstly, a basic limitation is drawn upon the sample size for the quantitative methods. Although the number of the participants was adequate for both quantitative and qualitative methods, a bigger sample with a variety of settingsand cultural backgrounds would be preferable. This would have enabled us to investigate this aspect and analyse the impact deeply, creating links with the context of the different settings and with the specific aspects of cultural differences.

Perhaps some of the quantitative measurements, and more specifically PIPS, needs to be re-examined in terms of its relation with the arts and the social construction of literacy. Although, this tool did not have a direct focus on the arts and it did not include the aspect of social literacy, the basic reason of its selection was the fact that it reviews literacy development holistically, including both productive and receptive skills, and it does not focus in only one area. However, in a subsequent research it would have been useful to search for a tool that includes all the above.

Looking closely the qualitative methods, some basic limitations could also be identified. It has to be acknowledged that a more in-depth analysis of the qualitative data from the observations, the PSP, the LIS-YC, the authentic assessments and interviews would be also useful and preferable. Being more specific, in the data analysis there was an analysis of some indicative but important extracts and not of the whole data that was collected. A more in-depth analysis would provide us the opportunity for a deeper understanding of the impact of the intervention according to the different features of each art form. It would also have enabled us to create better and stronger links with the relevant theory and the existing pieces of research. Therefore, in a subsequent research this aspect will be taken into highly consideration as well.

Another aspect that should be considered before making any generalisations is students' demongraphics. We gathered a variety of information regarding children's background and family status and examined if they had an influence on the results. However, it has to be acknowledged that children's socio-economic background has

also an important role in children performance. Therefore, information regarding their socio-ecomonic background should have been included as well because it might have a strong influence in the outcomes of this research project. Remaining on cultural aspect, another limitation was the fact that the majority of the theoretical part and literature review of this PhD thesis is based on international bibliography, whereas the research project took place in Greece and this might also have an influence in the methodological design.

Last but not least, another important limitation relies on the multidimensional and multivariable character of education. It is not a new argument that education is not a straightforward procedure with simple variables to manipulate. When we focus in the early years, this becomes even more challenging due to the age of the children and the strong emotional bonds with their families. Therefore, it is not always clear the relationship between the cause and the outcome, especially in an educational intervention. Thus, it can be argued that there could be a variety of external factors that were responsible for children's improvement every time.

All of the above limitations are recognized and will be taken into highly consideration in a subsequence study for a post doctoral research. For the purpose of this PhD research project it has to be acknowledged that time and space restrictions did not allow me to include all of the above aspects. One main argument for this is that this would make the project unmanageable with a very wide focus for a novice researcher. In my effort to provide a holistic review of the aspect under investigation, I have to recognise that I included a lot of different aspects in my research. This resulted in not having the appropriate time and space to analyse all the qualitative data in depth and provide an indepth analysis of my results in all areas of literacy. Reflecting now back in this procedure, I understand that I should have focused only in one area of literacy e.g. social literacy in order for me to be able to understand deeply the effects of the arts in general and the effects of the different art form and the influence of external factors in this procedure. So, a personal area of improvement would be to try to avoid to include a lot of things and focus only in one area for example only in literacy as social practice and leave the other ones for example social skills and involvement in a later research study. However, I was so excited to carry out a piece of research that investigates this aspect holistically and this was the reason that I wanted to include all of these areas.

Staying in the content of this PhD research project, it is worth indicating that there was a careful research design with a pilot implementation, random sampling technique and a pre- and post-test over control and experimental groups. In addition to this, a mix-method approach was used with qualitative and quantitative data to measure the outcomes of the intervention. Therefore, it can be argued that these findings can contribute as a first step to provide evidence in this area that there are

limited, if any, pieces of research in the education research field. This research project used the arts as a vehicle of learning and developing literacy in the early years settings and an interdisciplinary framework was suggested.The added value of this research relies on the fact that it focuses on the early years settings and examined the holistic effects of the arts in children's literacy performance, social skills, literacy as a social practice and involvement, which is something that was missing from the existing pieces of research. In this argument it should be reminded that the arts were used in an interdisciplinary way and not as a separated activity that might lead and support other areas of learning. Being more specific, during the suggested interdisciplinary framework the art and literacy activities were co-existing in every step and every children's interaction. Therefore, it is safer to argue that it was the interdisciplinary way that the arts were used and not the art per se. These findings are useful to early childhood practitioners as a pioneering approach to teaching and learning and to researchers as a motivating factor for further research. Finally, these findings will be definitely used to a subsequent research for post-doctoral pieces of research considering all the above limitations.

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Appendix 1: Consent letter to parents (in Greek)
This part is presented in Greek as the study was implemented in Greek early years settings and thus, it was written in Greek.

Αγαπητοί γονείς,

Ονομάζομαι Ευγενία Θεοδότου και είμαι Υποψήφια Διδάκτωρ στο Τμήμα Εκπαίδευσης και Αγωγής στην Προσχολική Ηλικία (ΤΕΑΠΗ) του Εθνικού και Καποδιστριακού Πανεπιστημίου Αθηνών (ΕΚΠΑ) με επιβλέπουσα τη Δρ. Μαρία Σφυρόερα. Στα πλαίσια της εκπόνησης της Διδακτορικής μου διατριβής διεξάγω μία έρευνα με σκοπό τη μελέτη μίας διεπιστημονικής προσέγγισης της τέχνης και της γλώσσας στο χώρο του νηπιαγωγείου εξετάζοντας παράλληλα την επίδρασή τους στις κοινωνικές δεξιότητες των παιδιών.

Η ερευνητική παρέμβαση θα αποτελείται από δραστηριότητες τέχνης και ειδικότερα δραματική τέχνη, κουκλοθέατρο, εικαστική έκφραση στα πλαίσια του καθημερινού εκπαιδευτικού προγράμματος από τις νηπιαγωγούς της τάξης. Για τη συλλογή δεδομένων ως προς τις δεξιότητες γραμματισμού θα υπάρξει αξιολόγηση πριν και μετά την παρέμβαση και για τη συλλογή δεδομένων ως προς τις κοινωνικές δεξιότητες θα γίνει παρατήρηση με καταγραφή σημειώσεων χωρίς τη χρήση βιντεοσκόπησης. Για την προστασία των ευαίσθητων προσωπικών δεδομένων αλλά και τη διασφάλιση της ανωνυμίας και προστασία των παιδιών, η συγκεκριμένη καταγραφή θα αξιοποιηθεί μόνο για ερευνητικούς λόγους και για κανένα άλλο λόγο. Για τη διασφάλιση της ηθικής δεοντολογίας της παρούσας έρευνας αλλά και την προστασία της προσωπικής ελευθερίας των ατόμων, η συμμετοχή των παιδιών σας θα γίνει με την έγγραφη σύμφωνη γνώμη σας.

Σας παρακαλώ να μου δώσετε τη συγκατάθεσή σας για να συμμετέχει το παιδί σας στην έρευνά μου, καθώς οι εμπειρίες, οι απόψεις και η συμπεριφορά του είναι πολύ σημαντικά στοιχεία για τη διεξαγωγή της Διδακτορικής μου διατριβής αλλά και για την προώθηση της επιστημονικής γνώσης. Μέσα από τη συγκεκριμένη διαδικασία τα παιδιά θα συμμετέχουν σε διασκεδαστικές δραστηριότητες τέχνης οι οποίες θα αποσκοπούν στην ανάπτυξη της γραφής και της ανάγνωσης.

Σας διαβεβαιώνω ότι η επεξεργασία των πληροφοριών και των προσωπικών σας στοιχείων θα ακολουθεί το Κώδικα Ηθικής Δεοντολογίας, ο οποίος διασφαλίζει την ανωνυμία και την εμπιστευτικότητα. Σε κανένα μέρος της Διδακτορικής μου διατριβής δε θα αποκαλύψω προσωπικά στοιχεία και πληροφορίες και θα τηρήσω το επιστημονικό απόρρητο και την ανωνυμία. Η συμμετοχή σας είναι προαιρετική.

Για οποιαδήποτε διευκρίνιση ή πληροφορία μπορείτε να επικοινωνήσετε μαζί μου.

Σας ευχαριστώ πολύ για το χρόνο σας και το χρόνο που διαθέσατε να διαβάσετε αυτό το γράμμα.

Με εκτίμηση

Ευγενία Θεοδότου

Email: etheodotou@gmail.com

Τηλ: 6945745449

Φόρμα συγκατάθεσης για συμμετοχή στην έρευνα με τίτλο: «Αξιοποίηση μορφών τέχνης στην κατεύθυνση της ανάπτυξης του γραμματισμού στο νηπιαγωγείο»

Βεβαιώνω ότι έχω διαβάσει και έχω καταλάβει το γράμμα συγκατάθεσης για τη διεξαγωγή της έρευνας και μου δόθηκαν τα στοιχεία της ερευνήτριας στην περίπτωση που ήθελα να κάνω ερωτήσεις ☐

Κατανοώ ότι η συμμετοχή μου είναι εθελοντική και ότι μπορώ να αρνηθώ χωρίς να παρέχω το λόγο ☐

Συμφωνώ να συμμετέχει το παιδί μου στην έρευνα ☐

Όνομα παιδιού……………………………………………………………………………………………………

Όνομα κηδεμόνα…………………………………………………………………………………………………

Στοιχεία επικοινωνίας (κατά προτίμηση τηλέφωνο στην περίπτωση που χρειαστεί)

………

Υπογραφή……

Ημερομηνία………………………………………………………………………………………………………

Appendix 1: Consent letter to practitioners (in Greek)
This part is presented in Greek as the study was implemented in Greek early years settings and thus, it was written in Greek.

Αγαπητοί συνάδελφοι,

Ονομάζομαι Ευγενία Θεοδότου και είμαι Υποψήφια Διδάκτωρ στο Τμήμα Εκπαίδευσης και Αγωγής στην Προσχολική Ηλικία (ΤΕΑΠΗ) του Εθνικού και Καποδιστριακού Πανεπιστημίου Αθηνών (ΕΚΠΑ) με επιβλέπουσα τη Δρ. Μαρία Σφυρόερα. Στα πλαίσια της εκπόνησης της Διδακτορικής μου διατριβής διεξάγω μία έρευνα με σκοπό τη μελέτη μίας διεπιστημονικής προσέγγισης της τέχνης και της γλώσσας στο χώρο του νηπιαγωγείου εξετάζοντας παράλληλα την επίδρασή τους στις κοινωνικές δεξιότητες των παιδιών.

Η ερευνητική παρέμβαση θα αποτελείται από δραστηριότητες τέχνης και ειδικότερα δραματική τέχνη, κουκλοθέατρο, εικαστική έκφραση στα πλαίσια του καθημερινού εκπαιδευτικού προγράμματος. Θα υπάρχει άμεση συνεργασία μας και βοήθεια στο σχεδιασμό και την εφαρμογή των δραστηριοτήτων. Για τη συλλογή δεδομένων ως προς τις δεξιότητες γραμματισμού θα υπάρξει αξιολόγηση πριν και μετά την παρέμβαση στα παιδιά και για τη συλλογή δεδομένων ως προς τις κοινωνικές δεξιότητες θα γίνει παρατήρηση στα παιδιά με καταγραφή σημειώσεων χωρίς τη χρήση βιντεοσκόπησης.

Για την προστασία των ευαίσθητων προσωπικών δεδομένων αλλά και τη διασφάλιση της ανωνυμίας και προστασίας η συγκεκριμένη καταγραφή θα αξιοποιηθεί μόνο για ερευνητικούς λόγους και για κανένα άλλο λόγο. Για τη διασφάλιση της ηθικής δεοντολογίας της παρούσας έρευνας αλλά και την προστασία της προσωπικής ελευθερίας των ατόμων, η συμμετοχή σας θα γίνει με την έγγραφη σύμφωνη γνώμη σας.

Σας παρακαλώ να μου δώσετε τη συγκατάθεσή σας για να συμμετέχετε, καθώς οι εμπειρίες, οι απόψεις και η συνεργασία σας είναι πολύ σημαντικά στοιχεία για τη διεξαγωγή της Διδακτορικής μου διατριβής αλλά και για την προώθηση της επιστημονικής γνώσης. Μέσα από τη συγκεκριμένη διαδικασία η παιδαγωγική ομάδα της τάξης σας θα συμμετέχει σε διασκεδαστικές δραστηριότητες τέχνης οι οποίες θα αποσκοπούν στην ανάπτυξη του γραμματισμού και των κοινωνικών δεξιοτήτων.

Σας διαβεβαιώνω ότι η επεξεργασία των πληροφοριών και των προσωπικών σας στοιχείων θα ακολουθεί το Κώδικα Ηθικής Δεοντολογίας, ο οποίος διασφαλίζει την ανωνυμία και την εμπιστευτικότητα. Σε κανένα μέρος της Διδακτορικής μου διατριβής δε θα αποκαλύψω προσωπικά στοιχεία και πληροφορίες και θα τηρήσω το επιστημονικό απόρρητο και την ανωνυμία. Η συμμετοχή σας είναι προαιρετική.

Για οποιαδήποτε διευκρίνιση ή πληροφορία μπορείτε να επικοινωνήσετε μαζί μου.

Σας ευχαριστώ πολύ για το χρόνο σας και το χρόνο που διαθέσατε να διαβάσετε αυτό το γράμμα.

Με εκτίμηση

Ευγενία Θεοδότου

Email: etheodotou@gmail.com

Τηλ: 6945745449

Φόρμα συγκατάθεσης για συμμετοχή στην έρευνα με τίτλο: «Αξιοποίηση μορφών τέχνης στην κατεύθυνση της ανάπτυξης του γραμματισμού στο νηπιαγωγείο»

Βεβαιώνω ότι έχω διαβάσει και έχω καταλάβει το γράμμα συγκατάθεσης για τη διεξαγωγή της έρευνας και μου δόθηκαν τα στοιχεία της ερευνήτριας στην περίπτωση που ήθελα να κάνω ερωτήσεις ☐

Κατανοώ ότι η συμμετοχή μου είναι εθελοντική και ότι μπορώ να αρνηθώ χωρίς να παρέχω το λόγο ☐

Συμφωνώ να συμμετέχω στην έρευνα ☐

Όνομα νηπιαγωγού……………………………………………………………………………………………………

Στοιχεία επικοινωνίας (κατά προτίμηση τηλέφωνο στην περίπτωση που χρειαστεί)

……

Υπογραφή……

Ημερομηνία………

Appendix 3: Performance Indicators in Primary Schools (PIPS) On-Entry Baseline Assessment (PIPS) (translated into Greek)
This part is presented in Greek as the study was implemented in Greek early years settings and thus, it was translated into Greek.

Section 1

Γραφή- <mark>σελίδα 8</mark>

- Ρωτήστε το παιδί να γράψει το όνομά του σε ένα χαρτί.
- Βαθμολογήστε το γράψιμο του παιδιού από το 0-5 συγκρίνοντάς το με τα παραδείγματα.
- Βάλτε μια γραμμή στην παρένθεση που αντιστοιχεί με το επίπεδο του παιδιού.
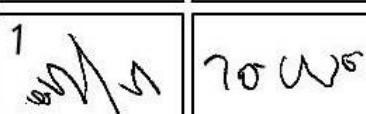
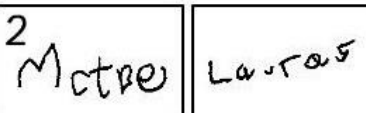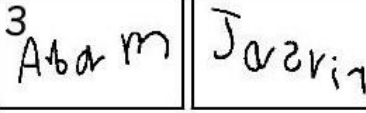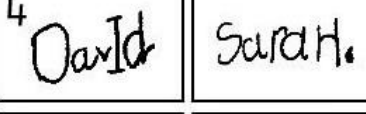Σημειώσεις σχετικά με την αξιολόγηση:
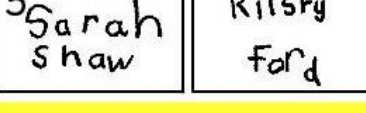
Σκοπός είναι να βαθμολογήσετε την ποιότητα γραφής του παιδιού.

Για να βαθμολογήσετε με 3 ή παραπάνω χρειάζεται να είστε ικανή/ικανός να αναγνωρίσετε περίπου τα μισά από τα γράμματα από το δείγμα γραφής του παιδιού.

Εάν το παιδί έχει αντιστρέψει μερικά από τα γράμματα, ο μεγαλύτερος βαθμός που μπορεί να πετύχει είναι το 3.

Εάν το παιδί έχει χρησιμοποιήσει κεφαλαία και πεζά γράμματα λάθος, ο μεγαλύτερος βαθμός που μπορεί να πετύχει είναι το 4.

Το παιδί θα πρέπει να έχει γράψει το όνομα και το επώνυμό του με την κατάλληλη χρήση των κεφαλαίων γραμμάτων για να βαθμολογηθεί με 5.

0	⌐	Unable to write
1	7σ ω⁶	Letters impossible or almost impossible to read
2 Mctre	La∙ra⁵	Very hard to decipher
3 Abar m	Jaɜri	Clearly recognisable
4 OavId	SaraH.	Quite clear
5 Sarah Shaw	Kirsty Ford	Very clear, well written

Παραδείγματα- Βαθμολογία-

0. Καμία προσπάθεια να γράψει το όνομά του ή μη αναγνωρίσιμοι χαρακτήρες.
1. Προσπαθεί να μιμηθεί τη γραφή αλλά τα γράμματά του είναι σχεδόν αδύνατον να διαβαστούν.
2. Το γράψιμο περιέχει 1 ή 2 αναγνωρίσιμα γράμματα. Λιγότερο από τα μισά γράμματα είναι αναγνωρίσιμα.
3. Πάνω από τα μισά γράμματα είναι αναγνωρίσιμα. Μερικά γράμματα μπορεί να είναι ανάποδα.
4. Όλα τα γράμματα είναι αναγνωρίσιμα. Κανένα από τα γράμματα δεν είναι ανάποδα. Κεφαλαία και πεζά γράμματα μπορεί να χρησιμοποιούνται λάθος.
5. Το όνομα και το επώνυμο είναι γραμμένα με την κατάλληλη χρήση κεφαλαίων γραμμάτων. Όλα τα γράμματα είναι καλά σχηματισμένα. Υπάρχει συνέπεια στο μέγεθος των γραμμάτων.

Εικόνες- Λεξιλόγιο- <mark>σελίδα 10</mark>

- Δείξτε στο παιδί την εικόνα στη διπλανή σελίδα. Ζητήστε να σας δείξει τα καρότα και περιμένετε την απάντησή του.

- Συνεχίστε αυτή τη διαδικασία, ρωτώντας το να σας δείξει:
  Καρότα
  Ένα μαχαίρι (οποιοδήποτε μαχαίρι είναι σωστό)
  Ένα πιρούνι («   πιρούνι   «   «   )
  Μια ντουλάπα
  Κεράσια
  Ένα τηγάνι
  Είναι μπολ

- Στο χαρτί αξιολόγησης τραβήξτε 1 γραμμή στην παρένθεση κάτω από κάθε εικόνα που αναγνωρίστηκε επιτυχώς.

Εικόνες- Λεξιλόγιο- <mark>σελίδα 12</mark>

- Δείξτε στο παιδί την εικόνα στη διπλανή σελίδα. Ζητήστε να σας δείξει την πεταλούδα και περιμένετε την απάντησή του.

- Συνεχίστε αυτή τη διαδικασία, ρωτώντας το να σας δείξει:
  Μία πεταλούδα
  Ένα χαρταετό
  Ένα κάστρο
  Μια σφήγκα
  Ένα περιστέρι (το σπουργίτι θεωρείται λάθος)
  Έναν ανεμόμυλο
  Μια χελώνα
  Ένα βιολί
  Ένα λουκέτο- κλειδαριά
  Ένα μανιτάρι

- Στο χαρτί αξιολόγησης τραβήξτε 1 γραμμή στην παρένθεση κάτω από κάθε εικόνα που αναγνωρίστηκε επιτυχώς. Εάν το παιδί δεν μπόρεσε να αναγνωρίσει καμία από τις εικόνες τραβήξτε 1 γραμμή στην παρένθεση με "no score"

Εικόνες- Λεξιλόγιο- <mark>σελίδα 14</mark>

- Δείξτε στο παιδί την εικόνα στη διπλανή σελίδα. Ζητήστε να σας δείξει ένα καράβι και περιμένετε την απάντησή του.

- Συνεχίστε αυτή τη διαδικασία, ρωτώντας το να σας δείξει:
  Καράβι
  Μερικά χρήματα
  Ένα μικροσκόπιο
  Μερικά κοσμήματα
  Ένα σαξόφωνο
  Καλλυντικά

- Στο χαρτί αξιολόγησης τραβήξτε 1 γραμμή στην παρένθεση κάτω από κάθε εικόνα που αναγνωρίστηκε επιτυχώς. Εάν το παιδί δεν μπόρεσε να αναγνωρίσει καμία από τις εικόνες τραβήξτε 1 γραμμή στην παρένθεση με "no score".

<u>Γνώσεις περί της γραφής- ανάγνωσης-</u> <mark><u>σελίδα 16</u></mark>

Δείξτε στο παιδί την εικόνα στη διπλανή σελίδα και ρωτήστε:

A. Μπορείς να μου δείξεις κάποιον που γράφει;
B. Μπορείς να μου δείξεις κάποιον που διαβάζει;
C. Μπορείς να μου δείξεις που υπάρχουν γράμματα; (τα γράμματα που γράφει το παιδί είναι επίσης σωστά)
D. Μπορείς να μου δείξεις μια λέξη στη σελίδα;
E. Μπορείς να μου δείξεις μερικά γράμματα της αλφαβήτα;

Στο χαρτί αξιολόγησης τραβήξτε 1 γραμμή στην παρένθεση κάτω από κάθε αντικείμενο που αναγνωρίστηκε επιτυχώς.

Γνώσεις περί της γραφής- ανάγνωσης- <mark>σελίδα 18</mark>

Δείξτε στο παιδί την εικόνα στη διπλανή σελίδα και ρωτήστε:

F. Εάν ήθελα να διαβάσω αυτήν την ιστορία, από πού έπρεπε να αρχίσω;
G. Μπορείς να μου δείξεις ένα κεφαλαίο γράμμα;
H. Μπορείς να μου δείξεις μια τελεία;
I. Μπορείς να μου δείξεις που ξεκινάει μια πρόταση;
J. Μπορείς να μου δείξεις που σταματάει μια πρόταση;

Στο χαρτί αξιολόγησης τραβήξτε 1 γραμμή στην παρένθεση κάτω από κάθε αντικείμενο που αναγνωρίστηκε επιτυχώς. Εάν το παιδί δεν μπόρεσε να αναγνωρίσει κανένα αντικείμενο τραβήξτε 1 γραμμή στην παρένθεση με "no score".

Ο Πέτρος και η Μαρία κοιτάζουν τη γάτα.

Η γάτα είχε κολλήσει στο δέντρο.

Επαναλήψεις- <mark>σελίδα 20</mark>

Ρωτήστε το παιδί:

Μπορείς να πεις...;

1. Σταμάτα
2. Σκεπάζω
3. Γαργαλάω
4. Φασαρία
5. Άρνηση
6. Αντιπαράθεση
7. Τολμηρός
8. Παρατηρητήριο

Μπορεί να χρειαστεί να επαναλάβετε τη λέξη.

Αποφασίστε εάν επανέλαβε τη λέξη σωστά.

Οποιαδήποτε λάθος προφορά είναι λάθος.

Στο χαρτί αξιολόγησης τραβήξτε 1 γραμμή στην παρένθεση κάτω από κάθε σωστή απάντηση. Εάν το παιδί δεν απάντησε καμία σωστή ερώτηση τραβήξτε 1 γραμμή στην παρένθεση με "no score".

1   Σταμάτα

2   Σκεπάζω

3   Γαργαλάω

4   Φασαρία

5   Άρνηση

6   Αντιπαράθεση

7   Τολμηρός

8   Παρατηρητήριο

<u>Λέξεις που έχουν ομοιοκαταληξία – <mark>σελίδα 22</mark></u>

Πείτε στο παιδί:

«Άκουσε αυτές τις λέξεις «αστέρι, χέρι, μαχαίρι». Ακούγονται σχεδόν το ίδιο. Κάνουν ομοιοκαταλαξηγία. Άκουσε μερικές ακόμα: «Φύλλο, μήλο». Ακούγονται σχεδόν το ίδιο. Κάνουν κι αυτές ομοιοκαταληξία.

Δείξετε την πρώτη γραμμή με εικόνες στην επόμενη σελίδα. Πείτε τις παρακάτω λέξεις την ίδια στιγμή που δείχετε την κάθε εικόνα:

«Φύλλο, Μήλο, Καρότο, Πεπόνι»

Ποια λέξη κάνει ομοιοκαταληξία με το φύλλο» Είναι το μήλο, το καρότο ή το πεπόνι; Ποια λέξη ακούγεται το ίδιο;

Μπορεί να χρειαστεί να επαναλάβετε αυτή την οδηγία ένα είναι απαραίτητο.

Συνεχίστε το ίδιο με τις υπόλοιπες εικόνες.

1	Φύλλο	Μήλο	Καρότο	Πεπόνι
2	Αστέρι	Χέρι	Σχολείο	Κορίτσι
3	Πρόβατο	Καπέλο	Γάλα	Μπάλα
4	Χόρτα	Πόρτα	Ποντίκι	Δαχτυλίδι
5	Πατάτα	Ντομάτα	Κορίτσι	Νερό

Στο χαρτί αξιολόγησης τραβήξτε 1 γραμμή στην παρένθεση κάτω από κάθε σωστή απάντηση. Εάν το παιδί δεν απάντησε καμία σωστή ερώτηση τραβήξτε 1 γραμμή στην παρένθεση με "no score".

Σταματήστε εάν το παιδί κάνει 4 λάθος απαντήσεις και συνεχίστε στην **αναγνώριση γραμμάτων**

1				
2				
3				
4				

5				

Λέξεις που έχουν ομοιοκαταληξία (συνέχεια)

6	Αστέρι	Σπίτι	Μύτη	Ήλιος
7	Ψάρι	Μαξιλάρι	Τούρτα	Αυτοκίνητο
8	Χέρι	Καπέλο	Πεπόνι	Παντελόνι
9	Μπάλα	Σκάλα	Μύτη	Καρότο

6				
7				
8				
9				

Αναγνώριση γραμμάτων- Γράμμα ονόματος- <mark>σελίδα 26</mark>

Δείξτε το πρώτο γράμμα του ονόματος του παιδιού και ρωτήστε το:

- Ποιο γράμμα είναι αυτό;

Στο χαρτί αξιολόγησης τραβήξτε μια γραμμή στην παρένθεση κάτω από το 'Yes' ή 'No'.

Ως σωστή απάντηση είναι το όνομα ή η φωνή του γράμματος.

A B Γ Δ

E Z H Θ

I K Λ M

N Ξ O Π

P Σ T Y

Φ Χ Ψ Ω

<u>Αναγνώριση γραμμάτων- Αρχικό γράμμα-</u> <mark>σελίδα 28</mark>

Δείξτε στο παιδί το Σ και ρωτήστε το:

- Ποιο γράμμα είναι αυτό;

Ως σωστή απάντηση είναι το όνομα ή η φωνή του γράμματος.

- Συνεχίστε με τα υπόλοιπα γράμματα.

Στο χαρτί αξιολόγησης τραβήξτε 1 γραμμή στην παρένθεση κάτω από κάθε γράμμα που έχει αναγνωριστεί επιτυχώς. Εάν το παιδί δεν αναγνώρισε κανένα γράμμα, τραβήξτε 1 γραμμή στην παρένθεση με "no score".

Σ o A

γ κ Τ

Β ζ μ

Χ Η ε

ρ

<u>Αναγνώριση γραμμάτων- Δεύτερα γράμματα-</u> <mark>σελίδα 30</mark>

Συνεχίστε τη διαδικασία με το να ζητήσετε από το παιδί να αναγνωρίσει το κάθε γράμμα από τη διπλανή σελίδα (όνομα ή φωνή γράμματος)

Εάν το παιδί κάνει 4 λάθη τότε σταματήστε και συνεχίστε στην αναγνώριση λέξεων.

Στο χαρτί αξιολόγησης τραβήξτε 1 γραμμή στην παρένθεση κάτω από κάθε γράμμα που έχει αναγνωριστεί επιτυχώς. Εάν το παιδί δεν αναγνώρισε κανένα γράμμα, τραβήξτε 1 γραμμή στην παρένθεση με "no score".

Λ   Φ   ψ

Δ   ν   Ν

υ   Τ   α

π   Γ   Ε

ı

<u>Αναγνώριση λέξεων-</u> <mark>σελίδα 32</mark>

Δείξτε στο παιδί τις εικόνες και τις λέξεις στο πάνω μέρος της σελίδας.

- Ζητήστε από το παιδί να σας δείξει τη λέξη «σπίτι».

Συνεχίστε με τις υπόλοιπες λέξεις.

Στο χαρτί αξιολόγησης τραβήξτε 1 γραμμή στην παρένθεση κάτω από κάθε λέξη που έχει αναγνωριστεί επιτυχώς. Εάν το παιδί δεν αναγνώρισε καμία λέξη, τραβήξτε 1 γραμμή στην παρένθεση με "no score".

ΣΚΥΛΟΣ

ΛΑΓΟΣ

ΠΑΠΙΑ

ΓΑΤΑ

ΣΚΥΛΟΣ

ΛΑΓΟΣ

ΠΑΠΙΑ

ΓΑΤΑ

ΛΑΓΟΣ

ΠΑΠΙΑ

ΓΑΤΑ

ΣΠΙΤΙ

ΣΚΥΛΟΣ

ΛΑΓΟΣ

ΠΑΠΙΑ

ΓΑΤΑ

ΣΚΥΛΟΣ

ΛΑΓΟΣ

ΠΑΠΙΑ

ΓΑΤΑ

ΔΕΝΤΡΟ

ΛΟΥΛΟΥΔΙ

ΜΠΑΛΑ

ΠΕΤΑΛΟΥΔΑ

ΔΕΝΤΡΟ

ΛΟΥΛΟΥΔΙ

ΜΠΑΛΑ

ΠΕΤΑΛΟΥΔΑ

ΔΕΝΤΡΟ

ΛΟΥΛΟΥΔΙ

ΜΠΑΛΑ

ΠΕΤΑΛΟΥΔΑ

δέντρο

λουλούδι

μπάλα

πεταλούδα

δέντρο

λουλούδι

πεταλούδα

αμάξι

κaράβι

αστέρι

αράχνη

πρόβατο

καράβι

αστέρι

αράχνη

πρόβατο

καράβι

αστέρι

αράχνη
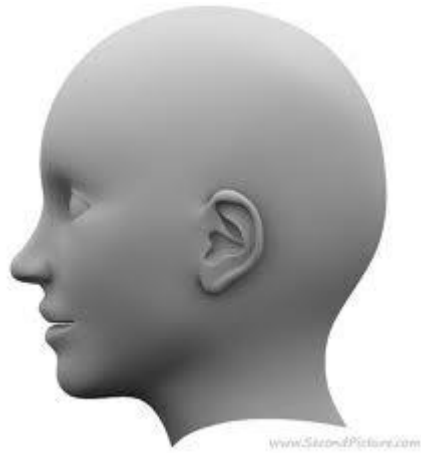
πρόβατο

καράβι

αστέρι

αράχνη

πρόβατο

κεφάλι

άλογο

χέρι

σπίτι

κεφάλι

άλογο

χέρι

σπίτι

κεφάλι

άλογο

χέρι

σπίτι

Appendix 4: Personal and Social Development measure (PSD) (translated into Greek)

This part is presented in Greek as the study was implemented in Greek early years settings and thus it was translated into Greek

Adjustment (Προσαρμογή)	1	2	3	4	5
Comfortable (Άνεση)	Αναστατώνεται κατά τον αποχωρισμό με τον κηδεμόνα/συνοδό στην αρχή της ημέρας. Ηρεμεί κατά τη διάρκεια της ημέρας. Δεν προσαρμόζεται εύκολα στη μετάβαση από τη μία δραστηριότητα στην άλλη ή από τη μία αίθουσα στην άλλη	Μερικές φορές αναστατώνεται κατά τον αποχωρισμό με τον κηδεμόνα/συνοδό στην αρχή της ημέρας. Μερικές φορές αντιμετωπίζει πρόβλημα στη μετάβαση από την μία δραστηριότητα στην άλλη ή από την μία αίθουσα στην άλλη	Σπάνια αναστατώνεται κατά τον αποχωρισμό με τον κηδεμόνα/συνοδό στην αρχή της ημέρας. Αντιμετωπίζει καλά τη μετάβαση από τη μία δραστηριότητα στην άλλη ή από τη μία αίθουσα στην άλλη. Είναι σχεδόν άνετος κατά τη διάρκεια της ημέρας	Ποτέ δεν αναστατώνεται κατά τον αποχωρισμό με τον κηδεμόνα/συνοδό στην αρχή της ημέρας. Είναι άνετος τις περισσότερες φορές κατά τη διάρκεια της η μέρας. Δεν έχει πρόβλημα στη μετάβαση από τη μία δραστηριότητα στην άλλη ή από τη μία αίθουσα στην άλλη	Ποτέ δεν αναστατώνεται κατά τον αποχωρισμό με τον κηδεμόνα/συνοδό στην αρχή της ημέρας. Είναι πολύ άνετος κατά τη διάρκεια της ημέρας. Δεν έχει πρόβλημα στη μετάβαση από τη μία δραστηριότητα στην άλλη ή από τη μία αίθουσα στην άλλη
Independence (Ανεξαρτησία)	Βασίζεται στους ενήλικες ή σε κάποιο άλλο παιδί για καθοδήγηση ή υποστήριξη για αρκετή ώρα. Γενικά χρειάζεται βοήθεια στις προσωπικές του δραστηριότητες (πχ ντύσιμο, τουαλέτα κ.λπ)	Κάποιες φορές βασίζεται από τους ενήλικες ή από κάποιο άλλο παιδί. Χρειάζεται βοήθεια στις προσωπικές του δραστηριότητες (πχ ντύσιμο, τουαλέτα κ.λπ)	Είναι ανεξάρτητος τις περισσότερες φορές αλλά χρειάζεται κάποια περιστασιακή καθοδήγηση. Μπορεί να φέρει εις πέρας τις προσωπικές του δραστηριότητες αλλά όχι πάντα (πχ μπορεί να βάλει το παλτό του αλλά δεν μπορεί να το κουμπώσει)	Είναι ανεξάρτητος τις περισσότερες φορές αλλά χρειάζεται κάποια περιστασιακή καθοδήγηση. Μπορεί να φέρει εις πέρας τις περισσότερες προσωπικές του δραστηριότητες	Ανεξάρτητος. Αναζητάει βοήθεια μόνο όταν χρειάζεται ειδική υποστήριξη. Μπορεί να βάλει το παλτό του και να το κουμπώσει, να πάει στην τουαλέτα κ.λπ.)

Personal (Προσωπικός τομέας)	1	2	3	4	5
Confidence **(Αυτοπεποίθηση)**	Πολύ διστακτικός. Δεν συμμετέχει στην ομάδα και σπάνια μιλάει	Σχεδόν διστακτικός. Απρόθυμος να συμμετέχει στην ομάδα ή σε συζητήσεις.	Θα συμμετέχει σε ομαδικές δραστηριότητες μόνο όταν τον παρακινήσεις να το κάνει.	Έχει σχετική αυτοπεποίθηση. Ενδιαφέρεται να συμμετέχει σε ομαδικές δραστηριότητες ή σε συζητήσεις	Έχει πολύ αυτοπεποίθηση. Ενδιαφέρεται να συμμετέχει σε ομαδικές δραστηριότητες ή σε συζητήσεις
Concentration Teacher-directed activities **(Συγκέντρωση)** (Καθοδηγούμενες δραστηριότητες)	Βρίσκει εξαιρετικά δύσκολο το να συγκεντρωθεί. Σχεδόν σπάνια συγκεντρώνεται σε ένα πράγμα και αποσπάται η προσοχή του πολύ εύκολα	Μικρή συγκέντρωση προσοχής. Βρίσκει δύσκολο να συγκεντρωθεί σε ένα πράγμα. Η προσοχή του αποσπάται εύκολα	Μπορεί να συγκεντρωθεί σε μία δραστηριότητα για συγκεκριμένο χρονικό διάστημα. Μπορεί να αφαιρεθεί.	Παρακολουθεί σχετικά καλά. Μπορεί να διατηρήσει την προσοχή του και δεν αποσπάται από μικρές ενοχλήσεις	Μπορεί να συγκεντρωθεί ακόμα και στις απαιτητικές δραστηριότητες. Συγκεντρώνεται για μεγάλο χρονικό διάστημα (πχ 15 λεπτά).
Concentration Self-directed activities **(Συγκέντρωση)** (Αυτοκαθοδηγούμενες δραστηριότητες)	Βρίσκει εξαιρετικά δύσκολο το να συγκεντρωθεί. Σχεδόν σπάνια συγκεντρώνεται σε ένα πράγμα και αποσπάται η προσοχή του πολύ εύκολα	Μικρή συγκέντρωση προσοχής. Βρίσκει δύσκολο να συγκεντρωθεί σε ένα πράγμα. Η προσοχή του αποσπάται εύκολα	Μπορεί να συγκεντρωθεί σε μία δραστηριότητα για συγκεκριμένο χρονικό διάστημα. Μπορεί να αφαιρεθεί.	Παρακολουθεί σχετικά καλά. Μπορεί να διατηρήσει την προσοχή του και δεν αποσπάται από μικρές ενοχλήσεις	Μπορεί να συγκεντρωθεί ακόμα και στις απαιτητικές δραστηριότητες. Συγκεντρώνεται για μεγάλο χρονικό διάστημα (πχ 15 λεπτά).
Actions **(Δράσεις)**	Αντιδράσει αυθόρμητα χωρίς να σκέφτεται την ευημερία των άλλων. Επιδεικνύει μη κατάλληλη συμπεριφορά σε όλες τις περιστάσεις. Δεν μπορεί να προσαρμοστεί στις αλλαγές στις	Μερικές φορές σκέφτεται την ευημερία ων άλλων πριν κάνει κάτι αλλά ακόμα επιδεικνύει συχνά αυθόρμητη συμπεριφορά. Θα αντιδράσει κατάλληλα με τους άλλους μόνο όταν τον παρακινήσεις.	Σχεδόν τις μισές φορές σκέφτεται την ευημερία των άλλων πριν κάνει κάτι. Κάποιες φορές αντιδράει κατάλληλα με τους άλλους αλλά συχνά χρειάζεται παρακίνηση. Προσαρμόζεται καλά στις	Συχνά σκέφτεται την ευημερία των άλλων πριν κάνει κάτι. Συνήθως αντιδράει κατάλληλα με τους άλλους χωρίς να χρειάζεται παρακίνηση. Αντιδράει καλά με τις αλλαγές στις	Σχεδόν πάντα σκέφτεται την ευημερία των άλλων πριν κάνει κάτι. Πάντα αντιδράει καλά με τους άλλους χωρίς να χρειάζεται παρακίνηση, εκτός εάν τον έχουν προκαλέσει σοβαρά. Ανταποκρίνετ

	1	2	3	4	5
	καθημερινές ρουτίνες.		αλλαγές στις καθημερινές ρουτίνες αλλά τις περισσότερες φορές αντιδράει με πάρα πολύ ενθουσιασμό.	καθημερινές ρουτίνες.	αι θετικά στις αλλαγές στις καθημερινές ρουτίνες.
Social **(Κοινωνικός τομέας)**	**1**	**2**	**3**	**4**	**5**
Relationship to peers **(Σχέσεις με τους συνομηλίκους)**	Βρίσκει εξαιρετικά δύσκολο το να επικοινωνήσει με τα άλλα παιδιά ή να κάνει φιλίες. Φαίνεται να μην δίνει σημασία στους άλλους.	Συνήθως έχει δυσκολία στην επικοινωνία με τα άλλα παιδιά και να κάνει φιλίες	Επικοινωνεί σχετικά εύκολα με τα άλλα παιδιά και είναι ικανός να κάνει φιλίες. Αντιλαμβάνεται τα συναισθήματα των άλλων μόνο όταν γίνουν πολύ αντιληπτά.	Επικοινωνεί σχετικά εύκολα με τα άλλα παιδιά και κάνει γρήγορα φιλίες. Αντιλαμβάνεται τα συναισθήματα των άλλων.	Επικοινωνεί πολύ εύκολα με τα άλλα παιδιά και κάνει γρήγορα φιλίες. Είναι ενήμερος για τους άλλους και ανταποκρίνεται στις ανάγκες τους.
Relationship to adults **(Σχέσεις με τους ενήλικες)**	Βρίσκει εξαιρετικά δύσκολο το να επικοινωνήσει με τους ενήλικες. Δεν τους προσεγγίζει ή τους μιλάει. Μη κατάλληλη συμπεριφορά κατά τη διάρκεια της αλληλεπίδρασής του με τους ενήλικες	Συνήθως έχει δυσκολία στην επικοινωνία με τους ενήλικες. Απρόθυμος στο να τους προσεγγίσει ή να τους μιλήσει. Συνήθως αλληλεπιδρά με κατάλληλη συμπεριφορά στους ενήλικες.	Επικοινωνεί με τους ενήλικες με κάποια δυσκολία. Θα προσεγγίσει τους ενήλικες και θα τους μιλήσει. Σπάνια επιδεικνύει μη κατάλληλη συμπεριφορά όταν αλληλεπιδρά μαζί τους.	Προσεγγίζει με σιγουριά τους ενήλικες όταν χρειάζεται. Κάνει σχέσεις μαζί τους και έχει κατάλληλη συμπεριφορά	Προσεγγίζει με σιγουριά τους ενήλικες όταν χρειάζεται. Κάνει σχέσεις μαζί τους και έχει κατάλληλη συμπεριφορά. Μιλάει μαζί τους με φυσικό τρόπο και γίνεται εύκολα κατανοητός.
Rules **(Κανόνες)**	Δεν υπακούει στους κανόνες. Ενοχλεί τους άλλους και διακόπτει τις δραστηριότητες	Υπακούει πολύ λίγο στους κανόνες. Μπορεί να ενοχλεί τους άλλους και να διακόπτει τις δραστηριότητες	Μερικές φορές αγνοεί τους κανόνες. Ίσως ενοχλεί τους άλλους σε συγκεκριμένες περιστάσεις.	Συνήθως υπακούει στους κανόνες και σπάνια ενοχλεί τους άλλους.	Πάντα υπακούει στους κανόνες και ποτέ δεν ενοχλεί τους άλλους.

Cultural awareness (Πολιτισμική συνειδητοποίησ η)	Δείχνει ότι αντιλαμβάνετ αι τις ρουτίνες στο περιβάλλον του σπιτιού. Πχ σε παιχνίδι ρόλων στο κουκλόσπιτο	Επιδεικνύει κατανόηση του να είναι μέρος μίας οικογένειας/σπιτιού καθώς μιλάει για τις σχέσεις και τις εμπειρίες τους με τους γονείς/αδέρφια/συγ γενείς	Αντιλαμβάνετ αι το ότι είναι μέρος μίας ευρύτερης κοινωνίας μέσα στη γειτονιά και στο σχολείο. Μιλάει για τις εμπειρίες του στο περιβάλλον αυτό.	Αναγνωρίζει ότι ο τρόπος ζωής των άλλων διαφέρει από το δικό του. Περηφανεύετ αι για τα κατορθώματά του.	Αναγνωρίζει και σέβεται τη ζωή των άλλων. Κατανοεί ότι το ο δικός τους τρόπος ζωής θα πρέπει να είναι σεβαστός από τα παιδιά και τους ενήλικες.
Communication (Επικοινωνία)	Επικοινωνεί με τους άλλους μονολεκτικά, με κινήσεις και εκφράσεις του προσώπου	Μιλάει χρησιμοποιώντας απλές εκφράσεις. Χρωματίζει τη φωνή του για να κάνει ερωτήσεις αντί να χρησιμοποιεί σωστή γραμματική.	Ξεκινάει να συνδυάζει εκφράσεις για να παρουσιάσει ένα επιχείρημα ή μία επεξήγηση με συνέπεια. Η ομιλία του είναι συνήθως προτάσεις από ένα συνδυασμό ιδεών που συνήθως δεν είναι γραμματικά σωστές.	Ρωτάει απλές ερωτήσεις. Η ομιλία τους είναι συνήθως γραμματικά σωστή.	Συνήθως μιλάει με ευχέρεια και συνέπεια. Η ομιλία του είναι συνήθως αλλά όχι πάντα γραμματικά σωστή. Ακούμε με προσοχή τις απόψεις των άλλων και ανταποκρίνετ αι κατάλληλα.

ADJUSTMENT	1	2	3	4	5	Date	Comment
Comfortable							
Independence							
PERSONAL	1	2	3	4	5	Date	Comment
Confidence							
Concentration *(Teacher-directed activities)*							
Concentration *(Self-directed activities)*							
Actions							
SOCIAL	1	2	3	4	5	Date	Comment
Relationship to peers							
Relationship to adults							
Rules							
Cultural awareness							
Communication							

Appendix 5: Authentic Assessment/Portfolio Checklist (in Greek)

This part is presented in Greek as the study was implemented in Greek early years settings and thus it was designed in Greek

Φάκελος αξιολόγησης	
Ακρόαση	
Συμμετοχή στο διάλογο	
Έκφραση	
Ανάγνωση	
Γραφή και γραπτή έκφραση	
Ακρόαση	
Ακροάται και αναγνωρίζει ήχους	
Διακρίνει ήχους	
Μιμείται ήχους	
Ακροάται και επαναλαμβάνει λέξεις ή φράσεις με ρυθμό	
Ακροάται και εκτελεί εντολές που ακούει ζωντανά ή μαγνητοφωνημένα	
Συμμετοχή στο διάλογο	
Λέει τα ονόματα των συμμαθητών του	
Ονομάζει αντικείμενα	

Ανακοινώνει τα νέα της ημέρας	
Αναφέρει δραστηριότητες που έχουν γίνει ή πρόκειται να γίνουν	
Εξηγεί και ερμηνεύει	
Χρησιμοποιεί επιχειρήματα για να τεκμηριώσει τις ιδέες του	
Έκφραση	
Χρησιμοποιεί σωστά τα ρήματα στο σωστό αριθμό και χρόνο	
Χρησιμοποιεί σωστά τα επίθετα	
Κάνει ερωτήσεις	
Χρησιμοποιεί καταφατικές και αρνητικές προτάσεις	
Εκφράζεται μπροστά σε άλλους	
Περιγράφει και διηγείται προφορικά	
Ανάγνωση	
Αναγνωρίζει τις διαφορετικές εκδοχές γραπτού λόγου και τα μηνύματα που μεταφέρουν (πχ εφημερίδα, συσκευασίες, βιβλία)	
Υιοθετεί βασικές πρακτικές ανάγνωσης (πχ από αριστερά προς τα δεξιά, από πάνω προς τα κάτω, από την αρχή προς το τέλος)	
Διακρίνει τα διαλογικά από τα μη διαλογικά μέρη	
Αναγνωρίζει οικείες λέξεις στο περιβάλλον του	
Παίρνει πληροφορίες από διάφορες πηγές (πχ καρτέλες, συσκευασίες)	
Χρησιμοποιεί τη βιβλιοθήκη της τάξης	
Εντοπίζει τον συγγραφέα, τον τίτλο του βιβλίου κ.λπ.	
Ζητάει βοήθεια από κάποιο παιδί	
Ζητάει βοήθεια από τη νηπιαγωγό	
Γραφή και γραπτή έκφραση	
Χρησιμοποιεί τη γραφή ως μέσο επικοινωνίας	
Χρησιμοποιεί το μολύβι, τη γόμα και το στυλό αποδοτικά	
Γράφει το όνομά του με κεφαλαία ή πεζά γράμματα	
Αντιγράφει λέξεις	
Γράφει λέξεις όπως μπορεί	
Γράφει προτάσεις όπως μπορεί	

Ζητάει βοήθεια από κάποιο παιδί	
Ζητάει βοήθεια από τη νηπιαγωγό	

Appendix 6: Leuven Involvement Scale for Young Children (LIS-YC)

This part is presented in English as it was used by researcher only and there was no need for a translation into Greek

Involvement signals	1	2	3	4	5	Description
Concentration						
Energy						
Complexity and creativity						
Facial expression and posture						
Persistence						
Precision						
Reaction time						
Language						
Satisfaction						
The Child Involvement Signals						
Concentration	The attention of the child is directed toward the activity. Nothing can distract the child from his/her deep concentration.					
Energy	The child invests much effort in the activity and is eager and stimulated. Such energy is often expressed by loud talking, or pressing down hard on the paper. Mental energy can be deduced from facial expressions which reveal 'hard' thinking.					
Complexity and Creativity	This signal is shown when a child freely mobilises his cognitive skills and other capabilities in more than routine behaviour. The child involved cannot show more competence - he/she is at his/her very 'best'. Creativity does not mean that original products have to result, but that the child exhibits an individual touch and what she/he does furthers his/her own creative development. The child is at the very edge of his/her capabilities					
Facial Expression and Posture	Nonverbal signs are extremely important in reaching a judgment about Involvement. It is possible to distinguish between 'dreamy empty' eyes and 'intense' eyes. Posture can reveal high concentration or boredom. Even when children are seen only from the back, their posture can be revealing					
Persistence	Persistence is the duration of the concentration at the activity. Children who are really involved do not let go of the activity easily; they want to continue with the satisfaction, flavour and intensity it gives them, and are					

	prepared to put in effort to prolong it. They are not easily distracted by other activities. 'Involved' activity is often more prolonged but it can be dependent on the age and the development of the child.
Precision	Involved children show special care for their work and are attentive to detail. Non-involved children gloss over such detail, it is not so important to them.
Reaction time	Children who are involved are alert and react quickly to stimuli introduced during an activity e.g. children 'fly' to a proposed activity and show prolonged motivation and keenness. (NB. Involvement is more than an initial reaction.)
Language	Children can show that an activity has been important to them by their comments e.g. they ask for the activity repeatedly. They state that they enjoyed it!
Satisfaction	The children display a feeling of satisfaction with their achievements
Child Involvement Scale (to be read in conjunction with the signals for Involvement)	
Level 1. Low Activity	Activity at this level can be simple, stereotypic, repetitive and passive. The child is absent and displays no energy. There is an absence of cognitive demand. The child characteristically may stare into space. N.B. This may be a sign of inner concentration.
Level 2. A Frequently Interrupted Activity	The child is engaged in an activity but half of the observed period includes moments of non-activity, in which the child is not concentrating and is staring into space. There may be frequent interruptions in the child's concentration, but his/her Involvement is not enough to return to the activity.
Level 3. Mainly Continuous Activity	The child is busy at an activity but it is at a routine level and the real signals for Involvement are missing. There is some progress but energy is lacking and concentration is at a routine level. The child can be easily distracted
Level 4. Continuous Activity with Intense Moments	The child's activity has intense moments during which activities at Level 3 can come to have special meaning. Level 4 is reserved for the kind of activity seen in those intense moments, and can be deduced from the 'Involvement signals'. This level of activity is resumed after interruptions. Stimuli, from the surrounding environment, however attractive cannot seduce the child away from the activity.
Level 5. Sustained Intense Activity	The child shows continuous and intense activity revealing the greatest Involvement. In the observed period not all the signals for Involvement need be there, but the essential ones must be present: concentration, creativity, energy and persistence. This intensity must be present for almost all the observation period.

Appendix 7: Interview schedule with the practitioners

This part is presented in English, as it has been translated for the data analysis section

Academic and professional achievements
- Would you like to tell me about your academic achievements?
- What is your professional experience so far? In what posts have you worked?

Personal teaching approaches and strategies
- How would you describe a typical every day in the early years classroom?
- Before you started using this framework, what were the teaching methods you were using up to now?

Implementation of the interdisciplinary framework
- How was your participation? How do you feel about it?
- Did you have the support and resources you needed when you needed?
- Did you find any challenges during the implementation of the interdisciplinary framework?
- What was the most exciting part during the implementation of the interdisciplinary framework?

Children's development during the interdisciplinary framework
- How did you observe children's progress in regards to children's development during the interdisciplinary framework?
- How did you observe children's involvement in literacy activities during the interdisciplinary framework?
- What differences do you see in your teaching methods now on? How would you use this experience in the future?

Appendix 8: Pedagogical projects during the intervention (in Greek)

This part is presented in Greek as the study was implemented in Greek early years settings and thus it was written into Greek for the convenience of the practitioners

In this part there are some indicative but important pedagogical projects from the 3 experimental groups as part of the intervention while they implemented the suggested interdisciplinary framework. Due to space limitations, the below projects are only from the final study, but there were similar pedagogical projects that were implemented in the pilot study as well.

Experimental Group 1 (EG 1)- Paintings

<u>Παιδαγωγικό σχέδιο εργασίας: Λουλούδια</u>

<u>Ας ξεκινήσουμε</u>: Τα παιδιά κατά τη διάρκεια του ελεύθερου παιχνιδιού τους στην αυλή επικεντρώνονται συνέχεια στα λουλούδια που έχουν αρχίσει να ανθίζουν. Αφιερώνουν αρκετή ώρα στο να συζητούν για τα διαφορετικά τους χρώματα και σχήματα. Παρατηρήθηκε ότι αρκετά παιδιά φέρνουν μερικά λουλούδια το πρωί μαζί τους για να τα δώσουν στις δασκάλες

<u>Οι τέχνες</u>: Τα παιδιά με την παιδαγωγό παρατηρούν διάφορους πίνακες ζωγραφικής του Μονέ που απεικονίζουν ανθισμένα και ανοιξιάτικα τοπία με λουλούδια. Ο πίνακας 'Water Lily Pond' τους έχει τραβήξει την προσοχή. Ο πίνακας απεικονίζει μία λίμνη στην οποία επιπλέουν λουλούδια και υπάρχει μία στρογγυλή γέφυρα. Συζητούν έντονα για το που στηρίζεται η γέφυρα και το γεγονός ότι τα λουλούδια επιπλέουν στο νερό. Τους κάνει εντύπωση γιατί δεν έχουν ξαναδεί κάτι παρόμοιο.

<u>Υλοποίηση</u>: Τα παιδιά με την παιδαγωγό συζητούν τις δραστηριότητες που θέλουν να κάνουν για αυτόν τον πίνακα. Η παιδαγωγός διευκολύνει τη διαδικασία στον

ενταχθούν στοιχεία εγγραματισμού στις δραστηριότητες αυτές. Οι δραστηριότητες που αποφασίστηκαν και υλοποιήθηκαν ήταν οι εξής:

- Ελεύθερη ζωγραφική του πίνακα σαν μικροί ζωγράφοι.

Σε κόλλες Α4 και σε μεγάλο χαρτί του μέτρου τα παιδιά ζωγραφίζουν τη δική τους εκδοχή αυτού του πίνακα. Τα υλικά ζωγραφικής είναι στην ελεύθερη επιλογή των παιδιών πχ πινέλα, δακτυλομπογιές, νερομπογιές, μαρκαδόροι κ.λπ. Στο τέλος αποφασίζουν να στείλουν τις ζωγραφιές τους στο Μονέ και του ετοιμάζουν ένα γράμμα στο οποίο του εξηγούν τι ακριβώς έχουν ζωγραφίσει. Σε κάποιες ομάδες τα παιδιά γράφουν εναλλάξ διάσπαρτες λέξεις, σε κάποιες άλλες ομάδες η παιδαγωγός λειτουργεί ως γραφέας των παιδιών και τέλος σε μερικές μικρές ομάδες τα παιδιά γράφουν το γράμμα στο Μονέ με 'ψευδογράμματα'. Στο τέλος βάζουν τις ζωγραφιές τους και τα γράμματα σε ένα φάκελο και τα δίνουν στον οδηγό του σχολικού να τα πάει στο ταχυδρομείο.

- Γράμμα από το Μονέ

Ο Μονέ τους έστειλε ένα γράμμα με το ταχυδρομείο να τους ευχαριστήσει για το γράμμα και τις ζωγραφιές που του έστειλαν. Τα ρωτάει τι τους αρέσει πιο πολύ για να τους φτιάξει έναν πίνακα αποκλειστικά γι' αυτά. Κάποιες λέξεις είναι στα Ελληνικά και κάποιες λέξεις είναι στα Γαλλικά καθώς ο ζωγράφος είναι από τη Γαλλία. Τα παιδιά με την παιδαγωγό συζητούν για το τι σημαίνουν οι φράσεις 'Bonjour', 'Comment ca va?'. Τους κάνει εντύπωση η διαφορετική γραφή των λέξεων και θέλουν να τις αντιγράψουν. Ρωτούν την παιδαγωγό ποια θα ήταν η κατάλληλη απάντηση και αντιγράφουν 'Ca va bien merci! Et toi?'. Συζητούν για το τι τους αρέσει πιο πολύ για να πουν στον Μονέ να βάλει στον πίνακα. Αποφασίζουν ότι θα θέλουν έναν πίνακα με πολλά λουλούδια, θάλασσα, καράβια και παιδιά να παίζουν. Τα παιδιά προσπαθούν να γράψουν αυτές τις λέξεις και του ζωγραφίζουν μία ζωγραφιά με αυτά τα στοιχεία στην περίπτωση που δεν μπορέσει να διαβάσει τα ελληνικά.

- Πίνακας κατά παραγγελία

Ο Μονέ λαμβάνοντας υπόψη τις προτιμήσεις των παιδιών τους 'φτιάχνει έναν πίνακα με τα στοιχεία που του ζήτησαν και τους το στέλνει με το ταχυδρομείο. Ο πίνακας αυτός ήταν ο 'Cliff Walk at Pourville (Promenade sur la falaise, Pourville)'.

Τα παιδιά με το που έλαβαν τον πίνακα τον παρατηρούν και συζητούν για το περιεχόμενό του. Ξεκινάνε ένα παιχνίδι στο οποίο το ένα παιδί περιγράφει ένα στοιχείο του πίνακα που του αρέσει χωρίς να πει τι είναι. Αποκαλύπτει μόνο το πρώτο γράμμα και τα υπόλοιπα παιδιά πρέπει να το βρουν Σε αυτόν τον πίνακα μου αρέσει πάρα πολύ κάτι που αρχίσει από οοοοοοοοοοο, το κρατάμε όταν βρέχει και έχει πολυ νερόοοοοοοοοοοοο και έχω ένα ίδιο σε ροζ με την Barbie. Τι είναι; Η ομπρέλα. Για να το κάνουν να έχει περισσότερη αγωνία, προσπαθούν να απομνημονεύσουν τον πίνακα και κλείνουν τα μάτια τους έως να βρουν τη λέξη.

Παιδαγωγικό σχέδιο εργασίας: Πεταλούδες

Ας ξεκινήσουμε: Μία πεταλούδα μπήκε μέσα στην τάξη και άρχισε να κάνει βόλτες στις διάφορες γωνιές δραστηριοτήτων. Τα παιδιά ενθουσιάστηκαν και άρχισαν να της μιλούν. Στην αρχή της έδιναν οδηγίες πχ πέτα εδώ, κάτσε εδώ, κούνα τα φτερά σου και μετά άρχισαν να τη ρωτούν το όνομά της που μένει κ.λπ. Παρατηρήθηκε οτι αυτό το γεγονός τα επηρέασε πάρα πολύ καθώς στο ελεύθερο παιχνίδι τους ενσωματώνουν αυτό το γεγονός και ασχολούνται ή κάνουν ότι είναι πεταλούδες.

Οι τέχνες: Τα παιδιά με την παιδαγωγό ψάχνουν στο διαδίκτυο πίνακες ζωγραφικής με πεταλούδες. Τους μελετούν προσεκτικά και αποφασίζουν εάν έχουν στοιχεία ελκυστικά για να ασχοληθούν με αυτούς. Οι πίνακες ζωγραφικής 'Butterfly Mother in a book' και 'Butterfly Ship' του Salvador Dali τους ελκύουν την προσοχή πάρα πολύ. Τους κάνει εντύπωση ο τρόπος που έχει απεικονίσει ο ζωγράφος τις πεταλούδες.

<u>Υλοποίηση</u>: Τα παιδιά με την παιδαγωγό συζητούν τις δραστηριότητες που θέλουν να κάνουν για αυτόν τον πίνακα. Η παιδαγωγός διευκολύνει τη διαδικασία στον ενταχθούν στοιχεία εγγραμματισμού στις δραστηριότητες αυτές. Οι δραστηριότητες που αποφασίστηκαν και υλοποιήθηκαν ήταν οι εξής:

- Παράξενες πεταλούδες

Τα παιδιά με την παιδαγωγό συζητούν για τις διαφορετικές πεταλούδες που βλέπουν σε αυτόν το πίνακα. Προσπαθούν να καταλάβουν το λόγο που ο ζωγράφος έχει ζωγραφίσει τις πεταλούδες με αυτόν τον τρόπο. Αναζητούν όλους τους πιθανούς λόγους και αιτίες και η παιδαγωγός λειτουργεί ως γραφέας στις συζητήσεις των παιδιών. Μερικές από τις ιδέες των παιδιών ήταν:

- o Είναι ένα μαγικό μέρος με τεράστιες πεταλούδες. Η μαμά πεταλούδα είναι μέσα στο βιβλίο γιατί αυτό είναι το σπίτι της. Είναι πολύ έξυπνη και έχει διαβάσει πολύ γι' αυτό είναι μέσα στο βιβλίο.

- o Την έχουν φυλακίσει μέσα στο βιβλίο οι άνθρωποι με το καράβι. Οι πεταλούδες είναι καλές και οι άνθρωποι τις έχουν αιχμαλωτίσει. Τις κρατάνε μέσα στο βιβλίο και παίρνουν τα φτερά τους για να τα κάνουν πανιά. Πρέπει να τις σώσουμε.
- o Μάλλον το είδε στον ύπνο του αυτό το μέρος και γι΄αυτό το ζωγράφισε. Σίγουρα είναι ένα μαγικό μέρος μέσα στο δάσος που έχει μία θάλασσα.

Η παιδαγωγός μεταφέρεις τις ιδέες τους σε ένα μεγάλο χαρτί του μέτρου και τα παιδιά ζωγραφίζουν τις δικές τους παράξενες πεταλούδες και γράφουν διάφορες λέξεις που τους έρχονται στο μυαλό από αυτούς τους πίνακες πχ πεταλούδα, καράβι, βιβλίο.

- Σχέδιο διάσωσης

Τα παιδιά αποφασίζουν ότι οι πεταλούδες αυτές είναι σε κίνδυνο και πρέπει να τις σώσουν. Καταστρώνουν ένα σχέδιο διάσωσης και φτιάχνουν ένα κατάλογο με τα εφόδια που θα χρειαστούν. Εναλλάξ γράφουν στον κατάλογο τη λίστα με τα εφόδια πχ σκοινί, κιάλια, μπότες, μπουφάν, παγούρι, νερό, φαγητό κ.λπ. Αποφασίζουν να φτιάξουν ένα χάρτη για να μπορέσουν να βρουν το δρόμο για το μαγικό μέρος που είναι φυλακισμένες οι πεταλούδες. Στο χάρτη ζωγραφίζουν εναλλάξ μία διαδρομή και σχεδιάζουν/γράφουν τα σημαντικά σημεία με τους κινδύνους που πρέπει να προσέξουν πχ φίδια, γκρεμός, βροχή κ.λπ.

- Πεταλούδες στον καθρέφτη

Τα παιδιά με την παιδαγωγό αποφασίζουν να φτιάξουν τις δικές τους παράξενες πεταλούδες με ένα κρυμμένο μυστικό μήνυμα. Η παιδαγωγός τους προτείνει να χρησιμοποιήσουν την τεχνική του καθρέφτη με πινέλα και δακτυλομπογιές. Διπλώνουν ένα χαρτί Α4 στη μέση και ζωγραφίζουν τη μισή παράξενη πεταλούδα από τη μία μεριά μόνο. Στη συνέχεια διπλώνουν το χαρτί στη μέση και το σχέδιο αποτυπώνεται και από την άλλη μερικά. Τα παιδιά ενθουσιάζονται και θέλουν να κρύψουν μυστικά μηνύματα στη ζωγραφιά τους. Γράφουν πολύ απαλά με μολύβι ένα μυστικό μήνυμα το οποίο περιέχει ψευδογράμματα ή λέξεις που τους έρχονται στο μυαλό πχ σώσε τις πεταλούδες. Στη συνέχεια καλύπτουν τα μυστικά μηνύματα με ένα χαρτί και προσπαθούν να μαντέψουν ο ένας το μήνυμα του άλλου.

Experimental Group 2 (EG 2)- Drama play

Παιδαγωγικό σχέδιο εργασίας: Ταξίδι στο διάστημα

Ας ξεκινήσουμε: Την ημέρα της δανειστικής βιβλιοθήκης ένα παιδί έφερε ένα βιβλίο με διάφορους πλανήτες και αστροναύτες. Σχεδόν όλα τα παιδιά θέλουν να το δανειστούν και βγάζουν κλήρο για να αποφασίσουν τη σειρά και το πόσες μέρες θα

το δανειστεί ο καθένας. Παρατηρείται ότι το ενδιαφέρον των παιδιών μένει αμείωτο όσο περνάει ο καιρός. Τα παιδιά που δανείστηκαν το βιβλίο και το διάβασαν συμμετέχουν σε έντονες συζητήσεις με τους φίλους τους και ανταλλάσουν απόψεις για το τι τους άρεσε πιο πολύ. Τα παιδιά που δεν το έχουν δανειστεί και διαβάσει ακόμα παρακολουθούν με μεγάλη αγωνία.

Οι τέχνες: Η παιδαγωγός με τα παιδιά οργανώνουν ένα δραματικό παιχνίδι με θέμα 'Ταξίδι στο διάστημα' για να ανακαλύψουν τι υπάρχει και να αποφασίσουν τα παιχνίδια που θέλουν να παίξουν. Διαλέγουν τη μουσική, βγάζουν τα παπούτσια τους και από τη γωνιά μεταμφίεσης διαλέγουν τα ρούχα και τα αξεσουάρ που θέλουν να φορέσουν. Η παιδαγωγός με τα παιδιά βάζουν τη μουσική και ξεκινάνε το ταξίδι για να ανακαλύψουν το διάστημα. Ο καθένας αυτοσχεδιάζει και υπάρχει απόλυτη ελευθερία κινήσεων και δράσεων. Μόλις τελειώνει η μουσική, συζητούν αυτά που είδαν και αποφασίζουν τα παιχνίδια που θέλουν να παίξουν.

Υλοποίηση: Η παιδαγωγός λειτουργεί ως γραφέας στις ιδέες των παιδιών και ο καθένας εξιστορεί την ιστορία που έζησε και αυτά που είδε στο δραματικό παιχνίδι με θέμα ταξίδι στο διάστημα. Η παιδαγωγός διευκολύνει τη διαδικασία στο να ενταχθούν στοιχεία εγγραματισμού στις δραστηριότητες αυτές. Οι δραστηριότητες που αποφασίστηκαν και υλοποιήθηκαν ήταν οι εξής:

- Ο εξωγήινος

Τα παιδιά και η παιδαγωγός συζητούν για τις μορφές ζωής που πιθανόν να υπάρχουν στο διάστημα. Συζητούν για το πως θα μπορούσε να μοιάζει ένα εξωγήινος. Μετατρέπουν την τάξη τους σε διαστημικά σπίτια εξωγήινων, χρησιμοποιώντας διάφορα υφάσματα που έχουν στη γωνιά μεταμφίεσης. Ο καθένας αποφασίζει το χαρακτήρα του εξωγήινου που θέλει να είναι και γράφει το εξωγήινο όνομά του σε μία καρτέλα και την κρεμάει στο λαιμό του. Δημιουργούν διάφορες εξωγήινες ταμπέλες με εξωγήινα γράμματα (ψευδογράμματα) και σχέδια που δείχνουν το δρόμο από το ένα μέρος στο άλλο και τα τις κολλάνε στις καρέκλες. Όταν ολοκληρώσουν το σκηνικό παίζουν ένα δραματικό παιχνίδι στο οποίο ένας εξωγήινος χάθηκε και ακολουθούν τις ταμπέλες για να τον βρουν.

- Πρόσκληση σε πάρτι

Τα παιδιά αποφασίζουν ότι θέλουν να καλέσουν στο αποκριάτικο πάρτι που θα κάνουν τους εξωγήινους που γνώρισαν στο ταξίδι τους. Σχεδιάζουν τις προσκλήσεις, ζωγραφίζουν το εξώφυλλο και γράφουν την πρόσκληση για το εξωγήινο που θέλουν να καλέσουν ονομαστικά. Στήνουν πάλι το σκηνικό και παίζουν δραματικό παιχνίδι στο οποίο ο ένας εξωγήινος δίνει την πρόσκληση στον άλλον.

- Ο ήλιος του εξωγήινου

Καθώς παρατηρούν το βιβλίο με τους πλανήτες του ηλιακού συστήματος, τους κάνει εντύπωση που ο ήλιος είναι ένας από αυτούς τους πλανήτες. Συζητούν για το ήλιο που θα έχει ο εξωγήινος για να ζεσταίνει τον δικό του πλανήτη. Αποφασίζουν να κάνουν μία επίσκεψη στον εξωγήινο και στον ήλιο του για να τα δουν από κοντά. Φοράνε τις καρτέλες με τα εξωγήινα ονόματά τους, επιλέγουν τη μουσική και ξεκινάνε το ταξίδι στο σπίτι του εξωγήινου και στον ήλιο του. Κατά τη διάρκεια του ταξιδιού συζητούν για το τι πρέπει να προσέχουν και γράφουν τους σχετικούς κινδύνους για να μην τους ξεχάσουν. Μόλις επιστρέψουν από το ταξίδι τους συζητούν την εμπειρία τους και η παιδαγωγός λειτουργεί ως γραφέας. Φωτοτυπούν πολλές φορές τις ιδέες τους αυτές και ζωγραφίζουν μερικά σχέδια. Γράφουν το όνομά τους και το εξωγήινο όνομά τους στο έργο τους.

Παιδαγωγικό σχέδιο εργασίας: Το μουσείο

<u>Ας ξεκινήσουμε</u>: Το σχολείο έχει οργανώσει ομαδική επίσκεψη όλων των τμημάτων νηπίων, προνηπίων και παιδικού σταθμού σε ένα μουσείο *(για λόγους ηθικής και ανωνυμίας το όνομα του μουσείου δεν αποκαλύπτεται)*. Κατά τη διάρκεια της επίσκεψης τα παιδιά παρακολούθησαν μία παρουσίαση από τις μουσειολόγους και παρατήρησαν τα εκθέματα. Η επίσκεψη ήταν αρκετά ενδιαφέρουσα αλλά δεν εμπεριείχε την άμεσα ενεργό συμμετοχή των παιδιών. Με την επιστροφή στο σχολείο τα παιδιά συζήτησαν με την παιδαγωγό για την επίσκεψή τους και της ζήτησαν ότι θέλουν να πάνε σε ένα μουσείο που μπορούν να παίξουν.

<u>Οι τέχνες</u>: Η παιδαγωγός αφουγκράζοντας τις ανάγκες των παιδιών οργανώνει μαζί με τα παιδιά ένα δραματικό παιχνίδι με θέμα 'Επίσκεψη στο μουσείο'. Επιλέγει μαζί με τα παιδιά την κατάλληλη μουσική και ρίχνουν όλοι στο κεφάλι τους μαγική χρυσόσκονη για να μεταφερθούν στο μουσείο κατευθείαν. Κατά τη διάρκεια του ταξιδιού τους η ιστορία διαδραματίζεται σε συνεργασία με τα παιδιά. Η παιδαγωγός ρωτάει τα παιδιά για το τι διαδρομή θα ακολουθήσουν, τι θα κάνουν μετά κ.λπ. Μόλις τελειώσει η μουσική, συζητούν για το ταξίδι τους και αποφασίζουν τα παιχνίδια που θέλουν να παίξουν.

<u>Υλοποίηση</u>: Η παιδαγωγός λειτουργεί ως γραφέας στις ιδέες των παιδιών και ο καθένας λεει τις ιδέες τους για τα παιχνίδια που θέλουν να παίζουν με θέμα το μουσείο. Η παιδαγωγός διευκολύνει τη διαδικασία στο να ενταχθούν στοιχεία εγγραμματισμού στις δραστηριότητες αυτές. Οι δραστηριότητες που αποφασίστηκαν και υλοποιήθηκαν ήταν οι εξής:

- Εκδρομή στο μουσείο φασαρίας

Τα παιδιά αποφάσισαν ότι ένα από τα στοιχεία που δεν απολαμβάνουν σε κάθε τους επίσκεψη στο μουσείο είναι ότι πρέπει να κάνουν συνέχεια ησυχία και να μην μιλάνε. Αποφάσισαν λοιπόν να δημιουργήσουν ένα μουσείο φασαρίας στο οποίο θα

επιτρέπεται να κάνουν όση φασαρία θέλουν. Καταγράφουν σε μία λίστα τα εκθέματα του μουσείου που θα είναι πράγματα που κάνουν πολύ φασαρία όπως κόρνα, ντέφι, ντουντούκα κ.λπ. Τα παιδιά προσπαθούν εναλλάξ να γράψουν τις λέξεις. Στη συνέχεια αναζητούν τα αντικείμενα αυτά και τα στολίζουν στο χώρο της τάξης τους. Αναλαμβάνουν ρόλους και ο καθένας φτιάχνει την καρτέλα του κάθε εκθέματος που γράφει το όνομά του. Τα παιδιά αναζητούν τις λέξεις από το περιβάλλον τους αλλά καταλήγουν ότι θα τις γράψουν όπως μπορούν. Με τη βοήθεια της παιδαγωγού, η οποία λειτουργεί ως γραφέας, φτιάχνουν ένα ταμπλό με τους κανόνες του μουσείο, ενδεικτικά μερικοί κανόνες είναι οι παρακάτω:

- o Μιλάτε πολύ δυνατά
- o Φωνάζετε για να σας ακούσουν
- o Εάν ακούτε μουσική, να είναι πολύ δυνατά
- o Χτυπάτε τα πόδια σας δυνατά στο πάτωμα

Τέλος, φτιάχνουν εισιτήρια και μοιράζουν ρόλους για το δραμματικό παιχνίδι τους και την επίσκεψη στο μουσείο φασαρίας π.χ. ξεναγός, καλλιτέχνες, επισκέπτες, ιδιοκτήτης μουσείου. Αναπαριστούν την επίσκεψή τους πολλές φορές ώστε όλοι να παίξουν όλους τους ρόλους. Κάθε φορά τα παιδιά αυτοσχεδιάζουν χωρίς να υπάρχει ένα προκαθορισμένο σενάριο.

- • Εκδρομή στο μουσείο ησυχίας

Μετά την επίσκεψη στο μουσείο φασαρίας, τα παιδιά αποφάσισαν ότι θα θέλουν να συνεχίσουν το παιχνίδι τους και να πάνε εκδρομή στο μουσείο ησυχίας. Αποφάσισαν ότι σε αυτό το μουσείο οι κανόνες θα ήταν πολύ διαφορετικοί από το προηγούμενο μουσείο καθώς αυτή τη φορά θα έπρεπε να κάνουν απόλυτη ησυχία και τα εκθέματα θα ήταν αντικείμενα που δεν μπορούν να κάνουν κανένα θόρυβο. Καταγράφουν τη λίστα με τα εκθέματα αυτά όπως βαμβάκι, χαρτί, υφάσματα κ.λπ. Τα παιδιά προσπαθούν εναλλάξ να γράψουν τις λέξεις. Στη συνέχεια αναζητούν τα αντικείμενα αυτά και τα στολίζουν στο χώρο της τάξης τους. Αναλαμβάνουν ρόλους και ο καθένας φτιάχνει την καρτέλα του κάθε εκθέματος που γράφει το όνομά του. Τα παιδιά αναζητούν τις λέξεις από το περιβάλλον τους αλλά καταλήγουν ότι θα τις γράψουν όπως μπορούν. Συζητούν για τους κανόνες του μουσείο και ζητούν τη βοήθεια της παιδαγωγού για τους γράψει σε ένα μεγάλο χαρτί. Ενδεικτικά μερικοί από τους κανόνες είναι οι παρακάτω:

- o Κάντε απόλυτη ησυχία
- o Μην μιλάτε
- o Περπατάτε αθόρυβα
- o Μην φταρνίζεστε

Αποφασίζουν ότι θα αφού είναι ένα διαφορετικό μουσείο θα πρέπει να φτιάξουν καινούρια εισιτήρια και μοιράζουν τους ρόλους για το δραμματικό παιχνίδι κατά την επίσκεψή τους στο μουσείο ησυχίας. Τα παιδιά αυτοσχεδιάζουν κατά τη διάρκεια του δραμματικού παιχνιδιού και αποφασίζουν ότι δεν θέλουν να τηρήσουν τους κανόνες, οπότε αντί για ησυχία, κάνουν φασαρία και πείθουν τον ιδιοκτήτη του μουσείου ότι αυτό έχει περισσότερη πλάκα.

- Το δικό μας μουσείο

Τα παιδιά με την παιδαγωγό αποφασίζουν ότι θέλουν να παίξουν ένα μουσείο με αυτά για πρωταγωνιστές. Αναλαμβάνει το κάθε παιδί να φέρει μία φωτογραφία του και μία φωτογραφία με τα αγαπημένα μέλη της οικογενείας του. Στην προετοιμασία του μουσείου, το κάθε παιδί κολλάει τις φωτογραφίες σε ένα χαρτόνι και γράφει από κάτω το όνομά του και τα ονόματα των απεικονιζομένων στη φωτογραφία. Αποφασίζουν να γράψουν και λίγα πράγματα για αυτά όπως το αγαπημένο τους χρώμα, φαγητό, τραγούδι κ.λπ. Τα παιδιά προσπαθούν να γράψουν τις λέξεις όπως μπορούν. Όταν ολοκληρώσουν στολίζουν τα εκθέματα στο χώρο και παίζουν δραμματικό παιχνίδι ότι επισκέπτονται το μουσείο για να δουν αυτούς τους σπουδαίους ανθρώπους. Τα παιδιά αυτοσχεδιάζουν και δημιουργούν ιστορίες με υπερήρωες για τα άλλα παιδιά που απεικονίζονται.

Experimental Group 3 (EG 3)- Puppets

Παιδαγωγικό σχέδιο εργασίας: Οι κότες της αυλής

Ας ξεκινήσουμε: Κάθε πρωί κατά τη διάρκεια της πρωινής προσέλευσης των παιδιών υπάρχει ένας κόκορας που λαλεί συνέχεια και μερικές φορές έως το μεσημέρι. Τα παιδιά με το που θα μπουν στο νηπιαγωγείο συζητούν για το γεγονός αυτό και ρωτάνε το ένα το άλλο για το πόσες φορές άκουσαν τον κόκορα σήμερα να κάνει κικιρίκου.

Οι τέχνες: Η παιδαγωγός αφουγκράζοντας τα ενδιαφέροντα των παιδιών φέρνει μία κούκλα κουκλοθέατρου στον πρωινό κύκλο που μοιάζει με κότα και παίζει κουκλοθέατρο με τα παιδιά. Δημιουργεί μία ιστορία λέγοντάς τους ότι η κυρία κότα η Κική είναι φίλη της κόρης της και ήθελε να έρθει να τα γνωρίσει. Τα παιδιά ξεκινούν αμέσως μία συζήτηση μαζί της και τη ρωτάνε εάν ξέρει τον κόκορα που λαλεί κάθε πρωί. Η κυρία κότα η Κική τους απαντάει ότι τον έχει ακούσει αλλά δεν τον ξέρει προσωπικά. Τους παροτρύνει να σκεφτούν διάφορα παιχνίδια που θέλουν να παίξουν σχετικά με αυτό και για να γνωρίσουν τον κόκορα.

Υλοποίηση: Τα παιδιά με την παιδαγωγό διαλέγουν μία κούκλα κουκλοθέατρου και παίζουν κουκλοθέατρο με την κυρία κότα την Κική και συζητούν τα παιχνίδια που θέλουν να παίξουν με αφορμή αυτό το γεγονός. Η παιδαγωγός λειτουργεί και ως γραφέας στις ιδέες των παιδιών και διευκολύνει τη διαδικασία στον ενταχθούν

στοιχεία εγγραματισμού στις δραστηριότητες αυτές. Οι δραστηριότητες που αποφασίστηκαν και υλοποιήθηκαν ήταν οι εξής:

- Ο κόκορας που έκανε φασαρία

Τα παιδιά με αφορμή αυτό το γεγονός αποφασίζουν να οργανώσουν μία κουκλοθεατρική παράσταση με θέμα έναν κόκορα που έκανε συνέχεια φασαρία. Αποφασίζουν ότι ο κόκορας θα πρέπει να ήταν πολύ μεγάλος και αναζητούν με την παιδαγωγό την κατάλληλη τεχνική για να δημιουργήσουν μία τέτοια κούκλα. Αποφασίζουν ότι θα χρησιμοποιήσουν την τεχνική του Μασέ Παπιέ και με μπαλόνια θα φτιάξουν το σώμα και το κεφάλι του κόκορα. Δημιουργούν μία λίστα με τα υλικά που θα χρειαστούν και τα παιδιά γράφουν εναλλάξ τις λέξεις. Παίζοντας κουκλοθέατρο με διάφορες κούκλες διαλέγουν του υπόλοιπους ήρωες του έργου και τους φτιάχνουν με σφουγγάρια. Για να καταλήξουν στο τελικό κείμενο του έργου χρησιμοποιούν τις κούκλες που έφτιαξαν και παίζουν αυθόρμητα έως να καταλήξουν στην ιστορία που τους αρέσει. Χωρίζονται σε δύο ομάδες: τους θεατές και τους κουκλοπαίχτες και παίζουν εναλλάξ την ιστορία που έχουν ετοιμάσει. Για να μην ξεχάσουν της ιστορία που έφτιαξαν γράφουν σε ένα χαρτί του μέτρου λέξεις κλειδιά από τις σημαντικότερες στιγμές του έργου πχ κικιρίκου, φασαρία, μαμά κότα κ.λπ.

- Οι φινετσάτες κότες

Τα παιδιά επισκέπτοντας την γωνιά κουκλοθεάτρου διαπιστώνουν ότι δεν έχουν αρκετές κούκλες με κότες και αυτές που έχουν δεν έχουν ωραία ρούχα. Αποφασίζουν ότι θέλουν να παίξουν ένα κουκλοθέατρο που να εμπεριέχει πολλές κότες που είναι καλοντυμένες. Αποφασίζουν ότι το πιο εύκολο είναι να χρησιμοποιήσουν γλωσοπίεστρα στα οποία θα κολλήσουν το κεφάλι της κότας και για τα ρούχα θα βάλουν υφάσματα τα οποία θα τα στερεώσουν πίσω από το κεφάλι και με αυτό τον τρόπο θα μπορούν να αλλάζουν ρούχα όποτε θέλουν. Αφού δημιούργησαν τις κούκλες, ξεκινούν να παίζουν κουκλοθέατρο και συνειδητοποιούν ότι δεν έχουν τα κατάλληλα σκηνικά για όταν οι κότες θέλουν να πάνε για ψώνια. Σχεδιάζουν τα διάφορα μαγαζιά σε χαρτόνια Α4 και γράφουν στην κορυφή τους το όνομα του κάθε μαγαζιού. Στη συνέχεια παίζουν αυθόρμητα κουκλοθέατρο με τις κούκλες και τα σκηνικά που δημιούργησαν.

- Μια περίεργη ιστορία

Τα παιδιά θέλουν να φτιάξουν μία παραμυθοσαλάτα και να παίξουν κουκλοθέατρο με αυτή. Διαλέγουν τα αγαπημένα τους παραμύθια και αποφασίζουν τη σειρά που θα ανακατέψουν τα παραμύθια. Μερικά παιδιά λειτουργούν ως γραφείς και καταγράφουν εναλλάξ στη σειρά των παραμυθιών. Μερικά αλλά παιδιά ζωγραφίζουν τις σχετικές εικόνες από τα παραμύθια δίπλα στις λέξεις. Ως κεντρικός ήρωας της ιστορίας τους είναι οι κότες που έχουν δημιουργήσει έως τώρα και

χρησιμοποιώντας τη λίστα με την παραμυθοσαλάτα παίζουν κουκλοθέατρο στο οποίο συμμετέχουν ενεργά θεατές και κούκλες.

Παιδαγωγικό σχέδιο εργασίας: Ο Δίας και η μυθολογία

Ας ξεκινήσουμε: Τα παιδιά συζητούν έντονα για το Δία και τους 12 θεούς του Ολύμπου και τις διαφορετικές δυνάμεις που έχει ο καθένας τους. Είναι πολύ ενθουσιασμένα με το Δία και με το γεγονός ότι κρατάει κεραυνούς και δεν καίγεται. Παρατηρείται ότι στο ελεύθερο παιχνίδι τους προσποιούνται ότι είναι ο Δίας και μεταμορφώνουν τις κούκλες κουκλοθέατρου που έχουν στους 12 θεούς του Ολύμπου.

Οι τέχνες: Η παιδαγωγός λαμβάνοντας υπόψη τα ενδιαφέροντα των παιδιών τα ρωτάει εάν θέλουν να τους παίξει ένα κουκλοθέατρο με το Δία και τους 12 θεούς του Ολύμπου. Τα παιδιά ενθουσιασμένα απαντούν ότι θέλουν. Κατά τη διάρκεια του κουκλοθέατρου η παιδαγωγός συστήνει έναν-έναν τους θεούς του Ολύμπου και εξιστορεί τις δυνάμεις τους και την ιστορία τους. Στο τέλος ο Δίας ρωτάει τα παιδιά εάν τους άρεσε και τα παροτρύνει να σκεφτούν τι παιχνίδια θέλουν να παίξουν.

Υλοποίηση: Η παιδαγωγός μοιράζει τις κούκλες στα παιδιά και τα παροτρύνει να παίξουν κουκλοθέατρο και να πουν στο Δια τις ιδέες τους με αφορμή αυτό το γεγονός. Η παιδαγωγός λειτουργεί και ως γραφέας στις ιδέες των παιδιών και διευκολύνει τη διαδικασία στο να ενταχθούν στοιχεία εγγραματισμού στις δραστηριότητες αυτές. Οι δραστηριότητες που αποφασίστηκαν και υλοποιήθηκαν ήταν οι εξής:

- Ο Δίας πάει διακοπές

Τα παιδιά ζητούν από την παιδαγωγό να παίξει ένα αστείο κουκλοθέατρο στο οποίο ο Δίας αποφάσισε να πάει διακοπές και άφησε όλους τους υπόλοιπους θεούς μόνους τους χωρίς να ξέρουν τι να κάνουν. Η παιδαγωγός λειτουργεί ως γραφέας στις ιδέες των παιδιών και δημιουργούν την ιστορία. Γράφουν σε ένα μεγάλο χαρτί του μέτρου την ιστορία στην οποία τα παιδιά βοηθούν την παιδαγωγό να βρει τα γράμματα των λέξεων. Μερικές φορές για μεγαλύτερη ευκολία βάζουν εικόνες αντί για λέξεις.

- Η μηχανή του χρόνου

Τα παιδιά σκέφτονται ότι θα ήθελαν πολύ να γνωρίσουν από κοντά τους 12 θεούς του Ολύμπου αλλά συνειδητοποιούν ότι ζούσαν σε μία άλλη εποχή. Αποφασίζουν να παίξουν κουκλοθέατρο το οποίο θα τους μεταφέρει στην εποχή αυτή. Κατασκευάζουν μία κούκλα κουκλοθέατρου η οποία θα ήταν η χρονομηχανή από μικρές χαρτόκουτες και ζωγραφίζουν στα χέρια τους ήρωες της ιστορίας. Με τη βοήθεια της παιδαγωγού η οποία λειτουργεί ως γραφέας αποφασίζουν τις οδηγίες χρήσεις της μηχανής του χρόνου και τις κολλάνε στο σκηνικό της παράστασης. Κατά

τη διάρκεια του κουκλοθέατρου προσποιούνται ότι διαβάζουν τους κανόνες και σημειώνουν/διαγράφουν τα βήματα που ολοκλήρωσαν για να βάλουν εμπρός τη μηχανή του χρόνου. Όταν φτάνουν στην Αρχαία Ελλάδα, γνωρίζουν τους θεούς έναν έναν και κρατάνε σημειώσεις από τις ιστορίες τους.

- Οι 12 θεοί μπερδεύτηκαν

Τα παιδιά αποφασίζουν ότι θέλουν να παίξουν κουκλοθέατρο ελεύθερα με τους 12 θεούς του Ολύμπου. Αναζητούν στο διαδίκτυο εικόνες με τους θεούς του Ολύμπου και ο καθένας επιλέγει αυτόν που του αρέσει πιο πολύ. Τον εκτυπώνουν, τον κολλάνε σε ένα χαρτόνι και τον στερεώνουν σε ένα καλαμάκι. Στη συνέχεια όπως μπορούν γράφουν το όνομα του θεού που επέλεξαν σε μία καρτέλα και ξεκινούν να παίζουν ελεύθερα κουκλοθέατρο. Κατά τη διάρκεια του έργου, οι θεοί έχασαν τις καρτέλες με τα ονόματά τους και έχουν ξεχάσει ποιοι είναι ακριβώς. Το παιχνίδι γίνεται πιο διασκεδαστικό όταν διαλέγουν μία καρτέλα με ένα άλλο όνομα και προσπαθούν να εφαρμόσουν τις δυνάμεις του θεού που λέει η καρτέλα αλλά προφανώς δεν τα καταφέρουν. Τα παιδιά με την ολοκλήρωση του αυθόρμητου κουκλοθέατρου ήταν πολύ ικανοποιημένα και αποφάσισαν να δημιουργήσουν ένα βιβλίο με την ιστορία αυτή. Χωρίστηκαν σε 2 ομάδες: τους συγγραφείς και τους εικονογράφους. Οι συγγραφείς ήταν υπεύθυνοι να γράφουν όπως μπορούν την ιστορία και οι εικονογράφοι να δημιουργήσουν μία εικόνα που να είναι σχετική με το κείμενο/λέξεις από κάτω. Όταν ολοκλήρωσαν το βιβλίο τους, το χρησιμοποιήσουν ξανά και ξανά ως σημείο αναφοράς για να 'διαβάζουν' την ιστορία καθώς παίζουν το κουκλοθέατρο.