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## THE ARTS APPROACH BASED ON THE PRINCIPLES OF DIFFERENTIATED TEACHING AND THE PROJECT METHOD AS A MEANS OF UNIVERSAL DESIGN OF PRESCHOOL EDUCATION. LINKING THEORY TO PRACTICE

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#### Abstract:

The diverse and rapidly evolving society at political, social and technological levels makes Universal Education Planning based on the principles of Differentiated Instruction and the Project method a necessary condition. In accordance with the recommendation of the European Parliament and UNESCO, inclusive education needs to be consolidated. This paper attempts to show that a holistic approach to the Arts can be a main instrument for a pluralistic education space that responds to the wide range of diversity of children. The purpose of this paper is twofold. Firstly, to explore through a literature review the contribution of Arts to the development of a holistic approach to Early Childhood Education for all children without exception. Subsequently, a survey will be examined whether Preschool Educators are aware of and implement Art programs based on the modern pedagogical practice of Universal Educational Planning. The method used is quantitative data analysis using SPSS with random sampling after the distribution of a questionnaire after approval of the Ethics Committee of the Educators regardless of their level of study working in Primary Kindergartens in different regions of Attica. The conclusions that will emerge from the analysis of the data will be useful for the field of Early Childhood Education, because they will be the trigger for further investigation in order to ensure the implementation of effective teaching practices, such as Differentiated Instruction & the Project Method and, by extension, Universal Design for Learning in the field of Early Childhood Education.

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## 1. Introduction

Every prosperous democratic society must ensure that all children, without exception, are given equal opportunities to learn in order to acquire the knowledge and skills necessary for their future economic independence and social autonomy. The educational programme, both at pre-school and school age, must be addressed to the whole child and modern pedagogical practices must be applied, responding to the full range of diversity or differentiation of children regardless of socio-cultural differences, different types of intelligence, with or without special needs (Dokou & Sakellariou, 2019).

In fact, the heterogeneity that is now appearing to a large extent in modern times following the social, economic and political changes that have taken place on the international scene makes Catholic Educational Planning based on the principles of differentiated teaching and the Project method a necessary condition. This is because it creates different 'learning paths' through which children with different abilities, interests and learning needs can acquire knowledge (Argyropoulos, 2013).

Research shows that the intersection of Universal Design for Learning and the Arts can offer attractive learning options in an integrated educational program throughout a child's pre-school and school life (Glass, Meyer, & Rose, 2013). The importance of the role of the visual arts is recognized by the Interdisciplinary Framework of Curricula (2003) and the Detailed Education Program following international efforts that constitute the holistic model of learning (Constantinou, Vaos, & Lavidas, 2015).

Teaching the Arts is more than just providing artistic skills. It contributes to the all-round development of children (Chapman, 1993; Arapaki, 2013; Magouliotis & Labitsi, 2012) by making them culturally and visually literate and equipping them with the necessary competences and social skills to meet the challenges of modern society in the future. And this is achieved for all children regardless of their socio-economic status, as well as any learning difficulties and behavioral problems.

In fact, when the Arts approach is combined with the modern pedagogical practices of Differentiated Instruction and the Project Method maximum learning outcomes are achieved. This is because the teaching is adapted to the individual characteristics, learning profile, language background and interests of the children, respecting the heterogeneity often found in Early Childhood Education and in education in general, as well as the right of active participation of all.

## 2. Universal Design for Learning

Universal Design is the theoretical model developed at the Centre for Applied Technology in Special Education and is the design approach of the educational program

in a way that can respond to a wide range of human skills, abilities, requirements and preferences without any subsequent modifications and adaptations (Giannelos & Mathioudaki, 2017; Padeliadou & Filippatou, 2013).

Based on its principles several models were observed, such as the Universal Instructional Design according to Goff and Higbee in 2008, the Universal Design for Learning according to Rose and Gravel, in 2011 and the Universal Design for Teaching according to Burgstabler in 2012. In the Higher Education Opportunity Act of 2008, Congress defined Universal Design for Learning as the scientifically valid framework for guiding educational practice that (CAST, 2019; Giannelos & Mathioudaki, 2017):

- Provides flexibility in the way information is presented, in the way students express their knowledge and get involved (Tracey, Meyer, & Rose, 2012).
- Reduces barriers to learning, provides appropriate adaptations, support and challenges and maintains high expectations of achievement for all learners, including learners with disabilities, and learners with limited English proficiency (Tracey, Meyer, & Rose, 2012).

The general framework of Universal Design for Learning includes elements from the theories of Piaget, Bruner, Vygotsky and Bloom (Giannelos & Mathioudaki, 2017) and can be divided into two levels, the cognitive level which includes the three neural networks and the implementation level which includes the three basic principles. Its theoretical background is rooted in the research field of neuroscience, which argues that during learning three basic neural networks are activated in the brain: a) the recognition network, which enables the individual to recognize and understand information b) the strategy network, which allows the individual to plan, execute as well as monitor actions c) the emotional network, which is related to the degree of responsibility of the individual towards his/her tasks (CAST, 2019; Giannelos & Mathioudaki, 2017).

These three learning networks correspond and correlate with the three basic principles underlying Universal Design for Learning (Glass, Meyer, & Rose, 2013; Nicolaraizi, 2013): the representation of teaching content (what they learn), student action and expression (how they learn), and the active participation of students (why they learn). More specifically, the presentation of knowledge must be easily understood by all learners with or without educational needs, which is achieved through the provision of multiple means of representation such as auditory, visual and tactile modalities, translation into another language, provision for graded language difficulty in information, reinforcement of the use of cognitive and metacognitive strategies (Padeliadou & Philippatou, 2013). This results in the strengthening of recognition networks.

The second principle of Universal Design refers to the provision of multiple means of action and expression and is necessary to strengthen emotional networks (Giannelos & Mathioudaki, 2017). This entails being able to access a wide range of educational materials and tools, such as educational software that everyone can use and with which they are able to interact with the learning environment and express their knowledge (Nikolaraizi, 2013). It is also based on the principle of providing support to those in need and feedback to help them monitor and evaluate their work (CAST, 2019; Nikolaraizi, 2013).

The third principle refers to the provision of multiple means of engagement in the learning process and is necessary to strengthen the emotional network (Giannelos & Mathioudaki, 2017). According to the Universal Design, the teacher must use a variety of ways to constantly attract the interest of students and achieve their active participation, such as encouraging, motivating and fostering self-regulation skills in order to be effective in engaging them in the learning process (CAST, 2019; Nikolaraizi, 2013).

In general, Catholic Design follows the logic of "*the preventive rather than the curative*" thus minimizing unnecessary physical effort or conditions and following collaborative practices. This fosters a sense of belonging, a sense of common purpose and creates a warm and friendly atmosphere among students, elements that promote not only the will to learn but also collective effort and progress (Trilianos, 2003).

Assistive technology is a valuable aid to this learning model (Miler, 2013), i.e., educational technology applications, which are essential tools for creating a flexible learning environment and thus help everyone, without exception, to access learning (Padeliadou & Philippatou, 2013). This is consistent with the use of age-appropriate software and in particular open educational technology (OET) software that allows active learning and decision-making by children (NAYEC, 2012).

## 3. The Arts as a Means of Universal Design for Learning

The purpose of education is to contribute to the all-round, harmonious and balanced development of children's intellectual and psychosomatic strengths, so that regardless of their socio-economic characteristics, origin, gender and learning style, they have the opportunity to develop into well-rounded individuals and live creatively. This purpose is achieved through the Arts.

This is because, according to the etymological meaning of the term "Art", the "tecton" becomes at the same time a "tecon", that is, one who builds, creates with his thoughts, gives birth to them, materializes them and brings and places them in the world. The Arts have an important place in the field of Early Childhood Education and education in general, as it has been established that they contribute to the all-round development of the child (Cassirer, 1994) to his/her mental balance and the mitigation of psychosomatic and mental disorders (Stephanopoulou, 2015). The benefits of arts education are universal (Hall, 2015).

According to the Pre-School Curriculum, children come into contact with the Arts through Visual Arts, Music and Drama. Through them, they can fully express their personal experiences, ideas and feelings in a variety of expressive forms and then develop the ability to produce creative work. And all this happens spontaneously, in a natural and enjoyable way. The arts are considered suitable subjects for the implementation of the Universal Design for Learning, since by their nature as teaching fields they provide many opportunities for the use of different, alternative ways of presenting knowledge, but also of action and expression (Halkiadaki & Akogiunoglou, 2018). The accessibility of the Arts or its ability to bridge the gaps in learning style, cognitive function and motor skills, is what makes it a valuable tool in inclusive education programs and guides all children without exception towards a mutual learning goal (Woo, 2013).

More specifically, Visual Arts, Drama and Music by their very nature are not only directly aligned in the direction of active learning ("*social constructivism*" of L. Vygotsky) but also constitute a proposal for differentiated teaching and methodology (Study Guide for the Visual Arts, 2011; Teacher's Guide for Theatre, 2011). They can support the implementation of the Universal Design for Learning by helping all children regardless of their socio-economic statuses (Koustourakis, 2013) well as any learning difficulties and behavioral problems (Vaos, 2000). This is because research shows that different children through their involvement with the arts can demonstrate their knowledge in a variety of ways and in a versatile way, as well as develop critical thinking skills, metacognitive skills and self-efficacy, as Francis highlighted in 2017 (Halkiadaki & Akogiunoglou, 2018). The wide range of tools, techniques and materials allows each child to express himself/herself in the way he/she chooses, thus illuminating the uniqueness of his/her personality Halkiadaki & Akogiunoglou, 2018). It is the sensory nature of the arts that makes them an invaluable tool for supporting multimodal, inclusive learning environments (Woo, 2013).

Through the creation and observation of visual artworks, through listening to different types of music, and through role-playing, children are invited to trust and appreciate the ideas of others and, most importantly, to accept and respect anything that is different (Maraveli, Svirou, & Pliogou, 2014). At a cognitive level, they learn the concept of difference and understand its role in human relationships. In terms of skills, they learn to communicate with people of different languages and cultures and in terms of attitudes, they become aware of the concept of coexistence with others (Malafanti & Karela, 2012).

The visual arts are considered to be an appropriate subject for the implementation of the Universal Design for Learning because they provide many opportunities for the use of different, alternative ways of presenting knowledge, action and expression, as well as participation. Also, as a multi-tool, it enables children to become active recipients and participants, and to choose the way that suits them. For example, some prefer to create individually and others by participating in group work, others prefer to engage in painting, others in clay and plasticine with salt dough and plasticine, and others in collage. The options are many and varied, whether manual or digital.

The same is true for Drama and Music. Some children want to sing, others to play, others to dance, others to use the tools provided by technology, to improvise, to play roles

either individually or in collaboration with other children, forming small or larger groups.

It is a creative process that provides children with immediate satisfaction and at the same time a dynamic tool in the hands of the teacher-educator. This is because through the Arts they are able to use strategies that follow the universal design, as they combine visual, auditory and tactile ways of teaching. At the same time, this multiplicity in the way of presentation, action and engagement enhances the motivation for all children to participate regardless of their skills and learning profile.

Through the Arts, children are able to work in conditions of creative upliftment at their own personal pace, which fills them with peace, calm and relief, without being pressured to put more effort into achieving a goal. Along with the positive emotions they experience, interpersonal contact is achieved, building strong social bonds, which will be necessary in the future for children who need social support (Kotsiopoulou, 2018).

In general, the arts, visual, theatrical and musical education and training can create a safe learning environment for all children without exception, while giving them the motivation for a better life. They can also provide opportunities to enhance the capacity for learning, practice, experience and redefinition of principles and values needed in a society, especially one like ours today, which is full of change, contradictions, inequalities, discrimination, tensions and uncertainties (Christidis, 2010). According to Cassirer, "*it is a road to freedom, the process of liberation of the human spirit, which is the true and ultimate goal of all education*" (Cassirer, 1994).

## 4. Characteristics of the Holistic Approach to the Arts

The characteristics of a holistic approach to the Arts that aims at the active participation of all children are as follows (Woo, 2013: Curriculum for Pre-School Education, 2020, Stephanopoulou, 2015):

- The exploratory-reflective approach (principle of constructivism, socio-cultural constructivism) is supported by methods of experiential knowledge acquisition. Knowledge is built by the children themselves in an interaction between them and open environments. They construct their knowledge through exploration, observation and attempting to understand the world around them.
- The empirical-experiential engagement through visits to nature, to the city, to museums, to artists' workshops, as well as through the various forms of Theatre Game.
- Group collaborative practice is applied (Perakaki, 2009) which encourages cooperation between children, the exchange of opinions, ideas, skills and the application of decisions during the implementation of a visual, musical or theatrical activity.
- The approach of Arts is interdisciplinary with the project method (Interdisciplinary Work Plan), where the interconnection with other pre-school

education courses is achieved, as well as with the application of mixed pedagogical practices (Koustourakis, 2013; Stephanopoulou, 2015, Foti, 2020).

- The collection and organization of materials and tools by the Educator are done in such a way that the children can easily find and select them on their own according to their expressive goals and abilities, which is an important part of the artistic process (Chapman, 1993).
- The use of new technologies age-appropriate for preschool children and especially open educational technology (Open Educational Technology) (Foti, 2020). The use of Web 2.0 applications has the power to pave the way for self-directed learning and the equal participation of all children, regardless of any learning and behavioral difficulties and problems, through the provision of a variety of media with particular flexibility (Toki & Drosos, 2019) involving many senses with beautiful colors and graphics.
- There is an atmosphere of creativity, joy, enthusiasm and acceptance in the classroom. There is an atmosphere that allows children to invent, improvise and invent in their own way, without feeling judged or evaluated (Kotsiopoulou, 2018). They are able to be free, to be themselves without feeling anxious or insecure ((Faure & Lascar, 1994).
- The role of the Educator is supportive, encouraging and focused on building the positive self-image of all children regardless of their age. More specifically: a) organizes and ensures an appropriate learning environment in a way that promotes learning for all children; b) builds a culture that fosters creativity, ingenuity, experimentation, constructive receptivity to error, risk-taking and criticism; c) promotes a positive social environment by bridging potential inequalities; d) interacts effectively with children by helping them to develop their ideas and is a partner in the construction of knowledge.

Through the spirit of a holistic approach to the Arts, all children succeed in developing their innate and potential abilities and skills, as well as using many types of "intelligence" (Stephanopoulou, 2015) in a natural and enjoyable way. A natural consequence of this approach is to produce multi-dimensional, creative and innovative individuals (Hall, 2015).

## 5. Material and Methods

This chapter presents the methodology on which the research was based, namely the purpose and objectives of the research, the research questions, the research procedure, the sample of the surveyed population, the research instrument, the processing and analysis of the findings and finally the results.

The present research will examine whether Early Childhood Educators implement Art programs with the Project method, respecting the principles of Differentiated Instruction, with the ultimate aim of revealing whether this holistic approach is a main instrument of Universal Design for Early Childhood Education.

The research population consisted of Early Childhood Educators regardless of their educational level. Given the fact that the population under investigation was large in number, sampling was done and a random sample of Early Childhood Educators was selected, representative of the population from which it came. More specifically, the sample consists of 68 Early Childhood Educators working in Municipal Kindergartens in various regions of Attica.

"All research is the result of mature thinking and serious reflection and even more serious planning" (Dimitropoulos, 1994). The process followed in this research was based on the above fact and was shaped through specific stages. In the first stage, the questions were recorded and weighted against the purpose and individual objectives. After the relevant consultation with Dr. Foti Paraskevi, for the review and approval of the questions, the necessary corrections, modifications and additions were made and the content of the questionnaire was finalized. In the second stage, the questionnaire was created with the help of the Microsoft Forms application, which is compliant with the General Data Protection Regulation (GDPR), thus respecting all the requirements for its publication and for the safeguarding of the participants in it. The survey was conducted between 19 December 2022 and 2 January 2023.

Then the sharing was approved by the Ethics Committee of the University of West Attica using a link via messenger to Pedagogical Staff and those who wanted to complete it. The third stage involved the construction and coding of the data, as well as their statistical analysis, which was carried out with the help of the statistical program SPSS Statistics version 27.

Analysis of the survey results was carried out through graphs and tables. First, descriptive analyses were conducted followed by correlation tests using the X2 criterion and ANOVA to determine whether age and educational level are correlated with Preschool Teachers' responses regarding ICT and Universal Design of Education. X2 is performed between two qualitative variables to test whether there is a relationship between them and ANOVA test because the dependent variable is ordinal and the independent variables are qualitative.

## 6. Results and Discussion

68 Early Childhood Educators participated in this survey, all of whom were women. Most of the educators were aged between 41 and 50 years old as shown in Figure 1, they were graduates of University and Technological education (49,3%) and 23.2% of the participants were graduates with a Master's degree as shown in Figure 2. All of them worked in a public kindergarten. Still, most of the teachers reported that they were working as permanent employees and the total time of professional experience was equal to more than 21 years (43.5%) as shown in Figure 3.

Subsequently, the survey revealed that most of the participants were often involved in the arts (see Figure 4), they stated that their involvement in the arts (Visual Arts, Drama, Music) gives them a sense of creativity (73,9%) as shown in Figure 5 and they agreed that visual arts are defined as "the ability one has to give form to matter, to depict and represent it" (84%) as shown in Figure 6. Most of the participants (85%) also agree that theatre play is defined as 'imitation of action', i.e. the representation of an action or a series of actions and is the point of convergence between theatre and play (see in Figure 7); 89,9% agree that music is defined as 'a set of sounds organized in such a way that they have a rhythm, melody and ultimately to be a pleasant sound for humans" as shown in Figure 8.

Figure 9 shows that most of the participants know either a lot or a lot about the contribution of the Arts to the child's all-around development (33.3%). 26.1% of the participants know a lot about the contribution of the Arts to the child's all-round development and 7.2% of them know very little about the contribution of the Arts to the child's all-round development. Figure 10 shows that most participants strongly agree that exposure to the arts helps the child develop social skills (56.5%). 42% of participants agree that exposure to the arts helps the child develop social skills and 1.4% of them neither agree nor disagree that exposure to the arts helps the child develop social skills and 1.4% of them neither

Figure 11 shows that most of the sample reported that the approach of the Arts in their educational program is not at all based on the principles of Differentiated Instruction (27.5%). 21.7% of the participants reported that the approach of the Arts in their educational program is quite based on the principles of Differentiated Instruction, 20. 3% of them reported that the approach to the Arts in their educational program is very much based on the principles of Differentiated Instruction, 17.4% of them reported that the approach to the Arts in their educational program is very much based on the principles of Differentiated Instruction, 17.4% of them reported that the approach to the Arts in their educational program is very little based on the principles of Differentiated Instruction, and 13% of them reported that the approach to the Arts in their educational program is very much based on the principles of Differentiated Instruction. and they applied the Project method quite a lot in their educational program. Figure 12 shows that most of the participants apply the Project method a lot in their educational program (37.7%). 18.8% of them apply the Project method a lot in their educational program and 13% of them either apply the Project method a lot in their educational program and 13% of them either apply the Project method a lot in their educational program and 13% of them either apply the Project method a lot in their educational program and 13% of them either apply the Project method a lot in their educational program and 13% of them either apply the Project method a lot in their educational program and 13% of them either apply the Project method a lot in their educational program and 13% of them either apply the Project method a lot in their educational program and 13% of them either apply the Project method a lot in their educational program.

Also, most of the participants (65.2%) have knowledge of ICT applications, they reported that the Arts approach is not at all enriched by the use of Technology in their pedagogical program (see Figure 13) and they are definitely interested in attending a seminar on the application of ICT in Early Childhood Education in the future.

Subsequently, most participants (42%) agree that the Arts approach based on modern pedagogical practices (Differentiated Instruction and Project method) can be a main instrument of Universal Design for Early Childhood Education as shown in Figure 14 and that Universal Design for Learning in Early Childhood is necessary. Also, most of the participants (73,9) stated that it is necessary to implement Universal Education Planning in Early Childhood because there are children who do not know the Greek language well, with different learning profiles, with behavioral disorders and with motor difficulties and stated that the Arts approach based on modern pedagogical practices is a main instrument of Universal Education Planning in Early Childhood, because there are children who do not know the Greek language well, with different learning profiles, with different learning profiles, with different learning styles and with different learning styles Figure as shown in 15.

60,9% of the participants stated that they definitely have the need for training regarding the implementation of this modern pedagogical practice (see Figure 16) and stated that it is imperative that Early Childhood Educators are trained on Universal Early Childhood Education Planning and that it should be implemented. Since this encompasses the concept of inclusion, acceptance and teamwork.

Subsequently, the study revealed that there is no statistically significant relationship between the age of the Early Childhood Educators and their knowledge in the implementation of ICT, their knowledge of the implementation of ICT in Early Childhood and the extent to which the Arts approach is enriched by the use of Technology in their pedagogy.

Further, the study revealed that to the extent that the Arts approach is enriched with the use of Technology in their pedagogical program, as the level of education of the participants increases, their interest in attending a seminar on the application of ICT in pre-school increases and that Postgraduate degree holders perceive to a greater extent that the Arts approach is enriched with the use of Technology in their pedagogical program compared to others.

The survey then revealed that there is no statistically significant relationship between the age of Early Childhood Educators and the reasons for implementing Universal Pre-School Age Education Planning (see Table1), that there is no statistically significant relationship between the educational level of Early Childhood Educators and the reasons for implementing Universal Pre-School Age Education Planning and the reasons for implementing Universal Pre-School Age Education Planning and that the Arts approach is based on modern pedagogical methods (see Figure 17). While as the level of education of educators decreases, the percentage of those who do not know the reasons why the Arts approach based on modern pedagogical practices is a main instrument of Universal Early Childhood Education Planning increases.

Furthermore, the survey revealed that educators who held a post-graduate degree agree to a lesser extent than the Arts approach based on modern pedagogical practices (Differentiated Instruction and Project method) can be a main instrument of Universal Early Childhood Education Planning compared to educators who are graduates of Technical High School and graduates of Secondary Education School. Finally, no statistically significant difference was found between the age and educational level of the participants and the importance of Universal Design for Learning in Early Childhood. Finally, it is extremely interesting to convey the views that Early Childhood Educators recorded in the online anonymous questionnaire on the Universal Design for Early Childhood Education:

"It is a program that helps children in early childhood holistically"

"More and mandatory training for those involved in early childhood"

*"Educators who have graduated several years should be trained on universal education planning so that they can use it properly in the educational process"* 

"I would like to know more about Catholic Education Planning"

"I believe that it should be the basic method of early childhood education and that all educators should be trained regardless of their level of education"

"It is imperative because of the learning heterogeneity that is currently observed"

"I believe that Universal Early Childhood Education Planning is imperative in order to ensure equal participation of all preschool children"

## 7. Conclusions

The approach of the Arts (Visual Arts, Theatre, Music) based on the principles of Differentiated Instruction and the Project method has an important place in Early Childhood Education, because it contributes to the all-round development of children and to the formation of socially minded individuals, individuals capable of expressing what they want from life and to play an active role in social events as free citizens. Moreover, they are considered suitable subjects for the implementation of the Universal Design of Education, since by their nature as teaching fields they provide many opportunities for the use of different, alternative ways of presenting knowledge, but also of action and expression. This is because they have the potential to bridge gaps in learning styles, cognitive functioning and motor skills, thus achieving active participation of all children.

From the literature review, both foreign and Greek, the collection of data from books and scientific articles, it is clear that the Arts approach is a teaching method with diverse educational value, as well as a means of total education that serves a wide range of children. In a natural and enjoyable way, all children without exception can fully express their personal experiences, ideas and feelings in a variety of expressive forms and then develop the ability to produce creative work. They are also given the opportunity to accept cultural diversity and perceptions that differ from their own, so that their way of thinking becomes multidimensional, acquiring the dynamics of respect for heterogeneity. The modern pedagogical perception no longer focuses on the necessity of the visual arts, theatrical play, music and the arts in general in pre-school education, which is taken for granted, but on their better use. Their approach on the part of Early Childhood Educators and teachers, in general, must be based on modern pedagogical practices in order to provide flexibility in the way information is presented, in the way children express their knowledge and engage them. In the light of universal design, design for all, barriers are reduced and high expectations of achievement are created for all children, regardless of cultural, socio-economic characteristics, gender, as well as learning style, which means that a 'sense of belonging', the existence of a common goal, and the creation of a warm and friendly atmosphere among them are reinforced. A natural consequence of this is the promotion of collective effort and progress.

In the same direction, the use of new technologies and especially open-type software, age-appropriate for children of pre-school age, is also aligned with the Universal Design of Education in Early Childhood Education and Training. This is because educational technology applications are essential tools for creating a flexible learning environment and thus help everyone to access learning. They have the power to pave the way for the equal participation of all children regardless of any learning and behavioral difficulties and problems.

The survey conducted by distributing a questionnaire appropriately structured through the Microsoft forms platform that is compliant with the General Data Protection Regulation (GDPR) showed that a large percentage of 94.2% of Early Childhood Educators are often to very often involved in the arts and agree on their pedagogical value and their contribution to the all-round development of children and the cultivation of their social skills.

According to the survey, the Educators apply the Project method, although by a large percentage of 44.9%, their approach is hardly based on the principles of Differentiated Instruction and is not enriched by a large percentage of 52.1% with the use of Technology. There is a statistically significant difference in this respect from the Early Childhood Educators with a high level of education, who hold a university or Technological Education, as well as a Master's degree.

Also, the majority of Early Childhood Educators agree that it is necessary to implement the Universal Design of Education in Early Childhood and consider that the Arts approach based on the principles of Differentiated Instruction and the experiential and child-centered Project Method is a main tool of the Project, because it helps children who do not know the language well, children with different learning styles, with behavioral disorders and with motor difficulties.

There is a strong interest in training on the application of Information and Communication Technology (ICT), as well as a clear need for training in the application

of the modern pedagogical practice of Universal Design for Learning (UDL), as a significant percentage of Early Childhood Educators do not have sufficient knowledge.

The implementation of the Universal Learning Design in pre-school education and in education, in general, is an urgent need nowadays in the complex society we live in due to the economic globalization, the rapid technological development, the cultural diversity that prevails after the increase of the migratory flow, a fact that unfortunately is not observed according to the results of the research. There is therefore an undeniable need to modernize educational teaching and to broaden the strategies for a pluralistic area of pre-school education. In order to achieve this goal, those who are responsible for the planning of the Educational Policy in Early Childhood Education must undertake the training of Early Childhood Educators in order to ensure the implementation of this universal learning design.

Only then will the Catholic Learning Design become an integral part of the daily curriculum for every Early Childhood Educator working in the field of Early Childhood Education and Education with the Arts as a valuable helper.

#### 8. Recommendations

The conclusions that emerged from the evaluation and assessment of the findings are useful for the field of Early Childhood Education, because it emerges that the holistic approach of the Arts in the kindergarten meets the needs of all children without exception and is a means of Universal Education Planning, which is an urgent need nowadays. All of this will be the impetus for further exploration to ensure the implementation of these effective teaching practices in general. Therefore, it is deemed necessary to investigate whether Preschool Teachers implement Project-based Art Programs by respecting the principles of Differentiated Instruction in the Kindergarten setting as well. In fact, this research should be extended to both the public and private sectors with the ultimate aim of drawing conclusions at a more generalized level and extending to the wider field of Pre-school Education.

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## **Conflict of Interest Statement**

The authors declare no conflicts of interest.

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## Appendix

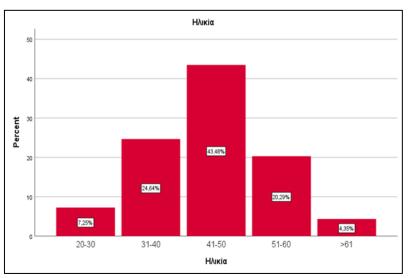
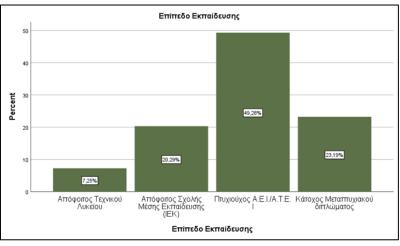
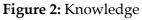


Figure 1: Age





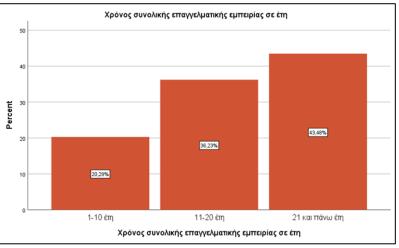


Figure 3: Professional experience

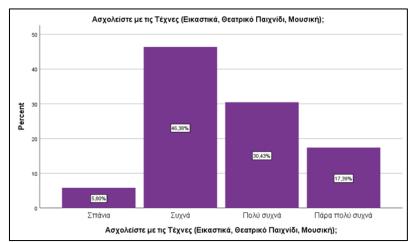


Figure 4: Frequency of involvement in the arts (Visual Arts, Drama, Music)

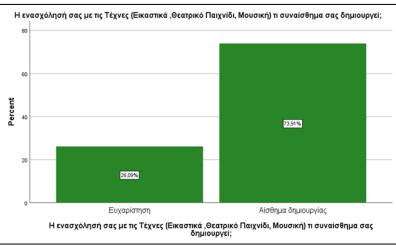
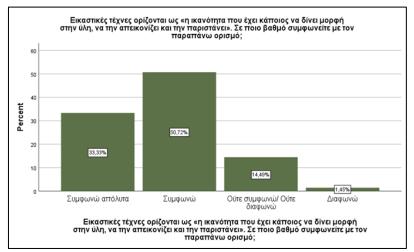
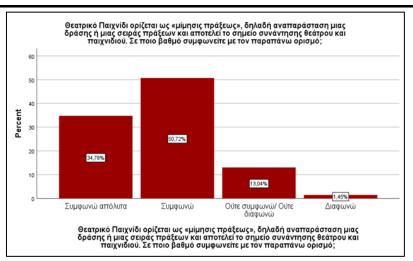


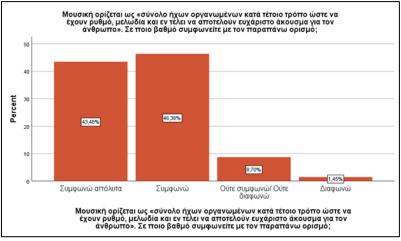
Figure 5: The feeling created by their involvement with the Arts (Visual Arts, Drama, Music)



**Figure 6:** Degree of agreement for the visual arts is defined as "the ability one has to give form to matter, to depict and represent it"



**Figure 7:** Degree of agreement for theatrical play is defined as "imitation of action", i.e. the representation of an action or a series of actions and is the meeting point of theatre and play



**Figure 8:** Degree of symphony for music is defined as "a set of sounds organized in such a way that they have rhythm, melody and are ultimately pleasing to the ear"

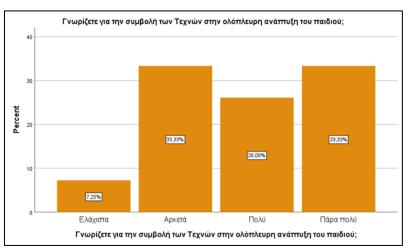
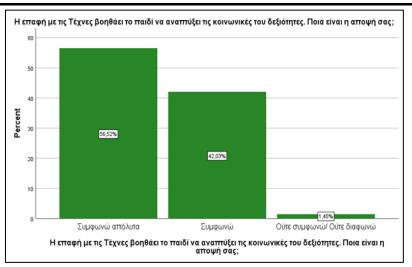
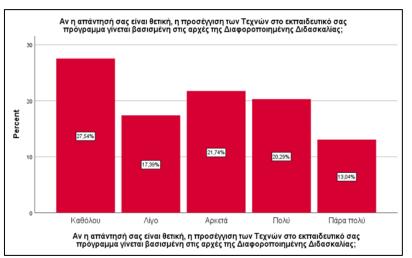


Figure 9: Knowledge of the contribution of the arts to children's all-round development



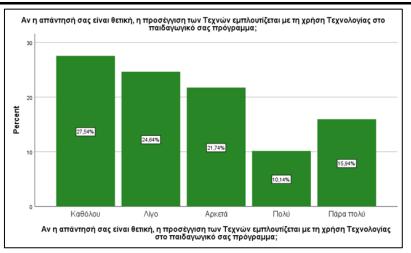
**Figure 10:** The degree of agreement that contact with the arts helps the child to develop social skills

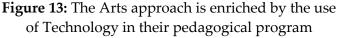


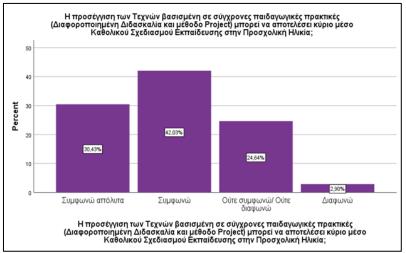
**Figure 11:** The approach of the Arts in their curriculum is based on the principles of Differentiated Instruction

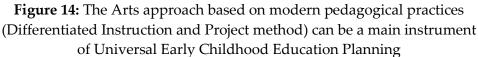


Figure 12: Degree of application for the Project method in the educational program











**Figure 15:** Reasons for implementing Universal Design for Early Childhood Education and Training

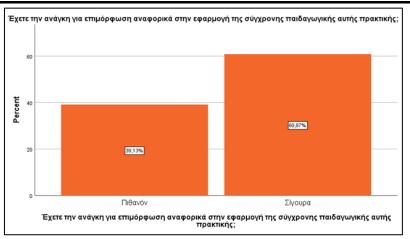
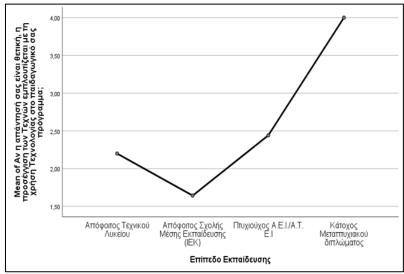
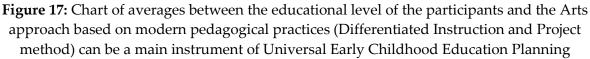


Figure 16: Need for training regarding the implementation of this modern pedagogical practice

# **Table 1:** ANOVA test between the age of the participants and the Arts approachbased on modern pedagogical practices (Differentiated Instruction and Project method)can be a main instrument of Universal Early Childhood Education Planning

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5,903	4	1,476	2,355	,063
Within Groups	40,097	64	,627		
Total	46,000	68			





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