



ANCIENT GREEK LANGUAGE IN PRE-SCHOOL EDUCATION THROUGH AESOP'S FABLES WITH THE CONTRIBUTION OF ICTS - AN INTERVENTION PROGRAM

Paraskevi Fotiⁱ

Dr., Educational Coordinator
in third region of Attika,
Greece

Abstract:

In this paper we present an educational intervention that took place in kindergartens of Athens during 2016-2017. It was intended to bring children in touch with the Ancient Greek language and art in a playful way, which included Aesop's fables set to music and the contribution of ICTs. Children had the educational experience through specific visual and perceptive exercises in which they participated, came in touch and understand Aesop's fables in Ancient Greek language, which they "sang" and played with the contribution of specific educational software.

Keywords: ancient Greek, kindergarten, music, Aesop's fables, educational software

1. Introduction

Research data from the fields of Neurosciences and Psychology during the 20th century, suggests that cognitive, linguistic and socio-emotional development are largely shaped by the first six years of the child's life. At the same time, the experiences of the children during infancy and early childhood influence their subsequent progression in school and their lives, justifying the great attention paid to pre-school education today, as well as the increasing worldwide interest in pre-school education; as well as its inclusion by government agencies in the legislative framework as compulsory, under Law 3518/2006. A young child represents the future, a future full of hope, prospect and potential which will develop over time (USPG, 2002). Education is the means of converting our abilities into skills and that must start in children's early ages (Robinson, 1998).

For a child who starts their educational course in kindergarten, adopting positive attitudes towards school and cultivating learning incentives is extremely important - even more than acquiring knowledge and skills, as stated by Katz (1993). Therefore, it is necessary to develop a functional learning environment which will be rich in stimuli and

ⁱ Correspondence: email vivifoti@gmail.com, pfoti@uniwa.gr

will encourage children to explore and discover learning by solving real problems; a didactic model which allows the child to seek, comprehend and apply “useful knowledge”. Children are involved in social issues, in their own way and according to their own needs, while relating their task to the real world; a fact which sensitizes and integrates them into the community in the best possible way (Nagel, 1996). Children can achieve knowledge building by developing curiosity and judgement within a context where learning activities will have meaning for them and will help them to better understand facts and phenomena of their environment (Doliopoulou, 1999/2004).

When a child goes to kindergarten, they are making a very important step towards learning and living, making the transition from the home to a more organized school environment; a transition which will greatly influence their stance towards school. A child in kindergarten receives “ἀγωγή”, i.e. education, a word derived by the word “ἄγω”, which means to lead somebody towards a specific direction or objective; namely, the child is being led to their somatic-spiritual and intellectual maturity through a harmonious coexistence with the environment.

Kindergarten is a space within which the children are acquainted with a variety of languages, cultures, as well as skills; since each child has their own rhythm of development, is in a different stage of development, possibly speaks a different language and lives in a different home environment. All the above differences comprise opportunities through which one child learns from the other, and together they will become the members of a small society.

The exploration of new ideas and innovative practices which can be applied in kindergarten school, have led to the main theme of this research. The study of research which has been conducted in Greece, as well as in other countries, and the bibliographic review, led to questions which formed the structure of this paper.

- How can Ancient Greek contribute to Psycho-educational Development of a pre-school Child?
- Which research has already been conducted in Greece and abroad that can prove the power of the Greek language and its effects on the brain?
- How could kindergarten children be taught Ancient Greek through a playful, educational intervention?
- What would be the contribution of Aesop’s Fables in this intervention by initially exploring the pedagogical and didactic importance of folk narratives?
- How could technology help, through educational programs?

2. Theoretical framework

The Ancient Greek is a lively language which can sharpen the mind and our visual-perceptual skills. Research of the Open Psychotherapy Centre was conducted by Ioannis Tsegos, with 50 normal children, aged 6 to 9, divided into two fully compatible groups, each consisting of 25 children. The research investigated the reasons behind learning difficulty; one group of children attended an additional two hours of Ancient Greek

lessons per week. Their assessment was conducted with the IQ test W.I.S.C.-III, which has been calibrated in our country by Psychology Professor D. Georgas and the psycho-educational test "ATHENA", which was created and calibrated on Greek children by Psychology Professor I. Paraskevopoulos of the department of Philosophy, Pedagogy and Psychology. The data collected was studied by using standardized statistical methods, T-test, Paired T-test, as well as non-parametric tests (Tsegos, 2005).

From the very first phase of research, which lasted nine months, improvement of certain cognitive functions of the children, aged 6-9 years, was observed; especially of visual-perceptual functions, such as perception (perceptive ability) and memory (mnemonic retention). In the final phase (the third examination) of the research, as was initially planned, the same children, but of older ages (5th, 6th grade), were tested, aiming at examining skills and functions which correspond to those ages.

At this stage, it was observed that "multitonals" dominated once more, with statistically important upward differences in sub-tests which concerned verbal skills, such as Vocabulary, Verbal Understanding, Concept Generation, Generalizations and Categories, that is, skills in Abstract Thought and Linguistic Development.

There was also a statistically important upward difference in a test regarding Visual-Perceptual abilities, such as Optical Short-term Memory, writing accuracy, symbol processing speed, hand-eye coordination, the ability to learn in general and proper adaptation to school type work. The "monotonals", in contrast, did not present any statistically important upward tendencies in any of the abilities and functions which were examined, while downward tendencies were observed in certain Verbal and Visual-Perceptual abilities.

Kate Chanock (2006), an Australian researcher, described how Ancient Greek helped a dyslexic English speaker to become non-dyslexic, while, by political decision through the educational reform conducted in Great Britain, Ancient Greek will be taught in schools, so that students can learn proper "English" (Beard, 2010).

Iris Project was an educational charity institute, founded by Dr. Lorna Robinson in 2006, in an attempt to introduce the ancient languages of Greek and Latin to all of Britain, through narration activities, dramatization and theatre. It began, initially, with a free magazine which was given to students of elementary schools, and language lessons on weekends, which subsequently expanded to the cities of London and Oxford as a literacy program (Wikipedia, 2012).

The central question of the research was to approach the ancient Greeks in a playful manner. The notion of using a playful approach to Aesop's fables is the main didactic and methodological pedagogy, combined with the musical accompaniment of the fables. Using musical intelligence (according to Gardner, 1993) along with the linguistic, spatial and kinesthetic intelligence allowed us to make an interdisciplinary connection of cognitive fields, using as many types of intelligence as possible (Matsaggouras, 2002).

3. ICT in the educational intervention program

We live in a time where the acquisition of “computer culture” allows us to conform to the demands of today’s society and intensifies the need for ICT integration in the educational process. Therefore, the utilization of new technologies potential in the learning process and involvement of the students in utilizing new digital tools which serve learning purposes are considered necessary.

The researcher, in order to include the ICT in the educational intervention program, paid special attention to questions and concerns with which pre-school educators are preoccupied, and those are summarized by Zarani and Economides (2009):

- Where? When? How? Why? For how long?
- Can they be organized by other means (e.g. supervisory material) and if so, why choose to use a computer in this specific case?
- Do they support the overall development of the child?
- Do the children want to participate, or do they feel pressured and do they protest?
- Are those activities harmoniously combined with the rest of the program?
- How much time of computer occupation will their completion need?
- Do they follow the principles of constructivism, exploratory learning and critical pedagogy?
- Do they allow cooperation, interaction and communication between children?

The points mentioned above were questions which the researcher seriously considered before creating and preparing the children’s activities with ICT and the software which was finally selected.

For this educational intervention, the Hot Potatoes Software was used because it is an open-ended software program, with which comprehension and ancient Greek word matching exercises can be made - words that the children learned through contact with the three fables of Aesop and their images and the teacher can easily create many different types of exercises in the form of web pages (html). The individual Hot Potatoes 6.2 programs are called JQUIZ and JMATCH, and they allow us to speak of evaluation of the educational intervention program in the form of play, because it combines learning with play, transforming it into a pedagogical tool for the researcher, but also a type of feedback of the educational material produced. The JQUIZ and JMATCH educational tools were used to map pictures of the phenomenon in the order of occurrence and corresponding words, where the children had to match the ancient Greek words to the new Greek words. Consequently, students can access it through the local network and when the exercises are appropriately combined with the lesson, in this intervention with the fable, the program offers opportunity for feedback and becomes a worthwhile tool in the hands of the educator, who will not have to be limited to a simple teaching assessment machine.

Based on the above data, an Ancient Greek Quiz was created for the children by the researcher, through the Hot Potatoes software for understanding and evaluating achieved knowledge, and especially with the JQUIZ tool, which is used to match images of the phenomenon in the order it occurs and corresponding words, where the children

had to match the ancient Greek words to the Modern Greek words, by moving the mouse and simultaneously observing the on screen cursor, and “dragging” the cursor to a specific spot by clicking the left mouse button once (single click).

After completing this Ancient Greek JQUIZ, which included three questions of matching ancient Greek words to Modern Greek words, a matching exercise followed, using the same Hot Potatoes software and the tool JMATCH, which was also designed by the researcher. In this exercise, the children had to match the ancient Greek words to the Modern Greek ones, by moving the mouse and simultaneously observing the on screen cursor, and “dragging” the cursor to a specific spot by clicking the left mouse button once. In this manner, they were basically solving a crossword with ancient and Modern Greek. In both Hot Potatoes software exercises, the children could see their scores, as well as the right answer, which they had to find in order to complete the exercise. The score was on a scale of 100/100.

These activities were based on behavioral learning theories, where learning is related to the stimulus-response connection and requires the active involvement of the student. Repetitions reinforced connections, so did learning. Guidance, teaching and practice software is based on these theories, but also on the view that the best way to learn and develop children's knowledge and attitudes is to experiment and actively engage the child.

As a continuation of the previous paragraph, the characteristics of visualization, experimentation, and curiosity activation, as well as the enhancement of students' memory skills and metacognitive ability.

4. Methodological framework

The research – action was the methodological tool that took place in schools, because the teacher himself is simultaneously the researcher and the one who acts; in fact, he is the one who investigates, assumes a central role in the research process, designs the research program and actively participates in the whole educational process by formulating assumptions, strategic actions and making assessments. The research-action was in a small-scale intervention in the operation of the real world and the close examination of the effects of this intervention. The research - action was thorough and with specific purpose, it was collaborative, with the participation of 25 class teachers, it was participatory, with the participation of all the members of the groups, as well as self-evaluative, because the modifications are constantly evaluated, since the final goal is to improve the practice in one way or another.

We used the random sampling method for the formation of the total sample and the six groups from the existing kindergarten classrooms. The method of participatory observation was used to extract information and collect data, as the observer was an element directly related to the situations under observation (Delamont & Hamilton, 1993).

4.1. Sample

Regarding the sample of children participating in the intervention, 87 of them were girls (49.4%) and 89 were boys (50.6%) (see Figure 1), i.e. the total sample consisted of 176 children. The relatively large number of both the children involved in the research and the measurements required by our research tool resulted in lots of time required to collect the necessary data.

4.2. Material

Within the context of the intervention, five tests were given to students, which were evaluated by the researcher. The areas assessed were understanding, time-perception, matching, visual ability and visual-perceptual ability. The following table shows the arithmetic averages and the standard performance deviations per fable and assessment field.

The Aesop's fables presented to the children were the Turtle and the Hare, the Dog and the Fox and the Jitsiks and meringues. Initially, there was the discussion and the discovery of prior knowledge of pupils through question and answer and the contribution of the puppet theater to the two ancient Greek dolls (bell-shaped) introduced to children as Fivos and Athena. Followed by the narration of the myth with the presentation of the images (visualization of the myth) and the first activity (understanding of the text) the next visit to the schools, was initially followed by the song. Within the context of the intervention, five tests were given to 276 students, which were evaluated and were statistically processed with the advanced SPSS IBM Statistics 21 by the researcher.

4.3 Criteria of evaluation

The areas assessed were understanding, time-perception, matching, visual ability and visual-perceptual ability. The following table shows the arithmetic averages and the standard performance deviations per fable and assessment field (see Table 1).

5. Results

Specifically, in terms of fable understanding, in the first myth the average children's performance is 74.43% in the second 83.69% and in the third it is increased to 92.78% (see Figure 2).

In terms of time capacity, in the first myth it was 75.80%, in the second myth 86.70% and in the third it was increased to 93.35% (see Figure 3).

As for the correspondence of the ancient with the new, in the first myth the percentage was 84.49% in the second 89.66% and in the third it was increased to 96.93% (see Figure 4).

In terms of visual ability in the 3 fables the average performance in the first myth was 77.33%, in the second myth 86.55% and in the third it was increased to 94.15% (see Figure 5).

Finally, in terms of visual-perceptual ability with accents, the average children's performance was 70.54%, in the second myth it was 77.78%, and finally in the third myth it was increased. at 86.70% (see Figure 6).

The parents participated in the whole educational program with questionnaires given at the beginning, middle and end of the intervention and formed the basis for reflection and feedback on the continuation of the program. The age range of parents was between 30-40 in 57%, 52.6% in primary education and 31.4% in secondary education, 93.7% Greek and 81.8% national origin. had contact with ancient Greek in secondary education. Through the statistical analysis of the educational intervention, according to the parents and the feedback received from their children, the rates were initially 85.1%, then 94.3% and finally 98.9%, while regarding the question of their child's interest in intervention, it was initially 83.5%, then reached 99.4%, ensuring and demonstrating once again the success of educational intervention (see Figure 7).

The effectiveness of the program and its success were evaluated by all 25 teachers who participated, anonymously, in evaluating and completing questionnaires before, during, and at the end of the intervention. 72% of teachers were high school graduates and 28% had a postgraduate degree while the average age was 37.2.

After processing the teachers' questionnaires, it appeared that the teachers found that this intervention program succeeded in contributing to all areas of development, namely reading, language, visual-perceptual memory, mathematical thinking, in writing, creativity and expression but also in ICT, with the highest rates in children's musical development and cultivation, children's visual-perceptual memory, language development and in mathematical thinking.

The results of the evaluation of the questionnaires completed by the teachers showed that the overwhelming majority of teachers (88%) considered and considered the specific intervention program of Ancient Greek as beneficial for children, while in terms of the interest shown by the children throughout the program, the teachers in the departments considered that they were very high, at 92%, and agreed to be included in the curriculum (see Figure 8).

It is worth mentioning that the younger teachers were more positive about the interest of the children, while the benefit was equally positive at all ages.

6. Discussion

Specific proposals arising from the results of our intervention to design appropriate programs for pre-school age are:

- To integrate the ancient Greek lesson in the curriculum of the kindergarten and on the axis of the already existing Unified Cross-thematic Curriculum Framework entitled "Child and Environment" as a separate unit called *Child and Ancient Greece* and to include: familiarization of children with Ancient Greece,
- familiarization with Ancient Greek Art and its forms of expression,

- familiarization with the Ancient Greek Language. He previously mentioned axes of *the Child and Ancient Greece* unit should be approached in teaching forms and ways whose their main feature and component will be the gaming, experiential and inventive education of children, i.e. their active participation.
- To enrich the curriculum with appropriate teaching material and specific educational suggestions that are suitable and that the pre-school teachers are able to use, adapt and "match" them to classroom and pupil data. This material should be based on the power of the image and of music, but also on the power of ICT and the computer and to be suitable for the developmental level of children, while at the same time to be able to stimulate the interest and attention of the pupils.

The behaviourists maintained the concept of reinforcement and reward with the right frequency of praise to strengthen the child's dedication; from Piaget's cognitive theory, shaping materials to fit the age and the intellectual level of children; from the socio-cultural approach of Vygotsky, the zone of proximal development and the highest potential level that the child can conquer, as well as the concept of guided participation and the role of the educator as a facilitator who allows the child's agency and learning through their mistakes.

The basic idea of Bruner's theory that the educator, knowing the level of the child, can teach "anything", as long as it is comprehensible to the child, was maintained; in accordance with this, the teaching of the intervention was adapted by activating all three ways of teaching proposed; and finally, from Gardner's multiple intelligences theory, combining forms of intelligence, mobilizing the interest of more children and making a cross-link of cognitive areas, using multiple intelligence types (Matsaggouras, 2002).

The specific intervention program of ancient Greek through Aesop's fables set to music showed with empirical evidence its successful contribution to children, in terms of cultivation of language, mathematical and visual-perceptual abilities as well as familiarization and acquaintance with the ancient Greek language and Art. Based on the playful approach, the researcher tried to "unite" Music, the ancient Greek Language and Pre-school Education by forming an educational intervention program that was evaluated as successful by parents, teachers and, mostly, by children, bringing them in contact with the language of their ancestors being spoken until today in an experiential way.

About the Author

Paraskevi Foti is a Coordinator of the Primary and Secondary Education at the 3rd Region of Attica (Greek Ministry of Education) and formerly Head of the 4th Kindergarten of Agia Varvara. She has studied piano and higher theory at the National Conservatory of Athens and has completed her master's degree in Intercultural Education and Management of Diversity. She completed her second degree in Psychology at Ethnic Kai Kapodistrian University of Athens with a specialization in Psychology and at the same department she completed her doctoral dissertation with the title: "The contribution of ancient Greek language to art and language of Aesop and the added value of ICT

Technology". Her first book, entitled "Otherness, Prejudice and Stereotypes in the School Class. Teacher Management Methods" (2016, Athens: Grigoris) was selected as a university book at Harokopeio University of Athens and also, she has participated in a collective volume on Teaching Scripts through ICT. (2017, Athens: Grigoris). She has published in international and national conference proceedings as well as in scientific journals and has a keen interest in Information and Communication Technologies and their contribution to the teaching process while being an eTwinning and Moodle trainer in support of open source software. She is a Researcher Associator in the Early Childhood Department of Education and Care at the University of West Attica teaching the courses in "Children's Literature" and "Pedagogy of Image" and in the Interdisciplinary Program of Pedagogy through New Technologies.

References

- Beard, M. 2010. The Parthenon Harvard University Press
Bernstein, L. 1976. The unanswered question: Six talks at Harvard. Cambridge, Mass: Harvard University Press,
- Brown, J., Sherill, C., & Gench, B. 1981. Effects of integrated Physical Education .Music program in changing early childhood perceptual motor performance. *Perceptual and Motor Skills* 53 :151-154.
- Chanock, K. 2006. Help for a dyslexic learner from an unlikely source: the study of Ancient Greek. *Literacy, Volume40, Issue 3*: 164-170.
- Dalcroze, E. J. 1921/1967 *Rhythm, Music and Education* (translated by H. F. Rubinstein). Surrey: The Dalcroze Society.
- DEPPS 2002. *Interdisciplinary Single Side of Kindergarten Curriculum and Activity Planning and Development Programs*. Athens, Ministry of Education and Science
- Dewey, J. 1971. *A common faith*. New Haven, CT.: Yale University Press.
- Dodge D. T. & Colker R. 1988. *The Creative Curriculum fir early childhood*, Teaching Strategies Inc. Washington D.C.
- Hoene Wronski 1978. *Definitions of music*. New York: Da Capo Press.
- Karageorgis, C., & Terry, P. 1997. The psychophysical effects of music in sport and exercise. *Journal of Sport Behavior* 20 : 54-68.
- Doliopoulou E. 1998. The Computer in Preschool in *Pedagogical Review* 27: 97-115.
- Doliopoulou, E. 1999. *Contemporary Trends in Preschool Education*. Athens, Typothito – George Dardanos.
- Katz, P. 1982. Development of children's racial awareness and inter group attitudes, in: L. Katz (ed), *Current topics in early childhood education*, Norwood, NJ, Ablex: 17 – 54.
- Kendall R. A. 1986. The role of acoustic signal partitions in listener categorization of musical phrases. *Music Percept* 4(2):185-214.
- Markantonis, I. 1981. "Education" in *Papyros Larous Britannika*, vol. 2, Papyros Publishing Organization, Athens,

- Matsagouras, H. 2002. The Intersectionality in School Knowledge: Conceptual Reinforcement and Work Plans. Athens,
- Grigoris. McClellan 1997. The Healing Power of Music. (E. Pappas, Trans.) Athens. Merriam-Webster Online Dictionary, 1997. McDonald, D. & Simons, G. 1989, Musical growth and development: birth through six. New York: Schirmer, Merriam Webster online www.merriam-websites.com (January 2017) Nagel J. 1996. Repower and the resurgence of identity and culture. New York: Oxford University Press.
- Orff, C. 1978. The Schulwerk (translated by M. Murray). New York: Schott Music Corporation.
- Pound L., & Harrison Ch. 2003. Supporting musical development in the Early Years. Open University Press. Robinson, L. The Iris Project <http://irisproject.org.uk/index.php/the-iris-project/about-us> 2006. Tsegos I., Papadakis, Th., Vekiari, D. 2005. The revenge of the tones. Athena. Alternative Publications.
- Tsokakis, S. 2008. The influence of music on students' performance and behavior. Retrieved from <http://ka-parentsassociation.gr> (2003, January)
- Zaranis, N. & Economidis, B. D. 2008. The Information and Communication Technologies in Preschool Education. Theoretical Overview and Empirical Investigation. Athens: Grigoris.

Appendix

a. Figures and Tables

Student sheet

Girls Boys

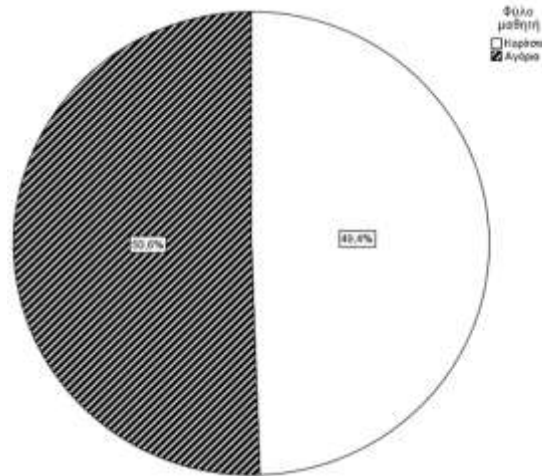


Figure 1: Gender percentage ratio of students participating in the intervention

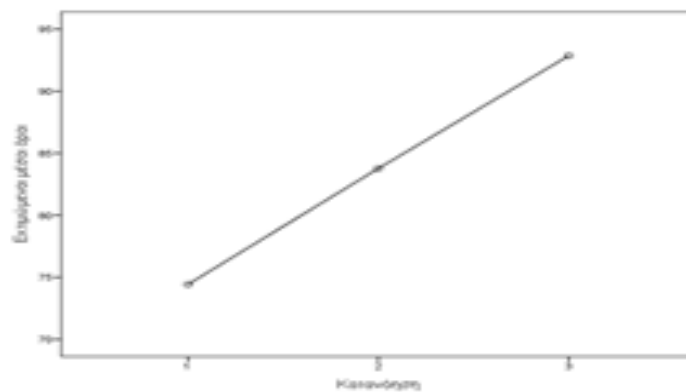


Figure 2: Average student performance in the 3 fables comprehension

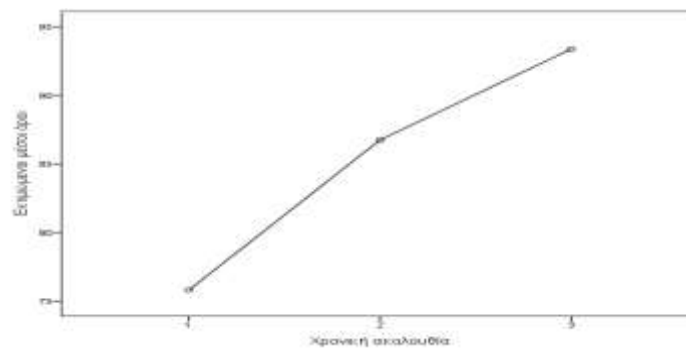


Figure 3: Average student performance in time sequence in the 3 fables

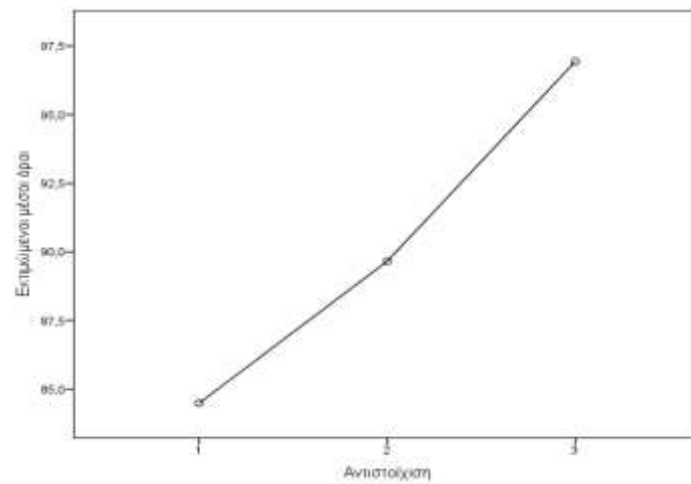


Figure 4: Average student matching performance in the 3 fables

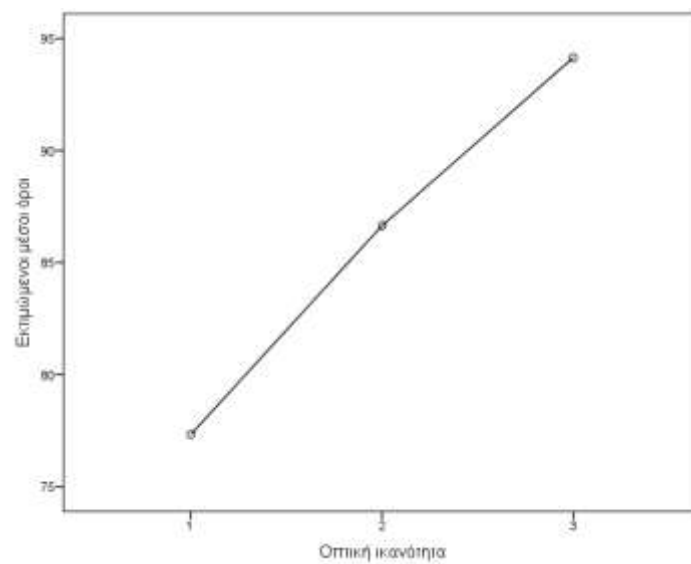


Figure 5: Average student visual ability performance in the 3 fables

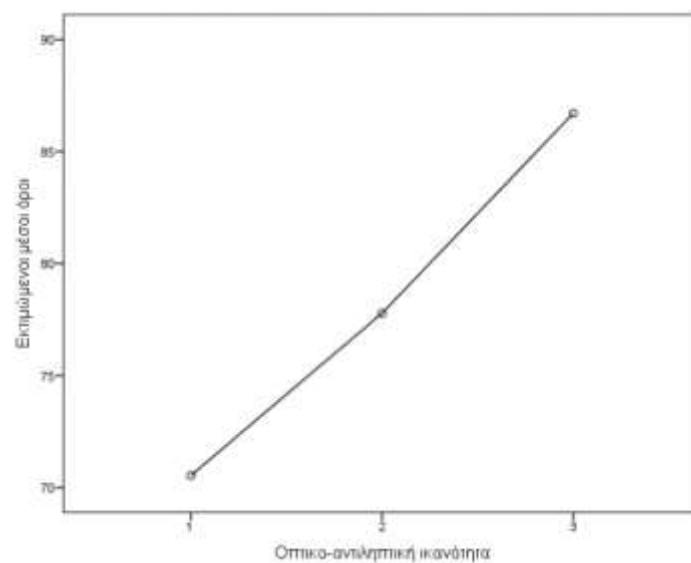


Figure 6: Average student visual-perceptual ability performance in the 3 fables

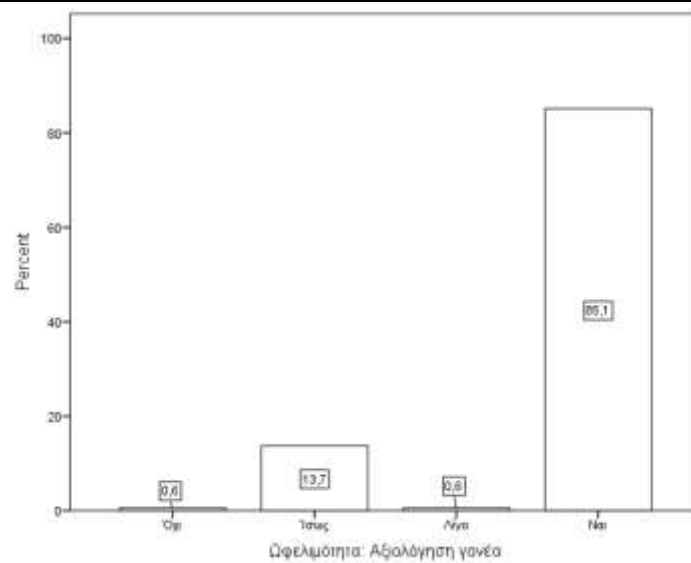


Figure 7: Expectations of parents regarding the usefulness of the intervention program prior to its implementation

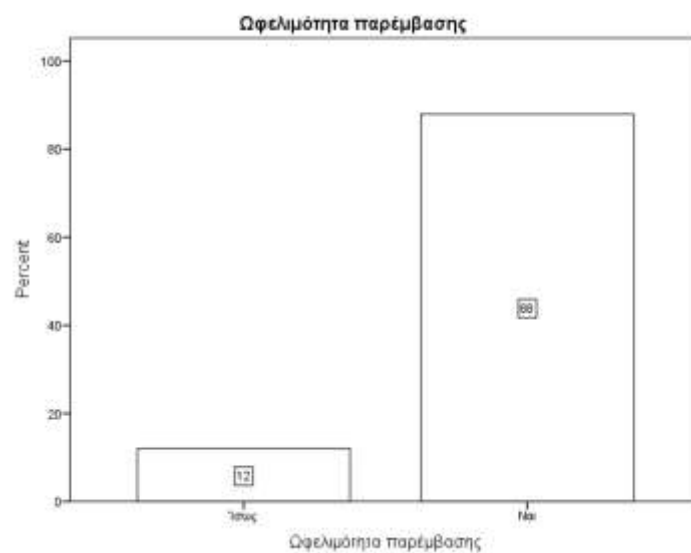


Figure 8: Percentages regarding the evaluation of the usefulness of the intervention program by teachers prior to the start of the intervention

Table 1: Arithmetic averages and standard performance deviations based on pupil evaluation per fable and per field

	Average	Standard Deviation
Contact with dolls	87,92	32,07
1st fable - comprehension	74,43	9,31
1st fable - time capability	75,80	9,17
1st fable – matching	84,49	10,07
1st fable - visual ability	77,33	9,87
1st fable - visual-perceptual ability	70,54	9,16
2nd fable - comprehension	83,69	8,85
2nd fable - time capability	86,70	10,17
2nd fable – matching	89,66	9,62

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2nd fable - visual ability	86,65	9,78
2nd fable - visual-perceptual ability	77,78	8,76
3rd fable - comprehension	92,78	8,60
3rd fable - time capability	93,35	11,24
3rd fable - matching	96,93	6,02
3rd fable - visual ability	94,15	7,28
3rd fable - visual-perceptual ability	86,70	9,53

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