

*Theory
Application
Research*

International e-Journal
ISSN: 2585-3821

Sciences of Education

Issue 05
April 2020

Publisher: Pantelis Georgogiannis
Patras, Greece



International e-journal
peer-reviewed

Sciences
of
Education

Issue 05

Patras, April 2020

Title: Sciences of Education

ISSN: 2585-3821

p.p. 53, size 17,5 X 25 cm.

Publisher:

Pantelis Georgogiannis

Antoniou Oikonomou 8, 26504 - Agios Vassilios, Patras, Greece

Tel/Fax: 2613019948

website: <http://e-journal.inpatra.gr>

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Sciences of Education

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‘Science education for all’ towards social justice and equity: A review

Abstract

This paper aims at developing a framework that promotes a ‘science education for all’ movement towards social justice and equity. To achieve this goal, we focus on science education scholarship that refers to broader social phenomena like social exclusion, poverty, social justice, and equity. A number of studies acknowledge the relation between children’s social, economic, and cultural background and their performance in science courses, which highlights the important role of science curriculum in developing an inclusive science education for all. In this paper, we describe the framework that emerges through scholarship review towards the development of a human and democratic perspective of science education that will ensure no child be excluded from acquiring all the needed knowledge and competencies in order to live a beautiful life.

Keywords: Science education; science curriculum; social exclusion; social justice, equity.

1. Introduction

A number of scientists have been viewing science as fact-based knowledge. Within this context a fundamental feature is that science deals solely with scientific facts and not with human values. Furthermore, science is seen as objective, certain and permanent knowledge¹. A different approach to science is based on the communication among different cultures, ICT skills and informed citizens who are able to make decisions on contemporary social, cultural and environmental issues². The socio-cultural approach to science takes into consideration the citizens' independent and critical thinking skills, their willingness and capability in teamwork and relies on continuous information exchange and creativity³. From this perspective, science is understood as the interaction of the scientific, social and cultural features of society. The slogan '*Science for All*' has been used in many countries for a long time⁴. The accumulation of this idea has turned it into a powerful message and many countries around the world, one after another, changed their curricula to make the slogan a reality⁵. The reason behind this change is that the world is entering a new era of renegotiating the financial relationships among countries and the free market under the umbrella of modern capitalism. In the 19th century the conservative educational policy in many countries supported that schooling for the working-class children⁶ and the quality of content of science curricula⁷ could turn out to be a risk for the upper class. In reality, they were concerned that the science curriculum of that time was more directly linked to the daily life of children having lower socio-economic backgrounds. Because of this, science curricula were tuned to the needs of the upper-class. Curricula became more compatible to the expectations of upper-class education which could afford – literally moneywise and metaphorically timewise – to acquire the knowledge of 'pure' science and exclude 'everyday' science. The notion of schooling continued to change throughout the 19th century as well as the first half of the 20th century by being separated from children's daily life. As a result, teaching and learning science within the school environment became an important cultural aspect only for a few who could actually afford their own education. In other words, schooling and scientific knowledge – which was communicated through education – were

1 Allchin, D. (1999). Values in science: an educational perspective. *Science & Education*, 8, 1-12.

2 Aikenhead, G. S. (1997). Toward a First Nations cross-cultural science and technology curriculum. *Science Education*, 81, 217-238.

3 OECD (2007). *Pisa 2006: Science competencies for tomorrow's world: Vol.1 Analysis*. Paris: OECD.

4 Brock, W. H. (1996). *Science for All. Studies in the History of Victorian Science and Education*. Aldershot: Variorum.

5 Jenkins, E. W. (1999). School science, citizenship and public understanding of science. *International Journal of Science Education*, 21 (7), 703-710.

6 Cook-Gumperz, J. (Ed.) (2006). *The social construction of literacy*. Cambridge: Cambridge University Press.

7 Hodson, D., & Prophet, R. B. (1994). Why the science curriculum changes: Evaluation or social control? In R. Levinson (Ed.), *Teaching Science* (pp. 22-39). New York: Routledge.

structured based on the notion of upper/lower social classes⁸. Thus, skills and competencies in science education aimed to the progress of the economic and social status of students individually⁹ in the context of teaching concepts of ‘pure’ science. In other words, the goals of science education did not include the advancement of the community or the general welfare¹⁰.

Research in the field of science curricula has shown that curriculum development leads to a ‘guided’ education and tends to develop easily manipulated citizens¹¹ regardless whether curricula are based on educational practices which have nothing to do with the daily experience of children¹² or on teaching science without any theoretical background¹³. Moreover, in our time the restructuring of capitalism creates new conditions which encourage the exclusion of children from education generally and from science education in particular. It is argued that modern capitalism is completely different from what we have known it to be so far. The principles of traditional employment, the purchasing of goods and property ownership have been replaced by newly formed, more important ideals such as access to education¹⁴.

Teaching students ‘pure’ science and lab-oriented knowledge can be seen as an action of denying them access to the scientific knowledge which is important for their future life, thus generating the abhorrence of students towards science and as a result excluding them from understanding the world around them¹⁵. A critical discourse within the field of scientific literacy has been developed in order to confront students’ exclusion from learning and understanding science¹⁶, ¹⁷, ¹⁸, ¹⁹. Within this framework, science is seen culturally and technologically

8 Cook-Gumperz, J. (Ed.) (2006). *The social construction of literacy*. Cambridge: Cambridge University Press.

9 Soltow, L., & Stevens, E. (1981). *The Rise of Literacy and the Common School: A socioeconomic Analysis to 1870*. Chicago: University of Chicago Press.

10 Benceze, J.L., & Carter, L. (2011). Globalizing students acting for the common good. *Journal of Research in Science Teaching*, 48(6), 648–669.

11 Hodson, D., & Prophet, R. B. (1994). Why the science curriculum changes: Evaluation or social control? In R. Levinson (Ed.), *Teaching Science* (pp. 22-39). New York: Routledge.

12 Millar, R. H. (1981). Curriculum Rhetoric and Social Control: a Perspective on Recent Science Curriculum Development. *European Journal of Science Education*, 3 (3), 271-284.

13 Jenkins, E. W. (1999). School science, citizenship and public understanding of science. *International Journal of Science Education*, 21 (7), 703-710.

14 Rifkin, J. (2001). *The age of access*. New York: G.P. Putnam and Sons.

15 Benceze, J.L., & Carter, L. (2011). Globalizing students acting for the common good. *Journal of Research in Science Teaching*, 48(6), 648–669.

16 Benceze, L., Alsop, S., Sperling, E., Nazir, J., & DiGiuseppe, M., (2008). Science teachers’ motivation for encouraging students to promote individual, social & environmental wellbeing. Proceedings of the annual conference of the National Association for Research in Science Teaching, Baltimore, MD, March 30–April 2, 2008.

17 Calabrese Barton, A. (2001). Capitalism, critical pedagogy, and urban science education: An interview with Peter McLaren. *Journal of Research in Science Teaching*, 38 (8), 847–859.

18 Hodson, D. (1999). Going Beyond Cultural Pluralism: Science Education for Sociopolitical Action. *Science Education*, 83, 777-796.

19 Roth, W. M., & Calabrese Barton, A. (2004). *Rethinking Scientific Literacy*. Great Britain: Routledge Falmer.

interrelated with society and tries to reveal the links of science education with the increasingly more complex and powerful features of society. Through the ‘politicization’ of science education, students as future citizens will be able to develop their own views concerning science and be prepared to take action in a scientifically and technologically rich environment.

Figure 1: The role of science education in dismantling the reproduction of power by dominant groups.

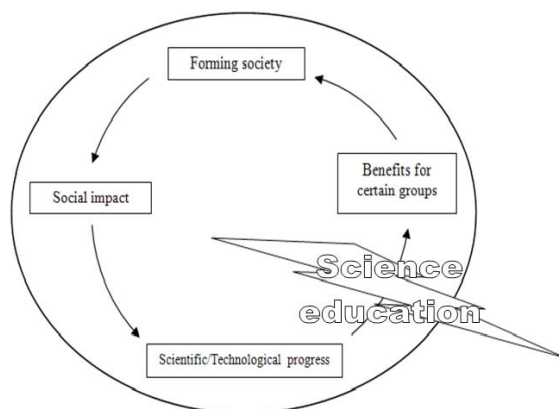


Figure 1 shows how the accumulation of social power works against socially excluded groups. The scientific and technological progress in our society benefits certain groups only; namely the ones that are comfortably settled in a wealth of opportunities. These benefits are highly empowering and as a result these groups can determine the way society is organized through their great impact on it. However, the benefit of scientific literacy is that it enables socially excluded groups to equally participate in the forming of society just like the privileged groups do. Specifically, through scientific literacy students are not only able to develop their critical thinking by learning science but really act in the frame of decision-making as informed citizens and communicate their understanding on important political or socioscientific issues (SSIs). In other words, students will be able to realize the values reflected on the scientific and technological progress in order to break up the recycle of social power by the dominant group.

In order for science education to contribute to preparing all students to actively participate in society²⁰, it is important the science curriculum be oriented towards the social justice and equity movement²¹. In this path, science

20 Lee, S., & Roth, W.M. (2002). Learning science in the community. In W.M. Roth & J. Desautels (Eds.), *Science education as/for sociopolitical action* (pp. 37-66). New York: Peter Lang.

21 Calabrese-Barton, A. (2012). Citizen(s) science: A response to “The future of citizen science”. *Democracy*

education can be transformed into a tool to avert a situation where social values, individual involvement, responsibility, community participation and the very heart of democratic decision making will be dominated and practiced by a small elite²². It is supported that science education should prepare students to develop an understanding of the important role of science in children's daily life. This way, students will be encouraged to actively participate in society by using their critical understanding as well as society will be strengthened towards a human and democratic perspective^{23, 24}. Research in science education shows that teaching and learning science is significantly related to the inequalities students encounter living in conditions of social exclusion and poverty²⁵.

In this paper, we highlight features proposed by the science education scholarship that refers to social exclusion, poverty, social justice, and equity in order to develop an inclusive science curriculum that appeals to all children regardless of their socio-economic status and promotes the context of social justice and equity in science education. In order to achieve this goal, we classify the features proposed by the literature and highlight the ones that can contribute to improving science teaching and learning for all children.

2. Pedagogical Intentions in Science Curricula

Science composes a social activity which is guided by values, principles and visions of the society it belongs. It means that societies may define and specify science in different cultural perspectives. Moreover, it reflects the social, religious, political, economic and environmental background in which science has developed. Current debate around multicultural education and science aims at pinpointing the scale in which science is culturally developed as well as discover the way science exceeds human differences by functioning as a communication means between cultures, religions and races²⁶. Putting the science approach into a sociocultural framework provides a prospect and inspiration needed in order to encourage all students to equally participate in science education²⁷.

& *Education*, 20(2), 1-4.

22 Chen, D., & Novick, R. (1984). Scientific and technological education in an information society. *Science Education*, 68(4), 421-426.

23 Freire, P. (2005). *Pedagogy of the oppressed* (30th Anniversary ed.). New York: Continuum (Original work published 1970).

24 Hodson, D. (2011). *Looking to the future: Building a curriculum for social activism*. Sense Publishers.

25 Calabrese-Barton, A. (1998a). Reframing 'science for all' through the politics of poverty. *Educational Policy*, 12(5), 525-541.

26 Hodson, D. (1993) Teaching and learning about science: Considerations in the philosophy and sociology of science. In Edwards, D., Scanlon, E., and West, D. (Eds.), *Teaching, learning and assessment in science education* (pp. 5-32). London: The Open University Press.

27 Siatras, A. (2013). *Πρόγραμμα σπουδών Φυσικών Επιστημών και κοινωνικός αποκλεισμός: Μια παιδαγωγική προσέγγιση*. (Διδακτορική διατριβή). Παιδαγωγικό Τμήμα Δημοτικής Εκπαίδευσης, Αριστοτέλειο Πανεπιστήμιο Θεσσαλονίκης.

In order for science education to prepare students to deal with everyday aspects of their lived realities, science curriculum is important to ensure to all children equal access to social and cultural wealth of education²⁸. To this end, science education is transformed to an inclusive education that empowers all children to acquire all the needed knowledge and competencies in order for the latter to be able to engage in addressing socio-scientific issues²⁹. In other words, students should be well-equipped to actively participate in decision-making processes of our society in order to shape it towards social justice and equity, and live a beautiful life³⁰.

3. Science content

The features presented in science education scholarship related to science content are classified into four sub-levels: 1) Science Concepts, 2) Nature of Science (NoS), 3) Science Methods, and 4) Socio-Scientific Issues (SSIs).

3.1. Science concepts

Science concepts have played a key-role in developing science curricula since the mid-nineteenth century valuing the teaching of science concepts in science courses³¹. In this path, the academic discourse is focused on how much and what concepts be included in science curricula. It is supported that science concepts should not be based on teaching purely lab-oriented knowledge and abstract meanings of science applications, but on aspects of science knowledge that is part of students' social and cultural life. In other words, students should be encouraged to realize the importance of understanding the conceptual knowledge of science to their daily life in order to be able to interpret the world around them³².

Ensuring the fundamental function of a human and democratic society means equipping students with an adequate and coherent science knowledge in order for the children to be able to make informed decisions regarding various local and global socio-scientific issues that influence their communities. In other words, science curriculum is important to move away from preparing students to recitate science concept definitions or scientific rules as well as to understand abstract meanings of science applications, towards promoting a science education

28 Brickhouse, N., & Kittleson, M. J. (2006). Visions of curriculum, community, and science. *Educational Theory*, 56(2), 191-204.

29 Calabrese-Barton, A. (2012). Citizen(s) science: A response to "The future of citizen science". *Democracy & Education*, 20(2), 1-4.

30 Hodson, D. (2011). *Looking to the future: Building a curriculum for social activism*. Sense Publishers.

31 Hodson, D., & Prophet, R. B. (1994). Why the science curriculum changes: Evaluation or social control? In R. Levinson (Ed.), *Teaching Science* (pp. 22-39). New York: Routledge.

32 Quicke, J. (2001). The science curriculum and education for democracy in the risk society. *Journal of Curriculum Studies*, 33(1), 113-127.

as a tool for tackling children's everyday problems in their daily life. To this end, science education should focus on a more holistic and systemic teaching of science concepts in order for the students to be able to acquire knowledge and competencies to face complex socio-scientific issues³³.

3.2. Nature of Science (NoS)

NoS is considered a crucial aspect of science education³⁴. The traditional perspective of science is based on promoting an elite image of science that fosters a reputation of tough courses that only a few and extremely smart students can participate in³⁵. In order to overcome the aforementioned obstacle, science curriculum should provide students with opportunities to engage in activities concerning NoS in order for the students to be able to shape positive attitudes about science, to recognize and respect the elements or data, and to monitor their ideas on science-related issues over time.

NoS refers to two interrelated branches: (a) NoS as a content knowledge, and (b) NoS as a means for fostering students' scientific mindset not only on science-related issues, but for their lived realities as well. The first branch highlights the development of students' views of what science is, the understanding of strengths and limitations of scientific knowledge, as well as the interaction of people's social and cultural identity within the process of generating new knowledge. The second NoS branch contributes to the cultivation of students' scientific mindset by reshaping their attitudes towards socio-scientific issues³⁶.

3.3. Science Methods

From early 20th century, it is argued that teaching of science methods makes a significant contribution to science education³⁷. We support the idea that scientific mindset constitutes a process that cultivates students' thinking in order for the students to be able to deal with socio-scientific issues in their everyday life. This perspective draws away from views that highlight science methods as a certain methodology that should be followed step-by-step in every students' problem.

Children interact with the social and natural environment using features of

33 Hodson, D. (2003). Time for action: Science education for an alternative future. *International Journal of Science Education*, 25(6), 645-670.

34 Abd-El-Khalick, F., & Lederman, N.G. (2000). Improving science teachers' conceptions of the nature of science: A critical review of the literature. *International Journal of Science Education*, 22(7), 665-701.

35 Brickhouse, N. (1994). Bringing in the outsiders: Reshaping the sciences of the future. *Journal of Curriculum Studies*, 26(4), 401-416.

36 Yacoubian, H. (2012). *Towards a philosophically and a pedagogically reasonable Nature of Science curriculum* (Doctoral dissertation). Department of Secondary Education, University of Alberta.

37 Dewey, J. (1910). Science as subject-matter and as method. *Science*, 31, 121-127. (Reprinted from *Science & Education*, 4(4), 391-399, 1995).

science methods, such as observing, touching, and asking questions for everything they do not understand in order to make sense for things and activities being present in their daily life. It is broadly argued that science curriculum is important to include science activities that will help students to become competent in using features of science methods as well as be encouraged to employ them in their daily life. Having acquired science methods, students will be able to acknowledge questions that can be investigated, use data or evidence on which they can draw conclusions, as well as get used to apply science methods in all aspects of their everyday life³⁸.

3.4. Socio-Scientific Issues (SSIs)

The previous three levels of science content are closely interlinked to the ongoing changes that take place in society. From one hand, science education provides opportunities to shape society towards a more democratic perspective, and from the other hand, science education is shaped by society towards establishing new social directions that will empower a human perspective of science education³⁹. This leads to acknowledging the role of science education in encouraging children to understand the importance of the content knowledge in science education in order for the students to be able to understand and cope with SSIs⁴⁰.

Science education is important to provide opportunities not only to help students to take decisions democratically on various SSIs, but to acquire the needed knowledge and competencies to be used in decision making processes on SSIs that will empower students to practice their understanding with a critical viewpoint⁴¹. The democratic and human society is empowered when all students -equally to everyone- acquire the needed knowledge and competencies in order to understand the social and natural environment and interfere in decision-making processes that affect society⁴². It is argued that science curriculum is important to focus on motivating students to become responsible, participatory and justice-oriented citizens who act collectively to confront SSIs.

4. Supporting science teaching and learning for all children

It is argued that science education need to be shifted from traditional teaching

38 Hodson, D. (2011). *Looking to the future: Building a curriculum for social activism*. Sense Publishers.

39 Calabrese-Barton, A. (2012). Citizen(s) science: A response to “The future of citizen science”. *Democracy & Education*, 20(2), 1-4.

40 Quicke, J. (2001). The science curriculum and education for democracy in the risk society. *Journal of Curriculum Studies*, 33(1), 113-127.

41 Chen, D., & Novick, R. (1984). Scientific and technological education in an information society. *Science Education*, 68(4), 421-426.

42 Benze, J.L., & Carter, L. (2011). Globalizing students acting for the common good. *Journal of Research in Science Teaching*, 48(6), 648-669.

practices in order to become meaningful to all children⁴³. Traditional teaching practices are based on a linear kind of instruction where teachers mention the definitions of science concepts that students ought to memorize and, student, in turn, memorize mechanically the abstract science applications by repeating the definitions included in science textbooks. Traditional science teaching practices are based on the ‘banking’ concept of education⁴⁴. In this vein, teachers ‘deposit’ science content that students ought to ‘withdraw’ by memorizing as well as using it correctly in evaluation processes. Science teaching based on the ‘banking’ model of education makes sense only for a few students who have decided to follow science-related careers, and not for the majority of students that sees science teaching as an obstacle that must be overcome⁴⁵.

In other words, science curriculum should not be focused on preparing a limited number of students to participate in the future scientific community, but to promote meaningful teaching practices that ensure to all students the opportunity to actively participate in science teaching and learning^{46, 47}. Within the path of the ‘integrated’ science education, science teaching is based on social practices where students as subjects become part of a social teaching and learning process by collecting, evaluating, and interpreting information or data, planning and implementing research, negotiating different perspectives and views, as well as making decisions on various SSIs⁴⁸. To this end, science teaching practices provide students the opportunity to generate new ideas, interact with their peers, and interpret social and natural phenomena they deal with in everyday life⁴⁹.

Students who live surrounded by social exclusion or within poverty are already facing a number of social inequalities even before entering school⁵⁰. In this vein, students are hindered to absorbing public and social wealth by depriving students of accessing to the products of scientific and technological progress and leading to exclusion of students from social decision-making structures that affect children’s individual and social life⁵¹. Hindering students to absorbing

43 Hodson, D. (1994). Seeking Directions for Change: The Personalization and Politicization of Science Education. *Curriculum Studies*, 2, 71-98.

44 Freire, P. (2005). *Pedagogy of the oppressed* (30th Anniversary ed.). New York: Continuum (Original work published 1970).

45 Costa, B.V. (1995). When science is ‘another world’: Relationships between worlds of family, friends, school, and science. *Science Education*, 79(3), 313-333.

46 Hodson, D. (2003). Time for action: Science education for an alternative future. *International Journal of Science Education*, 25(6), 645-670.

47 Lucas, K. B., & Roth, W. M. (1996). The nature of scientific knowledge and student learning: Two longitudinal case studies. *Research in Science Education*, 26(1), 103-129.

48 Aikenhead, G. S., Calabrese-Barton, A., & Chinn, P. W. U. (2006). Toward a politics of place-based science education. *Cultural Studies of Science Education*, 1(2), 403-416.

49 Michaels, S., Shouse, A., & Schweingruber, H.A. (2007). *Ready, set, science! Putting research to work in K-8 science classrooms*. Washington, DC: The National Academies Press.

50 Calabrese-Barton, A. (1998b). Teaching science with homeless children: Pedagogy, representation, and identity. *Journal of Research in Science Teaching*, 35(4), 379-394.

51 Tsiakalos, G. (2003). *Υπόσχεση της Παιδαγωγικής*. Θεσσαλονίκη: Εκδόσεις Παρατηρητής.

public and social wealth in the field of science education means students' passive participation in science courses due to the fact that science education does not bridge the gap between the academic perspective of science content and students' everyday reality. Further, it means science textbooks that reproduce specific matter-of-fact knowledge that appeals to a small minority of students who have already chosen to engage in science related careers, without understanding how science knowledge can be important in their life outside of school context.

It is supported that the design and development of a science curriculum that promotes students' civic engagement can break down children's exclusion from absorbing the public and social wealth offered by science education⁵². Science curriculum should promote a science education that is relevant to students' socio-cultural background due to the fact that students' milieu has a significant influence on their performance in science⁵³. In other words, science education should empower students to access the sociopolitical structures of their communities, through which they will be able to plan and actively shape their individual and social actions, values, and living conditions⁵⁴. Students' engagement in science education is an inalienable children's social right and that social right can be protected by developing a science curriculum towards ensuring equal access to a high quality of science education to all students.

5. Conclusion

In this paper, we argued that in order to dismantle exclusion of students with low socio-economic background from science education, it is important to develop a science curriculum that will prepare children to acquire the needed knowledge and competencies to interpret the real world situations as well as to promote students' collective action towards social justice and equity issues. Furthermore, we maintained the importance of identifying the interaction of science with the ideological, political, and economic implications of society by degrading the traditional image of science that highlights it as a scientific field which does not affect society. The key-role of science education is to prepare students to acquire the needed knowledge and competencies in order as future citizens to be able to fight collectively for developing a democratic and human society.

Towards this direction, science education focuses on preparing students to develop their own personal views and values about important science-related issues, not just to acknowledge that science influences (and is influenced by) the cultural, economic, and political features of society, but to acquire the needed

52 Hodson, D. (2011). *Looking to the future: Building a curriculum for social activism*. Sense Publishers.

53 OECD (2007). *Pisa 2006: Science competencies for tomorrow's world: Vol.1 Analysis*. Paris: OECD.

54 Mueller, M., Tippins, D., & Bryan, L. (2012). The future of citizen science. *Democracy & Education*, 20(1), 1-12.

knowledge and competencies in order for the students to be able to participate in decision-making processes in their communities.

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Athanasia Thanopoulou

The use of the game in education and skills development of children with autism - positions and opinions of teachers of Special Education

Περίληψη

Το παιχνίδι αποτελεί μια από τις κύριες απασχολήσεις του παιδιού, καθώς και βασικό στοιχείο σε όλα τα εκπαιδευτικά προγράμματα. Η αναγκαιότητα του παιχνιδιού στην εκπαιδευτική διαδικασία παιδιών με Ειδικές Εκπαιδευτικές Ανάγκες (Ε.Ε.Α.), κυρίως παιδιών με αυτισμό, αποτελεί βασικό παράγοντα ανάπτυξης δεξιοτήτων επηρεάζοντας καθοριστικά τη μαθησιακή διαδικασία. Το παιχνίδι συμβάλει στη ανάπτυξη πολλών δεξιοτήτων, όπως κοινωνικών, κινητικών, γλωσσικών, αισθητικών και θέτει τις βάσεις για μια σωστή ανάπτυξη και διαμόρφωση της προσωπικότητας των παιδιών με αυτισμό καθιστώντας τη μαθησιακή διαδικασία ευχάριστη και δημιουργική. Στόχος της εν λόγω ερευνητικής πρότασης είναι η σημασία του παιχνιδιού στη ανάπτυξη δεξιοτήτων παιδιών με αυτισμό, αλλά και οι απόψεις των εκπαιδευτικών ειδικής αγωγής και εκπαίδευσης για το παιχνίδι στη μαθησιακή διαδικασία.

Λέξεις - κλειδιά: Αυτισμός, παιχνίδι, δεξιότητες ανάπτυξης, απόψεις εκπαιδευτικών.

Abstract

The game is one of the main occupations of the child, and a key element in all educational programs. The necessity of the game in the educational process of children with Special Educational Needs (SEN), particularly children with autism, a basic skills development decisive factor influencing the learning process. The game helps develop many skills, such as social, motor, linguistic, aesthetic, and lays the foundations for a proper development and formation of the personality of children with autism by making the learning process enjoyable and creative. The objective of this research proposal is the importance of play in child development skills with autism, but also the views of special education and training teachers on play in the learning process.

Keywords: Autism, game, Skills Development, teachers' views.

1. Introduction

Play is a basic activity for all children and children with autism. Through the play the child shapes and forms a healthy personality. Acquires knowledge, motivation, skills and values that are important in understanding the social environment in which it operates and evolves¹. With play, the child develops linguistic, social, spiritual, and emotional functions that will help him or her gain self-control and social adjustment and integration into social cognition². Play is a process of integration and creativity with the child's peers as they learn to interact with and manage different roles in the play³.

For this reason, the role of teachers is important. Teachers through school curricula can provide developmental play according to the abilities of each child⁴. Included in this effort is the present study, which seeks to explore the role of play in the development of autistic children 's skills and teachers' views of special education and training on the importance of play in educational practice.

The research questions are:

- A) What is the role of play in developing the skills of children with autism?
- B) What are the views of special education and training teachers on the importance of play in the education of children with autism?

1 Αυγητίδου, Σ. (2001). *Το παιχνίδι: σύγχρονες ερμηνευτικές και διδακτικές προσεγγίσεις*. (μετ. Άσπα Γολέμη). Αθήνα: Τυπωθήτω Γ. Δρδανός.

2 Jordan, R. (2000). *Η εκπαίδευση παιδιών και νεαρών ατόμων στον αυτισμό*. Αθήνα: Ελληνική Εταιρεία Προστασίας Αυτιστικών Ατόμων.

3 Αυγητίδου, Σ. (2001). *Το παιχνίδι: σύγχρονες ερμηνευτικές και διδακτικές προσεγγίσεις*. (μετ. Άσπα Γολέμη). Αθήνα: Τυπωθήτω Γ. Δρδανός.

4 Lin, Yen-Chun (2010). Improving parent – child relationships through block play. *Academic Journal*, 130, 3, 461

Educational research in recent decades has highlighted the need for play in the educational process of children with autism, concluding that these children learn, develop, and enjoy through play⁵. The success of the game is not as important as the interaction and joy these children will experience in their lives. This gives these children the opportunity to explore their surroundings and become aware of the various things and materials around them through the senses⁶. They begin to smell, to see, to hear the sounds of their surroundings in order to experience the world around them. According to Piaget, children act on things and acquire knowledge⁷. For this reason, teachers have to organize structured school curricula, but also through experiential teaching practices to provide learning opportunities both inside and outside the school⁸.

Play is a means of learning, interacting, developing skills, communicating and building the child's identity. They acquire a social role and learn social norms through communication and interaction with their peers. Research findings show that playing with children with autism teaches them to communicate, to resolve different situations in their own way, to express feelings and desires⁹. We also find that through play, teachers can better understand and interpret the child's needs, effectively identifying teaching objectives and educational planning¹⁰.

This study will explore the role of play in the development of autism skills in children. In particular, it will study the importance of play in developing skills such as social, linguistic, kinetic, cognitive, emotional and aesthetic. A second element to consider is teachers' views on the importance of play in the education of children with autism. In particular, we will stress the importance of appropriate play opportunities provided by teachers to these children through school curricula.

2. Theory

Play affects the development of the social skills of children with autism, as they contribute to the development of linguistic, motor, and aesthetic functions. The child with autism is trained to acquire adaptability, self-control and reasoning

5 Dawson, G., Rogers, S. J., Munson, J., Smith, M., Winter, J., Greenson, J., & Varley, J. (2010). Randomized, controlled trial of an intervention for toddlers with autism: the early start Denver model. *Pediatrics*, 125(1), e17-e23.

6 Schertz, H. H., Odom, S.L., Baggett, K.M., & Sideris, J.H. (2018). Mediating Parent Learning to Promote Social Communication for Toddlers with Autism: Effects from a Randomized Controlled Trial. *Journal of Autism and Developmental Disorders*, 48(3), 853-867.

7 Lightwood, C., Cole, M., & Cole, S. R., (2015). Η Ανάπτυξη των Παιδιών (Εντσίο), (Επιμ. Ζ. Μπαμπλέκου), Αθήνα: Gutenberg.

8 Schertz, H. H., Odom, S.L., Baggett, K.M., & Sideris, J.H., ο.π., σελ. 853-867.

9 Schertz, H. H., Reichow, B., Tan, P., Vaiouli, P., & Yildirim, E. (2012). Interventions for toddlers with autism spectrum disorders: An evaluation of research evidence. *Journal of Early Intervention*, 34(3), 166-189.

10 Αυγητίδου, Σ. (2001). Το παιχνίδι: σύγχρονες ερμηνευτικές και διδακτικές προσεγγίσεις. (μετ. Ασπα Γολέμη). Αθήνα: Τυπωθήτω Γ. Δρδανός.

abilities. Experiences gained through structured play encourage creativity, imagination, and the acquisition of basic skills such as fine mobility¹¹. At this point, curriculum intervention through school curricula and structured education is an important factor. By providing appropriate opportunities for developmental play, the teacher responds to the needs of these children by helping these children acquire better adaptive behavior¹².

The importance of play in the education of children with autism, as well as the teachers' views on the role of play in the education of these children, has been of interest to researchers. Playing is the child's "job". It is the medium of expression, but also the basic way of learning. According to Αυγητίδου¹³ appropriate activities through play significantly influence the development of the child by meeting their learning needs. Thus, children gain active participation, come in contact with a variety of materials or objects and activities in a variety of contexts (indoor or outdoor such as school, parks)¹⁴. This reduces the tendency for isolation and passivity participating the same in various recreational activities.

Μπιμπήρη¹⁵ states that the role of teachers is important as she is the one that facilitates, organizes and defines the functioning of the by guiding the learning process. It is the one who will implement this practice that will facilitate the child to understand thoughts and feelings, but also the expressiveness and exploration of the game¹⁶.

The development of social, aesthetic / visual, linguistic and emotional skills of children with autism is affected by the game, which presupposes the teacher's teaching intervention by influencing the development of these skills. Research has shown that play is an important element in the overall development of the child. It affects cognitive-spiritual development as it focuses attention, thinking, memory and imagination¹⁷. At the same time, it lays the foundations for language development, as the child is encouraged to create stories, to express thoughts, desires and feelings, to communicate and to talk¹⁸. On the emotional level, play evokes pleasure, expression of various positive and intense emotions, such as joy, calm, contentment, anger, fear¹⁹. Also, the physical - kinetic development

11 Lin, Yen-Chun (2010), ο.π., σελ. 461.

12 Διαμαντόπουλος, Δ. (2009). *Το παιχνίδι. Ιστορική εξέλιξη, ερμηνευτικές θεωρίες, ψυχοπαιδαγωγικές επιδράσεις*. Αθήνα: Πουρνάρας Παναγιώτης.

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14 Brock, A., Dodds, S., Jarvis, P. & Olusoga, Y. (2016). *Παιδαγωγική του παιχνιδιού στην προσχολική και σχολική εκπαίδευση*. (Επιμ. Μ. Σακελλαρίου). Αθήνα: Πεδίο.

15 Μπιμπήρη, Ε. (2017). *Ακούει κανείς; Ειδική αγωγή: Αγώνες και αγωνίες πίσω από την πόρτα*. Αθήνα : Έναστρον.

16 Brock, A., Dodds, S., Jarvis, P. & Olusoga, Y. (2016). *Παιδαγωγική του παιχνιδιού στην προσχολική και σχολική εκπαίδευση*. (Επιμ. Μ. Σακελλαρίου). Αθήνα: Πεδίο.

17 Else, P. (2014). *Making sense of play*. Maidenhead: Open University Press.

18 Else, P. (2014). *Making sense of play*. Maidenhead: Open University Press.

19 Αυγητίδου, Σ., Τζεκάκη, Μ. & Τσάφος, Β. (2016). Ενισχύοντας τη μάθηση των παιδιών: Νοηματοδότηση

of children through play is considered important as it develops flexibility, endurance, coordination of movements, exercise of fine motility, strengthening of the muscular system, better breathing function. The game cultivates the child 's aesthetic - visual skill by providing rich materials and giving them the opportunity to exploit them, developing their creativity, initiative and self - esteem²⁰. Finally, group games allow the child to socialize and integrate in the group with their peers, as they are invited to communicate, collaborate and handle roles and rules within their abilities²¹.

Research results show that teachers have an important role to play in the educational process. It is they who organize, coordinate the play in order to facilitate the learning path of students with autism²². In this effort they take into account the interests of the pupils, adapt the game to the needs and abilities of the children, select materials and how they will the activity is carried out, while they are given the opportunity to observe the child during the play, encouraging children's creativity and initiative in a group and individual level²³.

2.1. Clarification of terms

2.1.1. Game

As stated in the literature, the term play is the object of entertainment, development of the child's imagination, knowledge and skills²⁴. It is an individual or collective framework activity defined by a regulation²⁵.

2.1.2. Autism

The term autism or the spectrum of autism refers to a pervasive – universal developmental disorder that affects one's life on many levels, such as cognitive, emotional, social, thus making it difficult for the individual to communicate, socialize, and be creative²⁶. The presence of autism in a child's life comes early,

και παιχνίδι στο «Οι υποψήφιοι εκπαιδευτικοί παρατηρούν, παρεμβαίνουν και αναστοχάζονται», Αθήνα, Gutenberg.

20 Μπότσογλου, Κ., (2010). Υπαίθριοι χώροι παιχνιδιού και παιδί: Ποιότητα, ασφάλεια, παιδαγωγικές εφαρμογές, Αθήνα, Gutenberg.

21 Στασινός, Δ. (2013). *Η ειδική εκπαίδευση 2020. Για μια συμπεριληπτική ή ολική Εκπαίδευση στο νέο ψηφιακό σχολείο με ψηφιακούς πρωταθλητές*. Αθήνα: Παπαζήσης.

22 Michalopoulou, A., Grantza, A., (2014). The Design, Realisation, and Evaluation of an Educational Programme: Promoting Play in Kindergarten στο *The International Journal of Early Childhood Learning*, Greece. Σχεδιασμός, υλοποίηση και αξιολόγηση εκπαιδευτικού προγράμματος: πρόωθητη του παιχνιδιού.

23 Βλ. ο.π.

24 Διαμαντόπουλος, Δ. (2009). *Το παιχνίδι. Ιστορική εξέλιξη, ερμηνευτικές θεωρίες, ψυχοπαιδαγωγικές επιδράσεις*. Αθήνα: Πουρνάρας Παναγιώτης.

25 Brock, A., Dodds, S., Jarvis, P. & Olusoga, Y. (2016). Παιδαγωγική του παιχνιδιού στην προσχολική και σχολική εκπαίδευση. (Επιμ. Μ. Σακελλαρίου). Αθήνα: Πεδίο.

26 Στασινός, Δ. (2013). *Η ειδική εκπαίδευση 2020. Για μια συμπεριληπτική ή ολική Εκπαίδευση στο νέο*

but at the age of three it is confirmed²⁷.

Skills development is about improving and advancing these skills that are essential to an activity²⁸.

2.1.3. Special Education

According to Law 3699/2008 Special Education is defined as

All of the educational services provided to students with disability and identified special educational needs. The state is committed to upholding and constantly upgrading the mandatory the nature of special education and training as an integral part of compulsory and free public education and to ensure the provision of free public special education and training to persons with disabilities of all ages and at all stages and levels of education²⁹.

2.1.4. Education

Education is defined as the structured and systematic teaching provided in various institutions, such as schools, with the aim of developing mental and physical abilities and skills aimed to carry out various activities in the life of individuals³⁰.

Opinions are about how each person expresses, thinks, perceives and judges a subject, an event, a situation³¹.

3. Theoretical approaches

The composition of the results of other studies shows that play is an appropriate means of learning and effective intervention for all children, but especially for children with autism. According to Brock et al.³² the contribution of play to a child's life enhances knowledge of new social skills, the development of new and creative solutions to difficulties and problems encountered by developing successful strategies, as well as the development of respect. and acceptance of both themselves and other people. Through the game they learn to be responsible, to express emotions by improving their self-esteem and by reducing feelings of anxiety, sadness, anxiety, aggression³³.

ψηφιακό σχολείο με ψηφιακούς πρωταθλητές. Αθήνα: Παπαζήσης.

27 Baron-Cohen, S. (2017). Editorial Perspective: Neurodiversity-a revolutionary concept for autism and psychiatry, *Journal of Child Psychology and Psychiatry*, 58, 6.

28 Μπαμπινιώτης, Γ. (1998). *Λεξικό της Νέας Ελληνικής Γλώσσας*. Αθήνα: Κέντρο Λεξικολογίας.

29 Νόμος: 3699/2008 - ΦΕΚ 199/Α'/2.10.2008. Ειδική Αγωγή και Εκπαίδευση ατόμων με αναπηρία ή με ειδικές εκπαιδευτικές ανάγκες.

30 Μπαμπινιώτης, Γ. (1998). *Λεξικό της Νέας Ελληνικής Γλώσσας*. Αθήνα: Κέντρο Λεξικολογίας.

31 Μπαμπινιώτης, Γ. (1998). *Λεξικό της Νέας Ελληνικής Γλώσσας*. Αθήνα: Κέντρο Λεξικολογίας.

32 Brock, A., Dodds, S., Jarvis, P. & Olusoga, Y. (2016). Παιδαγωγική του παιχνιδιού στην προσχολική και σχολική εκπαίδευση. (Επιμ. Μ. Σακελλαρίου). Αθήνα: Πεδίο.

33 Brock, A., Dodds, S., Jarvis, P. & Olusoga, Y. (2016). *Παιδαγωγική του παιχνιδιού στην προσχολική και σχολική*

The use of the toy in the education of children with autism is of particular interest. Their play lacks creativity, social interaction and responsiveness³⁴. Their play is limited to repetitive themes, they use games in an unusual way and only in relation to their physical properties, such as twisting them or simply place them in a straight line³⁵. Symbolic is absent as these children find it difficult to develop roles and overturn reality due to the difficulty of organizing thought, isolation from other children and communication with other children³⁶. Also, there is a lack of imaginative and fictitious play because they see things as they are without being able to impart fantastic properties to the games³⁷. The lack of communication and social interaction combined with the lack of language abilities, problems in mimicking expressions and movements, and the difficulty of waiting for their turn makes social –their dramatic play³⁸. Miltter et al.³⁹ stresses the absence of spontaneous and free play in children with autism because of the repetitive movements they make in the game and therefore it is necessary to assist and guide an adult who motivate them a spontaneous game. In the functional game Morfidi et al.⁴⁰ reports that they have difficulty in the complex functional game, while making it simpler. Another study reports that children with autism in functional play are more likely to engage in mobility and preschool games than children with formal development⁴¹. Children with autism prefer parallel - solitary play because they have not developed the capacity for spontaneous social interaction. They may be interested in other children, play next to them, but cannot participate in the play of others⁴².

It is very important to help children with autism develop skills and abilities

εκπαίδευση. (Επιμ. Μ. Σακελλαρίου). Αθήνα: Πεδίο.

34 Feldman, R.S.I. (2009). *Εξλεκτική ψυχολογία. Δια βίου ανάπτυξη*. (Μτφ. Αντωνοπούλου ζωή). Αθήνα: Gutenberg.

35 Brock, A., Dodds, S., Jarvis, P. & Olusoga, Y. (2016). Παιδαγωγική του παιχνιδιού στην προσχολική και σχολική εκπαίδευση. (Επιμ. Μ. Σακελλαρίου). Αθήνα: Πεδίο.

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37 Feldman, R.S.I. (2009). *Εξλεκτική ψυχολογία. Δια βίου ανάπτυξη*. (Μτφ. Αντωνοπούλου ζωή). Αθήνα: Gutenberg.

38 a) Brock, A., Dodds, S., Jarvis, P. & Olusoga, Y. (2016). Παιδαγωγική του παιχνιδιού στην προσχολική και σχολική εκπαίδευση. (Επιμ. Μ. Σακελλαρίου). Αθήνα: Πεδίο.

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41 Dominguez, A., Ziviani, J. (2006). "Play behaviors and play object preferences of young children with autistic disorder in a clinical play environment", *Autism*, 10(1): 53-69.

42 Preissler, M.A. (2006). "Play and Autism: Facilitating Symbolic Understanding" στο Singer, D., Michnick, R., Hirsh-Pasek, K. (2006). *Play=Learning. How Play Motivates and Enhances Children's Cognitive and Social - Emotional Growth*. New York, NY: Oxford University Press, Chapter 12: 392-426.

for a normal game. Through the sensory game, children will learn different objects, learn about materials, develop subtle mobility, learn about their physical and social environment⁴³. Kinetic-physical play will contribute to the development of motor skills, the child's orientation towards others and objects⁴⁴. Social - drama will enhance social interaction, communication and group integration. Palechka et al.⁴⁵ emphasize the importance of imaginative play in the development of symbols and representations, providing the child with pleasure and creativity. Play is important and valuable in children with autism because it is a means of expressing thoughts, emotions, being the child's self⁴⁶.

The child as he or she plays can give a lot of information about himself / herself, which he or she cannot express in a word, expresses it through play. The lack of skills enhances the isolation of these children, making them noticeably different from their peers. According to Morisson, Sainato and Sayaka⁴⁷ a timely strategic intervention that supports learning in play and less in school progress enables children with autism to enter mainstream school.

3.1. Teacher views on game use

The teachers' views from the research findings show that they are positive about the importance of play in the education of children with autism. Their role is important in game development⁴⁸. The teacher has the ability to enhance the child's play taking into account their interests, to consider what the child likes and dislikes, because the child chooses a particular toy, how he or she can suggest another toy⁴⁹. During the game he / she has the ability to observe the child's behavior, reinforce the positive points, while at the same time he / she can perceive the thoughts and feelings from the way he / she plays, the materials he / she uses and the way he / she interacts with his / her peers⁵⁰.

43 Κοτσαλίδου, Ε. (2011). *Διαθεματικές προτάσεις εργασίας για το νηπιαγωγείο και το δημοτικό, θεωρία και πράξη*. Αθήνα: Καστανιώτη.

44 Thiesen, P. (2014). 420 *Παιδικά Παιχνίδια: Για την απόκτηση σωματικών, πνευματικών, κοινωνικών & δημιουργικών δεξιοτήτων*. Αθήνα. Ίων.

45 Palechka, G., & MacDonald, R. (2010). A comparison of the acquisition of play skills using instructor-created video models and commercially available videos. *Education & Treatment of Children*, 33, 3, 457-474.

46 Κοτσαλίδου, Ε. (2011). *Διαθεματικές προτάσεις εργασίας για το νηπιαγωγείο και το δημοτικό, θεωρία και πράξη*. Αθήνα: Καστανιώτη.

47 Morrison, R.S./ Sainato D.M. and Sayaka E. (2002). "Increasing Play Skills of Children With Autism Using Activities Schedules and Correspondence Training", *Journal of Early Intervention*, 25(1): 58-72.

48 Αυγητίδου, Σ. (2001). *Το παιχνίδι: σύγχρονες ερμηνευτικές και διδακτικές προσεγγίσεις*. (μετ. Άσπα Γολέμη). Αθήνα: Τυπωθήτω Γ. Δαρδανός

49 Κοτσαλίδου, Ε. (2011). *Διαθεματικές προτάσεις εργασίας για το νηπιαγωγείο και το δημοτικό, θεωρία και πράξη*. Αθήνα: Καστανιώτη.

50 Trawick-Smith, J., Wolff, J., Koschel, M., & Vallarelli, J. (2015). Effects of toys on the play quality of preschool children: Influence of gender, ethnicity, and socioeconomic status. *Early Childhood Education Journal*, 43(4): 249-256.

The role of the teacher according to Papanikolaou et al.⁵¹ is important in the education of these children according to the Vygotsky ‘area of development’ theory and Bruner’s ‘scaffolding’ theory, which emphasize the supportive role of the teacher in the child’s learning and development process according to each child’s needs and abilities. The teacher has a supportive and coordinating role rather than a leading role⁵². It is he who will intervene, he will organize the game by letting go the child to move freely to develop its autonomy, creativity and imagination. He must have the flexibility and readiness to look for alternative forms of play and respond to the stimuli given to him by children⁵³. Teachers are more likely to use the guiding game in the education of children with autism because they feel that by observing and interacting more with children’s play they can better evaluate children’s learning and their abilities, while allowing children to play freely they cannot get a proper picture of their strengths and weaknesses⁵⁴. It is important that teachers, while often guiding the play of children with autism in the classroom, do not guide the play of children during breaks by providing specific play activities. Break time is a basic requirement and you should pay special attention. Break time is very important for creating friendships between children. Playing during breaks is the main opportunity to create friendships between children. However, the time taken for breaks is limited, due to the increase in teaching time⁵⁵. The break is the most difficult school time for children with autism. The lack of specific structure and predictability, the noise and the presence of many children during breaks cause anxiety in children with autism. In addition, their inability to read other children’s body language makes it difficult to learn social rules and make friends with other children. The only way teachers can help children with autism to cope with the chaos of the break is to integrate the break into their curriculum⁵⁶.

Teachers’ use of the game, the placement of the game in the educational system and the curriculum, factors that influence the development of the game in the classroom and the evaluation of children with autism through play are important factors in enhancing and improving the skills of children with autism. autism⁵⁷. About the use of the game by teachers, they use the game as a

51 Papanikolaou, K., Ntre, V., Triantafyllou, K., Giannakopoulos, G., Kokkosi, M. & Kolaitis, G. (2018). Psychosocial and Financial Needs, Burdens and Support, and Major Concerns among Greek Families with Children with Autism Spectrum Disorder (ASD). *International Journal of Caring Sciences*, 11, 2, 985-995.

52 Βλ. ο.π.

53 Σταμάτης Π. (2013), *Παιδαγωγική επικοινωνία στην προσχολική και πρωτοσχολική εκπαίδευση*, Εκδόσεις: Διάδραση, Αθήνα.

54 Αυγητίδου, Σ., Τζεκάκη, Μ. & Τσάφος, Β. (2016). Ενισχύοντας τη μάθηση των παιδιών: Νοηματοδότηση και παιχνίδι στο «Οι υποψήφιοι εκπαιδευτικοί παρατηρούν, παρεμβαίνουν και αναστοχάζονται». Αθήνα: Gutenberg.

55 βλ. ο.π.

56 βλ. ο.π.

57 Lee, J., & Vargo, K. K. (2017). Physical Activity into Socialization: A Movement-based Social Skills Program

means of educating children with autism. The majority of teachers often use a guiding game, that is, they guide children during the game. Teachers also often use imitation during play, as they emphasize activities that are fun and fun for the child. Likewise, it is equally important to always enhance the appropriate reactions of children to the game. Another important element is the placement of play in the educational system, with the aim of providing children with the opportunity to learn new things, develop skills and competences in an organized and coordinated manner⁵⁸. For this reason, teachers consider play education to be very important and believe that it must be an integral part of the curriculum. For this reason, more time should be devoted to the school curriculum for playing with children with autism, with the participation of the teacher⁵⁹. However, there are cases where teachers find that sometimes only classroom conditions favor the use of play as a means of educating children with autism.

Indeed, it is particularly emphasized that program requirements, materials available, and school space sometimes facilitate game development⁶⁰. Of course, teachers' work is facilitated when there is a positive attitude of the Ministry of Education towards the development of the game. Thus, in their efforts to implement their educational program, the Ministry of Education sometimes provides them with the appropriate materials and training to facilitate their development of the game⁶¹.

The teacher has an important role at school, which is to spend most of his time working with individual children or small groups, to circulate amongst them, offering his help whenever needed, and to evaluate their actions and interactions⁶². The teacher makes sure that the environment is interesting for the children, adding or removing materials or corners, proposing ideas, becoming a part of their game and following their ideas, etc. When planning, it is good to take into account the views of parents. When implementing the program, the teacher can inform parents by appointment, by letter, by telephone, of what is happening in the classroom, and by inviting them to participate in activities or separate classroom events. In addition, parents can help evaluate the effectiveness of the program⁶³.

Teachers can support and improve family and school collaboration.

for Children with Autism Spectrum Disorder. *Journal of Physical Education, Recreation & Dance*, 88, 4, 7-13.

58 βλ. ο.π.

59 Ζωγόπουλος Α. (2013). Η σπουδαιότητα των παραγόντων «Υλικοτεχνική Υποδομή» και «Πόροι» στις εκπαιδευτικές διαδικασίες. *Τα Εκπαιδευτικά*, 107, 108, 47-62.

60 Ζωγόπουλος Α. (2013). Η σπουδαιότητα των παραγόντων «Υλικοτεχνική Υποδομή» και «Πόροι» στις εκπαιδευτικές διαδικασίες. *Τα Εκπαιδευτικά*, 107, 108, 47-62.

61 βλ. ο.π.

62 Papanikolaou, K., Ntre, V., Triantafyllou, K., Giannakopoulos, G., Kokkosi, M. & Kolaitis, G. (2018). Psychosocial and Financial Needs, Burdens and Support, and Major Concerns among Greek Families with Children with Autism Spectrum Disorder (ASD). *International Journal of Caring Sciences*, 11, 2, 985-995.

63 Schertz, H. H., & Horn, K. (2017). Facilitating toddlers' social communication from within the parent-child relationship: Application of family-centered early intervention and mediated learning principles. In M. Siller & L. Morgan (Eds.), *Handbook of family-centered practice for very young children with autism*. Cham, Switzerland: Springer.

According to Papanikolaou et al.⁶⁴, children need emotional support, and such support can be generated by the environment efficiently, when the family and the school teachers work together. In addition, Jones et al.⁶⁵ point out that one of the effects of parental involvement in school curricula is to improve the behavior of children and the relationship between parents and teachers. The more important principles for more effective family and school collaboration⁶⁶:

- Family and school collaboration should focus primarily on prevention, not reaction. Teachers should address all families during the pedagogical process.
- It should be dominated by sensitivity and respect for the cultural background of children and their families.
- It should recognize and value the significant contribution of parents, regardless of their educational background.
- Family-school collaboration will be effective if it is based on mutual respect and trust, and if parental support is promoted through positive, meaningful, two-way communication between school and home.

The family and the school cover the child's needs, such as the need for love, the sense of security, recognition and acceptance of the child, which are necessary for the smooth psycho-emotional development⁶⁷. Within the family and school the child with autism acquires new experiences and knowledge, takes responsibility, learns the boundaries of human behavior by regulating his / her instinctive impulses, discovering himself / herself, slowly becoming independent by doing things alone and socializing with joining his peer group⁶⁸.

We understand that school and family play an important role in the development of a child with autism and are role models for these children. Malfunctions either in the family or at school can cause children with psycho-emotional problems, behavior problems, adjustment difficulties, and more⁶⁹.

64 Papanikolaou, K., Ntre, V., Triantafyllou, K., Giannakopoulos, G., Kokkosi, M. & Kolaitis, G. (2018). Psychosocial and Financial Needs, Burdens and Support, and Major Concerns among Greek Families with Children with Autism Spectrum Disorder (ASD). *International Journal of Caring Sciences*, 11, 2, 985-995.

65 Jones, L., Hastings, R. P., Totsika, V., Keane, L., & Rhule, N. (2014). Child Behavior Problems and Parental Well-Being in Families of Children with Autism: The Mediating Role of Mindfulness and Acceptance. *American Journal on Intellectual and Developmental Disabilities*, 119 (2), 171-185.

66 Σακελλαρίου, Μ. & Ρέντζου, Κ. (2012). Διερεύνηση του ρόλου των ενηλίκων στο παιχνίδι των παιδιών, υπό το πρίσμα της έρευνας-δράσης, στα Πρακτικά του 3ου Διεθνούς Συνεδρίου Προσχολικής Αγωγής, «Η έρευνα στην παιδική ηλικία: Προσδιορίζοντας ένα νέο τοπίο», Ιωάννινα, 11-13 Μαΐου 2012, Πανεπιστήμιο Ιωαννίνων.

67 Ζήση, Α., Μαυροπούλου, Σ. & Δαρδάνη, Χ. (2019). Η εμπειρία των μητέρων που μεγαλώνουν παιδί/ά στο φάσμα του αυτισμού: Παράγοντες ενδυνάμωσης και θετικής αναδόμησης (131-142). Στο: Α. Ζήση & Μ. Σαββάκης (Επιμ.). *Αναπηρία και Κοινωνία: Σύγχρονες Θεωρητικές Προκλήσεις και Ερευνητικές Προοπτικές*. Θεσσαλονίκη: Τζόλα.

68 Papanikolaou, K., Ntre, V., Triantafyllou, K., Giannakopoulos, G., Kokkosi, M. & Kolaitis, G. (2018). Psychosocial and Financial Needs, Burdens and Support, and Major Concerns among Greek Families with Children with Autism Spectrum Disorder (ASD). *International Journal of Caring Sciences*, 11, 2, 985-995.

69 Μαλικιώση-Λοϊζου, Μ. (2012). Διαπροσωπικές σχέσεις και επικοινωνία: η σημασία τους για την οικογένεια

Teachers value learning disabilities and problem behaviors that impede the learning process more than children with interpersonal and interpersonal behavior problems. Specifically, teachers attribute school-related problems to external factors, such as the lack of effort and interest on the part of these children, the low socio-economic level of the family, and the degree of parental involvement at home and school⁷⁰.

Teachers emphasize the importance of play in the education of children with autism, considering play as an appropriate means of acquiring knowledge and developing skills. According to research, teachers find it important to restructure the curriculum to provide more flexibility and freedom to the teacher, with set goals, to create the right conditions for play and to properly train teachers to respond effectively⁷¹.

4. Conclusions - proposals

It is a fact that play contributes significantly to the social, emotional, linguistic and cognitive development of children with autism⁷². Teachers recognize that play is an important alternative method of evaluation, diagnosis, and valid intervention. Improving the communication and interaction of children with autism through play seems to be crucial and necessary in the education of these children. Play is not only an educational approach, but also a therapeutic approach to the teaching task, as it enables these children to express thoughts, feelings, and opinions in their own way.

Teachers who teach children with autism understand that play helps maintain a strictly specific structure in game design, structure, and adherence to a specific program that will help and improve the abilities⁷³. Play is a means of assessing competences and a way of checking the progress and improvement that the student has made. Thus, the teacher can identify the deficiencies in order to make the necessary interventions and formulate an appropriate educational program that will effectively contribute to the teaching objective⁷⁴. During the play, whether structured or free play, the teacher can gather a lot of information about the child's developmental, cognitive, emotional level, their preferences,

και για το σχολείο (σελ. 100-126). Στο Χ. Χατζηχρήστου και Η. Μπεζεβέγκης (επιμ.) *Θέματα ανάπτυξης και προσαρμογής των παιδιών στην οικογένεια και στο σχολείο*. Αθήνα: Πεδίο.

70 βλ. ο.π.

71 βλ. ο.π.

72 Αυγητίδου, Σ. (2001). *Το παιχνίδι: σύγχρονες ερμηνευτικές και διδακτικές προσεγγίσεις*. (μετ. Άσπα Γολέμη). Αθήνα: Τυπωθήτω Γ. Δαρδανός.

73 Αυγητίδου, Σ., Τζεκάκη, Μ. & Τσάφος, Β. (2016). Ενισχύοντας τη μάθηση των παιδιών: Νοηματοδότηση και παιχνίδι στο «Οι υποψήφιοι εκπαιδευτικοί παρατηρούν, παρεμβαίνουν και αναστοχάζονται», Αθήνα, Gutenberg.

74 Ζήση, Α., Μαυροπούλου, Σ. & Δαρδάνη, Χ. (2019). Η εμπειρία των μητέρων που μεγαλώνουν παιδί/ά στο φάσμα του αυτισμού: Παράγοντες ενδυνάμωσης και θετικής αναδόμησης (131-142). Στο: Α. Ζήση & Μ. Σαββάκης (Επιμ.). *Αναπηρία και Κοινωνία: Σύγχρονες Θεωρητικές Προκλήσεις και Ερευνητικές Προοπτικές*. Θεσσαλονίκη: Τζιόλα.

how they think about play time. Of course, teachers also emphasize the difficulty they face in educational practice, such as organizing a classroom, school climate, program pressure, and access to materials⁷⁵.

It is also necessary to work with parents who will provide important information on children's preferences and needs, as well as the need to continue their education at home so that there is no change in the child which would disturb his / her personality. But it is also important to collaborate with the dedicated scientific staff who will facilitate the work of teachers, set common goals, exchange views on the program, activities and decide on how each child will be approached⁷⁶. It is important for the child to be able to move from solitary play to cooperative group play in order to benefit from education, communication with peers and social integration.

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Νόμοι/προεδρικά διατάγματα

Νόμος: 3699/2008 - ΦΕΚ 199/Α'/2.10.2008. Ειδική Αγωγή και Εκπαίδευση ατόμων με αναπηρία ή με ειδικές εκπαιδευτικές ανάγκες.

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George Kadigiannopoulos

**The New Testament and the Quran as a
Starting Point for Intercultural Dialogue on
an Educational level**

Abstract

The recent years have seen continuous population movements, involving either migrants or refugees, towards Greece and Europe in general. These populations differ in terms of religion, thus endowing Greek and European societies with multireligious characteristics. The purpose of this article is to ascertain, through the use of quality content analysis, whether the New Testament and the Quran may function as means for the initiation of intercultural dialogue on an educational level. The investigation of the two texts led to the assumption that they converge on certain key issues, such as poverty, human rights, respect of otherness but diverge on others, such as the approach of people with special needs. Still, the conclusion drawn is that the texts in question can contribute to intercultural dialogue on an educational level.

Keywords: Intercultural dialogue, New Testament, Quran, Education

1. Introduction

Within the past few years, migrants and refugees, mainly from Asian and African countries, have been continuously moving to Greece and Europe in general. These populations vary both culturally and religiously. As a result, the societies of the receiving countries have inevitably obtained multicultural and multireligious attributes. The majority of migrants and refugees have embraced Islam, a fact that necessitates certain social changes that may enable their smooth and fruitful coexistence with the dominant Christian populations. Within this framework, the educational system can play a fundamental role, since it generates the conditions for the substantial contact and absorption of all students, regardless of country or origin, religion.

2. Theory

2.1. Clarification of basic terms

Intercultural education is the educational answer to problems of an intercultural nature that arise in a multicultural and multinational society¹. In addition, intercultural dialogue is defined as the procedure encompassing an open and comprehensive exchange of views that is primarily characterized by respect and carried out, always on the basis of mutual respect and understanding, between people and groups that differ ethnically, religiously and linguistically².

2.2. Intercultural education

Within the past few decades, intercultural education has held a leading position among educational sciences, as it has, by and large, undertaken the task of combating discrimination and social exclusion. In addition, it has prioritized the safekeeping of equal learning opportunities for the whole of the student population, regardless of gender, social class, ethnicity, and race³.

The purpose of intercultural education is the preparation of independent people for their participation into a democratic, intercultural society characterized by cultural, ethnic, linguistic, and religious difference and inequality⁴.

The principles of intercultural education are the following:⁵

- the education for empathy, i.e. the ability of the “I” to identify cognitively

1 Essinger, H. (1990). Interkultureller Erziehung in multiethnischen Gesellschaften. *Die Bruecke*, 52, pp. 22-31.

2 Council of Europe. (2008). *White Paper on Intercultural Dialogue “Living Together As Equals in Dignity.”* Strasbourg: Council of Europe.

3 Bereris, P. (2001). *For an Intercultural Education in a Multicultural Society*. Athens: Apiroshora.

4 Batelaan, P. & Van Hoof, C. (1996). Cooperative learning in intercultural education. *European Journal of Intercultural Studies*, 7 (3), pp. 5-16.

5 Essinger, H. (1990). Interkultureller Erziehung in multiethnischen Gesellschaften. *Die Bruecke*, 52, pp. 22-31.

and emotionally with the “other” through the acceptance and incorporation of “his/her” expectations into “my” behavior towards “him/her”. The “other” is mainly understandable as a person functioning within a framework of possibilities and limitations that mar his/her social living conditions⁶

- the education for solidarity. This represents the fostering of a collective consciousness which transcends the limits of groups, races and countries, so that social inequality and injustice may be mitigated;
- the education for intercultural respect, which refers to the need for cultural expansion through inviting other cultures to join our own;
- the education against the nationalist way of thinking, which aims to eliminate national stereotypes and prejudices, so that peoples may open a dialogue and communicate with each other.

The assumptions-bases on which intercultural education is founded are the recognition of otherness, social cohesion, equality, and justice⁷. These are deemed as absolutely essential for securing the proper functioning of society and the preservation of social peace.

2.3. Intercultural Theology

Modern societies call upon the coexistence of people with distinct religious orientations, a fact that can, in some cases, create various problems. Intercultural theology can make a substantial contribution to the alleviation or solution of these problems, having the ability to lead religious dogmas to a fertile deliberation⁸.

Intercultural theology devises ways of communication that aid in improving cooperation and communication, while narrowing the causes of conflict and tension. Moreover, it is undeniably clear that it does not ignore the differences among the various religious convictions or their rules, and does not seek to cancel everlasting faiths and experiences⁹. Therefore, it suggests that people who disagree with our opinions should not be considered as our enemies¹⁰.

At the same time, intercultural theology stands firmly against religious fanaticism, and is a staunch defender of religious liberalism, the equality of women, and democratic institutions¹¹. On an educational level, it offers students

6 Govaris, C. (2001). *Introduction to Intercultural Education*. Athens: Atrapos.

7 Nikolaou, G. (2005). *Intercultural Didactics. The New Environment. Basic Principles*. Athens. Ellinika Grammata.

8 Portelanos, S. (2011). *Intercultural Theology*. Athens: Ennoia.

9 Portelanos, S. (2011). *Intercultural Theology*. Athens: Ennoia.

10 Boltetsos, T. (2010). “Pastoral Dimensions of Modern Multicultural Theology.” *Theology*, 2, pp. 81-118.

11 Baltatzis, D., Tsoukanaridis, D. and Baltatzi, E. (2010). “The Education with Respect towards Religious Otherness.” In *Intercultural Education – Immigration – The Management of Conflicts and the Pedagogy of Democracy*, edited by P. Georgogiannis and B. Baros, (2010), Volume 2, Proceedings of the 13th International Conference of KE.DE.K., Volume B, (Alexandroupolis, 7 – 9 May 2010), Patras, pp. 587-599.

a view of religions different that their own¹², aiming at, among other things, religious pluralism¹³.

2.4. The Intercultural Dimension of Religious Education

Having received a considerable number of migrant populations, modern Greek society has inevitably acquired multicultural characteristics. As a result, it is vital that the educational system targets the redefinition of the role of religious education. A critical point in doing so is the hesitation exhibited by religions in accepting diversity¹⁴.

The purpose of intercultural religious education is to make every young person aware of his/her religion, the culture and phenomena that stem from it¹⁵. In addition, it intends to positively transform people and their lives, as well as to achieve mutual interaction, the enrichment and development of healthy relationships with foreign students and people of different religions.¹⁶ Furthermore, it strives to mitigate contrasts, discriminations and conflicts on a social level, with a view to attaining reconciliation, solidarity, etc.¹⁷

Beyond the shadow of a doubt, from a moral standpoint, the content of Christianity entails authentic multicultural elements. It is thereby possible to connect intercultural and religious education on an educational level, as the latter highlights universal values that lead to mutual understanding and social solidarity,¹⁸ which constitute targets of the former.

Jackson¹⁹ assesses that there exist several fields of common action and cooperation between intercultural and religious education, since the two can augment social cohesion through their examination of religious dogmas and their

12 Nina, M. N. & Ferry, M. S. (2013). Religious and multicultural education: Introducing Interfaith Dialogue in the Indonesian Educational System. *AL ALBAB - Borneo Journal of Religious Studies*, 2 (1), pp. 67-75.

13 Hermans, C. (2003). *Participatory Learning; Religious Education in Globalizing Society*. Boston: Brill.

14 Karamouzis, P. (2008). "Religious Education and Intercultural Communication. From Paternalistic Manipulation to Religious Investigation." *Gallery – Pedagogical Currents in the Aegean*, pp. 41-53.

15 Koukounaras – Liagkis M. (2010). "Culture – Religion – Education. A Proposal for Obligatory Intercultural Religious Education, based on European thinking and Case Law." In *Intercultural Education – Immigration – The Management of Conflicts and the Pedagogy of Democracy*, edited by P. Georgogiannis and B. Baros, (2010), Volume 2, Proceedings of the 13th International Conference of KE.DE.K., Volume B, (Alexandroupolis, 7 – 9 May 2010), Patras, pp. 569-578.

16 Baltatzis, D., Tsoukanaridis, D. and Baltatzi, E. (2010). "The Education with Respect towards Religious Otherness." In *Intercultural Education – Immigration – The Management of Conflicts and the Pedagogy of Democracy*, edited by P. Georgogiannis and B. Baros, (2010), Volume 2, Proceedings of the 13th International Conference of KE.DE.K., Volume B, (Alexandroupolis, 7 – 9 May 2010), Patras, pp. 587-599.

17 Pepes, E. (2010). "Immigrants, Religious Inequalities and Discriminations: the Role of Religious Education in the Greek School." In *Intercultural Education – Immigration – The Management of Conflicts and the Pedagogy of Democracy*, edited by P. Georgogiannis and B. Baros, (2010), Volume 2, Proceedings of the 13th International Conference of KE.DE.K., Volume B, (Alexandroupolis, 7 – 9 May 2010), Patras, pp. 579-586.

18 Portelanos, S. (2011). *Intercultural Theology*. Athens: Ennoia.

19 Jackson, R. (2004). Intercultural education and recent European pedagogies of religious education. *Intercultural Education*, 5 (1), pp. 2-14.

differences. According to Gundara²⁰, religions have both positive and negative dimensions, so it is essential to exploit the former in order to safeguard human rights on a legal and secure basis, while improving understanding between people and groups. If this is to happen, students should be equipped with the knowledge needed to comprehend various aspects of religious freedom, such as religious rights, the respect towards people of different religions, and the responsibility involved in protecting and respecting the religious rights of others²¹.

2.5. Intercultural Dialogue

Globalization has brought about the need to develop intercultural dialogue, since this type of dialogue between people representing potent majorities and those expressing the views of minorities may prove to be instrumental in creating and solidifying an integrated identity²² both on an individual and social level.

According to the White Paper, intercultural dialogue presupposes the existence of principles such as respect for human rights, equal dignity, mutual respect, gender equality, etc.²³ It thus follows that intercultural dialogue is useful in that it assists in the combating of stereotypes, racism, xenophobia, bigotry, violence, intolerance, and discriminations related to nationality, religion, language or culture. It additionally functions as a tool in the attempt to manage diversity and strengthen social cohesion.

Nonparticipation in intercultural dialogue fosters the development of stereotypical beliefs about the “Other”, distrust, bigotry, discrimination, and, potentially, extremist activities.²⁴ While intercultural dialogue does not constitute a panacea, it is to be inferred that it can contribute to the alleviation of certain serious problems, provided that there is a desire for participation in dialogue within a minimum framework of commonly accepted values, such as equality, mutual respect, etc.

On a religious level, intercultural dialogue aids the faithful, regardless of age, in their attempt to come into contact with the culture of their fellow humans, thus nurturing respect and understanding²⁵. In any case, the multicultural composition of modern societies demands the understanding of similarities or

20 Gundara, J. (2000). Religion, human rights and intercultural education. *Intercultural Education*, 11 (2), pp. 127-136.

21 Julian, J. (2000). On religious freedom and civic learning. *Intercultural Education*, 11 (2), pp. 137-144.

22 Jackson, R. (2011). Intercultural dialogue is not interreligious dialogue: Europe’s secular and faith institutions in a dialogue of equals. In: J. Corrie & C. Ross (ed.), *Mission in Context: Conversations with J Andrew Kirk*. Farnham: Ashgate, pp. 1-10.

23 Council of Europe. (2008). *White Paper on Intercultural Dialogue “Living Together As Equals in Dignity.”* Strasbourg: Council of Europe.

24 Council of Europe. (2008). *White Paper on Intercultural Dialogue “Living Together As Equals in Dignity.”* Strasbourg: Council of Europe.

25 European Union. (2008). *Living Faiths together*. Brussels: European Youth Forum.

differences of religions coexisting in the same area²⁶.

With respect to religious intercultural dialogue, it is evident that this dialogue does not target the proselytization of believers of other religions²⁷ but the facilitation of a contact between people of different religious creeds. This type of dialogue is also a tool for the encouragement of meaningful relationships and respect between people on dissimilar religious and spiritual quests^{28 29}.

The purpose of intercultural dialogue between Christianity and Islam is the comprehension of the religious views and experiences of the two religions, the focus on common positions and convictions,³⁰ as well as the development of respect and mutual understanding, all of which can form the foundation of a better world³¹.

2.6. Related Research

The existence of extreme poverty around the globe has given rise to sizeable migration movements. The effort to tackle poverty may well be based on the common wish of Christianity and Islam to control it and reduce the number of financially weaker people. It is ultimately the duty of all religions to deal with poverty^{32 33} and this can be achieved through their cooperation on the matter³⁴, with intercultural dialogue in education serving as the starting point.

A matter of vital importance in the development of a productive intercultural dialogue on an educational level is gender equality. It is universally accepted that women are not treated as equal to men, and this belief is generally not challenged whenever reference is made to Islamic countries, in which the position of women is inferior to that of men³⁵. Therefore, the question of gender equality and its necessity in the modern world is bound to be discussed within the framework of an intercultural dialogue in education.

26 Cook, P. (2016). A Comparison and Analysis of the Christian and Muslim Faiths. *Faith Diversity*, pp. 1-13.

27 Brun, M. (2013), "The Contribution of Metropolitan Damascene (Papandreou) in Interchristian and Interreligious Dialogues." *Theology*, 4, pp. 41-67.

28 Ziaka, A. (2010) *Interreligious Dialogues. Volume B. The Meeting of Christianity with Islam*. Thessaloniki: Pourmaras.

29 Ziaka, A. (2013). "Interreligious Dialogue and the Christian Testimony in the Curriculum of the Faculty of Theology of the AUTH. The Contribution of Professor Petros Vasileiadis." Pp. 339-379 in *Ecumenical Dialogue in the 21st Century. Realities – Challenges – Prospects*, edited by I. Petrou, S. Tsompanidis, M. Goutzioudi. Thessaloniki: Vantias.

30 Giannoulatos A. (2005). *Islam. Religious Review*. Athens: Akritas.

31 Brun, M. (2013), "The Contribution of Metropolitan Damascene (Papandreou) in Interchristian and Interreligious Dialogues." *Theology*, 4, pp. 41-67.

32 Katerelos, K. (2013a). "Paul Knitter: With the Theology of Liberation in Religious Pluralism." *Theology*, 2, pp. 21-55.

33 Keramidas, D. (2013). "Interreligious Dialogue and Theology of Religions. The Example of Roman Catholic Theology." *Theology*, 4, pp. 109-162.

34 Trinlae, B. L. (2013). Leveraging Inter-religious Dialogue into Transformative Action Using Practical Theology's Reflexive Frameworks. *Interreligious Dialogue*, 11, pp. 51-60.

35 Giannoulatos A. (2005). *Islam. Religious Review*. Athens: Akritas.

Issues concerning human rights invariably attract people's interest, especially when these acquire a religious dimension and revolve around Islam. Within this framework, intercultural dialogue in education, in combination with religious education, may promote the respect of religious freedom and of a variety of other human rights³⁶.

2.7. Purpose of the Research

This research intends to investigate the texts of the New Testament and the Quran in order to determine whether they could initiate intercultural dialogue on an educational level.

2.8. Hypotheses of the Research

This investigation sought to address two research questions-hypotheses. The first one relates to the existence or not of points of convergence or divergence between the New Testament and the Quran on matters such as poverty, the position of women, the approach of foreigners, otherness, and human rights. The second question pertains to whether the aforementioned points of convergence or divergence can become the first step for intercultural dialogue in education.

3. Methodology

3.1. Content Analysis

The content analysis method³⁷ constitutes one of the most popular research methods, as it enables the researcher to examine texts by delving into their content and their sometimes elusive meanings.

Content analysis may acquire both qualitative and quantitative characteristics^{38 39}, while aiming at the investigation of specific secondary material. The method in question is used to condense texts and assign them into certain categories using predetermined codification rules^{40 41}. As a result, researchers may subsequently edit these texts and draw conclusions.

The adoption of content analysis as a method aims at covering certain main topics of a text⁴², while the success of the whole research depends largely on the

36 Council of European Union. (2013). *EU Guidelines on the promotion and protection of freedom of religion or belief*. FOREIGN AFFAIRS Council meeting Luxembourg. Luxembourg: Council of European Union.

37 Krippendorff, K. (1980). *Content Analysis: An Introduction to its Methodology*. London: Sage Publications.

38 Weibrenner, P. (1995). Grundlagen und Methoden probleme sozialwissenschaftlicher Schulbuch-forschung. In: R. Olechowski (ed.), *Schulbuchforschung*. Frankfurt: Peter Lang, s.s. 21-45.

39 Athanasiou, L. (2007). *Research Methods and Techniques in the Sciences of Education*. Ioannina: Efyra.

40 Weber, R.P. (1990). *Basic Content Analysis*. London: Sage Publications.

41 Daoutopoulos, G. (2005). *Methodology of social research*. Thessaloniki: Zygos.

42 Kyriazi, N. (2009). *Sociological Research. A Critical Review of Methods and Techniques*. Athens: Ellinika Grammata.

categories established⁴³. The criteria according to which these categories are created involve the purpose of the research and the given situation on a theoretical level⁴⁴⁴⁵. The unit of analysis is selected in accordance with the purpose, the targets, and the research questions⁴⁶ and can be a word, phrase, concept, person, etc.

The process of categorization is directed towards the formulation of hypotheses-questions by the researcher and the furnishing of answers to specific queries. Therefore, a fundamental goal of categorization in content analysis is to check the formulated hypotheses-questions. In this method, it is indispensable to analyze the whole of the researched text and not merely a part of it, and to make concrete and distinct categories for the categorization of data that may enable a researcher to repeat and verify the procedure. Additionally, it is necessary to assign numerical values to the variables, if possible⁴⁷.

One of the main assets of this method, possibly the dominant one, is the fact that it is uninfluenced by the Hawthorne effect: researchers cannot exert an influence on the content of the material, which means that the content analysis method may be regarded as more objective⁴⁸ ⁴⁹. Nevertheless, it cannot be wholly unaffected by the surrounding social atmosphere, the transmitter of messages or the researcher⁵⁰. Consequently, the danger of yielding answers that are not perfectly correct is always imminent.

The research into a body of texts and, in specific, into those of the New Testament and the Quran, is a complex and multidimensional process which exhibits various deficiencies due to the unquestionable difficulty faced when forming the necessary and appropriate analysis categories. In any case, the research method employed should be reliable, valid, and orientated towards a pragmatic methodological procedure⁵¹.

Depending on their degree of appropriateness, the chosen categories may later be modified or finalized. A pivotal question concerning content analysis is whether the researcher must remain focused on the apparent content of the text or attempt to discover the hidden text⁵². Most typical content analysts, unable to

43 Berelson, B. (1952). *Content Analysis in Communications Research*. New York: Free Press.

44 Athanasiou, L. (2007). *Research Methods and Techniques in the Sciences of Education*. Ioannina: Efyra.

45 Kyriazi, N. (2009). *Sociological Research. A Critical Review of Methods and Techniques*. Athens: Ellinika Grammata.

46 Athanasiou, L. (2007). *Research Methods and Techniques in the Sciences of Education*. Ioannina: Efyra.

47 Sellitz, C., Wrightsman, L.S., Cook, L.W. (1976). *Research Methods in Social Relations*. New York: Hold, Rinehart and Winston.

48 Daoutopoulos, G. (2005). *Methodology of social research*. Thessaloniki: Zygus.

49 Kyriazi, N. (2009). *Sociological Research. A Critical Review of Methods and Techniques*. Athens: Ellinika Grammata.

50 Bonidis, K. (2004). *The Content of the School Book as a Research Object. Diachronical Examination of the Relevant Research and Methodological Approaches*. Athens: Metaixmio.

51 Bonidis, K. (2004). *The Content of the School Book as a Research Object. Diachronical Examination of the Relevant Research and Methodological Approaches*. Athens: Metaixmio.

52 Kyriazi, N. (2009). *Sociological Research. A Critical Review of Methods and Techniques*. Athens: Ellinika

indicate a way towards a more effective analysis, ascertained the researcher's need to read between the lines⁵³.

The stages of the research process are as follows: the determination of the material under investigation, the analysis of the conditions under which the material was compiled, the typical characteristics of the material, the direction of the analysis, the formulation of questions in the light of the theoretical framework, the stipulation of the techniques to be used in the analysis, the creation of the system of categories-tabulation, the analysis using the criterion of the system of categories (summary, explanation, structuring), the additional examination of the system of categories in the light of the material and the theory, the interpretation of the data collected according to the basic questions^{54 55}.

Quality content analysis offers the researcher the chance to approach the content of the book under investigation on a macro- and micro-level as far as its context is concerned⁵⁶, thus resulting in broader and safer conclusions.

In view of this, quality content analysis is well-suited for the examination of texts like the New Testament and the Quran. Still, a correct and successful system of categories is demanded if the review of the research questions is to bear fruit.

In the present research, four renditions of the New Testament, considered among the most accomplished ones in Greece,⁵⁷ were used in its investigation^{58 59 60 61}. For the text of the Quran, two translations, regarded among the best in the Greek language⁶², were employed^{63 64}.

3.2. Limitations of the Research

Every research, and thus the present one, is subject to certain limitations. Firstly, the New Testament was examined using translations, and not the original texts.

Grammata.

53 Bonidis, K. (2004). *The Content of the School Book as a Research Object. Diachronical Examination of the Relevant Research and Methodological Approaches*. Athens: Metaixmio.

54 Flick, U. (1998). *Qualitative Forschung*. Hamburg: Rororo.

55 Bonidis, K. (2004). *The Content of the School Book as a Research Object. Diachronical Examination of the Relevant Research and Methodological Approaches*. Athens: Metaixmio.

56 Bonidis, K. (2004). *The Content of the School Book as a Research Object. Diachronical Examination of the Relevant Research and Methodological Approaches*. Athens: Metaixmio.

57 Karavidopoulos, I. (2016) *Introduction to the New Testament*. Thessaloniki: Ostrakon Publishing.

58 Vellas V., Antoniadis E., Alivizatos A., and Konidaris G. (1990). *The New Testament*. Athens: Apostoliki Diakonia of the Church of Greece.

59 Vassiliadis P., Galanis I., Galitis G., and Karavidopoulos I. (2003). *The New Testament*. Athens: Bible Society.

60 Kolitsaras, T.I. (2005). *Interpretive Rendition of the Four Holy Gospels from the New Testament*. Athens: Brotherhood of Theologians "Zoi".

61 Trembelas, P. (2009). *The New Testament with a Brief Commentary*. Athens: Brotherhood of Theologians "O Sotir".

62 Giannoulatos A. (2005). *Islam. Religious Review*. Athens: Akritas.

63 Pentakis, G. (2006). *The Holy Quran*. Athens: Kaktos.

64 Bilal, T. K. (2010). *Translation of the Meanings of the Noble Quran in the Greek Language*. Athens: Latsis Foundation.

Secondly, the investigation of the Quran was conducted by employing Greek translations, and not the original Arabic text. Thirdly, the quality content analysis was carried out by a single person, thereby making it difficult to check whether it was executed in the best way possible. Fourthly, the researcher is not familiar with the Arabic language, and was thus unable to use Arabic bibliography, which could have offered helpful additional information in the attempt to analyze the Quran. Finally, the main limitation of this research concerns the religious conviction of the researcher: being a Christian orthodox, it is possible that he approached the issues under discussion in a way that was more favorable towards the New Testament, and thus Christianity, than the Quran, a fact that may affect the level of objectivity of the research.

4. Presentation of Results

4.1. Content analysis results

The application of content analysis on the New Testament and the Quran with respect to the issues related to the hypotheses of the research led to the recording of specific references in these texts.

Table 1: Content analysis results

Number of references	New Testament	Quran
Poverty – Financial assistance	4	9
Position of women	14	16
Approaching foreigners (migrants, refugees)	6	10
Human rights	37	17

Table 1 illustrates that the New Testament and the Quran contain references concerning all the topics under examination (poverty, position of women, approaching foreigners, human rights). The references of the two texts substantially differ in number in the case of human rights, whereas the number of their references to the rest of the issues is more or less comparable.

4.2. Convergences between the New Testament and the Quran

The investigation for the existence of points of concurrence between the New Testament and the Quran revealed that, with regard to the major issue of poverty, the two texts agree on a provision of financial assistance to financially weaker people that must be characterized by the demonstration of respect towards the receiver. The extent of this aid should be in accordance with the actual financial potential

of the donor, as dictated both in the Gospels (Matt. 6:1-4; Matt. 19:16-25; Mark 10:17-27; Luke 18:18-30) and the Quran (2,3; 2,43; 2,219; 22,78; 31,4; 73,20).

With reference to the position of the woman, the texts under investigation are in accord concerning the approbation of marriage, the condemnation of divorce and the deprivation of the woman's right to apply for divorce, a right granted only to men (Matt. 19:1-9; Mark 10:1-12; Luke 16:18; 1,226; 2,226-237; 33,37; 65,1; 33,49-52). Furthermore, both the New Testament and the Quran emphatically disapprove of prostitution and adultery (Matt. 5:31-32; 1 Cor. 7:1-11; 1 Cor. 7:25-28; 1 Pet. 4:1-4; 1 Cor. 6:12-20; 17,34; 24,2-3; 24,4-10; 4,19-25), while exclusively blaming women for their inability to acquire offspring (Luke 1:5-25; Luke 1:36-37; 3,39-40; 19,5-8; 51,29). In addition, the two texts agree on the imposition of limits on the place of women on a religious level and on their attire (Cor. 14:34-35, Cor. 14: 34-36, Cor. 11:10-15; 1 Tim. 2:9-15; 3,36; 4,38; 24,30-31; 33,53).

On the matter of approaching foreigners, migrants and refugees, a significant problem of our era, the New Testament and the Quran converge on the display of friendliness towards them, a fact of undeniably great importance (Matt. 25:31-46; Matt. 27:7-10; Heb. 13:1-6; Rev 3:19; 11,78-79; 15,67-71; 12,59; 22,25).

A few more areas of convergence between the two texts are the safeguarding of certain human rights like those of children, the protection of slaves, and the improvement of their lives (Matt. 24:45-51; Luke 12:35-47; Matt. 26:51-53; Mark 14:47; Luke 22:49-51; John 18:10-11; Matt. 2:15; Matt. 19:13-15; Mark 10:13-16; 12,20; 6,140; 24,33).

4.3. Divergences between the New Testament and the Quran

The investigation of the New Testament and the Quran unveiled a point of disparity with respect to the obligatory nature attributed to the provision of help towards the financially weaker people by the Quran (2,3; 2,43; 2,83). The same is not true of the New Testament, which indeed champions this type of assistance but still bestows the believers with freedom of choice.

A serious disagreement between the two texts relates to the use of violence against women. On the one hand, the New Testament utterly disapproves of violent behavior against any person, and thus women (Eph. 5:21-33; Col. 3:18-22). On the other hand, violence against women is, in some cases, promoted in the Quran (4,34-38).

On the currently weighty issue of approaching foreigners, immigrants and refugees, the two texts diverge solely on the fact that the Quran includes nationalist and racist references to the Hebrew population (2,120; 3,54; 3,110; 3,187; 4,46-48).

As for particular matters pertaining to human rights, the investigation

of the New Testament and the Quran showed that there exist certain differences between them. To be more specific, the two texts appear to be in conflict over the behavior towards people of different religions. The New Testament advocates greater tolerance of such people (Matt. 18:15-17; Gal. 3:26-29; Rev 13:16-18; Luke 10:25-37; Acts 8:4-8; Eph. 3:1-13; John 12:20-26), whereas the Quran often sees religious otherness in a negative and aggressive way (2,105; 2,111; 2,165; 2,217; 5,17; 5,19; 9,29; 8,12-13).

Furthermore, a broad divergence between the two texts is evident in their way of approaching people with special needs. The Quran views these people in a particularly negative light (2,171; 5,110; 8,22-23; 17,97; 24,61; 80,1-2), while their comparative treatment in the New Testament is remarkably positive and replete with empathy (John 9:1-34; Matt. 20:29-34; Luke 18:35-43; Mark 8:22-26; Mark 10:46-52; John 5:1-18; Acts 9:32-35; Matt. 12:9-13; Mark 3:1-6; Luke 6:6-11; Matt. 8:1-4; Mark 1:40-45; Luke 5:12-15; Matt. 17:14-18; Mark 9:14-28; Luke 9:37-43; Matt. 9:27,34; Matt. 12:22; Matt. 21:14-17; Luke 11:14; Acts 3:1-10).

4.4. Summary

To summarize, it can arguably be maintained that there exist certain points of convergence and divergence between the New Testament and the Quran. Among the most characteristic examples of agreement, one finds the respectful financial support of the weak, the endorsement of marriage, the rejection of divorce, prostitution and adultery, the blaming of women for their inability to deliver offspring, the friendly attitude towards foreigners, and the defense of the rights of children and slaves. On the contrary, some of the most notable areas of disagreement lie in matters such as the compulsory nature of financial assistance to the poor, the tolerance of religious otherness, the acceptance of the Jews, and the use of violence against women.

5. Conclusions and suggestions

Judging by the apparent existence of points of convergence and divergence between the New Testament and the Quran, it may be ascertained that the texts in question are capable of instigating intercultural dialogue on an educational level. To be more specific, the shared views of these texts concerning the financial aid towards the poor⁶⁵ comprise a suitable ground for the development of intercultural dialogue in education, through which principles of intercultural education, such as empathy and solidarity, may be diffused.

Moreover, the promotion of friendliness towards foreigners advocated

65 Kadigiannopoulos, G. (2019). Poverty in the New Testament and the Quran. An Intercultural Viewpoint. *Journal of Sociology and Christianity*, Vol. 9, No. 2, pp. 74-85.

by both texts is a pivotal factor in the initiation of intercultural dialogue on an educational level, given the current dynamic migration and refugee surge. Bearing in mind that these widespread phenomena are associated with discrimination, nationalism, racism, and human exploitation, it is imperative to ground intercultural dialogue in education on empathy, solidarity, the eradication of the nationalist way of thinking, and other principles of intercultural education.

In view of the fact that the surge referred to above is combined with a substantial movement of Muslims from Islamic to Christian countries, it is indispensable to discuss the issue of respect for religious otherness within the framework of an intercultural dialogue on an educational level. This type of dialogue, feasible due to the existence of a shared minimum degree of acceptance of religious otherness witnessed in the New Testament and the Quran, should relate to the respect of religious otherness of migrant, refugee, as well as indigenous populations.

In addition, the New Testament and the Quran either converge or diverge on topics such as the position of women, the protection of human rights and children's rights, etc. These matters can form part of an intercultural dialogue in education that is organized around the principles and assumptions of intercultural education.

It must not be overlooked that all of the aforementioned issues are also the focus of interfaith dialogue^{66 67} since problems such as the condition of the poor, migrants or refugees, as well as respect for otherness, among others, have diachronically attracted the interest of religions.

All of the above yield the irrefutable conclusion that an intercultural dialogue on an educational level can be founded on the points of convergence and divergence between the New Testament and the Quran, since these touch upon particular issues and sections of the syllabus of both primary and secondary education in Greece. A few school subjects that may be employed in this regard are civic education, social and political education, modern Greek, modern Greek literature, home economics, sociology, and history, while thematically relevant school projects can also be utilized for the same purpose⁶⁸.

The areas of agreement between the two texts constitute the optimal point of departure for intercultural dialogue in education, as the focus on areas of conflict may result in serious friction.

66 Ziaka, A. (2013). "Interreligious Dialogue and the Christian Testimony in the Curriculum of the Faculty of Theology of the AUTH. The Contribution of Professor Petros Vasileiadis." Pp. 339-379 in *Ecumenical Dialogue in the 21st Century. Realities – Challenges – Prospects*, edited by I. Petrou, S. Tsompanidis, M. Goutzioudi. Thessaloniki: Vaniias.

67 Katerelos, K. (2013b). "John Hick: The "Copernican Revolution" in Theology." *Theology*, 3, pp. 153-184.

68 Kadigiannopoulos, G. (2019). "The New Testament and the Quran as Means of Promoting Intercultural Dialogue in Education." In *Education in the 21st Century: School and Culture*, edited by G. Papadimitriou and H. Kostaris (2019), Volume B, Proceedings of the 4th Panhellenic Conference of the National Centre of Research and Preservation of School Material, the Hellenic Educational Society and Athens College, (Athens, 10-12 May 2019), pp. 76-86.

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**International eJournal
Sciences of Education**
Patras, April 2020 / Issue 05, ISSN: 2585-3821
Publisher: Pantelis Georgogiannis
<http://e-journal.inpatra.gr>

