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Inclusive education and the role of digital technologies

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Abstract

This paper focus, first, on defining students with special education needs and on categorizing them in accordance with the greek law 3699/2008. Then, the terms “integration” and “inclusion” are clarified. Through the review of the bibliography, it is clear that the inclusion education creates an environment that values and respects all individuals, regardless of their differences. One of the most important issues in developed and developing countries is how the inclusion will be applied in education system. There are many models of inclusion. More specifically, the article focusses on inclusion education in Greece according to the legislation. Finally, are given the conditions in order to have a successful outcome in the implementation of inclusion education.

Keywords: Special Education; Students with Disabilities; Integration; Inclusion Education

1. Material and methods

If we observe the nature around us, we will see that between individuals, despite the similarities, there are also obvious differences in all areas of evolution. As a result, each person is unique. But in some individuals the variations and the differences from the average - normal person are so recognizable that smooth development and adaptation is hindered. People who have such discrepancies have occasionally been described as "problematic", "improper", “residual", “different", "crippled", "deviant", "special". The terms that have been adopted from time to time also demonstrate the society's attitude towards people with disabilities. Lately, it tends to prevail in scientific terminology the term disabled people, because this term is free of any negative anger and does not stigmatize the person bout 14.16% of the student population (Polychronopoulou, 2003) shows significant discrepancies which make it difficult to effectively attendance the normal school program. For this purpose, is established a new pedagogical area “Special Education”, which deals with the pedagogical and teaching problems of students with disabilities (Qvortrup & Qvortrup, 2018).

1.1. Definition of student with disabilities

According to the World Health Organization (1981), people with special needs are considered every person who suffers from a serious disability resulting from physical or mental impairment. Specifically, according to article 3 of Law 3699/2008, students with disability and special educational needs are those who, for all part or for a certain period of their school life have significant difficulties in learning due to sensory, cognitive, developmental, cognitive problems or mental and neuropsychiatric disorders, which afflict the process of school adaptation and learning.

1.2. Categorizing students with disabilities

Various systems are used to classify students with special educational needs, which are based on the cause of the problem, the symptomatology or on the characteristics of students with special educational needs. By most scientists of the Special Education, the most accurate categorization emphasizes on children's learning needs. The classification is

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made purely for pedagogical purposes, because excessive adherence to prefabricated accusations, often leads to arbitrary generalizations and the uncritical rejection of the child (Kauffman & Hornby, 2020)

In accordance with the applicable greek legislation (Law 3699/2008) students with special educational needs and children with disabilities include those who have:

1) mental disabilities, 2) sensory visual impairments (blind, amblyopes with low vision), 3) sensory hearing impairments (deaf hearing impaired), 4) motor disabilities, 5) chronic non-curable diseases, 6) disorders speech-language, 7) special learning difficulties such as dyslexia, dysgraphia, dysarithmia, , dyslexia, dysorthography, 8)attention deficit disorder with or without hyperactivity, 9) pervasive developmental disorders (spectrum autism), 10) mental disorders, 11) multiple disabilities, 12) delinquency abusive behaviour due to mistreatement, parental neglect, domestic violence.

1.3. The terms “integration” and “inclusion”

Since the early 1960s, there have been changes in the perceptions that were until then accepted, as far as the education of special children is concerned. The needs of these children leads to find ways in education for equal treatment regardless of their physical or mental abilities (Qvortrup & Qvortrup, 2018). In 1984 in the USA the Supreme Court declared illegal the unequal educational services. In the Warnock Report, on which English Legislation about education was based, it is clear that: “deviant children should be trained in the same school class with children of typical development in order to have same opportunities” (Warnock Report, 1982). In 1988 UNESCO states that the school system must be adapted to the needs of all students. This movement in Greece became known as “integration” and latterly as “inclusion”. The Ministry of Education in 1983-1984 aimed at cultivating a climate of “social mutual acceptance” and at preparing students’ transition from school to active life. In the same spirit, in the period 1989-1993, Greece participated in two european programmes called HELLIOS I and HELLIOS II, which focused on the social integration and inclusion of people with disabilities (Delassoudas, 2006).

It is necessary to clarify and define the meaning and content of the he terms “integration” and “inclusion” (Rodriguez & Garro-Gil, 2015). These terms are different. They express practices that were adopted at different times and are influenced by different philosophical currents and movements.

The term “integration” (Dictionary of Modern Greek, 1998) means "the union of one thing with another, so that it becomes one thing with it and loses its autonomy". Therefore, it implies the supremacy of the whole, which in our case are the "normal people". People who are going to be integrated are the people with disabilities, who are supposed to be a subordinate group (Soulis, 2002).

On the contrary, the term "inclusion" has not got the notion of assimilation. By "inclusion», people with disabilities retains their personality traits that make them unique (Patsidou, 2010). The term “inclusion” comes from the latin verb “includere”, which means to include and indicates an education for all students without labels, barriers and prejudices (Christoforaki, 2008). “Inclusive education” means the continuous struggle to create better education systems in the context of equal opportunities and the abolition of discriminations (Zoniou-Sideri, 2000 . Patsidou, 2010). The purpose of inclusion is each person to be accepted in his authenticity and to acquire the skills that are necessary in order to be an equal member of society (Pappas et al., 2018).

The foundations for the inclusive education were laid in Salamanca Declaration, which was signed by representatives of 92 governments and 25 international organisations in June 1994. This Declaration argues that normal schools, which are inclusion-oriented provide effective education in majority of students and improve the effectiveness of the entire education system (UNESCO, 1994). In the same spirit was the Convention on the Rights of Persons with Disabilities, UN 2006. Also, in the Luxembourg Charter (1996) it is referred that “one school for all” is necessary for all the students regardless of if they face special educational needs. Consequently, the implementation of inclusive education, in recent decades, has been one of the most current issues in the education policy (Qvortrup & Qvortrup, 2018 . Watkins, 2003).

1.4. Requirement for inclusion in general education school

The review of current research demonstrated the strong support to inclusive education. There are many arguments and reasons in favor of inclusive education (Moriña, 2017 . Zoniou – Sideri, 2000 . Soulis, 2002. Watkins, 2003):

- With the progress that has been made in the field of education it is possible to the special educational be implemented in common schools (awareness and training of teaching staff, flexible curricula, study, appropriate teaching material etc.)

- The isolation of children with special needs affects their emotional and learning development. The rejection causes low self-esteem and difficulties in accomplishing their daily needs.
- Inclusive education contributes to the acceptance, understanding and reduction of distance that separates the student with disabilities from the typically developing child.
- Joining into inclusive education means integration into society. The development of social skills, but also of those relating to general knowledge and functioning of students with special educational needs, is favored when it takes place in an inclusive educational environment rather than one of exclusion and segregation (Soulis, 2002).
- The inclusion of children with special needs in education is important condition for the participation of the individual in the productive process and in the social events of the community in which he or she lives. Only in this way the person experiences the value of life and feels happy, while society realizes him as an active presence and accepts it as an equal member (Moriña, 2017).
- The inclusion education complies with the moral and philosophical principles that should exist in a democratic country and protect the right of equal participation to social activities regardless of prejudices and stereotypes towards the different.(Soulis, 2002).

1.5. Models of inclusive education

Inclusive education and its practical application is diverse because is directly related to the school environment to which it is addressed. In addition, the the way in which it is carried out varies considerably from case to case, as is a function of the school's staff, the resources available to the school and the characteristics of pupils with special educational needs who are required to manage. Norwich (2002) described four schematic models of inclusion in order to illustrate the different ways of approaches in educational process. These models are:

- full non-exclusionary inclusion: In this model, inclusion is achieved by placing students with special educational needs within the general classes. The curriculum, the system management of student's participation and the educational staff remain the same and there are many different group combinations.
- focus on participating in the same place: On the basis of this model, the operation of special schools and special classes is being discontinued and the operation of general classes is promoted. The main difference between this model and full non-exclusionary inclusion lies in lies in the fact that the latter has additional and different systems to support participation of students with SEN in mainstream classes.
- focus on individual needs: In cases where the students with special educational needs seem unable to attend for a certain period of time period individualized educational program in a special school. The education of children with SEN in special school units takes place only in cases of children whose presence in a general class is deemed detrimental to their academic performance and social behavior.
- elective inclusion: the final model promotes the education of children with SEN in special schools or special classes. It is assumed that these structures are more appropriate learning environments for students with SEN as they allow them to meet children that they deal with similar difficulties. So, they are not subject in constant comparisons with their typical development peers. In this way the feeling of inferiority is diminishing and significantly strengthens the self-esteem significantly strengthens.

In Greece, according to law 3699/2008 article 6, students with disabilities and special educational needs can attend (Pappas et al., 2018):

- In a school class of the general school, as long as it concerns students with mild disabilities and learning difficulties. The class teacher cooperates on a case-by-case basis with Centers for Interdisciplinary Assessment, Counselling & Support (KEDASY) and with general and special education counselors.
- In a general school classroom, with parallel support-co-education by special education teachers.
- In specially organized and appropriately Inclusion Departments/classes, which operate within general schools with two different types of programs:
    - a specific program, established by a proposal from the relevant KEDASY for students with milder special educational needs, the which for each student will not exceed fifteen (15) hours of instruction weekly
    - specialized group or individual program of extended hours, which determined by the proposal of the relevant KEDASY, for students with more serious problems
- when the attendance of students with disabilities and special educational needs becomes particularly difficult in schools of the general educational program or in the Integration Departments/classes, due to their special educational needs, the education of these students is provided:
    - in autonomous schools of special education

- in schools or departments operating in hospitals, rehabilitation centers, institutions for the education of minors, institutions for the chronically ill or Education Services and rehabilitation of the Mental Health Units.
- with teaching at home, when it is deemed necessary, for serious short-term or chronic health problems, which do not allow them to move and study students at school.

1.6. Necessary conditions for a successful inclusive education

According to mainly empirical data (Kauffman & Hornby, 2020 . Ainscow & Sandill, 2010. Ainscow, 2005. Zoniou – Sideris, 2000 . Watkins, 2003) in order to have a successful outcome in the inclusion certain conditions must be met:

- the process of inclusion should be done gradually with specific program that will be based on a appropriate legislative and policy framework. A forced integration will lead to complete failure the diversity in the education (Ainscow & Sandill, 2010).
- schools that have an Integration class should ensure the proper functioning of them. These classes should be small and have the appropriate teaching equipment.
- staffing of schools with special education teachers and school psychologists who will have a positive attitude towards the inclusion and support the cooperation between general and special education teachers (Moriña, 2017 . Watkins, 2003)
- training of teachers on the process of co-teaching. The inexperience leads to the failure of inclusion as many teachers try to handle students with special educational needs with the same approaches applied to typical development students (Kauffman & Hornby, 2020. Ainscow, 2005) - early diagnosis of the child's condition. The school must cooperate with the competent medical and pedagogical services and with parents of students
- continuous assessment of progress of students with special educational needs and modification of educational programs (Zoniou – Sideri, 2000)
- in the general education school, when there are students with special educational needs it is necessary to be a reduced number of students in every classroom. The educational process must be adapted to capabilities of every student. It is important for students to cooperate in a democratic way, evaluating their activities and themselves. The supportive climate, the trust, the mutual respect and the acceptance are the most important condition for the success of education (Soulis, 2002)
- change of attitude and elimination of social prejudices through discussion (Moriña , 2017 . Ainscow, 2005)
- utilization of the findings of the new research and practical experience gained from the application of experimental educational programs (Ainscow, 2005)

1.7. Digital technologies and their role

Finally, it's critical to emphasize the useful and vital function that digital technologies play in the field of education. These technologies, including mobile devices (20-21), a range of ICT applications (22-33), AI & STEM ROBOTICS (34-37), and games (38), facilitate and improve educational processes including evaluation, intervention, and learning. Additionally, the use of ICTs in conjunction with theories and models of metacognition, mindfulness, meditation, and the development of emotional intelligence [39-50], accelerates and improves educational practices and outcomes, particularly for gifted students with ADHD.

2. Conclusion

More specifically, based on the above study, we conclude that the inclusive education is not a matter of the future, but an imperative of our time and concern all the members of the society. That is why it should be given particular importance that all students regardless of their special educational needs should have equal treatment. In this way we will tear down the walls of prejudices and ignorance and we enable students with disabilities to find a place in the general school and later in the society.

Compliance with ethical standards

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