



**THE TEACHING PROGRAMS AND
STRATEGIES. THE PERSPECTIVE WITH
NEUROEDUCATION AND NEUROPEDAGOGY: TRIBUTION
TO THE TEACHER AND WRITER KOSTAS CHRISTAKIS**

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Abstract:

In the context of the tribute to the teacher and writer Kostas Christakis, this paper discusses issues related to programs and teaching strategies in the light of neuroeducation and neuropedagogy. The following text is inspired by his books "Special difficulties and needs in primary school" and "Teaching programs and strategies for people with special educational needs and severe learning difficulties". Through the neuropedagogy, teachers understand the brain function to tailor instruction to the individual differences and special educational needs [SENs] and Disabilities of students. Their combination with the above programs creates a global framework for improving learning and the integration for them into the educational system. The perspective of neuroeducation and neuropedagogy reflect the importance of targeted special education and training [SET] under the pedagogical consideration principle of individuality. The teaching programs and strategies are formulated to meet the special educational [SENs] needs of each student, thus enhancing their success and autonomy in the educational environment (Christakis, 2023, 2011, 2006, 2000).

Keywords: neuroeducation, neuropedagogy, teaching strategies and programs

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1. Introduction

Modern trends and perceptions in special education include the change in the syntactic structure of terms and the decategorization of people with special educational needs (SENs). Also, according to Christakis (2000, pp. 24-26), the exoneration of the child and the culpability of the educational system, known as "pathology of education", is included in modern perceptions. The teaching programs and education strategies of the children currently enrolled in special education units would not be classified as having special educational needs if the general education school operated differently (Bemben, L. 2022). Christakis wonders if the increase in the number of children with special educational needs is due to malfunctions and inadequacies of the school and makes it clear that general education needs to do its self-criticism, (see excerpt below):

"Today we accept that the weakness or incapacity for effective education is not due to the child, or only to the child with difficulties, but is mainly due to the education system...an entrenched program, excessive demands of the school, unrestrained competition and degree-seeking, exclusivity of knowledge and degradation of thymic-emotional and humanitarian character" (Christakis, 2000, pp . 25-26)

Another concept refers to school integration and co-education of disabled people with other people of their age. This concept was adopted by UNESCO at the conference of Salamanca in 1994, establishing for the first time the terminology Inclusive School and Inclusive Education (Christakis, K, 2000; Drossinou-Korea, M, 2020). Recently, the terms inclusion and inclusive education have been discussed, concepts that, as Christakis mentions, are still untested and unclear (2023, p. 26).

Teaching programs and strategies are distinguished into curriculum, which are organized around certain general and specific principles that promote learning. The Experimental Curriculum for Specific Learning Disabilities offers teaching strategies and programs for individuals with non-neurotypical development (Bishop and Snowling 2004). The researches of Christakis (2013) emphasize the necessity of curriculum and teaching with certain teaching principles and models. These are described in a series of skills that promote sectoral integration for these groups of non-neurotypical development, enhancing the development of neural pathways and their assessment (Drossinou-Korea, M, 2020, pp. 315-330). Christakis, in his book *Children with Special Needs and Difficulties in Primary School: A Theoretical and Practical Approach to Supplements* (2011, pp. 321-250), has included the Program drawn up at the Pedagogical Institute in 1996 by the special education group for which he was responsible the author of this book (Markakis & Drossinou, 2000, pp. 321-350). It provides specific techniques and programs to address the neurodevelopmental difficulties due to dyslexia through teaching strategies (Ministry of Education-Pedagogical Institute 2009).

2. Ergography of Christakis

2.1 The teaching programs and education strategies of pupils with special difficulties and needs

The teaching programs and education strategies according to inclusive education are based on certain pedagogical principles (Christakis, 2013, pp. 127-172), which, as Christakis (2023, pp. 115-117) states, are in any case strictly observed for all students in their neighbourhood school. These principles refer to the internal organisation and functioning of the classroom, the social and emotional atmosphere of the classroom, the number of students in the classroom, the constant supervision and the possibility of individualised support for each student with special difficulties and needs within the classroom, as well as in the schoolyard. Christakis (2023, pp. 121-121) also refers to the pedagogical tool and curriculum model (Christakis, 2013, pp. 127-172), created by (Drossinou, Korea, 2017, pp. 307-338, 2017, 2020, 2023) in the context of which targeted individual structured and didactically differentiated inclusive interventions of Special Education can be designed and implemented with emphasis on supporting students with special difficulties and needs. In addition, for the atmosphere of the classroom, Christakis (2011, 2023, pp. 115-116) states in the following passage:

“The atmosphere in the classroom should be warm and friendly. Students should live and work calmly... The work in the classroom should be planned so that it is conducive to the continuous engagement of students. Prolonged relaxation and chaos are conducive to distraction and complete disorganisation of pupils with behavioural problems”.

According to the ergography of Christakis about the active teaching methods, referred as well as the pedagogical attitude of the teacher towards pupils with special difficulties and needs (Drossinou, Kalamari, Kaldi, & Romana, 2016). He noted the way in which actions, activities, and individualized programs are implemented in the context of cooperation between teachers, special educational staff and parents. Nevertheless, also the way in which pupils perceive and experience their place in the group of their peers an issues of particular importance in the inclusive school. It is worth emphasizing at this point the absolute need for cooperation between all stakeholders in education in order to successfully address the heterogeneous behavioural difficulties of students in the school environment. As Christakis (2011, 2023, pp. 116-117) notes,

“A good relationship between staff or parents greatly increases the likelihood of children developing educationally smoothly and improving their behaviour”.

The teaching programs and education strategies of pupils with special difficulties and needs, according to researchers (Thomas, Mareschal & Dumontheil, 2020) refer the educational neuroscience and the development across the life span which the interesting in neuroeducation and neuropedagogy is reflected in curricula and strategies of teaching

methodology throughout in the programs. As the researchers (Kolinsky, Morais, Cohen, & Dehaene, 2018, Mystakidis 2021) support the same as Christakis, for the neurological bases of language and learning highlight the importance of neuroscience in teaching reading. The Experimental Analytical Program of Specific Learning Difficulties (Dyslexia) drawn up in the Department of Special Education at the Pedagogical Institute has included in its targeting strategies with the perspective of neuroeducation. Christakis, in *Theoretical and Practical Approaches regarding Children with Special Needs in elementary school*, refers to teaching strategies in reading from the perspective of the neuropedagogical view (Markakis & Drossinou, 2000, pp. 321-350) and states ways understanding how we learn as a visual guide neuro-teaching as the learning readiness (Weinstein 2018).

The concept and importance of Readiness in the neurodevelopmental areas of Verbal Language (Kolinsky, Morais, Cohen, & Dehaene, 2018), Psychomotor, Mental Abilities (Stanislas 1977) and Emotional Organization were presented in the Book for the Special Education teacher compiled by an interdisciplinary team at the Pedagogical Institute (2009, Weinstein 2018). Between others (Slotnick 2017), this program which is known in Greek (1996) as the Framework of Analytical Program Special Education (FAPSE), highlights the anthropocentric model and special educational services to children and young people with cognitive, social, emotional and behavioral problems highlight the anthropocentric model and special educational services to children and young people with cognitive, social, emotional and behavioral problems (Weinstein 2018); (Drossinou Korea 2024.).

According to Gordon, as Christakis, 2023 p. 153 refers, the best way for a teacher to be effective in his classroom is to form and maintain a good relationship with his students as it refers to the procrastination and individual study methods of students with specific learning difficulties [SpLDS] in reading comprehension. Pedagogical attitudes and behaviours that affect the child's personality may, depending on the situation, have a negative or positive emotional connotation, as it is observed that teaching dyslexics students who are supported with the targeted, individual, structured, integrated program in the lesson of history (Drossinou Korea, Mintza, & Stavrou, I. 2020). Christakis, 2013, has presented the "curriculum," under the perspective of neuroeducation and neuropedagogy which reflects the importance of targeted and individual special education and training [SET] according to the pedagogical consideration principle of individuality. This is considered in the context of teaching programs and strategies for people with special educational needs and severe learning difficulties.

2.2. The teacher's handling of difficulties for people with special educational needs and severe learning difficulties

The teaching programs and education strategies can support the treatment of students' behavioural and academic difficulties. It is presupposed that the teacher in the modern, inclusive school be aware of the factors that cause these individual difficulties (Frangouli 2014, Drossinou Korea & Manikioti, 2019) as the learning difficulties and addiction to the

internet, in the cases of a student with ADHD in junior high school. However, according to Christakis (2023, pp. 102-104), the question arises whether or not this knowledge would be helpful, given that some researchers (based on the behavioural approach that emphasizes the symptom) believe that it is preferable for the teacher not to know the general causal factors. According to the ergography of Christakis, the teachers can focus on the symptoms that are directly related to the child's particular situation and behaviour.

Furthermore, there is another opinion that refers to the fact that the teacher should be aware of the factors that lead to the manifestation of behavioural difficulties. It is obvious that when the teacher, as Christakis (2023, p. 104), is aware of the factors.

“ factors that cause undesirable behaviour, can better understand the child’s manifestations and choose appropriate strategies for approaching and dealing with the child’s problems ”.

Christakis (2023, p.104) clearly expresses his view on the enhancement of the role of teachers and refers to the need to formulate a new model of teacher, the multi-purpose (or self-sufficient) teacher, who will be able to analyse and deal with the difficulties in children's behaviour either alone - when the difficulties are mild - or with the cooperation and support of other specialists as appropriate. In particular, Christakis (2023, p. 106) states that the phenomena that lead children and young people to anti-social behaviour should be addressed as soon as possible with educational and social measures.

“ Most importantly, changes and adjustments are needed in curricula, textbooks and teaching strategies, in order to form a purely human-centred system of education... ”

2.3. Pedagogical attitude at school and pupils with traumatic experiences

The teaching programs and education strategies can support modern schools when there are also students who suffer from the mocking attitude of classmates and experience bullying. In some cases, the child victim may exhibit passive behaviour, while in other cases, student victims resist, get involved in fights and react violently (Drossinou Korea, 2023). In addition, according to the ergography of Christakis, the teaching programs and education strategies can support pupils with traumatic experiences in the school who have been boredom, strain and frustration from schoolwork, as well as the wrong related behaviour of the teacher. Christakis notes that the creation of feelings of failure, the authoritarian teaching style, the restriction of initiative, as well as collective punishments without discrimination are recorded in the psyche of the pupils as traumatic experiences of school. Also, as Christakis (2023, p. 98) notes, pedagogical practices that contribute to the creation of traumatic experiences in school can be considered the following:

“Working for a long time with a student who has a problem. This tactic emphasizes the pupil’s problem and creates unpleasant feelings. Leveling tactics, i.e. not recognizing the additional abilities of some pupils ”.

When the difficulties are intense, if we attempt to deal with them all at once, we will fail and become frustrated both ourselves and the child or young person involved, as Christakis (2023, pp. 237-238) stresses, emphasising the need to prioritise the problems. Christakis (2023, pp. 239-240) supports the definition of a goal once the primary problem has been distinguished and selected. He refers to a long-term and instructional goal in order to formulate the desired behaviour that the child should achieve in a long or short period of time, such as a teaching hour. The assessment of behavioural difficulties is necessary in order to clarify whether to design a teaching programme or to try to address the difficulty with other targeted interventions. Christakis (2023, p. 241) refers to the "three P" and describes the process for designing an instructional program with the following steps:

*“Step 1. Preparation of the Programme (Preparation)
Step 2. Planning of the Programme (Planning)
Step 3. Programme Implementation (Performing)”.*

However, Christakis (2023, pp. 255-257) suggests that in cases where there may be a relapse, teachers should:

„(a) Not to get frustrated, but to continue to address the problems systematically,(b) Consider that possible recurrence of the problem is a "game condition", which may also lead to the final resolution of the difficulties, (c) Explain the situation to the students and help them to prevent or deal with recurrences with the right strategies.”

Christakis (2013, 175-184) speak to us about the advanced techniques for the analysis of teaching objectives and suggests that in cases of recurrence of difficulties, teachers and parents should:

„(a) Wait, perhaps more time is needed, (b) Observe and re-evaluate the results, (c) Monitor the process of planning and implementing the programme, (d) Repeat the interventions with better design and execution, and also (e) Test and use other programs and techniques.”

3. Conclusion

According to the ergography of Christakis (2013, pp. 127-172, pp. 175-184, 2011, 2023, pp. 101-102), the teaching programs and education strategies can support to the students who have academical and behaviour issues. Among other things, the bullying phenomena in

the school environment, can be faced with design appropriate programs, strategies and teaching methods. These implemented in the school, in the family and in the community with the perspective the new ideas from neuroeducation and neuropedagogy.

These programs will be addressed to students from Kindergarten to high school and universities. It is therefore proposed that appropriate educational material be created by the relevant bodies and that the corresponding actions and activities be included in the academic curricula with applicate the neuroeducation and neuropedagogy.

In this context, the pedagogical considerations of Christakis (2023) underline the importance of an anthropocentric system of education, which will simultaneously seek the education and formation of both the 'human-knowledgeable' and the 'social human'. The modern school seeks new pedagogical attitudes regarding ways of prevention, assessment and pedagogical management of difficulties in pupils' behaviour in the school environment, aiming at the functional inclusion of students in the classroom. To this purpose, the systematic implementation of information and awareness programmes for parents and institutions dealing with children and adolescents would also help, aiming at the formation of a human being who will be able to distinguish right from wrong and imaginary from real, building around him a special mechanism of self-protection.

Therefore, we conclude that behavioural difficulties can have a negative impact on the personal, social and school life of students, often disrupting relationships in the school and family environment with the perspective of new ideas from neuroeducation and neuropedagogy. However, with Christakis' writings as a key guide, a series of concepts, techniques, and methods have been conceptualized that support the development of a positive learning atmosphere, providing the space for building meaningful interpersonal relationships between pupils and teachers.

It became clear, according to the ergography Christakis texts (2013, pp. 127-172, pp. 175-184, 2011, 2023, pp. 101-102), that dealing with students' behavioural, academic and individual difficulties is linked to the pedagogical attitudes of teachers. His pedagogical considerations share with others that successfully dealing with students' difficulties requires the creation of an environment that is suitable for learning and flexible, with the possibility of implementing group work and activities with the perspective of new ideas from neuroeducation and neuropedagogy. In this pedagogical climate, teachers encourage the cultivation of cooperation skills in the classroom and ensure the provision of equal educational opportunities to all pupils.

In conclusion, Christakis notes that in the modern, inclusive school, a new pedagogical attitude is needed on the issues of prevention and treatment, as well as early and appropriate support for students. These new views came the perspective comes from neuroeducation and neuropedagogy and there are basic guidelines for teaching programs and education strategies for pedagogical support, which are summarised in '*a neighbourhood school for all*'.

Conflict of Interest Statement

The authors declare no conflicts of interest.

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