

Observation Methodology, Informal Pedagogical Assessment, and School Integration in a Student with Autism Spectrum Disorder



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ABSTRACT: The main hypothesis focuses on the ability of literature teachers to understand the difficulties of a student with Autism Spectrum Disorder [ASD] in junior high school (as presented in the film Ben X). The paper presents school and instructional integration in secondary education with the methodology of observation for special educational needs [SENs] in autism. For this purpose, the pedagogical tool "Targeted, Individual, Structured, Integrated Intervention Program of Special Education and Training" [TISIPfSEN] is used, with an emphasis on the school's weekly timetable. According to the findings, hetero-observations and the teacher's informal pedagogical assessment contribute to the definition of teaching priorities for the student in terms of time spent on the computer and cooperation with classmates.

KEYWORDS: integration, ASD, observation methodology, informal pedagogical assessment

I. INTRODUCTION

The present research, according to the Ethical Guidelines for Educational Research [1], focuses on the literature teacher's ability to understand the behavior of a student with Autism Spectrum Disorder (ASD) by collecting data from heteroobservations of the student's home, family, and school backgrounds. Autism Spectrum Disorders (ASD) are lifelong neurodevelopmental disorders, usually diagnosed during childhood, with an increasing prevalence worldwide over the last 20 years. Individuals with ASD present with impaired verbal and non-verbal social communication and interaction, as well as restrictive or repetitive interests, behaviors, or movements [2]. ASD-related challenges may differ across different phases of life, leading to multiple and changing needs over the lifespan of individuals with ASD and their families [3]. The diagnosis of ASD is based on clinical criteria, as formulated in the International Classification of Diseases (ICD-10) of the World Health Organization or the Classification of Psychiatric Disorders (DSM-5) [4] of the American Psychiatric Association [3].

In the paper, the case study focuses on the movie Ben-X scenario [5] and attempts to set instructional priorities based on informal pedagogical assessment, according to the pedagogical tool, the Targeted, Individual, Structured, Integrated Intervention Program of Special Education and Training [TISIPfSEN] [6], in order to promote the student's school integration. Diagnostic assessments, according to the DSM-5 [4] are a relevant part of the education of students with disabilities, such as autism [6], and can support teachers in monitoring and assessing students' learning progress in the classroom [1]. If used at the start of a school year to assist teachers in observing autistic behaviors. As a result, teachers, such as philologists, who have a lot of teaching time based on the week's schedule can base their lessons and support on the students with ASD's existing knowledge or skills to respond to their needs in a more individual way [7].

In the context of the de-categorization of individuals with Special Educational Needs [SENs] according to the Framework of Analytical Program Special Education (FAPSE) [1996] [8], the request for inclusion is addressed. School inclusion is also reflected in Law 3699/2008 of the Greek state [9], where emphasis is given to the special training and education of people with disabilities or special educational needs. According to Christakis [10] [11], targeted adaptations, measures, and limits are prerequisites that need to be individualized on a case-by-case basis. A multidisciplinary, targeted, individualized, and collaborative inclusion effort can mitigate a potential risk that may arise from attempting to integrate students with ASD into school. In the research, the theory (clarification of terms and theoretical approaches to the study), purpose, hypotheses, and methodology are presented. This is followed by the presentation and analysis of the results, the conclusions and recommendations that emerged, and finally the research limitations are set. Autism Spectrum Disorders [ASD], according to DSM-5, the diagnostic classification system of psychiatric and neurodevelopmental disorders, are characterised by difficulties in social skills, communication and social interaction. Furthermore, they are characterised by repetitive and monotonous behaviours and interests [3].

The study collects data from heteroobservations for the case study story, inspired by the protagonist of the movie Ben X [5]. In the scenario, Ben is on the autism spectrum and has daily routines that he follows. At home, he spends several hours playing his

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favorite computer game, and when he is outdoors, he wears his headphones to protect himself from sounds. Ben's father, refusing to accept the situation, left home and got a divorce. At school, Ben finds it difficult to cooperate with his classmates, who often taunt him. Soon, he meets a classmate online, and they develop a special relationship. Gradually, they work together, and Ben manages to embody in real life the brave character he used in the game.

II. CLARIFICATION OF TERMS AND THEORETICAL APPROACHES

A. Clarification of terminology

Observation methodology - case study: As a research method, the observation methodology in special education is used in a case study of a student with ASD. According to Avramides and Kalyva [12], the methodology in special education is used in a case study of a student with ASD because it is a research method applied to ASD cases. The observation methodology on students with special needs is used with research tools to generate qualitative data [13]. A limitation of the method is that only behaviors are recorded, as it is difficult to test attitudes and beliefs. Observation [14] in special education is a useful tool in special education, which can assist other research methods such as questionnaires and interviews. According to the phases of the pedagogical tool: Targeted, Individual, Structured, Integrated Intervention Program of Special Education and Training [T-[Individual]- SIPfSEN] the observation methodology is the first of the five phases [15], because it studies the theoretical approach of an individual with autism through the referrals into family and the school background of Ben.

School inclusion and Informal Pedagogical Assessment (IPA): The concept of including students with special educational needs has been a concern since the 1970s and is related to the integration of students without special needs into mainstream schooling. The term captures the effort to include the student in the classroom and thus in society. Inclusion is divided into school-related, social-related, and economic inclusion, with the former being divided into spatial, social, and educational inclusion [14]. This study focuses on school and educational integration, which requires proper preparation of the student and communication between the student and his classmates [10]. According to the second phase of the pedagogical tool as the Targeted, Individual, Structured, Integrated Intervention Program of Special education and Training [T-[Individual]- S-[Integrated]-PfSEN] the observation methodology processes the theoretical approach of integration and mainstreaming with classmates. The data is record in the tables and use for the Informal Pedagogical Assessment (IPA) of the student's skills in specific areas, as stated in the methodology in the special education teacher's textbook [14] [15]. The observation is captured in semesters of attendance based on the linear continuum of interventions the student has received. With the [IPA], the teacher of language courses makes heteroobservations and completes the Basic Skills Checklists (BSCLs) [16].

TISIPfSEN: In the methodology, the pedagogical tool [TISIPfSEN] is used, which states the pedagogical principles and considerations regarding Targeted, Individually Structured, and Inclusive Intervention Programs for Students with Special Educational Needs [18] [6] [19] [6]. It consists of five individual tools [phases] through which school inclusion is promoted. The first includes systematic empirical observation, the second includes informal pedagogical assessment with observations according to the basic skills checklists, and the third one includes a structured and differentiated instructional plan. Finally, the fourth phase focuses on the teaching intervention with differentiated pedagogical materials, while the fifth phase evaluates the teaching intervention [17]. In this study, the emphasis is on the first and second phases of TISIPfSEN, as presented in the figure below [16].



1. The phases of TISIPfSEN: Emphasis on the first and the second phase (blue circles).

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B. Theoretical approaches

According to [FAPSE] the theoretical basis of [TISIPfSEN] [19] is the pedagogical principles of student-centeredness and group cooperation. The pedagogical tool T[I]SIPfSEN [18] emphasizes student-centeredness and individuality, and the intervention is tailored to each student's unique characteristics [17]. Despite any efforts that may be made, few students with autism are effectively integrated into special schools, and even fewer into mainstream schools. In fact, in general secondary schools, it seems that pupils with autism do not receive differentiated help, and as a result, they are marginalized [19]. In a research of 641 general school teachers, they expressed their inability to integrate students with ASD [20]. For this reason, Christakis refers to certain parameters [10] when special education and education address the problem of the school integration of students with ASD at the individual, micro-group, or classroom level [11].

According to the theoretical background, the begging letters of the acronym TISIPfSEN denote:

- [T] the pedagogical targeting of teaching goals
- [I] the individuality of characteristic of the student with autism
- [S] is the core of a differentiated, structured, instructional intervention tailored to the needs of the Ben student, as recorded by the methodology of observation of special educational needs.
- [I] the pedagogical principle of inclusive education.
- [P] the pedagogical program on the school's weekly schedule.
- [SEN] The pedagogical principle of Special Education and Training for all people with Special Educational Needs



2. The acronym of TISIPfSEN.

Recognizing Ben's difficulties with school integration—he is isolated and has difficulty cooperating with his classmates, who make fun of him—is inextricably linked to the interdisciplinary team [17].



3. Screenshot from the movie: Ben's classmates are making fun of him [5].

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Christakis [10] defines special education as an integrated set of "*adaptations of the curriculum, instruction, support, and the creation of appropriate learning environments to appropriately and effectively address the difficulties and meet the special educational needs of the student.*"

C. Purpose, hypotheses and methodology

The study's necessity is summarized by the teachers' difficulties involved in the inclusion of students with special educational needs [22]. Therefore, the purpose of the study focuses on promoting the school inclusion of a student with autism through the methodology of observation of special educational needs. The hypotheses investigate how the teacher can observe and understand the special learning difficulties and behaviors resulting from the students with ASDs.

Informal Pedagogical Assessment is rooted in the methodology of observing special educational needs and provides important information about the specificities of ASD. With hetero-observations, qualitative data are noted in certain tables with checklists of basic skills and formulate inclusion priorities. The first phase tool collects empirical hetero-observations and self-observations. TISIPfSEN's second tool phase is used to collect data for the film's protagonist from: 1) the neurodevelopmental areas of learning readiness, 2) special educational needs according to the Framework of Analytical Program Special Education [FAPSE], 3) the general learning difficulties reflected in the literary subjects, 4) specific learning difficulties in understanding and 5) the observations on ASD's behaviors.

D. Sample, research tools and data evaluation

With the first tool and the first phase of recording protocols, empirical heteroobservations and the background of a student with ASD are collected. Ben is in the first semester of the first year (15th semester of compulsory formal education), is 13 years old [individual background], and has had parallel support throughout his primary schooling. Since the age of five (5), he has had difficulties in the verbal expression of his emotions and in cooperating with others. His teachers note that he has a particular interest in IT.

The inclusive teaching intervention scenario for Ben focuses on learning to understand certain social story texts that address social skills, such as cooperating with classmates. Avramides and Kalyva point out that observations of students with special educational needs and/or disabilities need to be made with sensitivity and discretion [12] [20]. The observation methods use the student's booklet in the neurodevelopmental area of learning and emotional readiness and organization and the first-grade history subject in the context of the Weekly Timetable with differentiated text comprehension.

| | Monday | Tuesday | Wednesday | Thursday | Friday |
|-----------------|---------------|--------------|---------------|--------------|-------------|
| 1 st | Modern Greek | Mathematics | Literature | Modern Greek | Physics |
| 2 nd | Ancient Greek | Odyssey | Ancient Greek | Geography | History |
| 3 rd | History | Modern Greek | Biology | Mathematics | Religions |
| 4 th | Religions | English | Mathematics | English | French |
| 5 th | Technology | Economy | Music | Literature | Gymnastics |
| 6 th | French | Gymnastics | Odyssey | IT | Mathematics |
| 7 th | Arts | Arts | IT | | |

4. Ben's weekly school schedule in a Greek secondary school.

E. Observation methodology and informal pedagogical assessment [IPA]

Pedagogical tools are used to collect data from observations with instructional interaction. With the second tool phase of TISIPfSEN, observations on the protagonist of the film BEN-X are collected with the basic skills checklists and registered in five Excel sheets.

- 1) IPA from the neurodevelopmental areas of learning readiness. The first table records skills from the neurodevelopmental areas of learning readiness in oral language, psychomotor skills, cognitive abilities, and emotional organization;
- 2) IPA of SENs from the FASEP. The second table records special educational needs [SENs] according to [FASEP] with emphasis on social skills and adaptation to the environment.
- 3) IPA of learning from the school's weekly timetable of language courses. The third lists general learning difficulties in literature subjects.
- 4) IPA from the reading of texts' organization into the school's weekly timetable. The fourth one lists the specific learning difficulties in text comprehension.
- 5) IPA of ASD's behaviors. Finally, the fifth table summarizes the observations on ASD behaviors, focusing on social skills, communication skills, thinking skills, and academic skills.
- The assessment of the research data tests the basic skills through the Informal Pedagogical Assessment with reference to the baseline formed by the semester and class of attendance and marked with a horizontal line. The teacher marks the semester with

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a number in which he or she tests the skills of the student with autism and finds the average of the deviations from the baseline. Finally, he or she visualizes the deviations with the dashed line, compares them, and sets the instructional priority.

III. LIMITATIONS AND RESULTS

A. Research limitations

The observations are inspired by the protagonist of the film "Ben X." As a result, the study's research limitations stem from the fact that the teacher of language courses met the student with ASD in the context of school integration without having the opportunity to consult with the family and special education staff. Also, the name Ben used in this study replaces another original name of a student in the junior high school.

B. Results and definition of teaching priorities

The empirical observations of school integration are marked by the recording of data in tables in terms of semesters of attendance, as defined by the Greek educational system. The kindergarten has a duration of 1 year (1-2 semesters), the primary school has a duration of 6 years (3-14 semesters), and the junior high school has a duration of 3 years (15-20 semesters).

The literature teacher in the first table notes data—observations from the neurodevelopmental areas of learning readiness.

Ben's overall average is 10.1, which corresponds to the second semester of fourth grade with a deviation of 5 semesters from the baseline (15th semester).

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Table (1): Informal pedagogical assessment of neurodevelopmental area of learning readiness

| | | Student's name: Ben | | | | Class: 1st Grade of Greek Secondary School, Semester: A (15) | | | | | | | Date: 2020_7 Dec | | | | | |
|---------------------------------|--|---|---------------------------|-------------------------|------------------------|--|-------------------|---------------------|---------------|-----------------|-------------------|---------------------------|-----------------------------------|-----------|--------------|------------------------|-------------------------|--|
| | | Levels (line) of Learning Readiness in developmental areas with Essential Skills Checklists | | | | | | | | | | | | | | | | |
| | | Teaching Priority: Emotional organization; cooperation with others | | | | | | | | | | | | | | | | |
| | | 1) Oral language | | | 2) Psychomotor skills | | | 3) Cognitive skills | | | | 4) Emotional organization | | | | | | |
| | | Listening | Participating in dialogue | Expressing with clarity | Sensitive motor skills | Orientation | Rhythm and timing | Fluency | Visual memory | Auditory memory | Functional memory | Concentration | Logical and mathematical thinking | Reasoning | Self-feeling | Interest in the lesson | Cooperation with others | |
| 20th semester | | | | | | | | | | | | | | | | | | |
| 19th semester | | | | | | | | | | | | | | | | | | |
| 18th semester | | | | | | | | | | | | | | | | | | |
| 17th semester | | | | | | | | | | | | | | | | | | |
| 16th semester | | | | | | | | | | | | | | | | | | |
| 15th semester, Secondary School | | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | |
| 14th semester | | | | | | | | | | | | | | | | | | |
| 13th semester | | | | | | | | | | | | | | | | | | |
| 12th semester | | 12 | | | | | | | 13 | 13 | | | | | | | | |
| 11th semester | | | | | | | | | 11 | | | | | | | | | |
| 10th semester, 4th Grade | | | 10 | 10 | | | | | 10 | | | | | | | | | |
| 9th semester | | | | | 9 | | | | | | | | | | | | | |
| 8th semester | | | | | | | | | | | | | | | | | | |
| 7th semester | | | | | | | | | | | | | | | | | | |
| 6th semester | | | | | | | | | | | | | | | | | | |
| 5th semester | | | | | | | | | | | | | | | | | | |
| 4th semester | | | | | | | | | | | | | | | | | | |
| 3rd semester, Primary School | | Average 10.7 | | | Average 10.3 | | | Average 11.2 | | | | Average 8.3 | | | | | | |
| 2nd semester | | General average 10.1 | | | | | | | | | | | | | | | | |
| 1st semester, Kindergarten | | | | | | | | | | | | | | | | | | |

Table 1. Informal pedagogical assessment of neurodevelopmental areas of learning readiness based on observations.

In particular, it is observed that in oral language, Ben has an average of 10.7. In listening, he is at the fifth grade level (12th semester), while in participating in dialogue and expressing himself clearly, he is at the fourth grade level (10th semester). In other words, Ben has difficulty participating in conversations (especially with multiple interlocutors) and expressing his thoughts clearly.

Ben's orientation is in the 5th grade (11th grade). Also, rhythm and timing are again assessed in the 4th grade, but in the 2nd semester (10th sem.). Furthermore, in lateralization, it is found in the first semester of the 5th grade (11th sem.). In general, sometimes the student makes strong movements and appears disoriented. The psychomotor skills section is at 10.3, showing a deviation of 4.7 from the baseline (15th semester).

In the field of cognitive abilities, Ben is tested in auditory and visual memory in the first semester of the sixth grade (13th sem.). At times, he is distracted, and therefore, on the board, he is in the 10th semester. In the same semester, the area of reasoning is also assessed. He has more difficulty in logical reasoning, where he is in the 4th grade (9th grade).

Finally, a greater deviation is observed in emotional organization, where Ben seems to be in the 10th semester of self-awareness while showing limited interest in the lesson (8th semester). The greatest deviation (8th semester) from the average is in cooperation with others, as he has difficulty when he needs to interact, let alone cooperate with others.

Through these observations, the inclusion process is tested with a teaching priority that focuses on education interventions into the emotional organization of student Ben and his cooperation with his classmates.

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|---|----------------|----------------|---------------------------|--------------------|--|---------|-------------|--|------------------|-------------------------------|-------------------------|----------------|------------------------------|------------------------|
| TABLE (2). INFORMAL PEDAGOGICAL EVALUATION OF SPECIAL EDUCATIONAL NEEDS-2ND PHASE OF TISIPFSEN | | | | | | | | | | | | | | |
| Student's name: Ben | | | | | Class: 1st Grade of Greek Secondary School. Semester: A (15) | | | | | Date: 2020_7 Dec | | | | |
| Levels of Special Educational Needs (line) as reflected in the Framework Analytical Program for Special Education Needs | | | | | | | | | | | | | | |
| Teaching Priorities: Basic Academic Skills(2)-Reading - Mathematics | | | | | | | | | | | | | | |
| Learning Readiness (1) | | | Basic Academic Skills (2) | | | | | Social Skills and Adaptation to the Environment(3) | | | Creative Activities (4) | | Pre-vocational readiness (5) | |
| Oral expression | Psychomotility | Mental ability | Emotional Organisation | Reading | Comprehension | Writing | Mathematics | Autonomy in the environment | Social Behaviour | Adaptation to the environment | Free Time | Aesthetic Arts | Pre-vocational Skills | Vocational Orientation |
| B' εξ. Γ' Γυμν-20 | | | | | | | | | | | | | | |
| α' εξ. Γ' | | | | | | | | | | | | | | |
| B' εξ. B' | | | | | | | | | | | | | | |
| α' εξ. B' | | | | | | | | | | | | | | |
| B' εξ. | | | | | | | | | | | | | | |
| α' εξ. A' | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| A' εξ. ΣΤ' | | | | | | | | | | | | | | |
| A' εξ. Στ' | | | | | | | | | | | | | | |
| B' εξ. Ε' Δημ. | | | | | | | | | | | | | | |
| A' εξ. Ε' Δημ. | 11 | | | | | | | | | | | | | |
| B' εξ. Δ' Δημ. | | 10 | | | | | | | | | | | | |
| A' εξ. Δ' | | | | | | | | | | | | | | |
| B' εξ. Γ' Δημ. | | | | | | | | | | | | | | |
| A' εξ. Γ' Δημ. | | | | | | | | | | | | | | |
| B' εξ. Β' Δημ. | | | | | | | | | | | | | | |
| A' εξ. Β' | Average 10 | | | Average 9.5 | | | | Average 11.33 | | | Average 10.5 | | Average 13 | |
| B' εξ. Α' | | | | | | | | | | | | | | |
| A' εξ. Α' | | | | | | | | | | | | | | |
| B' εξ. Νηπ-2 | | | | General Average 10 | | | | | | | | | | |
| A' εξ. Νηπ-1 | | | | | | | | | | | | | | |

Table 2. Informal pedagogical assessment from the observations of SENs by the FAPSE.

The second table lists the observations on special educational needs according to FAPSE. It emphasizes school readiness, basic academic skills, writing, reading, and comprehension, mathematics, social adjustment with social skills, leisure time management with creative skills, and vocational learning readiness.

In the second table, the overall average is 10.9, with a deviation of 4.1 from the baseline (15th semester). Therefore, in this table, Ben is in the 11th semester (1st semester, 5th grade).

In social skills and adaptation to the environment, autonomy in the environment is noted in the 5th grade (11th semester), while social behavior is lower (10th semester). Ben finds it difficult to return greetings and seems embarrassed when addressed.

Adaptation to the environment is controlled in the 13th semester (6th grade), while in the area of creative activities, there is a difficulty in managing his leisure time (10th semester), and he seems indifferent to the aesthetic arts (11th semester). When he returns from school, he immediately runs to his computer to play his favorite game. Sometimes he may even fast for many hours, which causes his mother's discomfort.

The observations conclude with pre-vocational readiness captured by pre-vocational skills in Computer Science and Programming, corresponding to the 6th grade, in the 13th semester.

The inclusion process is monitored through these observations and instructional priorities that focus on education interventions into basic academic skills for classroom inclusion, with an emphasis on reading and measuring time with a computer using simple mathematics.

The third Excel table notes observations on general learning difficulties as reflected in the language lessons taught by the philologist according to the weekly timetable.

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TABLE (3). INFORMAL EDUCATIONAL ASSESSMENT OF GENERAL LEARNING DISORDERS - 2ND PHASE TISIPFSEN

Student's name: Ben Class: 1st Grade of GreekSecondary Date: 2020_7 Dec
 Scol. Semester: A (15)

| Levels (line) of General Learning Difficulties with Basic Skills Checklists | | | | | | | | | | | | | |
|---|---------------------------------|-------------|------------|--------------------|----------------|------------------|------------------------|---------------------|----------------|-----------------|--------------------|----------|------------|
| Teaching Priority: NUMERICAL SKILLS (3)- Training - Problem solving | | | | | | | | | | | | | |
| LANGUAGE SKILLS (1) | | | | READING SKILLS (2) | | | | NUMERACY SKILLS (3) | | | READING SKILLS (4) | | |
| reading | comprehension | writing | production | oral expression | responsibility | mental abilities | emotional organization | operations | multiplication | problem solving | positive | negative | delinquent |
| 20 | 20th semester | | | | | | | | | | | | |
| 19 | 19th semester | | | | | | | | | | | | |
| 18 | 18th semester | | | | | | | | | | | | |
| 17 | 17th semester | | | | | | | | | | | | |
| 16 | 16th semester | | | | | | | | | | | | |
| 15 | 15th semester, Secondary School | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| 14 | 14th semester | | | | | | | | | | | | |
| 13 | 13th semester | | | | | | | | | | | | |
| 12 | 12th semester | | | | | | | | | | | | |
| 11 | 11th semester | | | | | | | | | | | | |
| 10 | 10th semester, 4th Grade | | | | | | | | | | | | |
| 9 | 9th semester | 9 | 10 | 10 | 9 | 12 | 10 | 10 | 10 | 9 | 9 | 12 | 10 |
| 8 | 8th semester | | | | | | | | | | | | |
| 7 | 7th semester | | | | | | | | | | | | |
| 6 | 6th semester | | | | | | | | | | | | |
| 5 | 5th semester | Average 9.5 | | | Average 11.5 | | | Average 9.33 | | | Average 11 | | |
| 4 | 4th semester | | | | | | | | | | | | |
| 3 | 3rd semester, Primary School | | | | | | | | | | | | |
| 2 | 2nd semester | | | | | | | | | | | | |
| 1 | 1st semester | | | | | | | | | | | | |

Table 3. IPA from the observations of learning from the school's weekly timetable of language courses.

Overall, Ben is in the 10th semester (4th grade), as shown in the standard and compulsory inclusive baseline, with the overall GPA checking in at 10.3, showing a 4.7 semester deviation from the baseline (15th semester).

The third table begins with observations on student language skills. Here, Ben is experiencing difficulties in reading and speech production, and he is in the 4th grade (9th semester), while in reading comprehension and writing he is in the 10th semester.

Then, in reading readiness skills, his oral language is in the 5th grade (12th semester). In psychomotor skills, he is in 4th grade (10th semester), and in cognitive skills, he is in 6th grade (13th semester). He also has difficulty expressing and organizing his emotions, which is why he is in the 5th grade (11th semester).

Ben has similar difficulties to those observed in reading and speech production (9th semester).

Furthermore, delinquent behavior is captured in the second semester of the fifth grade (the 11th semester), when Ben may exhibit aggression when he becomes resentful.

Through these observations, the inclusion process is monitored, with a teaching priority that focuses on education interventions into classroom inclusion and classmates' relationships, with an emphasis on teaching the skills of calculation of time spent on the computer [1] and with a focus on solving problems of organization in the school's weekly timetable [2].

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TABLE (4). INFORMAL PEDAGOGICAL ASSESSMENT OF SPECIFIC LEARNING DIFFICULTIES 2nd Phase

Setting teaching priorities: basic reading skills(4) - morphological - spelling - meaning

| Perceptual skills (1) | | Mnemonic skills (2) | | | Handwriting skills(3) | | | Basic Reading skills (4) | | | | | Mathematical skills(5) | | Behavioural skills(6) | | | | | |
|-----------------------|---------------------|--------------------------------|-----------------------------------|-------------------------------------|-----------------------|------------------------------|-----------------------------|---|-------------------------|-------------|---------|---------|------------------------|------------|-----------------------|----------------------------------|--------------------------|-------------------|--------------------|--------------------|
| Visual perception | Auditory perception | Visual and auditory perception | Multisensory perceptual functions | Functional memory - Sequence memory | Long-term memory | Short-term functional memory | Spatio-temporal orientation | Handwriting mobility and acquisition of graphic space | Phonological Perception | Pre-reading | Reading | Writing | Morphology - Spelling | Meaningful | Written Expression | Numbers and Mathematical Symbols | Language and Mathematics | Emotional support | Programming skills | Reading self-image |
| β' εξ, Γ' Γυμν-20 | | | | | | | | | | | | | | | | | | | | |
| α' εξ, Γ' Γυμν-19 | | | | | | | | | | | | | | | | | | | | |
| β' εξ, β' Γυμν-18 | | | | | | | | | | | | | | | | | | | | |
| α' εξ, β' Γυμν-17 | | | | | | | | | | | | | | | | | | | | |
| β' εξ, Α' Γυμν-16 | | | | | | | | | | | | | | | | | | | | |
| α' εξ, Α' Γυμν-15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| Α' εξ, ΣΤ' Δημ-14 | | | | | | | | | | | | | | | | | | | | |
| Α' εξ, ΣΤ' Δημ-13 | 10 | 10 | 10 | | | | | | | | | | | | | | | | | 13 |
| β' εξ, Ε' Δημ-12 | | | | 12 | | | | 12 | | | | | | | | | 12 | | | |
| Α' εξ, Ε' Δημ-11 | | | | 11 | | | | | | | | | | | | | | | | |
| β' εξ, Δ' Δημ-10 | | | | | | | | 10 | | | | | | | | | | | | |
| Α' εξ, Δ' Δημ-9 | | | | | | | | | 10 | 10 | 10 | 10 | | | | | | | | |
| β' εξ, Γ' Δημ-8 | | | | | | | | | | 9 | 9 | 9 | 8 | 8 | | | | | | 8 |
| Α' εξ, Γ' Δημ-7 | Average 12.8 | | | Average 10.7 | | | General Average 11 | | | Average 9.1 | | | Average 11 | | Average 10.7 | | | | | |
| β' εξ, Β' Δημ-6 | | | | | | | | | | | | | | | | | | | | |

Table 4. IPA from the observations into the reading of texts' organization into the school's weekly timetable.

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The fourth table records observations—data on specific learning disabilities skills such as perception, memory, graphical space, reading, numeracy, and reading behavior.

The overall average is tested in the eleventh semester and compared to the fifth primary grade, with a four-semester deviation from the baseline (15th semester).

Observations of perceptual skills in the student's visual, auditory, and audiovisual perception are found in the 6th grade (13th semester), while his multisensory perceptual functions are tested in the 2nd semester of the 5th grade (12th semester).

Observations of mnemonic skills in functional memory—sequence memory and Ben's long-term mnemonic memory—are found in the 5th grade (11th semester). Short-term memory, however, is in the 4th grade (10th semester).

Furthermore, observations of basic reading skills in phonological awareness, pre-reading, and writing are found in the 4th grade (10th semester), while reading and written expression are tested in the 9th semester. Finally, skills in morphology and spelling, as well as semantics, are in the 3rd grade (8th semester).

Observations on behavioral skills are checked in emotional support in the 5th grade of primary school (11th semester), while his reading self-image is checked in the 6th grade (13th semester). In planning skills, there is a large discrepancy as it is placed in 3rd grade (8th semester). Ben experiences particular difficulty managing his time and daily schedule.

Through these observations, the inclusion process is tested with an instructional priority that prioritizes basic reading skills for classroom inclusion, with an emphasis on morphological, spelling, and semantic skills.

METHODOLOGY OF OBSERVATION: STUDENT WITH SPECIAL LEARNING DIFFICULTIES - ASD

TABLE (5). ATYPICAL PEDAGOGICAL ASSESSMENT OF AUTISTIC DIFFICULTIES -2ND PHASE TISIP/SEN

| 3)Levels (line) of Autistic Difficulties with Basic Skills Checklists with DSM,5 (2013) | | Βήμα 1. Σημειώνω | | | | | | | | | | | | |
|---|---------------------|--------------------------|-------------------------|-------------------------|---------------|----------------------|---------------------|----------------|-------------|---------------------|------------|-----------------------|------------------|-------------|
| Teaching priority: Social skills(1)-building friendships | | COMMUNICATION SKILLS (2) | | | | | THINKING SKILLS (3) | | | ACADEMIC SKILLS (4) | | | | |
| (1) SOCIAL SKILLS | | | | | | | | | | | | | | |
| | social interactions | builds friendships | maintaining friendships | understanding the rules | Oral language | Verbal communication | body language | Speech meaning | Flexibility | Imagination | creativity | reading-understanding | writing-painting | programming |
| 20 | 20th semester | | | | | | | | | | | | | |
| 19 | 19th semester | | | | | | | | | | | | | |
| 18 | 18th semester | | | | | | | | | | | | | |
| 17 | 17th semester | | | | | | | | | | | | | |
| 16 | 16th semester | | | | | | | | | | | | | |
| 15 | 15th semester | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| 14 | 14th semester | | | | | | | | | | | | | |
| 13 | 13th semester | | | | | | | | | | | | | |
| 12 | 12th semester | | | | | | | | | | | | | |
| 11 | 11th semester | | | | | | | | | | | | | |
| 10 | 10th semester | | | | | | | | | | | | | |
| 9 | 9th semester | | | | | | | | | | | | | |
| 8 | 8th semester | 6 | 7 | 8 | 11 | 11 | 10 | 11 | 12 | 10 | 14 | 12 | 9 | 10 |
| 7 | 7th semester | | | | | | | | | | | | | |
| 6 | 6th semester | | | | | | | | | | | | | |
| 5 | 5th semester | | | | | | | | | | | | | |
| 4 | 4th semester | | | | | | | | | | | | | |
| 3 | 3rd semester | | | | | | | | | | | | | |
| | | Average 8,5 | | | | | Average 11 | | | Average 12 | | | Average 9 | |
| | | General Average 10,1 | | | | | | | | | | | | |

Table 5. Informal pedagogical evaluation based on observations of ASD's behaviors.

Finally, the fifth table records observations—data on ASD's behaviors.

The overall average is checked at 10.1 (Ex. 2–Dem. 4), showing a 5-semester deviation from the baseline (15th semester).

The observations for social skills, Ben's are in the 8th semester in social interactions. It is observed that he finds it difficult to establish (7th semester) and maintain (8th semester) friendships.

In terms of communication skills, Ben's oral and body language skills are in the 11th semester, while verbal communication is recorded in the 10th semester. The student expresses himself in short sentences or responds in one-word sentences. Finally, the meaning of speech is found in the 12th semester.

In the thinking skills, it is observed that flexibility shows five semesters of deviation from the baseline and creativity only three semesters. Quite close to the baseline, imagination is found in the 14th semester of study.

Academic skills, such as reading comprehension, are tested in the 9th semester, and in writing and painting, they are recorded in the 10th semester of study. Finally, in programming, it is placed in the 8th semester of study.

Through these observations, the inclusion process is tested with an instructional priority that focuses on education interventions into classroom social skills, with an emphasis on building friendships with other classmates.

Based on the above, the teaching aim of the inclusionary instructional intervention for Ben focuses on learning to cooperate with his peers and control the stays on his personal computer time.

CONCLUSIONS

The first concluding point suggests that the teacher of language courses in the high school can understand special educational needs, specific learning difficulties, and autistic student behaviors that affect school inclusion by utilizing informal pedagogical assessment [22]with empirical heteroobservations with particular basic skills checklists [11] [15].

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The second point emphasizes the literature teacher's ability to observe the SENs of ASDs in terms of 1) neurodevelopmental domains of learning readiness, 2) special educational needs according to [FAPSE], 3) general learning difficulties, 4) specific learning difficulties (ASD), and 5) ASD's behaviors with the goal of teaching the student with ASD with a Targeted, Individual, Structured, and Integrated Intervention Program [18] [20].

The third point highlights that the literature teacher can design education interventions to support school integration with the pedagogical tool, focusing on the criteria of a "Targeted, Individual, Structured, Integrated Intervention Program of Special Education and Training" [TISIPfSEN] [18].

According to the study, the suggestions that promote school inclusion through observations [22] [13] [14] of special educational needs can be extended to the practical applications of other literature that will attempt to understand autistic behaviors and document skills that support educational inclusion.

REFERENCES

- 1) British Educational Research Association. (2011). Ethical Guidelines for Educational Research. London: BERA. Retrieved from <https://www.bera.ac.uk/wp-content/uploads/2014/02/BERA-Ethical-Guidelines-2011.pdf>.
- 2) Daniels, A. M. & Mandell, D.S. (2014). Explaining Differences in Age at Autism Spectrum Disorder Diagnosis: A Critical Review. *Autism*, 18, 583–597.
- 3) Francis, K., Karantanos, G., Al-Ozairi, A., & AlKhadhari, S. (2021). Prevention in autism spectrum disorder: A lifelong focused approach. *Brain Sciences*, 11(2), 151. doi:10.3390/brainsci11020151
- 4) American Psychiatric Association (2013). Diagnostic and statistical manual of mental disorders fifth edition (DSM V). Washington, DC: American Psychiatric Publishing.
- 5) Ben X. (2007). [DVD]. Belgium – Netherlands: MMG Film.
- 6) Drossinou-Koreas, M., & Periferakis, T. (2018). Targeted, Individual, Structured, Inclusion programs of prevocational readiness for students with Special Education Needs (TISIPfSEns). *International Journal of Latest Research in Humanities and Social Science (IJLRHSS)*, 01(04), 28-35.
- 7) Autism Education Trust (2014). Training hubs. Retrieved from: <http://www.aettraininghubs.org.uk/early-years/training-hubs/>.
- 8) Ministry of State for Special Education and Inclusion (2022). Autism Good Practice Guidance for Schools. Ireland: Government of Ireland. Retrieved from: <https://www.gov.ie/pdf/?file=https://assets.gov.ie/219953/68580185-5620-4d61-aeb6-42490593e9e9.pdf#page=null>
- 9) Presidential Decree 301 (1996). Framework Analytical Special Education Program (FASEP). Athens: National Printing Office.
- 10) Law 3699, 2018 (2018). "Special education and training for people with disabilities or special educational needs". Athens: Ministry of Education, State Printing, Gov 199/A/2. 10. 2014. [in Greek].
- 11) Christakis, K. (2011). The education of children with difficulties, Introduction to special education. [in Greek]. Athens: Diadrasis.
- 12) Christakis, K. (2013). Curriculum. In *Teaching Programs and Strategies for People with Special Educational Needs and Serious Learning Disabilities* (pp. 127-172). [in Greek]. Athens: Diadrasis.
- 13) Avramidis, H. & Kalyva, E. (2006). Observations. In *Research Methods in Special Education, Theory and Application* (pp. 219-271). [in Greek]. Athens: Papazisi.
- 14) Ciccone, A. (2019). *L'observation Clinique*. Paris: Dunod.
- 15) Christakis, K. (2000). Special Difficulties and Needs in Reading and Comprehension of Text. In *Special Difficulties and Needs in Primary School* (pp. 175-266). [in Greek]. Athens: Atrapos.
- 16) Ministry of Education-Pedagogical Institute (2009). Learning Readiness Activities. Oral Speech, Psychomotricity, Mental abilities, Emotional Organization. Book for the teacher of Special Education and training and students. M. Drossinou, Ed. Athens: Pedagogical Institute, Organization for the Publication of Teaching Books.
- 17) Frey, J. R. (2019). Assessment for Special Education: Diagnosis and Placement. *The ANNALS of the American Academy of Political and Social Science*, 683(1), 149-161. doi:10.1177/0002716219841352
- 18) Drossinou Korea, M. (2017). Special education and training (SET). The "through" special education proposal for the Training of children and young people with special needs. [in Greek]. Patras: Opportuna.
- 19) Drossinou-Korea, M., Matousi, D., Panopoulos, N., & Paraskevopoulou, A. (2016). School Inclusion Programmes (SIPs). *Journal of Research in Special Educational Needs*, 16, 967-971. doi:10.1111/1471-3802.12352
- 20) Drossinou Korea, M. (2020). *Special Education Handbook and Training Narratives*. [in Greek]. Patras: Opportuna.
- 21) Zoniou-Sideri, A., & Vlachou, A. (2006). Greek teachers' belief systems about disability and Inclusive Education. *International Journal of Inclusive Education*, 10(4-5), 379-394. doi:10.1080/13603110500430690

Observation methodology, informal pedagogical assessment, and school integration in a student with Autism Spectrum Disorder

- 22) Avramidis, E., & Kalyva, E. (2007). The influence of teaching experience and professional development on Greek teachers' attitudes towards inclusion. *European Journal of Special Needs Education*, 22(4), 367-389. doi:10.1080/08856250701649989

TABLE of ACRONYMS

- 1) Targeted, Individually Structured, and Inclusive Intervention Programs for Students with Special Educational Needs (TISIPfSEN).
- 2) Framework of Analytical Program Special Education (FAPSE).
- 3) Autism Spectrum Disorder (ASD).
- 4) Basic Skills Checklists (BSCLs).
- 5) Informal Pedagogical Assessment (IPA).
- 6) Special Educational Needs (SENs).



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