

"Digital School: Digital Learning Of Children With Disabilities Educational Needs (E.E.A.) Of A Special Primary School In Greece –Good Practices."

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Abstract:

The aim of the digital school is the full inclusion and integration of Information & Communication Technologies (ICT) in the daily educational process and practice. Especially in Special Education and Training, the digital classroom is a new thing for the students a way of approaching knowledge where with the use of digital tools the skills of each student are transformed into abilities, isolation is removed, and the digital skills of people with difficulties are developed and the conditions are created so that these people can be and feel equal citizens of a privileged state.

Keywords- digital school, digital classroom, students with special educational Needs.

1. Introduction

This work aims to highlight good practices related to social communication of students with special educational needs (SEN), their inclusion in society, raising the awareness of students of typical development in the disability, as well as in learning and understanding concepts and mastering the learning and pedagogical objectives with the help of digital media and appropriate digital material, so that the abilities of students with SEN turn into skills. It was applied to a group of 5 students with Mental retardation or Autism Spectrum Disorders (ASD), chronological age 10- 13 years old, in the 1st Specialist - Amarousi Primary School.

2. ICTs and Education

Information and Communication Technologies (ICT) are an integral part tool her educational process for the contemporary educational systems, as form as long as concerns their teachers means: a) support and development of contemporary pedagogics approach her learning, b) exchange welcome practices with their colleagues in the global education community, c)

necessary for the lasting education they're in pedagogies developments. In relationship with the students form one useful tool: a) approach her knowledge, b) resolve problems, and end c) develop her creative and critical thinking and operate catalysts, influencing the structure of the school and essentially contributing to its modification and reformation teacher systemic. (Fitros, 2005; Chaidi, et al., 2021).

It is now accepted that technology aids the learning process as it transforms it from passive to active because it can make each student more independent and autonomous. The modern school aims to form complete people, cultivate and develop their skills so that to be led to their completion and contribute to society and even though many depend on the personality of the student, the technologies of Information and Communication open one new road for the learning with base her discovery and experience (Rishvas, 2005).

The educators define three interaction factors or as mentioned in 3 C in education: Children,

Community, and Computers (Raptis and Rapti, 2003) provide opportunities to approach knowledge, socialize individuals, and remove physical barriers to access knowledge for students with special educational needs. Chaidi, et al., (2021).

3. Special Education and Digital Media

The purpose of special education is the design and development of one alternative curriculum aimed at helping each student overcome particular difficulties and to be equal with his peers and other members of the school community. The school needs to play a leading role in acquiring knowledge and skills from children for future autonomy to the extent of their abilities and their social integration (Chaidi, et al., 2022). The provision of equal opportunity goes beyond equality in access to education, including the differentiation-adaptation of the teacher system in general.

Providing equal educational opportunities to children with special educational needs is a basic concern of each favored democratic society (Unesco, 1981)

The special treatment can benefit from the use of digital games as these offer the possibility of repetition, practice, and elaboration of many thematic modules through adaptation to the needs of the user. The use of digital games in the educational process, in general, promotes interactivity and attrition of tensions and offers new possibilities for communication and cooperation (Chaidi, et al., 2021). Of course, the teacher should ensure that the engagement with the computer does not turn into an obsession. For this purpose, it should have clear time frames and switching series at use from other students the to uses his computer as means reward once desired behavior.

In the frame of the purpose of Primary and other tiers of Education the education of people with special educational needs aims at the following:

- the comprehensive and harmonious development of her personality,
- the improvement and exploitation of their

capabilities and skills, to make possible their integration or reintegration into the common education system and the symbiosis with the social total,

- the integration in the educational system, in the social system corresponding to their capabilities Zoe and in professional activity,
- their mutual acceptance, their harmonious coexistence within society, and equality social their development.

For people with special educational needs, technology can be a great substitute for degree elements of disadvantage or disability and to bring the student closer to the cognitive good and social reality, since it enables him to communicate with the environment and her interaction with this (Fytros, 2005).

Specifically, the use of digital media in the school aims to:

- in mitigation of teachers' inequalities and his social blocking,
- in the lifting of limitations and obstacles that create each form of disability,
- in equalization of rights and equal participation of students with disabilities in society her knowledge and her information, as provided to the students with special needs where they need really:

- a) work in small ones successively steps (step-by-step),
- b) educational material, in printed and digital form, appropriately adapted for each category of disability,
- c) distance education and equipment appropriately adapted to each form of disability, and
- d) offer the possibility of repetition, practice, and processing of many thematic modules through its adjustment to the Needs of the user. (Chaidi, et al., 2021)

Finally, the digital media improve the quality of provided education, customized at Specific features of each student with special educational needs, ensuring so inside from activities expensive impression of abilities and students' skills in the stage of differential

diagnosis, the development of their abilities and the emergence they're in skills. multiple flat education such an in general as much as and in special treatment."

4. Methods

The study was implemented at the 1st Special Primary School of Amarousiou, in a group of 5 students with Mental Sciences Retardation and/or Autism Spectrum Disorders (ASD), chronological age 10-13 years old, from the teacher of the department and the school psychologist, in the context of good practices and innovative approaches her knowledge.

To conduct the study, there was information, awareness, and cooperation of the parents in the use of digital material, as well as its benefits, through the established monthly Parent Support Group of the school by the psychologist of the school unit in collaboration with the teacher of the department. The parents gave their consent. Then, the questionnaires were distributed to record their attitudes and opinions about digital learning, as well as a catalog of digital material: websites, games, and software.

Specifically, the following students participate in the implementation of the program, such as it looks in Figure 1:

Fig.1: Students' Profile

Name	Genus	Chronological Age	Diagnosis
A.	Female	13 years old	Mental Hysteresis & Serious problems Health (Syndrome Alagille)
A.	Female	14 years old	Mental Hysteresis
A.	Male	13 years old	Mental Hysteresis
L.	Male	10 years old	Disorder Autistic Spectrum
Pl.	Male	11 years old	Mental Hysteresis & Serious problems Health

A. is a student who lives with foster parents and 5 other siblings. Its self-service too handles the oral language satisfactorily. She is cheerful and social and creates easy contact with peers and adults. However, it is difficult to understand and apply social rules in everyday life. The educational level is located in the specification stage.

A. belongs to four members of family finances immigrants. Self-service starts with communication without always being in a socially acceptable way. Has developed oral language, but speaks selective and has not conquered the mechanism of her reading and her writing.

A. is the first child in a family of four. It is very popular with both students as well as the school staff. He is autonomous in his basic needs, sociable has gonorrhoea, and likes to deal with her policy. He's got to conquer him code her reading, reads incessantly newspaper without to understand the text.

L. is the first child of a family of five with socioeconomic problems. Is overweight, with serious problems with health, and self-service. He is nice, cheerful, and social, with a disposal of humor. He's got to create a friendly relationship with his classmate and a collaborative relationship and trust with her education of the class. Regarding the educational level, is in the software stage.

Pl. is the second child family of four economic immigrants. If he's got developed oral reason, is observed that they more times is not communicative.

Usually presents immediate the time-honored echolalia in various languages (Greek, Albanian, English) the softly sings. Sometimes communicates in one word individual basic Needs, e.g. "water". Others again times, spread out their hand to approach the desired object.

Receiving into account the Profile of students and the detailed program studies in daily learning procedures either concern standard procedure of learning (writing, reading, mathematics), or in

learning readiness for socialization, environmental and cultural education, or health education programs, digital media is used daily in combination with conventional teaching aids (notebook, pencil, book, panel, etc.). The material and the use of digital media are used as tools parallel support in the classic traditional educational procedure, for her support and its consolidation

each time concept where is taught.

The students with using digital media such as Electronic computers, Interactive Table, laptops,

1. **LANGUAGE: ORAL-WRITTEN SPEECH**

A) Use of software Sebran for learning the alphabet, and the identification of words and images.



B) Use of on line game " poisson rouge"

<http://www.poissonrouge.com>



C) Use of the software "The Magic Filter", software suitable for students with intellectual disabilities retardation, and autism with activities of both learning content (Language, Mathematics), as much as and activities social behavior and development thin- rough mobility.

TV, DVD player, CD player, and using Skype as well as using digital material appropriate for their students and used accordingly with them individualtheir abilities they approach in another way the learning.

End, the students participate in experiential activities.

As an example of a good practical educational approach in the everyday process of learning the following indicators are presented as activities in the clock lessons program according to post-APPS-DEPS Specialist Education:



C) "Aktines": Software Specialist His training Ministry Education.

https://www.youtube.com/watch?feature=player_embedded&v=4Kp-nZX1OQE



D) Finally, personalized worksheets were also used. The following is indicative


Andrew
I AM WRITING THE NAME MY and I GET THEM letters OF :
ANTREAS

2) MATHEMATICS

A) Use of software Sebran for: a) learning of numbers 1-10 b) quantity of number



B) Use of software: ROUND WITH VALUE: for learning the value of coins







http://www.e-yliko.gr/htmls/amea/amea_sort.aspx

C) "Aktives": Software Specialist His training Ministry Education.



Indicative worksheet:

 Andrew	
COUNT TA GIRLS and write HIM NUMBER IN THE BOX:	
	<input type="text"/>
	<input type="text"/>
	<input type="text"/>
HOW MANY IS ALL TOGETHER TA GIRLS?	
	<input type="text"/>

3) Social ADJUSTMENT

The DEPPS_APS of Special Education (In Greece) include the learning process and the social adaptation of

students that includes activities that help their social integration students.

Those are: I am aware of my body.

Self-service.

I eat right.

Apply their rules of hygiene.

Behave according to their social rules.


Feelings.

For the above activities were used the software, websites, games, and worksheets were.


1) Software: "Aktines": "I know my body"

2) Worksheet: "I know myself"

PRIMARY SCHOOL OF AMAROUSIOU in 'SIKIARIDEIO'



I know my self



Group rules

- I listen carefully when the lady or my classmates speak.
- I only speak after my turn or when I raise my hand.
- I respect (don't make fun of) my classmates and the lady.
- I pay attention to my classmates or the lady when they are talking and I don't interrupt them.
- I am calm, I sit and have my hands down.
- I don't discuss what we say to others when I go out of the office.
- I speak my mind freely.
- The lady is a member of our team.

Who am I:

Name:.....

Age:.....

Gender (Boy/Girl):.....

Name of School I go to:.....

.....

Where I am staying:.....

Mother's name:.....

Sister's name:.....

Hair colour:.....

Eye colour:.....

Favourite colour:.....

Favorite subject:.....

Favorite food:.....

Favorite season:.....

Favorite hobby (interest):.....

Favorite team:.....

Favorite song:.....

Favorite show:.....

My strong points

 (What am I good at)

.....

.....

.....

.....

My weak points

(What am I not good at)

.....

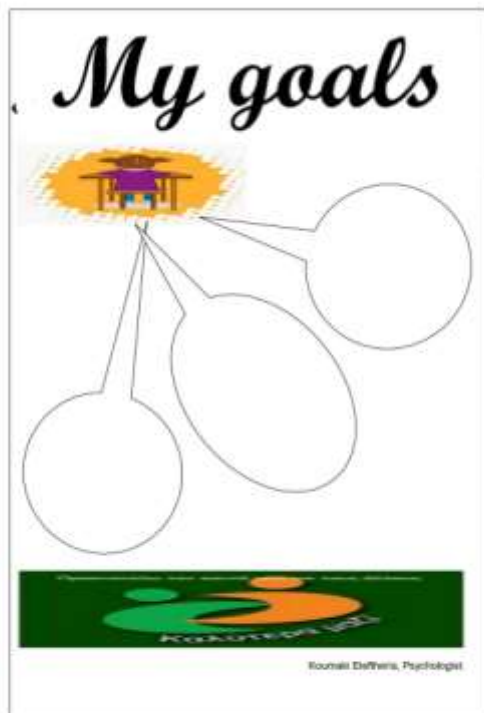
.....

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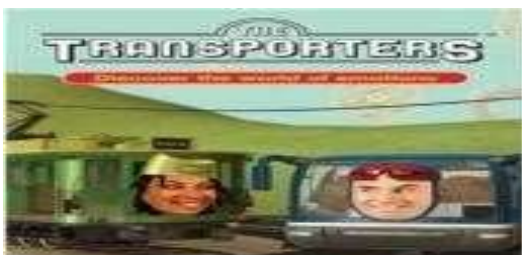
.....

.....





3) THE TRANSPORTERS: Recognition of emotions



www.thetransporters.com

4) Emotion Worksheet

Eliethra Kouraki, Psychologist

Name of the student: _____

School Year: _____ Date: _____

How I Feel Today:

What makes me feel this way?

Draw how you feel today!

This is how _____ is for me:

19

4) INNOVATIVE ACTION:

5) Social Activities: Rules of hygiene

Arrangement of space



<http://www.bbc.co.uk/wales/bobinogs/games/gamespage.shtm>

" Awareness of students of typical general school development, cooperation and participation of students of both educational contexts - special and general education - in joint activities".

The students of the department as well as the students of the 5th grade of the neighboring General Primary School participate in an innovative cultural program entitled: "Awareness of students of typical general school development, cooperation and participation of students of both educational contexts -special and general education- in joint activities"

Initially, consultation was made with the responsible teacher of the General School department for the planning of the activities, common and non-. The main action entitled "I plant a tree" was about tree planting.

Taking into account the mental and emotional peculiarities of students with SEN, the following took place:

- 1) Informing the students about the project: "I plant a tree"
- 2) View images of the general school and its premises for the upcoming visit and tree planting, Figure 2.



Fig 2: Foreigners Spaces General School

- 3) A discussion followed in the school classroom and painting on the interactive whiteboard and in block painting.
- 4) Meet the students of the two (2) schools via Skype.
- 5) Display of special education software for the

process of tree planting: the following took place:

<http://www.media.uoa.gr/epinoisi>

<http://pbskids.org/caillou/immersivegames/?gameID=5>

- 6) Sequencing images, as shown in Figure 3



Fig3: Image sequencing

- 7) Discussion about their actions regarding the tree planting, what they need the trees for to grow up to learn and follow social rules, such as "I wait for my turn", "ask kindly the shovel" etc.

- 8) Development of her concept of "plant" with an experiential way of planting in a bowl with cotton lentils and beans.

- 9) Discussion with the students about the name of the tree they would plant. Recommended by their same their student's name: "**Everyone together we can**".

- 10) Personalized writing and reading relevant to the theme texts. Specifically:

Reading a) " A tree asks for a yard", her ecological fairy tale Panagiotopoulou-Rizou Litsa, and

b) "The tree is what sees", an ecological fairy tale of the KPE Kalamata. http://www.kpe-kalamatas.gr/gr_pages/dentro.html

Tasks: "One tree he asks courtyard"

prooefitkidask.com/index.php?option=com_docman&task=doc.

Reading the above fairy tales the students are sensitized to the Meanings of ecological consciousness.

11) Mathematics: digital:
<http://www.wartoft.nu/software/sebran/>

12) Visit students with E.E.A. in the neighboring General School.

13) Visit of students of General School in the Special School.

The teaching intervention is implemented in the classroom of the department, where the space has been configured with "learning corners" and has been equipped with the appropriate material and technical equipment,

5. Results:

THE evaluation of the results of the didactic intervention is based on in:

- a) protocol observation, where it is done register her development of social and communicators skills of students as well of understanding concepts such as "plant", etc.,
- b) paintings of children,
- c) quiz-type tests through appropriate software for each learning concept that is taught,
- d) dealing with situations in real conditions, when it comes to teaching and learning basic emotions and social norms behavior.

The results seem to be encouraging, an improvement was observed as the students through the activities of the digital material as well as the conventional material used, had the opportunity through pleasant tasks to have fun and also to approach their knowledge from one road less stressful.

Analytically:

A) Oral Speech

The oral language improved since there were interactive activities in the software and by definition, the students had to develop the oral language to respond.

B) Mathematics:

The "colorful" activities attracted the students' interest as a result achieved The target: "understanding her concept of number".

C) Social adjustment:

The use of the digital material used in the experiential teaching method helped to achieve the goals of the social adaptation of the students of our school unit such as behaviors testify they're in the "social our excursions"

6. Conclusions

The incorporation of digital technologies in the special education domain is very productive and successful, facilitates and improves the educational procedures via Mobiles (Vlachou, et al., 2017, Papoutsis, et al., 2018, Karabatzaki, et al., 2018, Drigas, et al., 2017, Stathopoulou, et al., 2020, Stathopoulou, et al., 2015, Stathopoulou, et al., 2018, Drigas, et al., 2014, Kokkalia, et al., 2016), various ICTs applications

(Pappas, et al., 2018, Drigas, et al., 2011, Drigas, et al., 2004, Drigas, et al., 2004a, Drigas, et al., 2011, Charami, et al., 2014, Drigas, et al., 2005, Drigas, et al., 2016, Drigas, et al., 2017, Drigas et al., 2004; Drigas, et al., A., 2013; Pappas, et al., 2018; Papanastasiou, et al., 2018., Drigas, et al., 2016, Papanastasiou, et al., 2020, Drigas, et al., 2005, Pappas, et al., 2018, Pappas, et al., 2019, Drigas, et al., 2009, Theodorou, et al., 2017, Drigas, et al., 2015, Pappas, et al., 2015, Drigas, et al., 2014, Alexopoulou, et al., 2019, Pappas, et al., 2015, Drigas, et al., 2013, Drigas, et al., 2014, Drigas, et al., 2019, Bakola, et al., 2019, Kontostavlou, et al., 2019, Drigas, et al., 2016, Drigas, et al., 2006. Drigas et al., 2006), **AI & STEM** (Kefalis, et al., 2019, Drigas, et al., 2013, Drigas, et al., 2004, Drigas, et al., 2005, Drigas et al., 2009, Vrettaros, et al., 2009, Drigas, et al., 2013, Drigas, et al., 2012, Drigas, et al., 2014, Anagnostopoulou, et al., 2020, Pappas, et al., 2016, Chaidi, et al., 2021), **and serious games** (Papanastasiou, et al., 2017, Kokkalia, et al., 2017, Drigas, et al., 2015, Papanastasiou, et al., 2017, Drigas, et al., 2014, Kokkalia, et al., 2016) . **Additionally the combination of ICTs with theories and models of**

metacognition, mindfulness, meditation and emotional intelligence cultivation (Mitsea, et al., 2019, 2020, 2021, Papoutsis, et al., 2016, 2017, 2019, 2020, Pappas, et al., 2017, Karyotaki, et al., 2014, 2015, 2016, 2017, 2019, Drigas, et al., 2020, Kokkalia, et al., 2019, Drigas, et al., 2021, Papoutsis, et al. ., 2019, Chaidi, et al., 2020, Chaidi, et al., 2021, Drigas, et al., 2018, Mitsea, et al., 2021, Angelopoulou, et al., 2021, Tourimpampa, et al. ., 2018) **as well as with environmental factors and nutrition** (Stavridou, et al., 2021, Zavitsanou, et al., 2021, Driga, et al., 2019, Driga, et al., 2019), **accelerates and improves more over the educational practices and results.**

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