



## SAFETY COURSES FOR PUPILS OF VOCATIONAL SECONDARY EDUCATION WITH DISABILITIES

Xanthippi

Foulidi<sup>1\*</sup>

Sultana

Chouvarda<sup>2</sup>

Euaggelia

Kentrou<sup>3</sup>

Ioannis Marmaras<sup>4</sup>

Evangelos C.  
Papakitsos<sup>5</sup>

<sup>1</sup>University of the Aegean, Rhodes, Greece.

Email: [foulidi@rhodes.aegean.gr](mailto:foulidi@rhodes.aegean.gr) Tel: 00306938979533

<sup>2</sup>University of Thessaly, Karditsa, Greece.

Email: [tania.chouvarda@gmail.com](mailto:tania.chouvarda@gmail.com) Tel: 00306937010396

<sup>3</sup>University of West Attika, Athens, Greece.

Email: [kentrouphysio@yahoo.gr](mailto:kentrouphysio@yahoo.gr) Tel: 00306945208719

<sup>4</sup>Thrasio General Hospital, Elefsis, Greece.

Email: [jmarphysio@yahoo.gr](mailto:jmarphysio@yahoo.gr) Tel: 00306977295033

<sup>5</sup>University of West Attica, Egaleo, Greece.

Email: [papakitsev@uniwa.gr](mailto:papakitsev@uniwa.gr) Tel: 00302105381810



(+ Corresponding author)

### ABSTRACT

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The recent pandemic raised new issues of hygiene and safety, regarding large parts of population, especially considering the more vulnerable groups of societies. Among these groups, special care is required for pupils with mental, physical and/or functional disabilities. The latter category of disabilities is usually caused to immigrant pupils, due to language barriers that hinder the proper teaching and learning process. Along with the new hazards, old ones haven't disappeared, like the danger of traffic accidents. Accordingly, this paper presents two safety courses for pupils of secondary education with disabilities, the one regarding traffic education and the other issues of personal hygiene, that aim at achieving the equal and autonomous living of vulnerable groups of pupils who are subject to multiple discrimination. These two courses are described in sufficient details for being implemented by the interested educators of Special Vocational Education, after a pilot application in a vocational school of Secondary Special Education, at the city of Elefsis, Greece. This pilot application proved the validity of the described herein educational project, but its success should be enhanced by the dissemination of the results to the whole local community.

**Contribution/Originality:** This study contributes to the existing literature of Special Secondary Vocational Education, by presenting two safety courses for pupils with mental, physical and/or functional disabilities. The topics of the safety courses regard traffic education and personal hygiene, being described in details sufficient enough for their implementation by the interested educators.

### 1. INTRODUCTION

The content of the proposed herein courses of Special Vocational Education are related to educational activities aimed at the equal and autonomous living of vulnerable groups of pupils who are subject to multiple discrimination, such as people with disabilities or immigrant origin (MinEdu, 2000c; MinEdu, 2003c). With the aim of mutual respect and inclusion in education, a set of actions and thematic units was designed, which are implemented by pupils under the guidance of their teachers, in order to cooperate, interact, solve everyday problems, adapt and communicate (MinEdu, 2000d; MinEdu, 2003d). These activities have been a part of an ongoing educational project

in the context of social awareness and responsibility that are implemented in a vocational school of Secondary Special Education, at the city of Elefsis, Greece (Foulidi, Chouvarda, & Kentrou, 2020).

The desired educational goal for the pupils of secondary special education is to cultivate life skills, through a set of organized actions, always adapted to the age group they belong to, as well as to their particularities (MinEdu, 1995; MinEdu, 2000a; MinEdu, 2003a). Among the various topics of this educational project are courses focused on safety education and in particular: Traffic Education and Hygiene. Regarding the former, "The issue of road safety is a social matter of ongoing concern for the educational authorities, especially in Greece where an increased number of fatal traffic accidents occur annually" (Papakitsos et al., 2020). Even more demanding from an educational point of view is the traffic education for pupils with physical and mental disabilities (MinEdu, 2000b; MinEdu, 2003b). This course also includes scheduled visits to Traffic Education Parks and cooperation with other authorities, like the Traffic Police.

The estimated duration of each course is a month, while it is pointed out that the teachers, who will implement the courses, have the opportunity to choose which course of the two to start with. In addition, the teachers will be able to adapt the material to the age and learning needs of their pupils.

## 2. TRAFFIC EDUCATION COURSE

This particular course aims to emphasize the equal access of children with disabilities and/or immigrant origin to public transportation and the need for safe observance of traffic rules by all people. In particular, its purposes are:

- To understand the various means of transportation and their usefulness.
- To understand that everyone has the right to travel by means of transportation, regardless of nationality, race, sex and special physical characteristics.
- To apply the basic rules of the National Highway Code, regardless of their diversity.
- To recognize and follow the instructions of the traffic warden.
- To learn how to move properly on the road as pedestrians, on skates, as cyclists or as passengers in a car, motorbike or bus.
- To respect the priority of vehicles.
- To understand and prevent potential hazards and difficult situations that may lead to an accident.
- To realize their position in space and to apply safe behavior, as pedestrians and passengers.

There are two major activities planned, that include a series of workshops and actions with external visits.

### 2.1. Workshops

1. Presentation of photographic material and information about traffic education; the interactive games can be accessed from <http://photodentro.edu.gr/edusoft/r/8531/232> (in Greek).
2. Creation of an individual notebook for each pupil, in which photos related to the traffic education and the equal access to it are incorporated on the cover and the back cover; A4 size reference sheets, stick glues and printed material with means of transportation and road safety, as well as traffic signals are needed.
3. Carrying out pedagogical work - exercises with topics for traffic education, such as the means of transportation (in Greece) and in the country of origin of foreign pupils, with different cultural characteristics, how each one moves and what is their usefulness; the specific answers are placed in the pupils' individual notebooks.
4. Making a collage with material that aims at understanding the basic concepts of traffic education, but also cooperation, enhancing initiative, imagination, fine and gross mobility, and visual-motion coordination; more specifically, the next types of collages are suggested:
  - With drawings of pupils, related to traffic education in their country of origin and residence.

- With the tickets used on a public bus, metro or tram routes in their country of origin and residence.
  - With people of different characteristics, always moving around safely.
5. Making traffic signs from cardboard, gluing them to wooden bars (such as skewers) and discussing the basic shapes and colors of traffic signs and their importance [Figure 1](#).
  - 6.



[Figure-1](#). Making of traffic signs from cardboard.

## 2.2. Actions with External Visits

1. An educational visit to a nearby traffic education park; during it, the presentation of the rules of the National Traffic Code will be conducted, along with the rules of the correct car driving, the motorcycle, the bicycle, but also the rules of safe movement in the city for pedestrians and for all people, regardless of their nationality, gender, physical characteristics, class, etc. [Figure 2](#).



[Figure-2](#). Visiting a traffic education park.

2. Carrying out routes by public bus or by any means of public transportation in the area, in order to make the purchase and validation of tickets, to understand the beginning and end of the route, the various individual stops, the behavior towards the other passengers and finally the use (pressing) of the destination red-stop-button [Figure 3](#).



Figure-3. Making use of public transportation.

3. A poster is created that is posted at the school with the theme of equal access of all to public transportation means, for the information and awareness of the pupils' parents.

This course is scheduled for two (2) teaching hours per week.

### 3. "HYGIENE AND SAFETY FOR ALL" COURSE

This course aims to upgrade pupils' knowledge, skills and abilities on issues such as hand hygiene and good posture, which all pupils need to adopt for ensuring hygiene rules and procedures on their safety. The section "health and safety for all", which is addressed to each pupil in a balanced way, regardless of any difficulty, aims at the personal and social development of all pupils and consequently at the improvement of their quality of life, in terms of health.

Given the importance and emphasis on learning outcomes, which play a dominant role in curricula, the implementation of this educational scenario is proposed to focus on the pupil-centered approach and collaborative learning. More specifically, each pupil:

- Is actively involved in the educational process.
- Becomes able to link what is happening in the educational practice with his/her individual needs and concerns.
- Is actively involved in the implementation of the goals that have been set together with the teachers.
- Adopts an alternative assessment system that is not intended to rank him/her on the scale of a "good/bad" pupil.

The proposed scenario offers the opportunity for synergy with other subjects such as Research, Health Education, Technology, and Information Technology. Its objectives (a-f) are classified in terms of knowledge (a-b), skills (c-d) and attitudes/postures (e-f), where the pupils after the successful completion of the educational scenario will be able to:

- a) Recognize the term "hygiene and safety", "hand hygiene" and "good posture".
- b) define the factors that affect the "health and safety", the hygiene of the hands and the good posture.
- c) check the "hygiene and safety", "hand hygiene" and "good posture".
- d) draw up a program of rules on the "hygiene and safety", "hand hygiene" and "good posture".
- e) adopt "hygiene and safety", "hand hygiene" and "good posture".
- f) encourage others to adopt them, as well.

The organization of teaching and the required materials and technical infrastructure include a computer lab with internet connection, a video projector and the familiarization of pupils with the use of computers and the collaborative method of teaching (group action). The course is organized in subsections (topics) of specific duration (in minutes) that are conducted with the usage of specific educational techniques and tools [Table 1](#).

Table-1. Educational techniques and tools per topic.

No.	Topic	Duration	Techniques and Tools
1	Introduction - teaching objectives	5'	Video Projector
2	Hygiene and safety - Key Points - Composition	10'	Brainstorming/Questions-Answers, Cardboard, Marker, Video Projector
3	Factors-attitude control-check list	15'	Teamwork, Internship forms, pens
4	Results-Reflection - Conclusions	10'	Questions-Answers, Cardboard, Marker, Video Projector
5	Epilogue-Summary	5'	Suggestion, Video projector

More specifically, each subsection is structured in the following manner:

#### *1st Subsection*

Title: "Introduction - teaching objectives".

Venue: classroom.

Required material and technical infrastructure: Video projector, Paperboard, Marker.

Teaching methods and tools: Presentation, information sheet.

The teacher makes a brief introduction on the topic and objectives of the presentation.

Hand hygiene EODY (National Health Organization of Greece) websites:

<https://eody.gov.gr/mikroviaki-antochi-kai-loimoxeis-poy-syndeontai-me-choroys-parochisygeias/exonosokomeiako-perivallon-koinotita/ygieini-ton-cherion-plirofories-gia-to-koino/>

Ergonomics; Ministry websites:

[http://ebooks.edu.gr/modules/ebook/show.php/DSB100/534/3528,14493/index1\\_3.html](http://ebooks.edu.gr/modules/ebook/show.php/DSB100/534/3528,14493/index1_3.html)

#### *2nd Subsection*

Title: "Hygiene Health and safety - Key points – Composition".

Venue: classroom.

Required material and technical infrastructure: Video projector, Paperboard, Marker.

Educational methods and tools: Brainstorming / Questions-Answers.

#### *3rd Subsection*

Title: "Factors - health and safety control".

Venue: classroom.

Required logistical infrastructure: Internship forms, pens.

Teaching methods and tools: Bibliographic/online research and discussion, peer education (interactive).

Pupils are given an information sheet, listing factors that affect "health and safety", "hand hygiene", "good posture" and important points. Divided into working groups, they will initially try to identify factors influencing "health and safety", "hand hygiene" and "good posture", by practicing and searching for information on the Internet, and respond to corresponding questions. Then, the answers that will have been sent to the teacher by the pupils will be displayed on an optional basis. Finally, the answers of the pupils regarding the key points related to "health and safety", "hand hygiene" and "good posture" will be recorded in order to categorize them. Pupils answering the questions of the activity should recognize that there are characteristics that are related to "health and safety", "hand hygiene" and "good posture" in their daily lives regardless of nationality, gender or other cultural and social characteristics.

#### *4th Subsection*

Title: "Results-Reflection-Conclusions".

Venue: classroom.

Required material infrastructure: Paperboard, Marker, Video projector.

Teaching methods and tools: Questions-answers, teamwork.

It follows the discussion on the presentation and the pupils in a dynamic and active process submit their own comments on “health and safety”, “hand hygiene” and “good posture”.

*5th Subsection*

Title: Epilogue-Summary.

Pupils are given a self-assessment sheet, with multiple choice questions, which refer to the important points of the teacher’s teaching.

There are also two work sheets and their corresponding evaluation sheets.

*3.1. Work Sheet 1: “Health and safety” – “hand hygiene”*

Describe hand washing in the correct sequence of steps:

- 1) Wet your hands with clean running water.
- 2) Apply the soap to the entire surface of your hands on the palms and their dorsal surfaces, between your fingertips and the fingertips under your fingernails.
- 3) Rub your hands, insisting on the above points for at least 20 seconds.
- 4) Rinse your hands thoroughly under clean running water.
- 5) Dry your hands using a disposable towel or air dry.
- 6) Avoid closing the tap with clean hands; use a hand towel, which you should immediately throw in the trash.

*3.2. Evaluation Sheet 1*

Mark X next to the correct answer [Table 2](#):

**Table-2.** Evaluation Sheet 1.

Answer	Right	Wrong
Hand hygiene is the cleaning of our hands with soap and water or an alcoholic solution in order to remove germs.		
Proper hand hygiene is the most effective, cost-effective and simple intervention to reduce Infections.		
Hand hygiene means health for us and less transmission of germs to our family, friends, patients, specialists.		

*3.3. Work Sheet 2: “Health and safety” – “good posture”*

Mark the factors you think influence the posture:

- 1) Permanent deformations.
- 2) Pain.
- 3) Bad habit.
- 4) Psychological factors.
- 5) Natural wear and tear due to age.
- 6) Muscular spasm.
- 7) Breathing difficulty.
- 8) Excess weight.

Observe the images 1-5 below [Figure 4](#) and mark, with an X, the key points in the corresponding table [Table 3](#).

Be prepared to give feedback on your findings.

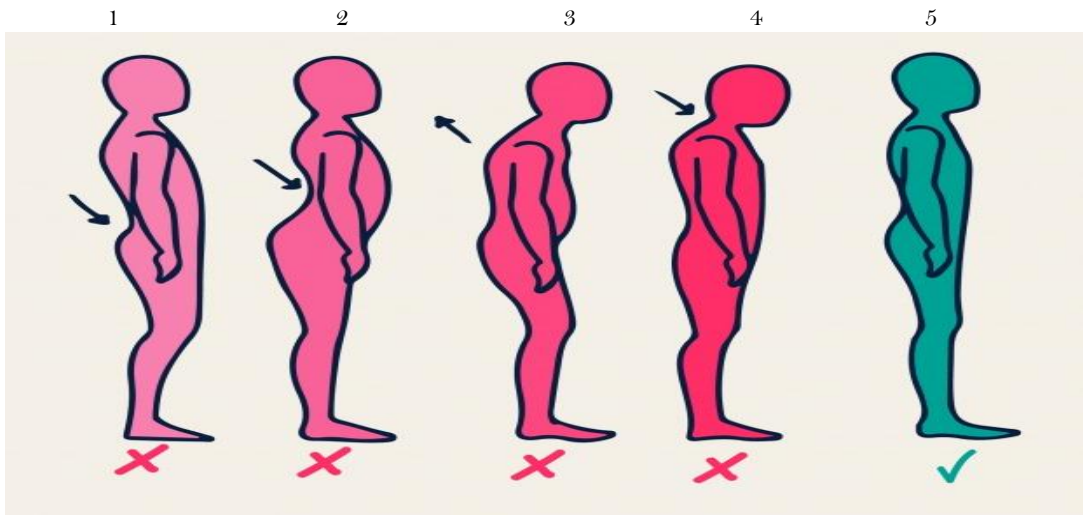


Figure-4. Bad and right postures.

Table-3. Work Sheet 2.

Image:	1	2	3	4	5
Head					
Shoulders					
Waist					

### 3.4. Evaluation Sheet 2

1. Mention a reason why everyone needs to adopt a good posture:  
.....
2. Mention three factors that influence posture:  
.....
3. Mention three key-points for the achievement of good posture from everyone:  
.....

This course is scheduled for a couple (1-2) of teaching hours per week.

## 4. DISSEMINATION OF RESULTS

The implemented actions for the dissemination of the results of the specific project are addressed to the whole school community and aim at the awareness of the parents and the connection of the school with the community. The following are suggested:

- The writing of a relevant article, its publication in a school newspaper or in the daily or periodical press in printed and/or in electronic form, or its posting on the school website.
- The presentation of the relevant educational material produced by the pupils in a radio or television show.
- The creation of an information leaflet that will be distributed to members of the school community and the local community.
- The implementation of a relevant event.

For the successful implementation of an activity promotion event, teachers need to emphasize values related to equality, solidarity and acceptance of diversity. The following are useful when defining practical issues:

- The specific needs and conditions related to the educational reality, such as, for example: the season, the proximity of time or coincidence with other school or extracurricular obligations or events, the implementation of similar events aimed at the same audience (e.g., if on the same day, many schools in the same area carry out their “intervention-event” activity).
- The setting of the time, which depends both on the nature of the activity and on the composition of the majority of those who have been invited to attend it.

- The list of guests, which must be prepared in time, several days before the event, in which their number and their capacity are determined (the Mayor, the President of the Parents, the Board of the Women's Association, journalists, teachers of other schools, etc.), as well as their details and the possibility of contacting them are confirmed.
- The external speakers/participants and other participants: if the activity requires the participation of persons outside the school community, it is necessary to make the appropriate contacts in time to ensure their presence, the clarification of their role, expectations regarding their participation, etc.

The text of the invitation definitely needs to answer the questions (Foulidi et al., 2016; Foulidi & Papakitsos, 2018; Foulidi, Papakitsos, & Karakiozis, 2019; Papakitsos, 2013; Papakitsos, Karakiozis, & Foulidi, 2017): *who* (invites), *what* (the content of the activity), *where* (the event takes place), *when* (the event takes place), *how* (event program), *why* (the event takes place).

## 5. CONCLUSIONS

The teaching and learning process for pupils with various categories of disabilities is a very demanding educational task, indispensable for the social inclusion of these vulnerable groups of population. The prevention of their social exclusion and discrimination, as well as the provision of equal opportunities, require the development of their life skills, which is the crucial goal of Special Education schools.

In this respect, two important courses have been presented herein, in sufficient details for being implemented by the interested educators of Special Education. The topics of these courses, namely, traffic education and personal hygiene, are of paramount importance for the safety of any person, but especially for those pupils that need to have their life skills developed in a more demanding manner, for achieving a quality of daily life equal to every other member of the society.

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