



**Promoting digital transformation
and social innovation in VET
for better access of deaf students
to the labour market**

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WP2: EUROPEAN MONITORING REPORT & 3D4DEAF DUAL TRAINING PACK:
INTRODUCING 3D TECHNOLOGIES IN TEACHING AND LEARNING FOR A SUSTAINABLE
FUTURE

A1: 3D4DEAF COMPARATIVE INDEX & PRACTICAL GUIDEBOOK

National Report: Cyprus

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CONTEXT

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PROJECT CONSORTIUM



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P6	IT	European Digital Learning Network	
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INTRODUCTION

3D4DEAF: Promoting digital transformation and social innovation in VET for better access of deaf students to the labour market aims to promote social inclusion and improve the outreach to people with fewer opportunities focusing on people with deafness/hearing impairments aged 15-21. 'Inclusion Europe' in European Commission (EC), states that due to Covid-19, people with disabilities have been tremendously affected by numerous challenges, including discrimination in the labor market. The project is aligned with the European Union Charter of Fundamental Rights and 'The right of persons with disabilities to benefit from measures designed to ensure their independence, social and occupational integration and participation in community life. The main objective is to develop a Training programme for VET teachers and school students with deafness or hearing impairments to upgrade their 3D, coding, digital, and social entrepreneurial skills to meet the needs of the digital labor market and foster equal opportunities.

The aim of this document is to describe the state of the art in the field of digitalization and the situation of deaf people in education and in the labor market.

EDUCATION OF DEAF STUDENTS

There are no specific data for the number of deaf people in Cyprus, however, the estimated number of deaf people or hearing loss is around 3,000 which is estimated by the deaf community and deaf school of Cyprus.

In education, approximately there are 200 deaf or hearing loss children which studied in primary and secondary education. A smaller number of children are studying in the deaf school of Cyprus which is located in Nicosia.

The education system in Cyprus is based on a centralized educational model managed by MoEC. This implies that the financial resources, school curricula and additional programs as well as the teaching staff (appointments, promotions etc.) are controlled by the state. Formal school education is organized into three levels: elementary (ages 6-12), gymnasium (ages 12-15) and lyceum (ages 15-18). Primary and secondary in public education are free of charge for the students and school education is compulsory up to the age of 15.

Cyprus has introduced various measures addressing the rights of people with disabilities in recent years. Most of the laws which have been developed refer to the employability of people with disabilities aiming to prevent disability discrimination at work in the country. More specifically, the Republic of Cyprus has been aligned with the following laws to ensure the social inclusion of people with disabilities:

- Convention 159 of the International Labour organization (ILO) to secure professional rehabilitation and employment of disabled persons (Validated Law 42/1987);
- 1989 Persons with Intellectual Disabilities Law (Law 117/1989) which secures the rights of persons with intellectual disabilities for a dignified living, social security, social welfare and opportunities for personal development;
- 1996 Revised European Social Map (Ratified Law);
- 2000 Law (Law 17(III)/2000) and 2011 Amended Law (Law 17(III)/2011) which emphasizes professional rehabilitation of persons with disabilities;

- 2000 Persons' with Disabilities Law (Law 127(I)/2000), the following 2004 Amended Law (Law 57(I)/2004) and the 2007 Law (Law 72(I)/2007) refer to the securing of the rights of persons with disabilities;
- Law 146(I)/2009 promotes employment opportunities for persons with disabilities;
- European Directive, Law 118 (I) / 2010, which introduced Article 30 states that the providers of audio-visual media services are subject to the jurisdiction of the Republic shall ensure that their services are gradually accessible to people with visual or auditory disabilities;
- Education and Training of Children with Special Needs Law 1999 (113(I)/1999);
- Mechanisms for Early Detection of Children with Special Needs (185(I)2001);
- Regulations for Education and Training of Children with Special Needs (186 (I)2001).

As seen above, laws in Cyprus specifically accommodate special-needs children. Moreover, the rights illustrated in the abovementioned laws refer to ensuring personal care with supportive bodies, machines, and other means and services that can support daily living and work such as an interpreter or a support worker, or any other support that is deemed necessary, social and financial rehabilitation services, professional evaluation and orientation and professional training and employment in the open labor market.

A fundamental policy of the Cyprus government is to support and encourage the integration of children with special needs into the general educational system providing them the chance to develop and learn with children without special needs. For those children whose special needs are more acute, additional educational help is provided through support teachers to help with their integration into the normal educational system

There are no specific data for the teachers who teach deaf or hearing loss students, however, in primary and secondary education the teachers are authorized by the Ministry of Education and Culture and they learn Cypriot Sign Language so they can communicate with the children. Is not necessary to finish any specific study or course.

In addition to this, although currently there is no CPD course related to courses for teachers in this field, Cyprus Government carries out CPD courses related to different studies fields. On the other hand, Cyprus College, The Institute of Certified Public Accountants of Cyprus, or even the University of Central Lancashire offer CPD's for anyone interested too.

THE SITUATION OF DEAF PEOPLE IN THE LABOUR MARKET

One of the permanent claims of people with hearing loss in Cyprus is the right to work. While there are now many university graduates, prejudice against people with disabilities still exists, which is why the unemployment rate among people with hearing loss is huge.

However, those who work in the public sector are treated the same as the rest of the staff. In the private sector, their working conditions depend on the Rules of each company.

Unfortunately, lack of support and guidance prevents people with hearing loss from setting up their own businesses while those who have taken the risk have found it very difficult to survive.

In Cyprus, there is quota legislation, where in announcements of positions in the public sector, 10% of the positions concern people with disabilities. In addition, the Department of Social Integration of Persons with Disabilities announces Financial Plans to private companies, for grants to hire persons with Disabilities. However, we are still in the early stages, so for now these plans are not yet widespread. However, the Legislation applies. The difficulty, however, is that the Legislation applies broadly to all disabilities, so people with hearing loss, who usually lag behind in language, will have to compete with people with other disabilities.

STATE OF ART IN THE FIELD OF DIGITALIZATION IN EDUCATION

Around one in eight Cypriots have never used the Internet, and around 50% lack basic digital skills. There is also a shortage of Technology specialists in Cyprus despite the increasing demand, which results in Cypriot companies searching for a specialized workforce from abroad.

Cyprus launched its own digital strategy named "Digital Strategy for Cyprus" in 2012 and has seen updates in 2015 and 2018 to correlate with the "Digital Agenda for Europe". Its main objective lies in improving digital literacy for all unemployed workforce and businesses. In addition, invest in lifelong learning programmes with an emphasis on digital literacy and digital entrepreneurship.

Secondary Technical and Vocational Education (STVE) in Cyprus is offered in two directions Theoretical and Practical. The duration of studies in both directions is three years.

In the first year, the students independently of direction choose their sector and specialty, which they preserve until the last year.

Both direction programs aim to offer a balanced schedule of general education, technological specialization, and lab practice in preparing the students so they will be able after their graduation to:

1. Be employed in the industry
2. Continue their academic studies at the University

During their registration for the first year of studies, the students select the direction, sector, and specialization they wish to follow.

By doing this, the students can focus on the essential subjects of their field and the specialty they chose, resulting in connecting the field's basic knowledge with their specialization.

Concerning digitalisation in VET schools starting from 2005, the Ministry of Education and Culture (MoEC) in the Republic of Cyprus has initiated an ambitious Educational Reform Programme intending to turn the vision of an efficient and more modernized educational system that will match today's world's needs and challenges. Funding by Europe has promoted ICT dramatically in the public school sector in recent years.

Under the Ministry of Education and Culture's coat, an ICT integration plan has been implemented in the last seven years. This program aims to efficiently use Information and Communication Technologies (ICTs) in the educational process and improve students' and teachers' digital literacy. The focus objectives of this program involve:

- A. Equipping schools with advanced ICT infrastructure and facilities
- B. Enhancing the teaching and learning support while exploiting ICT affordances according to the current curricula reform and pedagogical methods. For this goal, the MoEC has initiated two key projects:
 - a. The e-Content and educational software procurement

- b. Creating an educational portal and Learning Management System (LMS) named Schoolnet DIA.S.
- c. Educating teachers to acquire the necessary skills for using ICT tools in the educational process and keeping up with the current technological developments.

The Ministry has revised the National Curriculum of all subjects and all education sectors' timetables (primary, secondary, and VET) as part of the Education Reform Programme. The focus of the new curriculum is to meet society's needs. This focus, in effect, influenced the Curriculum of ICT heavily.

According to the current VET curriculum, both Theoretical and Practical direction, students of all subjects have the opportunity of selecting an ICT course for two hours per week for the first year of their studies. This course includes Applications in Informatics such as Word Processing, Presentations, Spreadsheets, Desktop publishing, and multimedia tools.

Concerning the Theoretical direction, students who choose the sector of Electronics and Electronic Applications have the most significant exposure to ICT-related topics with "Computers, Networks and Communications" and "Digital Technology and Programming" specializations covering the most courses in ICT.

For the Practical direction, students in Electronics and Electronic Applications with a specialization in "Computers, Networks, and Communications" will have the most exposure to ICT courses from the technician's point of view.

Industry 4.0 is currently at a very initial stage in Cyprus. Specifically, concerning Industry 4.0 in VET schools, there is no direct course that involves this sector per se.

New specializations associated to ICT skills and Industry 4.0 have been added in VET education in the last decade. In the theoretical direction, these include Computer Science, Networks and Communications, Digital Technology and Programming, Industrial Design and 3D printing, Renewable Energy Sources. In the practical direction there was the introduction of the Computer Networks & Communications technician specialization.

Additionally, the post-secondary institutes of VET in Cyprus, which have been approved as a public school of higher VET, offer accredited programmes which last for two years, leading to a Diploma. Some of the programmes of study, include subjects which aim at qualifying students for respective labor market needs and are a stepping stone for Industry 4.0 evolution. These specializations are:

- i. CNC technology – Woodworking industry
- ii. Computer and Communication Networks
- iii. Industrial and Residential Automation

"Entrepreneurship is included in the national curriculum for all schools of Technical and Vocational Education. No specialist entrepreneurship programmes or activities are offered, but all subjects include entrepreneurial components according to need (a cross-curricular approach). The National Strategy on Entrepreneurship in Education to 2010 aims to provide entrepreneurship training for all technical and vocational education teachers."

Additionally, it is also stated in the abovementioned report that initial training for teachers on how to teach entrepreneurship in vocational education is compulsory. Moreover, all vocational education teachers must attend in-service seminars on this topic organized by the Cyprus Pedagogical Institute.

Concerning students' direct entrepreneurship training, this is done through active participation in entrepreneurial competitions such as the Digital Championship organized by the Digital Champion for Cyprus, the Junior Achievement, and other competitions.

Such actions are reflected in the 2018/2019 Gin (Global Entrepreneurship Monitor) results, showing an improvement in entrepreneurial training at the post-school level, which is now considered a strength of Cyprus' entrepreneurial ecosystem.

Other activities regarding the enhancement of education from an entrepreneurial perspective which the Ministry of Education supports are activities that promote entrepreneurial activities and competition at the school and university levels. These activities aim to raise awareness of entrepreneurship, and build creativity, critical thinking, and other related skills and competencies in students of all ages (e.g., "Digital Entrepreneurship Competition", "Student Enterprise", "Spending Smart" etc.).

An example where a Vocational school was involved in an entrepreneurial act was the case of Makarios III Technical School in Nicosia. The school joined the municipality in a project to remodel and landscape the riverside. Students surveyed the area, designed the landscape and all details (benches, lighting etc.), and built models to demonstrate their ideas. In the end, the participating students presented the project successfully at the Town Hall.

CONCLUSION

To conclude, 3D education and social entrepreneurship in VET schools should be improved and the ministry of education and culture should enhance the schools with the appropriate equipment. Additionally, regarding the deaf or hearing loss community in Cyprus, they should be supported by the ministry of education and culture regarding 3D and social entrepreneurship.

Lastly, the opportunities in labor market should be increased in Cyprus for the deaf or hearing loss community.

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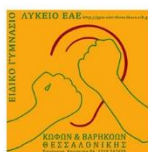
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