Knowledge is POWER:

Providing learning and empowering opportunities for young adults with special educational needs (SEN)

Project Nr: 2023-1-BG01-KA220-ADU-000156540

WP3: Development of a Training Course

A1: Small-scale Data Review and Analysis

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REPORT ON SMALL-SCALE DATA REVIEW AND ANALYSIS

Contents

INTRODUCTION

This document includes all the findings from the five desktop research efforts conducted in the relevant countries of the POWER UP project consortium (Bulgaria, Austria, Greece, Cyprus, and Italy), which aim to crucially support the development of entrepreneurship education material for young adults with special education needs (SEN).

Special education needs affect a very large population in Europe and the development of appropriately adapted educational material is of primary importance, both for equal access to knowledge for all, which is a human right, and for the development and competitiveness of the European economy based on innovative, ethical, human-centred and socially oriented entrepreneurship.

As special education needs are diverse and refer to different conditions, impairments and barriers faced by people with and without disability in multiple environments, POWER UP project focuses on a specific target group of end users. This research focused on the current situation in five EU countries and the challenges faced by young adults with **high-functioning autism**, **Asperger syndrome** and **dyslexia**, and the scientific and educational approaches used to avoid social and educational exclusion.

Particular emphasis has also been given to mainstream entrepreneurship education and the accessibility of the target group of the project to mainstream education, thus to entrepreneurship education programmes.

The results of the surveys are presented in six categories of interest where the readers can access specific information and data by country.

1. Educational System
2. Inclusive Approaches, Methods, and Tools
3. Online-Digital Tools
4. Bodies Providing Support to SEN Youth
5. Business Ventures For/From SEN Youth
6. Projects Similar to Power Up

To conduct the research, the project researchers relied on scientific and grey literature that can be found at the end of the document, in Sources-References part, while key stakeholders of the sector in each country were consulted as research informants.

This research effort follows the Research Review methodology. It is based on a review of available resources in each consortium country in order to gain knowledge in relation to all aspects of the inclusion of young adults with SEN and youth entrepreneurship concept in all partner countries. Its results have a specific objective (the evidence-based support for the

development of quality educational material) and do not claim the potential of generalization or the criticism-free adoption of its findings.

EXECUTIVE SUMMARY

In Europe, it is estimated that about 15 million children have special educational needs (SEN). The term 'Special Educational Needs' (SEN) initially proposed by the Warnock Report [Department of Education and science [DES], 1978) refers to individuals with learning difficulties or disabilities making it harder for them to learn than most individuals the same age. Official statistics indicate that approximately 6% of Europe's population is diagnosed with dyslexia (a learning disability impeding a person's ability to read) while the prevalence of Autistic Spectrum Disorders (ASDs) is estimated to be higher than previous reporting. Developing more inclusive education systems is high on the European Union's Agenda noting it as an opportunity to provide learners equal learning opportunities in line with the rights-based approach to education (European Agency, 2018a). Schooling years affect the adaptation to a job situation and formal competence increases the likelihood to secure employment (Båtevik et al. 2006). It is therefore of vital importance that individuals with SEN are equipped with the right knowledge and skills to allow them to find a foothold in the labor market. The important role of entrepreneurship in the creation of job opportunities and boosting of the economy is highlighted in the Entrepreneurship 2020 Action Plan (2013) where entrepreneurial education is identified as a key area for immediate intervention. It is also widely recognized that entrepreneurial education must be considered as a lifelong learning process starting in the early school years and progressing through all levels of education, including adult education. This framework entails training individuals with the right skills and competencies and fostering a culture of entrepreneurship to motivate them and empower them to take responsibility for creating windows of job opportunities for themselves.

Although the Sense of Initiative and Entrepreneurship has been defined by the European Commission as one of the 8 Key Competences according to The European Reference Framework for Key Competences for Lifelong Learning (European Commission, 2018a), its integration into the education system of each country has not yet been done in a uniform way. This research starts with this research hypothesis and seeks data on entrepreneurship education in the participating countries, at all levels (primary, secondary, and higher education), and in all types of education (formal, non-formal and informal education). Indeed, the findings of the survey reveal a relatively large imbalance in relation to the integration of entrepreneurship education in the participating countries, as in some countries there is compulsory attendance already from secondary education in relevant courses, while in other countries participation in entrepreneurship educational programmes is voluntary and based

on the initiative of the educational staff (so it is not uniform neither within the country nor even within the same school unit).

Taking this imbalance for granted the research continues to collect data on the integration of students with special educational needs into the educational system. Although the general approach followed in all countries is common, namely, to integrate people with special educational needs as smoothly as possible within the framework of general education, i.e. in a school accessible to all, there are also particular imbalances in this field, mainly due to the ability to finance structures and systems for the integration and further and specialized training of the teaching staff.

These two variables (i.e. entrepreneurship in education and inclusion in education for people with SEN) already create a framework for the development of POWER UP educational material. The different educational needs of the target group due to the different learning difficulties they face are placed in an even more complex and challenging context due to the difference in the implementation of inclusive education policies in different countries. An effective way to return from complete relativism to a fertile stable area where the specificities of each country can be addressed in a realistically common way is to examine the online tools used in each country for similar purposes and the projects (funded by the European Commission, national or private resources) that are moving in the same direction as POWER UP.

This focus helped us to realize in an informed way that, despite significant differences, there is a fairly broad common ground on which we can build to develop a training material that will be equally valuable in all project countries, but also in other countries in Europe. In addition, material was also collected on business initiatives already developed in the project countries that either start from people with SEN or target people with SEN. This inquiry can reveal a lot of information about both the cultural identity and situation of each country in relation to the awareness of the inclusion of people with SEN in the business arena and the labor market, but also about the level of inclusiveness of the institutional framework. Finally, the survey includes information on potential " allied " organizations, associations and collectives at local and national level, which have a similar constitutional objective to the POWER UP project and can, apart from their established experience in the field, enhance the results of the project through possible future cooperation in pilot and dissemination activities.

ACTIVITY 1 - SUMMARY

The conduct and presentation of this research is the first activity (A1) of a set of 4 interconnected activities that are part of Work Package No3 (WP3) of the POWER UP project. The overall result of WP3 consists of 6 microlearning educational modules in 5 languages (English, Bulgarian, Greek, German and Italian) to support and educate members of the target

group to advance their entrepreneurial skills and competencies and allow for a smooth transition from a school environment to the workplace.

The six modules will be developed in an easy-to-follow microlearning format (duration 10mins each), will include quizzes and feedback questions and will cover the below topics:

- Inclusion and teaching of entrepreneurship as a core subject of mainstream education.
- Smooth Integration of young adults with SEN: in theory and in practice.
- Teaching entrepreneurship to youth with SEN: what are the challenges & how to overcome these.
- Youth entrepreneurship: The HOW-TO: Identifying and seizing opportunities.
- Core Entrepreneurial skills and competencies.
- The art of creative thinking and problem-solving.

The **A1: Small Scale Data Review & Analysis** is a review and analysis of all aspects of the inclusion of young adults with SEN and youth entrepreneurship has been conducted via desk research and interviews with key stakeholders and practitioners in the five participating countries (social scientists dealing with special education, representatives of organisations supporting young people special education needs, trainers/teachers of special schools, parents or/and volunteers experienced in the field, representatives of social enterprises and business ventures for/from people with SEN, etc). To conduct the survey, a common template with six main topics and examples of data to be collected was created and used by all researchers. This template was developed by iED (Institute of Entrepreneurship Development), which is the lead partner of WP3, with the collaboration of all partners.

The results of A1 are a valuable reservoir of knowledge for the development of the training material, but alone are not sufficient for the optimal result that is the goal of the POWER UP consortium. The survey data will be complemented by the results of **A2: Identification of Needs and Definition of Final Topics for the 6 Blended Microlearning Modules**, which includes focus groups with the participation of at least 10 experts and key stakeholders in each country, using a questionnaire and an implementation methodology. The questionnaire and the methodology to implement the focus groups has been developed by ENOROS in collaboration with all partners (under the coordination of iED). The results of A2 will guide with more certainty and precision the project researchers in the **A3: Design and Development of 6 microlearning modules**, in order to have the greatest possible impact on the defined target group(s) of the project. The completion of WP3 comes with **A4: Translation of all modules in the national language of the participating countries** to have as result the 6 microlearning modules available in the 5 languages of the project (English, Bulgarian, Greek, German, Greek, Italian).

1. EDUCATIONAL SYSTEM

The first point of interest of the research is devoted to the way in which the educational systems of the consortium countries approach entrepreneurship education and the equal inclusion of people with special educational needs.

Data are presented on formal, non-formal and informal education and the role of entrepreneurship education at these different levels.

It provides important information on the approaches, ways, methods and tools used by each country to integrate people with special educational needs equally into the education system. It also presents the main challenges of the practical application of the theoretical principles followed by each country.

Key findings of Question 1:

- ➢ Entrepreneurship is not covered in secondary education in all countries. In higher education, courses in entrepreneurship are offered in all countries, at least in economics and business administration departments.

- ➢ In Austria and Italy, entrepreneurship has been integrated into compulsory education and specific performance indicators (number of hours of compulsory attendance for each student) have been set.

- ➢ In Greece and Cyprus, there are entrepreneurship educational programmes but they are more of a voluntary attendance nature and/or rely on the initiative of teachers to develop and deliver them.

- ➢ In Bulgaria and Italy there are schools and secondary education programmes specializing in entrepreneurship, with corresponding qualifications.

- ➢ In all countries non-formal education courses in entrepreneurship are available. Many of them are funded by the European Union programmes.

- ➢ Although the importance of inclusive education for people with special educational needs has been recognized in all countries, there is a widespread critical approach that there are still many steps to be taken.

- ➢ In Greece, Cyprus and Bulgaria the model of two different schools ("regular schools" and "special schools") is still dominant, with the ultimate aim of supporting students with SEN in order to integrate them into the regular education system. People with SEN who are integrated from the beginning into the regular education system are supported by specialized teachers and adapted educational material, but their actual needs are not sufficiently addressed.

> ➢ In Austria there are concerted efforts to implement the mixed inclusive model (students with and without SEN in the same schools) to avoid social and educational segregation of students, without ignoring the particular needs of students with SEN. The same approach is followed in Italy, but there is no evidence of its practical implementation.

1.1 Bulgaria

Education in Entrepreneurship

In Bulgaria (mainly in the capital city of Sofia), the main **state institutions** with a focus on youth entrepreneurship and management are concentrated in the following schools and colleges for young people between 14 and 18 years of age.

- First English Language School
- 108 Secondary School "Nikola Belovezhdov"
- 121 Georgi Izmirliev Secondary School
- 21 Hristo Botev Secondary School
- 19 "Elin Pelin" Secondary School
- 12 "Tsar Ivan Asen II" Secondary School
- 90 General Jose de San Martin Secondary School
- 127 "Ivan Nikolaevich Denkoglu" Secondary School
- 8 Secondary School "Vasil Levski"
- 203 St. Methodius Language School

The main principles in the curricula are introduction to the basic principles of business and first steps in entrepreneurship. The main emphasis is also on proficiency in English or another foreign language depending on the high school or school.

A key feature of most schools is their involvement in European projects with an entrepreneurial focus, youth education, innovation and introduction to business.

There are several specialized **private colleges** in the area of Sofia:

- College of Management, Trade and Marketing - Sofia
- Private Professional College of Business and Finance , Sofia
- English Business School "Eurostandard" Sofia
- Private Professional College Economics "Bulprogres"
- Private Professional High School "Banker"

The training is conducted according to an innovative English system of training, aligned with European standards, which includes teamwork skills and the development of team business projects, advanced training in English and information technology, as well as participation in various international projects and programs.

Successful graduates continue their studies at New Bulgarian University in the field of Economics, Varna Free University "Chernorizets Hrabar", University of Insurance and Finance, European University of Economics and Management and D.A. Tsenov Academy of Economics.

Higher education in Bulgaria provides a more in-depth study of entrepreneurship and management and a narrow specialization and orientation in Business profiles. University programs offer studies from 3 to 5 years in bachelor's or master's degree. The main higher education institutions with such orientation are:

- American University in Bulgaria - Entrepreneurship minor
- University of National and World Economy: Institute for Entrepreneurship Development
- Sofia University " St. Kliment Ohridski" Master of Management and Entrepreneurship
- Southwestern University "Neofit Rilski", major in Business Management and Entrepreneurship
- New Bulgarian University, specialty "Business Management and Entrepreneurship"
- The Higher School of Insurance and Finance

The educational programs of above mentioned universities overall include the study of the basic concepts and principles of accounting, the appropriate marketing strategies for a new product or startup, the development of a business plan, the application process of EU funds, strategies for continuous innovation, and the skills necessary to manage change and conflict.

In some of these universities' programs are included specific disciplines as Basic concepts of Law, State and Public Management, Introduction in Economics and Business administration, Introduction in Administrative Theories and Systems, Consumer behavior, as well as practical courses in Microeconomics, Macroeconomics, Business Management, Conception of Entrepreneurship.

Non-formal education

There are many non-formal educational institutions and organizations recognised by the Ministry of Education in Bulgaria specialized in Entrepreneurship for young adults, students or very often for everyone who needs a certification.

National Management School [1]

The school has the status of a non-profit organization carrying out its activities for public benefit. The main objectives of the association are:

- supporting the development and quality of education in the field of entrepreneurship, management and human resource management;
- to support the professional orientation and competitiveness of human resources in the field of economy, business and management;

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[1] https://nbschool.org/en/about-us-en/

- creating highly qualified professionals in the field of economic management and development;
- creating the conditions for building a knowledge-based economy;
- development and application of modern training methods for the development of professional and social skills and competences of human resources;
- supporting the personal, social and career development of young people;
- creating conditions for increasing employment;
- supporting the social integration and personal fulfillment of members of minority groups and disadvantaged persons;
- promoting forms of non-formal learning to broaden the knowledge, experience and skills of citizens to integrate them into the values of modern civil society;
- supporting and promoting youth initiatives and youth volunteering.

SOFTUNI[2]

Another important institution dedicated to the non-formal education for everyone is SOFTUNI. SOFTUNI is the largest and most respected IT educational institution in Bulgaria, providing training and career assistance in the fields of software engineering, digital marketing and design.

Founded in 2013, SoftUni is the organizer of a number of training programs, free courses and seminars, events and other educational initiatives that provide quality education for young people in Bulgaria, in the field of IT and digital technologies.

SoftUni works directly with over 100 technology companies and has an active community of over 400,000 students.

They have many different branches dedicated to Digital Marketing, Creative Graphic Design, IT and one concentrated on the importance of Finance education to everyone.

Finance Academy is an educational organization, part of SOFTUNI, creating next-generation opportunities in investments, personal finance, supplemental income, accounting and business. Responding to the challenges faced by all Bulgarians in their search for a better standard of living and higher incomes, Finance Academy provides practical, accessible and digital education in a language they can understand.

Educational platform UCHA.se[3]

One of the most famous platforms for informal education is the educational platform Ucha.se. At the beginning the platform was built to help students with their homework or in other words to additionally present to them the same materials they have at school but in a more acceptable, easy and fun way. Now, the platform covers all the national educational materials, presenting them in video materials - easy to watch and remember. The platform developed

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[2] https://softuni.bg/curriculum
[3] https://ucha.se/

many other channels - videos for teachers, additional courses for personal development, corporate education, and offers to create videos for private organizations. They are present in other countries as well - Spain, Italy and Romania. For the moment they do not have additional materials for educating young adults with SEN.

Education for Youth with SEN

Children with Special Educational Needs (SEN) and/or chronic diseases are trained in integrated schools that are obliged to accept them and as an exception when all other possibilities for training and education in public schools have been exhausted and upon written consent. For what it concerns entrepreneurship and students with SEN there are only temporary projects that may focus on learning these skills for a chosen group of students with their specificities. In Bulgaria the young students with SEN learn along with the other students the same educational program set by the Ministry of Education.

The main educational activities in the field of entrepreneurship and youth in Bulgaria remain projects funded by the EU or the Ministry of Education and Science. An example of such a project is "First steps for professional development"[4].

The project "First Steps for Professional Development" aims to address disadvantaged young people. The target group of the project consists of young people aged between 18 and 29, with completed secondary education, from the regions of Plovdiv, Pazardzhik and Stara Zagora, living in difficult conditions, but with the desire and ideas to develop their own business.

In the framework of the project, "disadvantaged groups" refers to young people who are at higher risk of poverty, social exclusion, discrimination and violence than the rest of the population, including but not limited to ethnic minorities, migrants, people with disabilities, abandoned persons, etc.

The course is free of charge and focused on the following topics: Introductions in entrepreneurship, how to create a business plan, Digital marketing, Financial management and budgeting, Intellectual property and Green Entrepreneurship. The course was released in the beginning of 2023 for about 2 months. All participants will receive a certificate for the training, and those who have prepared the best business plans after the training will receive free mentoring support and additional services to help with their implementation.

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[4] https://careerpath.bg/en/%D0%B1%D0%B5%D0%B7%D0%BF%D0%BB%D0%B0%D1%82%D0%BD%D0%BE-%D0%BE%D0%B1%D1%83%D1%87%D0%B5%D0%BD%D0%B8%D0%B5-%D0%BF%D0%BE-%D0%BF%D1%80%D0%B5%D0%B4%D0%BF%D1%80%D0%B8%D0%B5%D0%BC%D0%B0%D1%87%D0%B5%D1%81%D1%81%D0%B5%D0%B4%D0%BF%D1%80%D0%B8%D0%B5%D0%BC%D0%B0%D1%87%D0%B5%D1%81%D1%81%D0%B5%D0%BF%D0%BE-%81/

1.2 Austria

Introduction to Austria´s Educational System

The ibw - Institute for Educational Research in Economics provides a good overview of the Austrian education system, which is designed to cater to the diverse needs and interests of learners, offering a wide array of programs starting from the upper secondary level. Vocational education and Training (VET) hold significant importance, providing a variety of options from upper secondary level onwards, including both school-based and dual programs. Compulsory schooling in Austria begins at the age of six and extends for nine years, with a mandatory education program enforced until the age of 18 to promote equality of opportunity and enhance employability (ibw, 2019).

Primary education in Austria spans four years and focuses on imparting basic general education and fostering the social, emotional, intellectual, and physical skills of pupils. Special educational needs (SEN) students can attend special needs schools tailored to their requirements or integrated/inclusive classes within primary schools, where specially trained staff employ individualized teaching methods.

Lower secondary education offers two main pathways: new secondary schools (NMS) and the lower cycle of academic secondary schools (AHS). Pupils with SEN can attend years five to eight of special needs schools or opt for other educational options to ensure their transition to the upper secondary level.

Upper secondary education provides learners with choices between pre-professional, vocational, and general education programs. Pre-professional education, often chosen to prepare for dual VET pathways, includes prevocational schools and intermediate vocational education programs, offering practical orientation and career guidance. Vocational education and training (VET) options at the upper secondary level dual VET programs, mainly school-based programs, and higher vocational education at colleges, offering specialized training in various fields alongside general education. These pathways equip students with qualifications for immediate entry into the workforce or higher education.

General education pathways such as the upper cycle of academic secondary schools (AHS) prepare students for university-based studies and offer specialized tracks. Tertiary education in Austria is provided by universities, universities of applied sciences, and university colleges of teacher education, offering bachelor's and master's programs, with doctoral degrees available at universities.
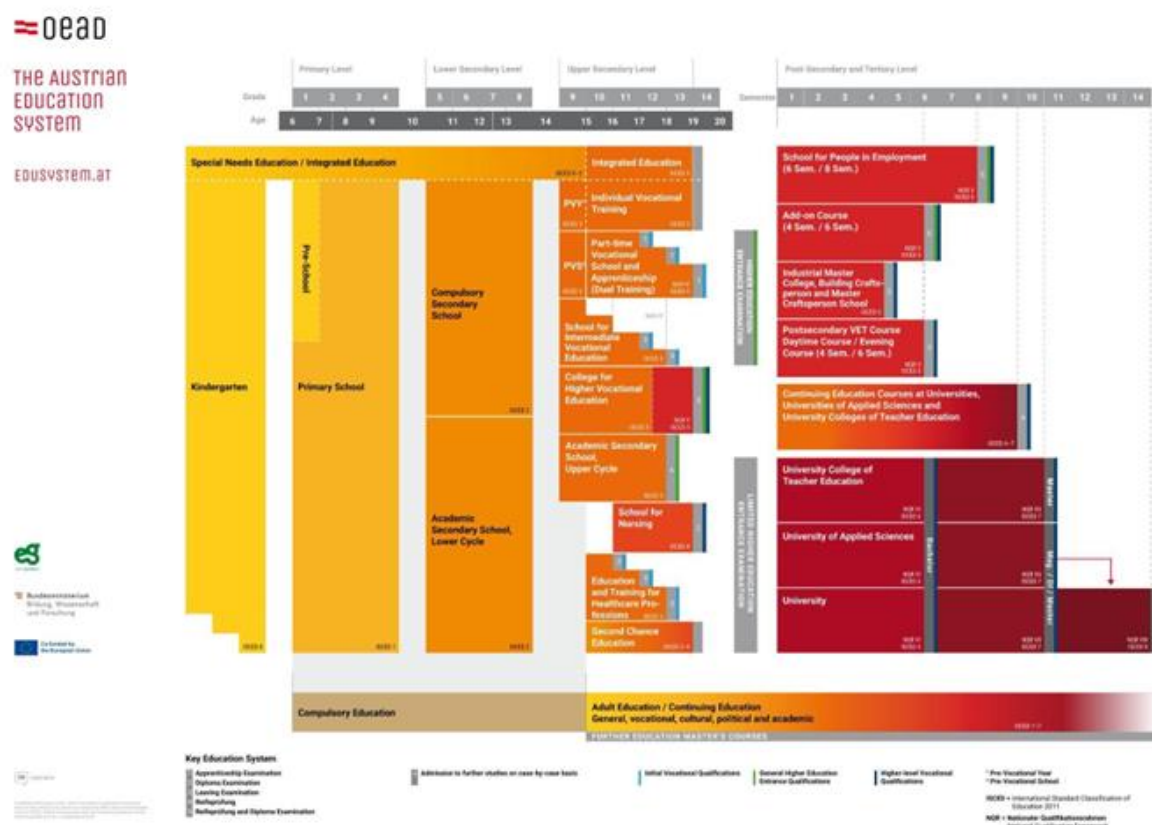
Figure 1. The Austrian Education System

Non-Formal Education in Austria

Education in Austria extends beyond traditional schooling, with non-formal and informal learning occurring in various environments. Non-formal education, facilitated by initiatives such as youth organizations and open youth work, provides valuable learning experiences outside formal curricula. Through voluntary participation in activities and projects, young Austrians develop essential skills like teamwork and leadership, contributing to their personal and professional growth (Bundes Jugend Vertretung, 2023).

Data from the Organization for Economic Cooperation and Development (OECD) highlights Austria's commitment to non-formal education. Austrian adults spend an average of 87 hours per year engaging in non-formal learning activities, reflecting a significant investment in continuous education beyond formal institutions. While individuals with higher educational attainment tend to participate more in non-formal education, those with lower qualifications often dedicate more time to learning activities, emphasizing the accessibility and importance of such opportunities for all segments of Austrian society (OECD, 2020).

The Bundes Jugend Vertretung advocates for the advancement of non-formal education in Austria, stressing the importance of robust infrastructure, financial stability for organizations, and proper recognition of acquired competencies. Through active engagement in ministerial working groups and networks, the organization strives to ensure that non-formal education remains accessible and beneficial for Austrian youth (Bundes Jugend Vertretung, 2023).

Education on Youth Entrepreneurship

Entrepreneurship education in Austria encompasses various measures aimed at nurturing entrepreneurial attitudes and skills among the youth. Recognizing the importance of fostering entrepreneurship across all levels of education, especially in vocational education and training (VET), the Austrian government introduced a 'National Action Plan for Entrepreneurship Education' at the end of 2020 (European Centre for the Development of Vocational Training [Cedefop], 2021). The action plan responds to the uncertainties posed by various challenges such as pandemics, climate change, and digitalization. It emphasizes the need to cultivate creative ideas and sustainable solutions, aligning with the Sustainable Development Goals (SDGs) at both societal and individual levels (Cedefop, 2021).

Collaboration among multiple ministries and stakeholders has resulted in the formulation of a comprehensive 'Map of Actions for Children and Young Adults' in entrepreneurship education. This plan outlines measures to expand entrepreneurship education structures, strengthen the ecosystem, and coordinate activities across different educational levels.

The action plan sets ambitious goals to be achieved by 2025, including incorporating entrepreneurial competencies across education levels and providing at least 100 hours of entrepreneurship education to all students. Six key fields of action have been identified, focusing on integrating entrepreneurial skills, enhancing teacher training, supporting business start-ups, fostering partnerships, and initiating relevant projects. Several measures are already underway, particularly in VET, such as establishing smart practice enterprises in VET schools, developing entrepreneurship-focused schools, piloting cooperative model businesses initiated by students, organizing competitions, and preparing a decree on entrepreneurship education (Cedefop, 2021).

Education for SEN Youth

Austria's journey towards inclusive education has deeply impacted its educational institutions, especially in addressing the needs of students with special educational needs (SEN). Historically, the country maintained a dual system, with special schools catering to students with disabilities alongside mainstream schools. However, shifts in societal attitudes and international obligations, notably the ratification of the UNCRPD in 2008, propelled Austria towards more inclusive practices.

Educational institutions in Austria have responded to these changes by implementing various policies and initiatives. For instance, the National Action Plan introduced measures to promote inclusive schooling and reduce reliance on segregated settings. The establishment of "inclusive model regions" aimed to pilot inclusive practices and gather insights for broader implementation. Additionally, teacher education programs underwent reforms to equip educators with the necessary skills for inclusive teaching.

Despite these efforts, challenges persist within educational institutions. The coexistence of special schools alongside inclusive settings reflects ongoing debates and entrenched biases. Moreover, the transformation towards fully inclusive education requires substantial resources and systematic planning, which educational institutions are actively navigating. (Buchner & Proyer, 2019)

In Austria, the educational landscape for students with Special Educational Needs (SEN) is underpinned by a robust legal framework and a commitment to inclusive practices. Over the years, Austria has prioritized the inclusion of children with SEN within the educational system, enshrining their rights and ensuring access to appropriate support mechanisms. Austria's legislative framework provides a solid foundation for SEN education. The Compulsory School Act (Schulpflichtgesetz) outlines the rights of learners with SEN, emphasizing parental choice in selecting between special schools or inclusive settings within mainstream schools. This legal provision underscores Austria's commitment to accommodating diverse learning needs and fostering inclusive environments.

Early intervention plays a pivotal role in Austria's approach to SEN education. The country's early intervention system, governed by the Provincial Disability Acts and the Youth Welfare Act, aims to identify and address developmental concerns at an early stage. Through regional institutions and non-governmental organizations, children deemed at risk of developmental disabilities receive targeted support, ensuring that potential barriers to learning are addressed proactively.

Austria adopts a two-track system for learners with SEN, offering options for education in special schools or inclusive settings within mainstream schools. Special schools cater to various disabilities, providing specialized instruction, small learner groups, and tailored curricula. These schools play a crucial role in supporting learners throughout their compulsory schooling, with provisions for pre-vocational training to facilitate their transition to the labour market.

Inclusive education is a cornerstone of Austria's approach to SEN provision. Mainstream schools offer inclusive settings where disabled and non-disabled learners study together, supported by various pedagogical strategies. These strategies include cooperative teaching, individualized learning, and the deployment of special teachers to address specific needs. Local authorities are tasked with ensuring the provision of necessary resources to facilitate special education within mainstream settings, emphasizing the importance of equitable access to quality education for all learners (European Agency for Special Needs and Inclusive Education, 2020). Vocational training in Austria follows a dual approach, combining practical apprenticeships in companies with theoretical education in vocational schools. Learners with SEN have the option to pursue extended apprenticeships or partial qualifications, supported by occupational training assistance. This comprehensive support mechanism aims to equip learners with the skills and resources needed to succeed in their chosen career paths, promoting inclusivity and equal opportunities in the workforce (European Agency for Special Needs and Inclusive Education, 2020).

Despite the strides made in SEN education, Austria faces challenges in effectively addressing the diverse needs of learners. The attribution of SEN status involves rigorous processes, with certain groups disproportionately affected. Moreover, while SEN curricula are available, their application varies, and graduates may encounter barriers in accessing upper secondary schools. These challenges highlight the need for ongoing efforts to enhance inclusivity and address disparities in educational outcomes (Pessl & Steiner, 2022).

Austria's approach to education for SEN youth reflects a commitment to inclusivity and equity. By prioritizing early intervention, offering tailored educational options, and promoting inclusive practices within mainstream schools, Austria endeavours to provide all learners with the support they need to thrive. However, addressing persistent challenges and ensuring the effective implementation of SEN policies remain essential for realizing the goal of equitable educational opportunities for all.

1.3 Greece

Education in Entrepreneurship

With regard to Greece and in particular in primary degree and secondary education, perhaps the instruction of other courses includes the reference to certain general concepts for the economy and its role in society, but such knowledge does not form part of a separate course. Primary school children have the opportunity to attend additional optional cognitive subjects, but these activities optionally chosen, will be implemented only on the initiative of tutors. These program s are intended, on one hand, the acquisition of knowledge, skills development and change attitudes and values in relation to the consumption while, on the other hand, the understanding of basic economic concepts which is necessary in everyday life.

In secondary education, we meet the sense of entrepreneurship in those non-compulsory activities and in high school; within the context of economy courses (Papagiannis, 2013). The implementation of various programs, optionally chosen by students and outcome of teachers' initiative enables students to be taught the notions relating to entrepreneurship.

In higher education, entrepreneurship is usually taught as an optional subject whereas it is compulsory course in a few departments of economic studies. In departments of economic studies, students can be taught the concept of entrepreneurship in various courses and acquire the necessary knowledge for establishing an enterprise, to promote its products, accounting and managing of it. On the other hand, in non-economic studies departments, entrepreneurship is taught within the context of selected courses. Also, besides entrepreneurship and other financial courses, in the direction of developing skills relating to entrepreneurship include services provided by the liaison University bureaus and offices of practical training as well as the organization of seminars, events and competitions on entrepreneurship.

Non-formal Education

It must also be noted the contribution of European Programs related to entrepreneurship education and lifelong learning in the above-mentioned sector. In particular under such schemes, the Units of Innovation and Entrepreneurship of Universities, with the aim of developing those actions cultivate entrepreneurial spirit of students and contribute to their business prospects. The aim of these Units as well as the structures for enhancing employment and career development is the connection of the education system and the labour market,

through the cultivation of entrepreneurial spirit among students and encouraging them to entrepreneurship. So, for this purpose, supported educational of sections with courses of entrepreneurship and other activities such as seminars, events and competitions, where an opportunity is given to students and graduates to reach quotes of basic notions of entrepreneurship and innovation, learn how to prepare a business plan and undertake business activities.

By way of a conclusion, actions that contribute to students' cognitive background, the development of business initiative but also in connection with their knowledge of the meaning of entrepreneurship, is the introduction of entrepreneurship courses in the curriculum of various sections or even support corresponding courses, business labs for the development of business plans, visits to enterprises and productive entities, entrepreneurs invitations in conferences and lectures, the creation of educational material plus the organization of business seminars and business ideas competitions. We could also add supporting students' innovative ideas, holding open seminars as well as intensive entrepreneurship and innovation seminars concerning a special topic and entrepreneurship summer schools.

Education for SEN Youth

Special education for minors is mainly divided into Primary Special Education and Secondary Special Education. Since the early 1980s, the institution has begun to grow, in particular. Nevertheless, the number of students between the two levels is particularly unequal. More specifically, the hierarchical levels are divided into special kindergartens, special primary schools (Primary Education), special high schools, and technical vocational schools for special education (Secondary Education).

The purpose of the Greek educational system, based on a.1§6 of Law 2817/00, is the school integration of students of all levels of education regardless of needs and particularities, to be followed by social participation, their participation in the production process and their equal social development. At the same time, it is reported that in the case of students with special educational needs in the schools of the common education system, or in the integration departments, it becomes particularly difficult, due to the type and degree of their problem, the education of children can be provided in independent schools. Also, in the specially organized Integration Departments that operate within the schools of general and vocational education. If the above procedure is deemed impossible then the student can attend independent special education schools, schools operating in hospitals, rehabilitation centers, institutions for the treatment of minors or institutions for chronically ill only minors, but at home. Special kindergartens and special primary schools take care of children from the 4th to the 14th year of their lives. Special high schools from the 14th to the 18th year. Especially high schools from the 18th to the 22nd year. The high schools consist of the preliminary class and are followed by classes A ', B' and C '. Students with mild disabilities can enter the first grade directly.

Finally, in relation to higher education, their enrollment in academic institutions is expected to exceed the number of entrants. For the examinations, it is provided that those candidates who are unable to participate due to permanent, temporary physical or sensory impairment

or dyslexia have the right to be examined orally by a special examination committee at the same time and in the same subjects as the other candidates. Then, the goals of the special education system in Greece help to improve the skills and abilities of students with special educational needs with the intention of integrating them into the common education system. Their main goal is their mutual acceptance with society as a whole based on equal social development through the educational process, vocational training and participation in the production process. Despite the ongoing institutional changes and the prevalence of the model of integration by the Greek education system, there seem to be difficulties in integrating this student population into the public education system. The reason; The lack of preparation of the educational community.

The assessment and identification of children with SEN is carried out by multidisciplinary teams at Centres for Multidisciplinary Assessment, Counselling and Support (KEDASY), which operate under the Ministry of Education, as well as by child and adolescent mental health services (CAMHS), which operate under the Ministry of Health. KEDASY's have the jurisdiction to suggest the proper educational setting for a child and plan an individual education programme (IEP), implemented by a specialist educator in collaboration with the school advisor. It should be highlighted that the child's parents are encouraged to take part in the process. However, results of previous research suggest that caregivers of children with ASD experience severe stigma, which in turn may affect their decision to access healthcare (Telesia et al., 2020). Unfortunately, several problems faced by KEDASY as well as CAMHS (e.g. waiting lists, non-permanent staff) make it difficult to fully evaluate and support children in timely way[5].

To ensure equity and quality, children with high-functioning ASD may attend mainstream school classes full-time alongside their typically developing peers, either without support or with individualized 'parallel support' by a person (a co-teacher), who preferably has a specialization in autism, on a permanent or fixed-term basis (Law 3699/2008)[6]. However, Stefanidis & Strogilos (Stefanidis & Strogilos, 2015) reported that 37.75% of co-teachers in their study had no qualifications related to special education. Parallel support is provided under the following conditions: (a) ability of the pupil to participate in the classroom curriculum, if supported by a co-teacher; (b) attendance at a rural school, where there is no other special educational setting provided (e.g. on remote islands); (c) a KEDASY report based on a multidisciplinary assessment.

Children with medium or low-functioning ASD may attend a 'resource class' within a mainstream school. Resource classes provide two types of educational programme: (a) a specialized programme for all pupils (up to 15 h/week) and (b) an individualized programme with an extended timetable for individuals with more severe SEN. Alternatively, young people

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[5] National Confederation of Disabled People. Disability Observatory Annual Report 2021 [in Greek]. NCDP, 2021. http://139.144.147.121/publications/others/6048-etisia-ekthesi-etoys-2021-paratir4444itirioy-thematon-anapirias

[6] Hellenic Parliament. Law 3699: Special Education of Individuals with Disabilities or Special Educational Needs [in Greek]. Government Gazette, no. 199: 2 Oct. National Printing House, 2008. https://e-nomothesia.gr/kat-ekpaideuse/n-3699-2008.html

with low-functioning ASD may attend either Special Education and Training Units or special schools (Law 3699/2008)[7].

Indicatively, during the school year 2019–2020, 89.597 children with SEN attended general primary and secondary education, 10.7% of whom received parallel support, and 12.086 attended Special Education and Training Units[8]. In the academic year 2020–2021, 12.6% of the total school population were supported by parallel support and 12.555 children were attending Special Schools. Most of the children in Special Schools were individuals with severe mental health problems, autism or multiple disorders, who were more likely to experience social exclusion due to the severity of their difficulties[9].

It should be highlighted that according to Law 3699/2008 parents have the right to refuse the recommendations made by KEDASY and register their child in the local mainstream school[10]. Law 4186/2013 (Article 28, paragraph 18) gave parents the right to hire a 'special assistant' to support their child within the mainstream setting, on agreement with the head of the school and the Teachers' Association of the school[11]. This allowed a shift from state-funded to privately funded special education provision, as instead of allocating more resources to inclusive education, the state passed on the responsibility to parents. Interestingly, during the 2019–2020 school year, 1.222 pupils in primary and secondary education were supported by special assistants hired by their parents[12].

Finally, students with ASD and significant disability certified by a Disability Certification Committee have only recently been admitted to university without participating in the main national exams (such students can constitute up to 5% of the total number of admissions)[13].

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[7] Hellenic Parliament. Law 3699: Special Education of Individuals with Disabilities or Special Educational Needs [in Greek]. Government Gazette, no. 199: 2 Oct. National Printing House, 2008.

[8] National Confederation of Disabled People. 10th Report of Statistical Information: Data on the Education of Students with Disabilities and/or Special Educational Needs [in Greek]. NCDP, 2019. https://www.esamea.gr/publications/others/5293-10odeltio-statistikis-pliroforisis-stoixeia-gia-tin-ekpaideysi-tonmathiton-me-anapiria-i-kai-eidikes-ekpaide999ytikes-anagkes

[9] National Confederation of Disabled People. Disability Observatory Annual Report 2021 [in Greek]. NCDP, 2021.

[10] Hellenic Parliament. Law 3699: Special Education of Individuals with Disabilities or Special Educational Needs [in Greek]. Government Gazette, no. 199: 2 Oct. National Printing House, 2008.

[11] Hellenic Parliament. Law 4186: Restructuring Secondary Education and Other Provisions [in Greek]. Government Gazette, no. 193: 17 Sep. National Printing House, 2013. https://www.minedu.gov.gr/publications/docs2018/N_4186_2013fek193.pdf

[12] National Confederation of Disabled People. Disability Observatory Annual Report 2021 [in Greek]. NCDP, 2021.

[13] Hellenic Parliament. Amendment of the data Φ. 151/17897/β607-02-2014. Joint Decision of the Ministers of Education and Religious Affairs and Health 'Determination of instruments, manner and procedure for the detection of serious diseases of candidates for admission to higher education' (B' 358) [in Greek]. Government Gazette, 6069/B: 28 Nov 2022. https://www.minedu.gov.gr/publications/docs2020/%CE%9D%CE%95%CE%95%CE%A3_%CE%A0%CE%91%CE%98%CE%97%CE%A3%CE%95%CE%99%CE%A3_5_2022.pdf

1.4 Cyprus

Education in Entrepreneurship

Entrepreneurship is not part of the curricula of schools in Cyprus. Students can participate in entrepreneurship programs on a voluntary basis and as part of non-formal education. Economics, which introduces enterprise, gets introduced in secondary education but only as an elective subject. Students can participate in entrepreneurship programs on a voluntary basis and as part of non-formal education. Students studying economics or business studies, or alternatively, post-graduate MBA students may take some lessons covering enterprise and entrepreneurship.

Non-formal Education

Regarding non-formal education, NGOs offer programmes dedicated to entrepreneurship for students from primary to tertiary education as well as young adults. Various EU-funded programs are offered throughout the board as well. There is no information on such programs for youth with SEN in Cyprus. The organisations in our network are geared towards the fair treatment and introduction of SEN youth to basic curricula and education rather than the further development that non-formal education offers.

The status of informal education in Cyprus, as detailed in a 2008 UNESCO report, showcased a nation in the midst of developing and refining its approach to recognize and integrate non-formal and informal learning within its broader educational and vocational frameworks. The Ministry of Education and Culture (MOEC) of Cyprus, as of 2008, held the overarching responsibility for the development and implementation of education policies, including those related to informal and non-formal learning. A significant step was the adoption of a Lifelong Learning Strategy in 2007, encompassing all aspects of education and training alongside informal and non-formal learning activities. This strategy aimed to make educational and training systems accessible to all, improve system content and infrastructure, increase research and development activities, and enhance governance efficiency in lifelong learning systems. This became available through various 'workshops and afternoon adult classes offered by the Ministry, nevertheless there is no information available in what is the case for SEN students in those workshops.

Moreover, despite the absence of specific procedures or guidelines for recognizing non-formal and informal learning within the educational system, certain institutions, especially higher education, have allocated credits for skills gained informally or non-formally. Furthermore, Cyprus's approach includes legislative support for workforce development, such as the apprenticeship system and the Human Resource Development Law, which sets standards for vocational qualifications and guides cross-border activities.

The report indicates that Cyprus is in the process of developing a National Qualifications Framework (NQF) aligned with the European Qualifications Framework (EQF), aimed at improving transparency in vocational qualifications and thereby enhancing the vocational education and training systems. This development is expected to facilitate the recognition of knowledge, skills, and competences needed both nationally and at the European level.

Education for SEN Youth

The responsibility of the education of youth with SEN is undertaken by the government of Cyprus for the ages of 5 and 18. Within the Cypriot context, research on disability, access, and provision in higher education is limited. Several private higher education institutions offer alterations to their programs to accommodate students with SEN but there are no specific provisions on this. Entrepreneurship is not part of the curriculum.

In Cyprus, the educational system for youth with SEN, especially at the secondary education level, is governed by the law of 1999, Special Education Law [113(1)99]. Children with mild-to-moderate SEN are placed in mainstream school settings with the relevant support from the Ministry of Education, in the form of curriculum and examination adaptations, and special educational provisions depending on the case. The law states that youth and children with more severe SEN are educated in special schools, however, there is no distinction on the situation of youth with autism and there is no specific special school for children with autism. Nevertheless, there is no specialized provision for youth with autism and Asperger's, though recent circulars aim to improve education for children with autism by training teachers. Children with dyslexia are the most integrated and there is more support and knowledge in the general public and schools.

Overall, there have been efforts of inclusivity in education in Cyprus, nevertheless, there isn't adequate follow-up and information available. Moreover, entrepreneurship end general critical thinking and development courses are not yet introduced in the educational system. Informal education is dedicated to adults, however, there is no nationwide system of recognition for such courses but there are various courses available for adults, but there is insufficient information on methods for youth with SEN in those cases.

1.5 Italy

Education in entrepreneurship

Referring to the Italian context, there is no national strategy on entrepreneurship education[14]. However, as part of the promotion of lifelong learning introduced into the Italian law 92/2012[15] (art. 4, paragraphs 51-68), ever-increasing attention has been dedicated to the development of entrepreneurial skills in training courses formal, non-formal and informal. Italy does not adopt a national definition but refers to the description of the "entrepreneurship" competence contained in the European Reference Framework on key competences for lifelong learning (22 May 2018 European Council Recommendation)[16]. This has been used as a national guideline of the curriculum of primary schools and secondary

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[14] https://www.politichegiovanili.gov.it/politiche-giovanili/attivita-internazionali/youthwiki/3-occupazione-e-imprenditoria/3-8-sviluppo-della-competenza-imprenditoriale/

[15] https://www.gazzettaufficiale.it/eli/id/2012/07/03/012G0115/sg

[16] https://eur-lex.europa.eu/legal-content/IT/TXT/PDF/?uri=CELEX:32018H0604(01)&from=IT

schools, as well as in the development of a *syllabus* dedicated to secondary schools to accompany them in introducing entrepreneurship education in a structural way, as follows:

- As regards primary school and the first cycle of education, the Ministry of Education MIUR decree 03.10.2017, n. 742 - Attachment B[17], contains the reference to the key competence "spirit of initiative and entrepreneurship".
- In the context of secondary school, entrepreneurship education was introduced in a structural way, through the Ministry of Education (MIUR) decree n. 4244 of 03.13.2018[18] "Promotion of an entrepreneurship education course in the public and private High School in Italy and abroad". It provides courses aimed at developing students attitudes, knowledge, skills and competences in the entrepreneurial field and useful "in every working context and in every experience of active citizenship". The promotion of entrepreneurial competence development paths within secondary education courses is accompanied by useful tools for their implementation. In particular, the MIUR decree proposes a Syllabus - built with the involvement of numerous stakeholders including business associations, cooperative world, businesses, professional associations (and others) - which provides teachers with examples of possible teaching methods and themes to propose to students. These range from topics such as the analysis of personal attitudes, to the management and realization of ideas, to the development of creativity, based on the conceptual model of the Entrepreneurship Competence Framework (ENTRECOMP)[19] defined by the European Commission to offer member states a common reference for the development of initiatives to support entrepreneurial competence. The entrepreneurship education paths can start as early as the two-year period and then be consolidated in the last three years and involve the adoption of teaching approaches based on the active involvement of students and which favour the "practice" dimension. The secondary system comprehends in Italy:
  - High school, technical institute and professional institute courses for students aged 14 to 19. For all secondary schools, there is the mandatory introduction of courses for transversal skills and orientation (from 90 hours up to 210 hours), called PCTO[20], to bring school students closer to entrepreneurship through collaborations with enterprises, public and private organisations. It includes activities such as meeting with experts, enterprise visits, field research, business simulation, project work, internships, entrepreneurship projects.
  - Three-year and four-year vocational education and training (IeFP) courses of regional competence. The three-year IeFP courses, for young people over 14 years, are free and financed by the Regions. Upon completion, the students acquire a professional qualification. Training contents: technical-professional skills (quality, safety, environment and health) and basic skills (languages, mathematics,

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[17] https://www.miur.gov.it/-/d-m-742-del-3-10-2017-finalita-della-certificazione-delle-competenze-

[18] https://www.miur.gov.it/-/promozione-di-un-percorso-di-educazione-all-imprenditorialita-nelle-scuole-di-ii-grado-statali-e-paritariein-italia-e-all-estero

[19] https://ec.europa.eu/social/home.jsp?langId=en

[20] https://www.miur.gov.it/documents/20182/1306025/Linee+guida+PCTO+con+allegati.pdf

history, economics). Practical activities: educational laboratory simulations and activities with enterprises, in addition to internships in the company (160 hours the first year; 260 hours the second year).

- At tertiary level the Italian system foresees:
    - at the university level study courses which by their nature dedicate particular space to subjects such as economics and management (for example, economics and business or management engineering), however there are no centralised initiatives to support entrepreneurship education. There are numerous universities in the national territory that offer courses to support the creation of new businesses and to support the skills of young entrepreneurs, in particular in the context of university business incubators.
    - The Italian tertiary system foreseen Higher Technological Institutes (ITS Academy), at national and regional level, aimed at students with a secondary education diploma or a higher technical specialization certificate (IFTS) in a field coherent technological program, lasting two or three years. For example, at regional level, one of the institutes that promotes the culture of entrepreneurship and encourages the entry of young people into the world of work is ITS UMBRIA ACADEMY[21]: three-year post-diploma courses to facilitate access to the world of work. Approaches: learning-by-doing, project work, problem solving, design thinking. Activities: internship in the entreprises.

Non-formal education

Regarding non-formal education, association of enterprises, stakeholders, NGOs offer programmes dedicated to entrepreneurship for students as well as young adults. The largest non-profit organization in the world, involving from 2022 1 million youth from 6 to 29 years old, dedicated to the economic and entrepreneurial education of young people is JA. JA Italia aims to inspire children and youth from 6 to 29 years old, with specific training offer[22], encouraging them to follow their dreams and find their path, providing them with the necessary skills to face the future and help them become the professionals of tomorrow. UNICEF E JA ITALIA – UPSHIFT[23] proposes training courses on skills mapping; territory analysis; identification of solutions; mini-business simulation.

At regional level, the School for business, "School for entrepreneurs"[24], promoted by Confindustria, Manager, Confindustria Training Systems and Luiss Business School, in collaboration with Confindustria Umbria, Confindustria Umbria Training Systems and Umbria Business School propose a yearlong entrepreneurship training path (8 for training and 4 for the development of an entrepreneurial and/or business idea). It organizes Live Off Campus Training; PEER & Social learning; Digital Learning Material On-Demand; On Campus and Virtual Panel.

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[21] https://www.itsumbria.it/

[22] https://www.jaitalia.org/proposte-didattiche/

[23] https://www.datocms-assets.com/30196/1636970169-modello-upshiftbriefnov2021.pdf

[24] https://www.confindustria.umbria.it/wp-content/uploads/2022/08/Luiss_Executive_Scuola_Imprenditori_Umbria-brochure-DEF.pdf

Education for SEN Youth

The first experiences of integrating students with disabilities into regular schools began in the 1970s. From that point, legislation has evolved to guarantee students with disabilities and those with other special educational needs -BES- the right to individualization and personalization of education. The acronym BES "Special Educational Needs" was introduced with the ministerial directive of 27 December 2012: "*Intervention tools for youth with special educational needs and territorial organisation for school inclusion*". Youth with SEN are not all the same. In fact, they can be grouped into two main categories:

● BES without clinical certification - this area includes students subject to socioeconomic disadvantage, students coming from other countries with poor knowledge of the Italian language and culture and students awaiting certification.
● BES with clinical certification - pupils with DSA (dyscalculia, dyslexia, dysorthography and dysgraphia), pupils with DVA (cognitive delay, psychophysical and sensory impairments), pupils with ADHD (English acronym which stands for Attention Deficit Hyperactivity Disorder), pupils with FIL (limited intellectual functioning) and students with verbal and motor disorders.

Special Educational Needs became of great public interest in 2012[25], the year in which the relevant Ministerial Directive was issued. The topic has been the subject of attention for several years. Disabilities, in fact, are certified by the national health service with law 104 of 1992. It established the "Individualised Educational Plan -PEI", describing, for each young person with disabilities, the interventions, educational and rehabilitative projects, socialisation, as well as the integration methods between school and extracurricular activities helpful in promoting school and social inclusion.

Developmental disorders such as DSA, however, are regulated by law 170 of 2010, it recognizes Specific Learning Disabilities in the school environment and the need to "ensure equal opportunities for the development of skills in the social and professional sphere" and the development of the Personalized Educational Plan (PDP).

In Italy, the field of non-formal education has received a strong boost especially from private social entities including cultural and youth associations, foundations, NGOs and some training centres and volunteer networks which have proven to be sensitive to the topic also due to their ability to involve and enhance young people within their activities. For example, **AID (Italian Dyslexia Association)**[26] was founded with the aim of deepening knowledge on specific learning disorders, promoting research, improving teaching methodologies in schools, addressing and solving social problems related to DSA. Alongside its commitment to the inclusion of students with DSA, over the years the association has increasingly expanded its activity to the world of adults and work, to guarantee equal opportunities for all people with DSA of personal and professional fulfilment. Training courses, workshops, seminars,

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[25] https://www.istruzione.it/dg_studente/normativa_disabilita.shtml

[26] https://www.aiditalia.org/news/a-portata-di-app-strumenti-e-strategie-per-studenti-universitari-e-lavoratori-con-dsa

consultancy activities and training activities are therefore organized by associations and profit or non-profit organizations that deal with the SEN target. Below are some examples:

- **AID - DSA: FormAzione Lavoro**: for SEN workers and SEN aspiring workers. Contents: three sections of video lessons, with in-depth materials or exercises. Topics: job search, interviews, CV structure, work organization, practices for using compensatory tools, personalized career counseling meetings with a career consultant.
- **AID - "A portata di App"**: tools and strategies for university students and workers with SEN. Participants: university students with SEN, employed people with SEN or SEN people looking for work. 10 video lessons and 12 video tutorials. Contents: strategies and tools to better manage work and study activities.
- **Centro Servizi Welfare – Progetto Koala**[27]: Workshops for autistic children: four cycles of six meetings each based on a series of activities aimed at achieving autonomy and work. Tests on work activities: commissioned assembly, secretarial work and data entry.

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[27] https://www.secondowelfare.it/terzo-settore/impresa-sociale/un-nuovo-modello-di-intervento-per-i-giovani-e-adolescenti-con-autismo-il-progetto-koala-anchio-divento-grande/

2. INCLUSIVE APPROACHES, METHODS, TOOLS

In all countries, methods, and tools for the inclusion of learners with SEN use a combination of behavioural, developmental, and cognitive approaches. Although in the POWER UP project the focus is mainly on the development of cognitive skills related to entrepreneurship and creative problem solving, the interaction of the different approaches cannot be neglected as both the behavioural, developmental and cognitive dimensions of the educational work are often extremely indistinguishable in practice.

Although the aim of the project is to create digital educational material, there is a critical perspective on the use of digital tools and online platforms, as they may intensify the sense of isolation of learners and not leverage collaborative learning. However, the use of images and audio suggested in various educational tools can take the form of digital learning materials. The challenge at this point is to create an interactive learning environment, in a digital environment, that supports learner autonomy while harnessing the benefits of small groups. As the peer learning methodology is emerging in almost all countries as particularly beneficial for learners with SEN, it would be particularly useful to explore ways in which, digital learning materials include the participation of other learners and volunteer and professional caregivers.

Key findings of Chapter 2:

> ➢ In all countries the focus is on developing an inclusive learning environment with the participation of all members of the educational community.

> ➢ In Bulgaria, educational materials are adapted to the needs of students with SEN, but teachers' awareness needs to be increased.

> ➢ In Italy, the emphasis in the inclusion of students with SEN is on appropriate and effective training of teaching staff as an individualized approach is promoted for each person with (different) learning difficulties.

> ➢ In Bulgaria multisensory teaching is proposed as an important complement to traditional education methods (Reading, Listening, Oral presentation and Writing) thus highlighting one of the disadvantages of education through digital platforms or the need to involve other people (trainers, caregivers).

> ➢ From the research in Austria, Greece and Cyprus, the TEACCH method that emphasizes structured teaching methods and visual supports to enhance learning and independence among individuals is proposed for the development of the POWER UP educational material.

> ➢ In Greece the need for collaboration with experts is highlighted as many of the best practices in mainstream education (i.e. group work) can be real challenges for education for people with SEN.

> ➢ In both Greece and Italy, the coexistence of students with and without disabilities inside and outside the classroom is recommended, as inclusion in education is approached as part of wider socialization.

> ➢ In all countries a small number of trainees with SEN in each training programme is recommended.

> ➢ The findings of the research in Cyprus also suggest the use of visual material, appropriate organisation of the teaching environment, the use of outdoor activities, as well as co-teaching with peers and teaching in subject-specific pre-vocational training.

2.1 Bulgaria

According to the Law on "Preschool and School Education - Based on the school curriculum", an individual curriculum is developed for the students in individual form of education, as well as, if necessary, for: pupils with special educational needs who study in day, evening, combined.

The individual curriculum of students with special educational needs may contain only a part of the subjects defined in the framework, type or school curriculum. For the training in each subject in the individual curriculum, the personal development support team develops an individual curriculum, which is approved by the headmaster. The individual curriculum for students with special educational needs is developed on the basis of the framework requirements set by the state educational standard for inclusive education. The individual curricula are developed by the teachers in the respective subjects together with the specialists who are in the team to support the personal development of the particular student. In the General Education Monitoring Report from 2021, created by UNESCO and the European Agency, the following conclusion is stated. "*There is a need to develop teaching aids for students with SEN, adapting the curriculum content reflected in the textbooks. There is also a need for methodological guidance for teachers on how to adapt the content of the curriculum to the education of pupils with SEN*". There is a real gap between the students and the teachers when we face special education needs in the classroom.

The platform "Prepodavame.bg"[28] is a website for experts that brings together useful information for teachers, practical educational resources, lesson plans, video courses and strategies for better teaching. One of the authors is Violeta Georgieva, graduated in Slavic Philology and Special Education. She works at the Regional Centre for Support of the Process

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[28] https://prepodavame.bg/

of Inclusive Education - Montana Region as a resource teacher and expert in the sector "Methodological activity, assessment and guidance for additional support for personal development". She writes articles on effective inclusion of children and students with special educational needs, methodological support for pedagogical specialists and cooperation and interaction with parents. In her article for Inclusive Education[29] she points out that there are a few steps in order to create an environment that can be called inclusive for students with SEN.

1. Teacher awareness is one of the foundations for working with young people with SEN.
2. Environment which is acceptable and welcoming.
3. Individual approach with young people with SEN.
4. Recognizing the specificities of each young adult.
5. Supporting personal development and synchronizing school teams.

The majority of initiatives related to education for SEN youth are concentrated on teaching materials and methods dedicated to teachers.

Example of this kind of initiative is "One school for everyone"[30] where a model for an inclusive environment is created for the educational staff focused on psychologists, educators, speech therapists, directors of public or private schools.

Inclusive education is a process of changing the school environment based on respect and acceptance of the other. Wise management of school processes is needed, so that children are supported to develop their abilities and overcome difficulties, teachers feel encouraged and confident that they can cope with increasing challenges, and parents take on their responsibility and role in partnership with the school.

In every school there are children who need extra support, temporarily, for a longer period of time or permanently, to learn fully. Inclusion in education is an opportunity for schools to provide quality education to children regardless of their learning needs, ethnicity, socio-economic status or the constraints of the environment in which they grow up.

This study is based on several principals in order to elaborate an individual working process for every school. These principles could be grouped around:

● a collective effort and responsibility between teachers, parents and youngsters,
● self-assessment of the institutions and teaching staff,
● identification of schools needs and priorities, recognizing the resources by giving them ready solutions,
● knowledge of the characteristics of specific disabilities or learning difficulties and the presentation of pedagogical techniques.

The "OneSchool for Everyone" model has been made between 2014-2016 year from the Centre of Inclusive Development, with the collaboration of the Faculty of Pedagogy - Sofia University, financed by the foundation "America for Bulgaria".

In conclusion we can regroup the most effective methods for working with young adults, children with SEN around these scientific approaches:

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[29] https://prepodavame.bg/detsa-ot-spektara-i-obshtoobrazovatelna-sreda/
[30] https://www.ela-bg.eu/bg/OneSchoolForAll-BGN

- **Multisensory teaching** - Visual and auditory learning combined with language is the most common method of teaching in schools. Tactile and kinesthetic learning is rarely emphasized. These rarely used channels of information have many advantages. Multisensory learning is learning through the use of at least two senses at once. The brain is adapted to learn by stimulating all our senses - sight, hearing, smell, sense of taste, touch, movement, sense of balance. In this way we get a complete picture of our body, information about the world around us and the interplay between them. This multisensory teaching takes the form of play, which further creates positive emotions and stimulates the registration of information in our long-term memory.
- **A metacognitive approach** - Metacognition is thinking about one's thinking. More precisely, it refers to the processes used to plan, monitor, and assess one's understanding and performance. Metacognition includes a critical awareness of a) one's thinking and learning and b) oneself as a thinker and learner.
- **Reading, Listening, Oral presentation and Writing** are the most common educational methods used in mainstream education.
- **Critical thinking -** Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action.
- **Practice methods** like "Podkrepi me"[31] - puzzles, images, recognizing different forms like circle, triangle, games with colors, sound and video materials.
- **Sensory integration -** Sensory integration, also known as **sensory processing**, is the process by which the brain recognizes and responds to information our senses provide. So, this means how we process or integrate things that we see, taste, smell, touch, or hear — as well as the way that our body exists in space.
- **Ergotherapy -** Ergotherapy improves the physical, cognitive, sensory, psychological, social skills and abilities of the person through meaningful and purposeful activities. It is a person-centered health approach that aims to increase the level of independence and participation in daily life activities and to improve health.

A CRITICAL POINT on DIGITAL PLATFORM TOOLS

Although it is important for young adults with SEN, an online platform takes away the other senses of learning like touch, smell, activity which are very important for these kids. The Multisensorial method is chosen as central to work with kids with SEN and a digital platform takes away this possibility and focuses only on watching, reading, and hearing. Even real communication with a teacher or another student is not available with a digital tool like a learning platform. This is why maybe - most of the e-learning materials and tools for education for SEN youngsters are dedicated to the teachers and parents and not directly to the students. Individual one-on-one work or even in groups helps children with SEN to develop their social skills in addition to learning new knowledge.

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[31] https://podkrepime.mon.bg/public-resource/9243fec4-4456-476e-92be-bd1694c7b4ee

2.2 Austria

Approaches:

a. Behavioral Approach: Drawing from behavioural theories, educators focus on reinforcing positive behaviours and skill acquisition through systematic reinforcement and intervention. This approach emphasizes the use of structured teaching techniques and positive reinforcement strategies to facilitate learning among SEN youth.

b. Developmental Approach: Rooted in developmental theories, this approach recognizes the importance of addressing the unique developmental stages and needs of SEN individuals. Educators employ age-appropriate and developmentally sensitive interventions to support the cognitive, social, and emotional growth of SEN youth.

c. Cognitive-Behavioral Approach: Integrating cognitive and behavioural principles, this approach targets the cognitive processes underlying behaviour and learning. By identifying and addressing cognitive distortions, educators help SEN youth develop adaptive thinking patterns and coping strategies to navigate academic and social challenges effectively.

Methods:

a. Individualized Instruction: Recognizing the diverse needs of SEN youth, individualized instruction should be tailored to each student's strengths, preferences, and learning goals. This method allows educators to address specific learning difficulties and provide targeted support to maximize student engagement and learning outcomes.

b. Small Group Learning: In addition to individualized instruction, small group learning environments are utilized to promote peer interaction, collaboration, and social skills development among SEN youth. Group activities, discussions, and projects facilitate peer learning and mutual support, enhancing both academic and social-emotional growth.

Practices-Tools:

a. PECS (Picture Exchange Communication System): PECS is a widely used communication tool for individuals with communication difficulties, including those with autism spectrum disorder (ASD) and other developmental disabilities. Through the exchange of picture cards, SEN youth can effectively communicate their needs, preferences, and thoughts, facilitating language development and social interaction.

b. TEACCH (Treatment and Education of Autistic and Related Communication Handicapped Children): TEACCH is an evidence-based intervention program that emphasizes structured teaching methods and visual supports to enhance learning and independence among individuals with autism. Within the POWER UP project, educators could utilize TEACCH

principles to create visually structured environments and individualized work systems tailored to the needs of SEN youth.

c. Social Stories: Social stories are personalized narratives designed to teach social skills and behavioural expectations to individuals with autism and other developmental disabilities. These stories provide clear, concrete explanations of social situations and appropriate responses, helping SEN youth navigate social interactions and understand social cues.

Teaching Strategies:

The following list of main Teaching methods is taken from the video "Special Education Teaching Strategies" (Teachings in Education, 2020)[32]:

Pre-Teach Vocabulary	Checklists	Alternative Assignments
Provide Repetition	Behavior Plans (BIP's)	Differentiate Instruction
Establish Routines	Instructional Scaffolding	Improve Spatial Organization
Appropriate Goals	Develop Relationships	Outlining
Visual Aids	Graphic Organizers	Limit Number of Concepts
Teach to Interests	Formative Assessment	Finished Products

2.3 Greece

As we can found in Fotopoulou (2006), outdoor education is important, because **outdoor activities** have proved to have a positive effect on students with educational needs like mental retardation, behavioral problems etc. as they offer opportunities for real-life experiences and interactions with other people in the community without special needs. These activities take them away from the classroom, a place they relate to their school failure; they enrich the curriculum, maximize their understanding of concepts, motivate and increase school enjoyment as in these activities they cannot fail and get disappointed. They promote autonomy, independence and self-confidence by allowing each student's personal skills and capabilities to develop. Unfortunately, even though the Greek State recognizes the value of Out-of-school activities, it puts restrictions on them: Primary schools have up to 9-day outings a year and on optional basis 2 hours per week for extra-curricular or off-site activities.

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[32] https://www.youtube.com/watch?v=nK2PDKPKd7k

There are many aspects of **team-working** which can have negative consequences on the effectiveness of practice during challenging situations. Although virtually everyone acknowledges this, it can be truly difficult to achieve good teamwork. It is one of those areas where all our personal human weaknesses are likely to become barriers to achieving communal human strength.

People who have special expertise like speech and language therapists, physiotherapists, psychologists, nurses, and the parents and friends of the person can be very helpful in our understanding this person's feelings and promoting well-being, contentment, or happiness. It is vital that we follow any advice, recommendations or guidelines and put it into practice so as to prevent challenging behaviors in particular situations. Therefore, all parents and teachers should feel welcome, valued, and necessary by being able to work jointly with other parents, teachers and professionals. Everyone brings knowledge, expertise and differing perspectives resulting in a combination of ideas being greater than the sum of the parts.

71% of the teachers warn that inclusion will not be facilitated unless **class size** is reduced, and sufficient resources are available to support inclusion. By insufficient resources we refer to the lack of resources and space, for example, the fact that may not be a chair to support a child with physical and motor disabilities or a ramp for his wheelchair. As for class size, no teacher can teach effectively a class of 25 students nor can he/she supports a child with severe learning difficulties under these conditions. If the main reason for which a child with special needs is placed in a special school is his/her non-adaptation to the surroundings of a regular school, why should he/she returns to the mainstream if nothing has changed in it?

In the article "Strategies & Digital Technologies for Autism Integration" (Moraiti et all, 2023, p. 112) we can see **A Standardized Model of Personalized Interventions**: "One of the most common barriers to inclusion is problem behaviors and when students exhibit frustrating behaviors in retaining themselves in general education settings. Prevent–Teach–Enhance (PTR) is a model of personalized PBS designed for use in classroom settings to address the need for a standardized, function-based behavioral intervention model for students with severe behavior problems (Iovannone et al., 2009). The model includes a process for conducting a functional behavior assessment and then using the results to develop intervention plans. It is a collaborative group process facilitated by a counselor experienced in behavioral principles who guides the group through five steps.

Step 1: Grouping establishes membership and an agreement on how the group will operate, including methods for achieving consensus and assigning responsibilities.

Step 2: Goal setting focuses on identifying and setting social, behavioral, and academic goals. The step involves developing a practical tool for daily measurement of target behaviors, the Behavior Scale (BRS).

Step 3: PTR assessment (functional behavior assessment) includes direct and indirect observations covering three categories related to antecedent variables (Prevention), function and replacement variables (Teach), and consequence variables (Reinforcement).

Step 4: Intervention requires the team to select interventions that fit the hypothesis and represent each intervention component (ie, PTR). Step 4 includes a plan for training and coaching adults to implement the strategies as intended. The fidelity of the implementation of the support plan is evaluated during this step.

Step 5: The evaluation uses the BRS data to make decisions about the plan's effectiveness and next steps.

The model manual has been published and provides detailed descriptions of each step as well as tools to be used by teams to collaboratively develop an effective function-based support plan (Dunlap et al., 2010). The PTR was systematically evaluated with more than 200 students with a variety of diagnoses (including students with autism) in five school districts in two states. Results showed that students who received the PTR intervention showed significantly greater improvements in social skills, behaviors, and academic participation than their counterparts who received standard services (Iovannone et al., 2009).

The PTR received high social validity scores and teachers were able to implement the interventions with fidelity. The students included in the study were placed in a variety of settings, including 45% in general education. Strain et al. (2011) specifically evaluated the PTR model with three students diagnosed with autism who spent most of their time in general education classrooms. The students' problem behaviors were severe and included aggression, property destruction, obsessive-compulsive behaviors, violent outbursts, and suicidal threats. Implementation of the PTR model resulted in rapid reductions in problem behaviors and improvements in task engagement for all three children. Teachers implemented the interventions with high fidelity immediately after training and during follow-up, indicating that the interventions were feasible to implement in the general education classroom".

2.4 Cyprus

The current status of special education in Cyprus emphasizes the right of every child to an education tailored to their individual needs. The system is designed to ensure inclusivity, with a strong preference for integrating students with special educational needs (SEN) into mainstream education settings. A minor percentage of students, around 5-6%, are placed in specialized schools. The legal framework, including Laws 113(I)/1999 and 69(I)/2001, and Regulations ΚΔΠ 185/2001 and ΚΔΠ 186/2001, outlines the identification, assessment, and placement processes for SEN students, mandating the development of Individual Education Plans (IEPs) and providing necessary resources and support. Despite the 1999 law (N.113(I)/99), and the progress made in the secondary education system that has encouraged

inclusion, the practical implementation of the existing regulations still results in SEN pupils, experiencing marginalization.

The educational framework for children with special needs in Cyprus is informed by comprehensive legislative and policy measures designed to ensure inclusivity and equal educational opportunities. This framework emphasizes the early identification of special educational needs, personalized educational planning through Individual Education Plans (IEPs), and the integration of students into mainstream educational settings wherever possible. Additionally, Cyprus employs a multidisciplinary approach to special education, incorporating insights from **behavioral**, **developmental**, and **cognitive** theories to tailor educational strategies that address the diverse needs of students.

The general approach for special education practices rests on the relevant teacher and informative booklets and teaching material are offered by the Ministry of Education, albeit only in Greek[33].

The materials provided by the Ministry include a manual specifically designed for people on the autism spectrum[34]. The document provides a comprehensive overview of various strategies for managing autism, integrating psychodynamic, biological, and behavioral treatments alongside educational approaches. It emphasizes the significance of adapting psychotherapeutic and pharmacological interventions to individual needs, advocating for a multi-faceted treatment plan.

Behavioral interventions for autism spectrum disorders employ learning theory principles to decrease maladaptive behaviors and increase adaptive responses. This approach often involves positive reinforcement for desired behaviors and consequences for undesired behaviors, aiming to modify behavior patterns over time. The TEACCH program, emphasizing structured teaching, employs visual aids and spatial organization to enhance understanding and reduce anxiety. Social learning strategies focus on developing social skills through peer interaction and role-playing, aiming to improve social integration. The Picture Exchange Communication System (PECS) and other communication development programs are designed to facilitate non-verbal communication, aiding in the development of verbal skills. Educational strategies highlight the importance of adapting teaching methods to the individual's needs, including co-teaching and emphasis on pre-vocational training, to prepare individuals with autism for future employment and social integration.

More specifically, some of the approaches, methods and tools that are recommended and could be useful for POWER UP:

In **cognitive approaches** ideas and thoughts have a central role. One such intervention is TEACCH (Treatment and Education of Autistic and Related Communication Handicapped Children), which is based on structured instruction. Key elements of TEACCH's structured teaching are:

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[33] https://www.moec.gov.cy/eidiki_ekpaidefsi/ekpaideftiko_yliko.html
[34] https://archeia.moec.gov.cy/mc/656/autism_booklet.pdf

o Programs: Using clear programs in the classroom or at home helps autistic children to understand what the daily activities are, what the order of the activities is and how they relate to each other (eg work first, then play). In cases where, for these programs, the simple ways of representation that are easily perceived by the person (eg photos, numbers, objects) are used, the programs become more visual and thus easier to understand. Visual programs reduce the anxiety of autistic children that can be caused when they do not know what they are about.

o Physical organization of the space: The organization of the classroom space (or learning environment) must be done in such a way that each corner is a separate activity space. The space for individual work should be free from other stimuli. There should be a clearly visible reference point from where the child will be informed about its schedule.

o Visual teaching: The use of visual instruction is preferred because of the difficulty most autistic children have with verbal communication. There should be visual clarity (e.g. color coding, use of labels), visual organization (e.g. all materials for a task are in small containers rather than scattered on the table) and visual instructions (e.g. photos, sketches, symbols or written instructions).

Social learning Approaches emphasize the cultivation of social skills. To address the social deficits seen in autism various social learning approaches are used:

● Using peers to teach acceptable social behaviours. As for the older ages, it is good to inform other children about the disability of autism and what it causes in the social behaviour of the person. This way, better acceptance of the autistic child will be achieved and mockery and teasing will be avoided. Many autistic children (especially those with higher IQs), want to develop friendships but don't know how. It is good to teach autistic children what to say as well as how to say it. An effective method is, after the correct model of a mediation is demonstrated, to be asked to represent the same through role-play. It is good to be taught how to respond to social overtures or to the non-verbal behaviour of others and to have at their disposal a repertoire of possible ways of responding. Let's not forget that their social "judgement" develops only after they are taught social rules that other children learn spontaneously and intuitively.

● Use of social groups whose aims are to make the social contacts of autistic people interesting for them. The point here is to enrich the lives of autistic people rather than make them more normal.

Educational Approaches: Special education programs emphasize the above as well as:

o Implementation of individual behaviour modification programs. Using positive reinforcement to shape desired behaviour is effective with many autistic children. Autistic children with high IQs are particularly responsive to praise. (The teacher can praise the autistic child for persisting in asking repeated questions once the child stops praising him for giving other children a chance to speak.). In cases of children who insist

on talking about the same topic, specific times of the day can be determined when the child can discuss the topic that concerns them. These periods (e.g. recess) when the child is free to talk about the obsessions can be built into the child's daily schedule. In cases of autistic children with aggressive or self-injurious behaviour a detailed analysis of the incident is needed (what precedes, what follows as well as what happens during the incident where the behaviour is manifested). If the child is non-verbal, perhaps this is the way for the child to communicate. In this case the autistic child can be taught alternative ways of communicating (e.g. if the autistic child bangs his head during an activity with the teacher, the child may want to signal that he is tired and wants to stop, so he can be taught to touch a signal that means "STOP" and be released from the activity).

o Communication skills development program implementation. Spontaneous communication does not usually develop on its own in autistic children unless the power of communication and the way social interactions work are understood. However, for this understanding to occur, special communication skills development programs are needed. In addition to the more general TEACCH method, another method used with autistic children who have not developed speech is the Picture Exchange Communication System (PECS). This method requires the child to identify the person with whom it will communicate and then show him the image of an object he wishes to acquire. The child immediately them the desired object by exchanging it for the picture. This system gradually leads the child to use pictures corresponding to verbs (eg "want", "see", "is", "hear"), ending up in creating a simple sentence with pictures. Research results show that many preschool and older children begin to use speech after receiving PECS training.

o Creating an environment that makes sense to the autistic person. The environment should be safe and predictable, there should not be many transition periods, there should be clear instructions for what will follow, there should be no "surprises", i.e. sudden changes in the schedule and daily activities. If there will be changes, the child should be prepared in advance.

o Teaching in the natural environment and not in the classroom (e.g. traffic education lesson in the city, teaching how to use money with real coins).

o Opportunities for co-teaching with children of the same age. Although in some cases the behavioθr of autistic children is such that they must attend a special unit or a special school, in many cases autistic children can benefit from co-teaching opportunities with normal children in the regular school. In fact, in cases where there are "lanes of abilities" in the autistic child, it is good to emphasize them. Cooperative learning situations can be created in which the autistic child's reading skills, vocabulary, memory, ability for mathematical calculations, or any other ability can be seen as a positive contribution to the group and thus lead to peer acceptance.

o Emphasis on pre-vocational training programs instead of traditional school curriculum subjects. The autistic child will benefit more from programs that will prepare it for the

workplaces it will find himself in later in life, as an adult, than from purely academic programs.

There are handbooks for autism and dyslexia and a special catalog of online resources that can assist and support teachers[35] however most of these resources are geared towards lower education and primary education, wherein the majority of students are diagnosed. There is some material available online, only in Greek, but it is not the entire curriculum. For older students the support offered is more focussed on more time available and assistance by an on-site specialist. There aren't many resources available online or readily accessible to the general public, in the case of Cyprus, nevertheless, teachers oftentimes use material offered by Greece's educational system since the curriculum follows to a certain extent, that of Greece's and the language is the same.

2.5 Italy

Italian law appears to be in the vanguard on school inclusion issues, whereas, from an operational point of view there is still a long way for affirming the real inclusion of students with disabilities in school life. This is what is reported in the 2024 latest "School inclusion of students with disabilities"[36], implemented by UNCRPD with the Italian National Institute of Statistics that investigates since 2008 as many elements of school inclusion as possible such as buildings' accessibility; support tools for the students; role of learning support teachers and other professional figures; students' participation.

Research on the conditions that facilitate school inclusion emphasises the importance of investigating not so much the characteristics of students with difficulties (and their real "functioning" within the school context and less their certification), but **the attitudes and skills of the teachers** working in those contexts. In fact, one dimension of inclusion is clearly related to the implementation of teaching methods that can be carried out in a wide range of learning styles and abilities. It is extremely important to differentiate the teaching methods to meet the varied needs of students, including those with disabilities, learning difficulties, and other special educational needs. The goal is to make all classroom activities accessible to every student. There is a general lack of teachers, especially well-trained ones, who are able to include students with disabilities. To develop their skills, experience and confidence in the inclusion of all students, teachers need to learn and practice inclusive education during their initial and ongoing training.

The Italian Ministry of Education in the "Guidelines for the right to study of students with learning disabilities"[37] presents some indications, methodologies and tools to create individualised and personalized educational interventions to make the best use of compensatory tools and to apply dispensatory measures. Law 170/2010 reminds educational

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[35] https://archeia.moec.gov.cy/mc/656/katalogos_logismikon.pdf
[36] https://unece.org/sites/default/files/2024-02/3Disabilities%20ITA%20Corradini%20ENG.pdf
[37] https://miur.gov.it/ricerca-tag/-/asset_publisher/oHKi7zkjcLkW/document/id/188260

institutions of their obligation to guarantee a PDP -Personalised didactic plan- with the definition of "compensatory tools, including alternative means of learning and information technologies, as well as measures dispensing with certain non-essential services for the purposes of the quality of the concepts to be learned". In this sense, it is important to underline the need to develop a series of inclusive teaching strategies that integrate the use of technologies to develop conscious study and, more generally, to promote student autonomy, some of them are mentioned as follows:

- **Speech synthesis**: allows the automatic reading of a digital text. Some programs also allow you to adjust the reading speed, the type of voice and the reading mode (for example, deciding the portion of text to read each time: phoneme by phoneme, word by word or sentence by sentence). Speech synthesis can also be used in combination with a text editor in order to have the possibility of making changes to the text if errors are encountered during reading;
- **Video writing program**: allows you to create texts in a short time. Video writing programs can also include automatic corrector which allows you to identify and highlight typing errors (a very useful tool for students who have writing difficulties such as dysorthography);
- **OCR – Optical Character Recognition**: this tool recognizes and scans paper texts transforming them into digital texts, which can in turn be modified with the text editor or readable with speech synthesis;
- **Speech recognition**: allows you to digitally transcribe an oral text. In fact, the tool recognizes the sound and transforms it into electronic text, allowing students who have problems writing with the keyboard to save a large amount of time;
- **Programs for annotating PDFs**: these programs allow you to intervene on PDF texts, annotating and highlighting certain portions of text to schematize and simplify the understanding of the text;
- **eBooks and audiobooks**: these are the now well-known digital books in ePub (electronic publication) format;
- **Math Technologies**: There are various tools in this category. An example are spreadsheets, which allow you to carry out mathematical operations on a blank spreadsheet with the advantage of keeping the page tidier and more readable than would be possible on a written sheet. Another aid consists of talking calculators, which read aloud the various steps of the operations that take place through vocal synthesis;
- **Programs for creating maps**: they are fundamental support tools especially for DSA students because they allow to create mental and conceptual maps from complex texts, allowing them to be simplified;
- **Technologies for foreign languages**: electronic dictionaries fall into this category and are normal dictionaries that can be consulted on tablets or eBook readers.

Choosing the appropriate compensatory tools depending on the difficulties that need to be compensated for is an operation that requires a lot of accuracy. The evaluation must in fact be based on the degree of severity of the problem, on the characteristics of the person but also on the functionality of the tool itself.

Moreover, a decalogue[38] dedicated to teachers has been published by the AID (Italian Dyslexia Association) offering a series of suggestions and guidelines to deal with BES (Behavior and Education Support). Moreover, the University of Perugia has elaborated a guideline for the students with DSA[39] to be used by all teachers.

Inclusion is also a **socialisation process**; for this reason, the peer group assumes a significant value at the relational and educational levels. Indeed, establishing supportive relationships can be an additional resource for inclusive teaching (as per guideline)[40]. Therefore, to ensure the inclusion, are fundamental the moments that **students with disabilities share with peers in the classroom and also out of the school**, so it is important to investigate the participation of students with disabilities in various activities, such as trips (including those with an overnight stay), participation to sport/motor activities. A series of method could be used:

- o cooperative learning;
- o group and/or pair work;
- o tutoring;
- o learning by discovery;
- o the division of time into periods;
- o the use of educational mediators;
- o the use of IT equipment and aids, software and specific aids (as specified in the previous paragraph)

Among the approaches promoted by scholars and university researchers, the school-wide approach to social emotional learning (SEL)[41] is a specific strategy to promote and improve not only students' transversal skills but also the quality itself of inclusion at school, thanks to the **active involvement of the entire educational community**. The school-wide application to SEL is extremely interesting and potentially usable from an approach perspective ecological to inclusion, as it shifts attention and responsibility from the individual teacher or small group of class teachers, to the entire educational complex, in synergy with the agents who also move outside of the school (family and community).

An additional essential element of inclusion is the **participation of the families and community in educational planning and the school life of students with disabilities**. It is crucial to pursue the goal of building alliances with families and the territory as a part of a clear, transparent and shared project. A significant contribution in this direction are the Inclusion Working Group (GLI) and the Operational Inclusion Working Group (GLO) (ESN legislation and Legislative Decree 66/2017); these are bodies that have a strategic role in fostering greater synergy at the school level and territorial networks (Ianes, 2013). The GLI, appointed by the school head, consists of representatives of all the actors involved in the educational and training process: teachers, parents or family members, educational assistants

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[38] https://www.aiditalia.org/decalogo-dei-consigli-per-i-docenti

[39] https://www.unipg.it/files/pagine/1223/dsa_linee_guida_per_i_docenti_dellateneo.pdf

[40]

https://www.miur.gov.it/documents/20182/0/Linee+guida+sull%27integrazione+scolastica+degli+alunni+con+disabilit%C3%A0.pdf/7e814545-e019-e34e-641e-b091dfae19f0

[41] https://rivistedigitali.erickson.it/integrazione-scolastica-sociale/it/visualizza/pdf/1743

for autonomy and communication, school staff, institutional or external experts under agreement with the school, representatives of Local Health Authorities, Parents' Associations, Local Authorities. Instead, among the most important tasks of the GLO is the preparation and definition of the Individualised Education Plan (IEP).

Moreover, in this regard, the ministerial project "New Technologies and Disability"[42] introduced the CTS (Territorial Center of Support) that aims to enhance the role of technologies in the educational integration of students with disabilities, focusing on 4 main areas:

- o teacher training,
- o consultancy,
- o good practices and
- o technologies for inclusion.

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[42] https://www.miur.gov.it/documents/20182/0/Direttiva+Ministeriale+27+Dicembre+2012.pdf/e1ee3673-cf97-441c-b14d-7ae5f386c78c

3. ONLINE-DIGITAL TOOLS

Although the presentation of online-digital tools for the development of skills for people with SEN does not include all the applications and training materials that may be available, nevertheless important information and insights are contained in this part of the research, which can help us to envision the form and characteristics of the materials that will be developed during the project. More importantly, they allow the consortium researchers (and any other interested parties) to use this information (without the expectation of generalisability) in the further exploration that will take place with the participation of inclusion experts in the focus groups in each country.

The consortium's researchers have come into contact with many tools that use digital technology to enhance teaching. Most of these tools are aimed at young children (mainly primary education) and aim at developing basic cognitive subjects such as reading and mathematics. Also, utilising the term 'inclusive education' and 'learners with SEN' in the research revealed too many results of digital applications being utilised for the inclusion of learners with visual and hearing problems. Knowledge of these tools is not aimed at inappropriately tailoring their use, but at providing information on the degree of effectiveness of each application on the teaching and learning of each target group.

From the collected material some interesting conclusions for the POWER UP project emerge that will be critical decision points for the development of the training material and the training methodology. For example, through the use of digital technology is it preferable to emphasize the autonomy of the end-user or joint coexistence with peer learners without SEN and, possibly, volunteers and professional caregivers? Will the application chosen to develop the training material allow appropriately trained trainers to format and adapt the training material on a case-by-case basis (through available options) or will the training material be the same for everyone? Without the information included in this section of the survey, the above questions would not have even appeared in the researchers' notebooks.

Key findings of Chapter 3:

 ➢ The use of new technology tools can have a positive effect on the self-esteem of learners with SEN (according to findings from Bulgaria, technological tools do not judge the users' mistakes, they do not underestimate them) but should be implemented with some limitations and with the supervision of caregivers or/and trainers.

 ➢ The research in Austria produced many interesting findings, mainly concerning educational tools for teachers and/or parents or targeting young learners on basic cognitive topics (literacy, reading, math).

> ➢ From the research in Greece, it is evident that inclusive digital educational material has been developed mainly for people with Blindness and low vision and Deafness/loss of hearing.
>
> ➢ The combination of visual and textual information significantly helped students with cognitive disabilities and ASD to focus on the presented contents, avoiding usability and accessibility issues and therefore improving their learning process.
>
> ➢ While the use of interactive applications for the use of tablets and smartphones can make the training process very entertaining, there is a need for a coexistence of trainer and/or caregiver, thus increasing the need for human resources.
>
> ➢ From the research in Cyprus, an integrated approach that combines digital tools with traditional teaching methods, tailored to the individual needs of vulnerable learners to improve their educational outcomes and well-being is proposed.
>
> ➢ In many cases the proposed tools involve applications that teachers can manage directly to create accessible educational material.

3.1 Bulgaria

Educational professionals working with children with special needs clearly identified the need for additional online support for both children, professionals and parents. In order to address this need, UNICEF, in partnership with the Ministry of Education and Science and the Regional Centre for Supporting the Process of Inclusive Education - Sofia-City, initiated the creation of appropriate and accessible resources united on an online interactive platform "Support Me". This project started in 2020 and the platform is still accessible today[43].

This platform is dedicated for educational materials for young kids in school and high school level of education. The resources presented in the platform are mainly addressed to teachers, experts and parents who struggle to find accessible materials to work with.

"Support Me" provides video training materials and resources for children with special educational needs, developed by specialists and teachers. These resources are structured into two sections - educational and therapeutic resources, some of which are publicly available, while others, which are more specialized, require a request from the parent. All resources on the platform are free of charge.

The content of the presented materials is related to Reading and Writing, Mathematics, Natural sciences, and Art. In each of these sections, we could find practice materials like puzzles, images, presentations of colors, schemes, video materials or sound materials with instructions about how to present the exercise to a kid. There are also video instructions

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[43] https://podkrepime.mon.bg/resources

dedicated to teachers and parents to explain a specific approach to succeed in our communications with kids with SEN.

In a document called "The Role of Information Technology in the Integration Of Children With Special Educational Needs And Disabilities"[44] by Anelia Ivanova, Galina Ivanova, Katina Deneva, the authors point out the positive and negative outcomes of using the digital technologies in the educational methods with young children with SEN.

"Resource teachers often say that children try to complete the tasks set in order to get the opportunity to play on the computer, tablet or smartphone as a reward. The computer is perhaps the only tool that can patiently partner the child with SEN without reproaching them for their mistakes, without ridiculing them, and without humiliating them. Well-designed training programmes contain within them all the positive aspects that the ideal personality-partner for the child should possess. It can encourage, gently correct, encourage new actions, awaken curiosity, inquisitiveness, and desire to finish the work started. But the proponents of this idea immediately specify that the computer must be used with parental supervision and for short intervals of time, i.e. the negative aspects of its use cannot be overcome after all."

In the paper, the authors systematize not only the possibilities of applying information technology for inclusion of children with SEN, but also the positive and negative impact of Information and Communication Technologies on children from these groups. These children need additional attention and preparation in order to be fully included in the general educational environment. For them, specialized learning programmes should be developed that re-design lessons in a way that is as appropriate as possible for them and adapted to the specific problems of different types of disability. The same applies to learning resources developed using Information and Communication Technologies.

3.2 Austria

Chilnet[45]

Childnet provides a website dedicated to supporting educators, parents, and caregivers in assisting young people aged 11 and over with Special Educational Needs and Disabilities (SEND) in navigating the digital world. This platform offers free, adaptable resources covering essential topics such as healthy relationships, digital well-being, and online pornography. The resources aim to facilitate discussions, equip individuals with strategies to manage online behaviour, and raise awareness about the impact of online actions.

For educators, Childnet offers a series of three lessons and films for each topic, designed to empower young people to navigate online spaces safely. Additionally, new modules are available on the Childnet Digital Leaders Programme. Parents and caregivers can access short

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[44] http://logoland-bg.com/wp-content/uploads/2015/06/SOP_and_IT.pdf
[45] https://www.childnet.com/what-we-do/our-projects/thrive-online/

films addressing important questions about supporting young people in their online relationships, managing digital well-being, and addressing issues related to online pornography. Childnet's platform is supported by Google.org and provides teaching resources and advice tailored specifically for young people with SEN. It serves as a valuable resource for promoting digital literacy and fostering healthy online behaviours among youth with special educational needs and disabilities.

Learning Ally[46]

Learning Ally's approach to literacy development, known as Whole Child Literacy, is particularly beneficial for youth with learning disabilities. This methodology allows educators to customize instruction based on the specific needs of students with learning disabilities. By understanding the cognitive variables and external influences that impact learning, educators can tailor interventions to support struggling readers effectively. Additionally, Learning Ally offers early assessment tools to identify learning issues in students with disabilities, enabling educators to intervene early and prevent learning gaps from widening. Accommodation options such as audiobooks and interactive tools are provided to ensure equitable access to learning materials for students with disabilities. Learning Ally also offers professional development opportunities for educators to enhance their understanding of literacy instruction for students with disabilities. Through interactive training and coaching, educators learn evidence-based strategies to support the diverse needs of their students effectively. Furthermore, Learning Ally's approach is informed by ongoing research and partnerships with renowned universities and educational institutions, ensuring that their solutions are grounded in evidence-based practices tailored to the needs of students with learning disabilities. Overall, Learning Ally empowers youth with learning disabilities to become independent, engaged learners who can achieve academic success despite their challenges.

Todo Math[47]

Todo Math is an inclusive app designed for all children, including those with learning differences like auditory and visual processing deficits or language delays. It offers 41 missions aligned with Common Core State Standards for grades K-2, covering various math topics. Children can progress sequentially or select specific games and skills in Free Choice mode. The app provides verbal and visual support, dyslexia-friendly font, and fine-motor options. Short quizzes assess comprehension, and kids can earn prizes. Todo Math is a meticulously crafted math tool that prioritizes safety, inclusivity, and adherence to educational standards. Its games offer focused math practice without distractions or barriers to learning. The app features a customizable countdown timer ideal for short daily math sessions. With its wide range of topics and customization options, Todo Math can cater to various learners over multiple years. Teachers can easily customize play options, track progress, and even send specific assignments or suggestions to students. In essence, Todo Math offers solid math practice with supportive feedback, making it suitable for all children without any gimmicks (commonsense.org).

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[46] https://learningally.org/

[47] https://todoschool.com/en/math

Skill Champ[48]

Skill Champ is an app designed to help children, especially those with learning differences, develop core skills for school and home. Users choose interests like farm animals or trains and practice skills such as picture matching and letter recognition. The app offers feedback and assistance as needed and allows customization for individual needs, including sound and timer options. At the end of each activity, students receive scores and can replay for more practice or switch tasks with teacher guidance. Skill Champ is meticulously crafted, evident from its transition counter, positive feedback loops, and engaging graphics. The app's adaptive nature and interest-driven design make it beneficial for students who require repeated practice of foundational skills. Additionally, printable curriculum and extension activities on the developer's website enhance its learning potential (commonsense.org).

Birdhouse[49]

Birdhouse for Teachers is a versatile organizational tool for special education teachers, parents, and caregivers to track student behaviour and progress in one place. It's designed for children with developmental disabilities but can be used for any student. Teachers create profiles for students, invite parents and colleagues to contribute, and record information like absences, food intake, homework, and behaviour observations in a Daybook. Users can customize sharing settings, create folders for medication and goals, and access progress reports over time. Birdhouse for Teachers enables collaboration between teachers, parents, and students, ensuring transparency and progress tracking. While effective for parents and caregivers, it could improve by allowing teachers to share selected data with students and providing more pre-generated options for ease of use. Birdhouse enables collaboration between caregivers and educators for behaviour management and goal setting. Teachers can email progress updates to parents and download data for meetings. Homework assignments, including due dates, can also be shared with parents (commonsense.org).

Digiskillssen. eu E-learning tools[50]

The "ICT in SEN School" program aims to enhance ICT competencies for teachers in Special Education Needs (SEN) schools. It became evident during the COVID-19 crisis that supporting SEN teachers in utilizing digital tools effectively is essential. Educators face challenges in adapting to evolving learning environments and technologies, especially senior teachers. The increased use of ICT solutions post-COVID-19 presents challenges for learners with special needs. Therefore, improving ICT skills among SEN teachers is crucial for enhancing teaching practices and ensuring quality SEN education.

"Technology and Special Educational Needs" Course[51]

The "Technology and Special Educational Needs" course explores using technology to support students with SEN. It covers various tools and emphasizes their role in the curriculum.

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[48] https://learningworksforkids.com/apps/skill-champ/

[49] https://www.commonsense.org/education/reviews/birdhouse-for-teachers#:~:text=Birdhouse%20for%20Teachers%20is%20an,for%20any%20kid%20as%20needed

[50] https://digiskillssen.eu/e-learning

[51] https://teachnet.ie/courses/sen/

Participants learn about assistive technologies, high-tech tools, literacy and numeracy supports, and planning for blended learning. The course is online and lasts from July 3rd to August 18th, 2023, requiring about 20 hours of engagement. Holly Murray, a certified Apple and Microsoft Innovative Educator, authored the course (teachnet.ie).

CodeCombat[52]

This browser-based game, CodeCombat, serves as an interactive platform for children and teenagers to delve into programming concepts. Players navigate a character through diverse buildings by employing programming commands to tackle challenges. Users select between Javascript or Python as the programming language and their preferred character at the outset. As they progress through levels, tasks become progressively complex, introducing concepts such as strings, loops, and variables. It's advised to use the latest versions of Google Chrome or Firefox for optimal performance, and the game offers German translations for many components. Registration enables players to save their progress and engage in multiplayer mode. CodeCombat serves as an engaging tool for beginners to initiate their programming journey, fostering a playful learning environment. Teachers can leverage the platform by creating classes, inviting students, and monitoring their progress, offering a valuable resource for educational settings (schule.at, 2021).

3.3 Greece

The development of accessible educational material and software for students with disabilities concerns the adaptation and digitalization of textbooks for the first two elementary grades. The repository of the developed material and also of the existing is hosted in the project's website (http://www.prosvasimo.gr) and can be accessed by everyone involved in the learning and teaching process since it is being constructed and designed within the philosophy of Open Educational Resources (Tuomi, 2013). Part of this project is the existing educational materials developed by co-financed projects in Greece and it is hosted in this website. The digitized accessible textbooks are no different in content from those used by students without disabilities. What the student with a disability sees on their computer screen is a virtual book corresponding to the identical book used in the general school. All the material will be accessible in multimedia electronic format with printing capabilities. The interface presentation aims for a better understanding of the content and is geared towards encouraging the development of cooperation between students, teachers and the computer. The material, especially the presented texts, is simultaneously read aloud by a native Greek speaker. This presentation format expands the benefits to students who are not disabled but may have learning difficulties or are auditory learners. The texts are also differentiated to match the different needs in order to be accessible by everyone. Moreover, accessibility-supported material includes features like Deaf native signers, interpretation by certified GSL interpreters, and the use of computer-assisted training materials to cater for all disabilities. In

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[52] https://codecombat.com/#

addition to accessible textbooks, special educational materials were developed for: language readiness in Greek Sign Language (GSL), alternative communication systems (image, sketch, and pictograms), tactile material for the blind, teaching Greek Braille code, mobility and orientation (Gelatsopoulou, Kourbetis, 2017, p.248).

The accessible materials for students in the autism spectrum are presented in the following ways: a) with the alternative language and communication programs best suited to autism spectrum disorders (ASD), (Picture Communications Exchange System, Pictograms etc.) b) using the appropriate educational approaches suitable to autism, such as the structured teaching approach of TEACCH, the use of ICT and interactive teaching approaches. The special software for accessing text (basic vocabulary, pictures, drawings, pictograms) will be widely available using a free, online digital library (Gelatsopoulou, Kourbetis, 2017, p.250).

According to numerous studies, information, and communication technologies (ICTs) offer new opportunities to people with developmental disorders in order to develop their autonomy and independence in their daily activities. Specifically, according to the following research participants with cognitive difficulties and autism spectrum disorder used two technological tools to perform their educational activities. The combination of visual and textual information significantly helped students with cognitive disabilities and ASD to focus on the presented contents, avoiding usability and accessibility issues and therefore improving their learning process. At the same time, the participants had fun interacting with the new technologies, which are found in smartphones and tablets, devices accessible to a wide range of the population. These devices, through their ease of use, touch interaction and portability, have lowered the barriers for people to interact with ICT. Tablets/smartphones allow users through natural gestures to interact and manipulate content directly, allowing them to express themselves in a more natural way, creating better understanding. Two areas of interest related to assistive technologies for cognitive disabilities are job placement and education. Technologies in general, and mobile technologies in particular, seem to fit perfectly into the shaping and training process. Traditionally, the skills necessary to advance these individuals' job entry are acquired by repeating standard tasks many times. During the sessions with the help of technological tools, the teachers provide verbal instructions as well as manuals with the necessary instructions to the parents. In some cases, these manuals are enriched with illustrations or diagrams. This approach presents some challenges, such as difficulties relocating when lost or looking for a specific instruction. In addition, during the learning process caregivers must monitor their performance, which requires time and human resources. To solve this problem, it is appropriate to choose a platform for the development of a customized system to support activities to be the smartphone/tablet devices which the user can buy in a wide range of prices according to his ability. In the field of education, the use of tablets for disabled people has generated a lot of excitement in the education community and their preference for touchscreens has long been documented. This enthusiasm has prompted developers to create hundreds of apps to help people with cognitive disabilities, making it difficult for educators to identify the most useful ones for each individual case. On the other hand, teachers do not achieve their educational goals several times since they are not able to provide appropriate multimedia content, mainly due to the lack of flexibility of the available tools (Moraiti et all, 2023).

"AssisT-Task app is an app that provides customized task guidance for mobile phones. Users receive assistance wherever they are at any time with the help of QR codes as needed and the context defined by their caregiver as they design the sequence of steps that make up the requested task for the user to perform. All the necessary information to identify the work is then coded into a visual signal (the QR Code) that must be printed and placed near the place where the work is to be carried out. This way users only need to launch the app and point their phones at the tag and get help. Guidance is provided through step-by-step instructions supplemented with photographs. To facilitate the process, the system can be set to read instructions aloud to meet needs in multiple ways and channels. Additionally, the app offers an alert mechanism to prevent users from being blocked. If users do not interact with their mobile for a period of time set by caregivers, the system reads the instructions aloud again to warn them that the app will lock. Finally, it records a detailed log so that user performance can be analyzed over time. Caregivers can create, edit, and customize the sequences for their users as the software allows them to tailor the sequence of tasks to the users' needs and where it is allowed to remove the assistance provided so that the users gain independence as they progress execution of tasks. They can select any step or steps from the sequence they have defined and remove them for a specific user when they have mastered a task. In this way, the help adapts according to the users' progress. The interface and functionality of the application have been designed in collaboration with therapists and educators with the aim of being understandable to users and with the ability to provide a personalized user experience according to the opinion of experts. Once the user is selected, a QR capture screen appears, the camera opens, and once a QR code is detected, it is captured and decoded. This loads all available job information and starts the sequence of steps.

Another technological implementation is **Dedos** which provides teachers with the right tools to design educational and collaborative activities for students. Accordingly, there is also an editing version, Dedos-Editor which is an authoring tool designed to allow teachers to create activities in a flexible way and share it with colleagues. This process can be performed on traditional computers and touch devices. The application is specially designed for users with little technological expertise and the device requirements to perform the activities are minimal. Each activity can be captured on cards so that they are easy to use for a wide range of students. It offers four types of activities, single and multiple choice, match pairs, connect the dots and math but can be combined to design more complex exercises. Once the learning project is designed, students can solve it using the Player version. The player can be either a digital whiteboard which you are placing in more and more schools or a tablet/smartphone device. Before starting the activities, teachers can shape them according to the educational goals they want to achieve and the needs of the students. Also, the application allows to configure the number of students who will perform the project, how the feedback will be given, if the students will solve the activities in different lessons or all at the same time, how many students must answer each activity, if the students must answer the activities correctly and if they have to give the same answer. As we understand the functions provided to teachers are many and all that is needed is an electronic device computer/tablet/smartphone" (Moraiti et all, 2023, p.114-115).

3.4 Cyprus

The Digital inclusion and well-being online tool from CEDEFOP[53] discusses the pivotal role of digital tools in vocational education and training (VET), emphasizing their potential to enhance inclusivity and support learners with special educational needs (SEN), including those in Cyprus. It highlights the disparities in digital tool integration across Europe and the exacerbated digital divide due to COVID-19, stressing the necessity for digital inclusion to prevent professional and social exclusion. The text outlines various digital interventions such as games, learning management systems, and assistive technologies that have shown promise in supporting SEN learners. However, it also addresses the challenges of digital inclusion, including access, cost, and the risk of increasing vulnerability among certain groups. The online tool underscores the importance of a comprehensive approach that combines digital tools with traditional teaching methods, tailored to the individual needs of vulnerable learners to enhance their educational outcomes and well-being.

This is highly relevant for the desk research on online digital tools for the education of SEN youth in Cyprus as it provides a framework for understanding the complex interplay between digital inclusion, education equity, and the specific needs of SEN learners. It also offers practical tips and considerations for implementing digital tools effectively, emphasizing the importance of personalization, accessibility, and the safe use of technology to ensure that digital education strategies genuinely benefit SEN learners.

3.5 Italy

The Italian Dyslexia Association makes available to members (who pay a membership fee and receive credentials to access the online platform) videos and tutorials for young SEN people.

Video guida LibroAID[54]: A short guide that illustrates how to use the "LibroAID" service, only in Italian.

Objective: to help them understand the tools and strategies to be used in the study and in the field working. These are the online digital tools in the catalogue:

A portata di App[55]: 12 videos. Immersive reading, creation of concept maps, applications for the shared creation and management of documents, accessibility functions integrated into Microsoft, Google and Apple programs.

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[53] https://www.cedefop.europa.eu/en/tools/vet-toolkit-tackling-early-leaving/intervention-approaches/digital-inclusion-and-well-being

[54] https://www.youtube.com/watch?v=XK6pb5WbF1E&t=1s

[55] https://www.aiditalia.org/a-portata-di-app

Strumenti compensativi[56] : 10 videos on strategies for effective use of compensatory tools for reading, writing, reading comprehension, mathematics, foreign languages and organizing commitments in everyday life.

Spazio studenti[57]: tutorials for maps; translation; reading and writing; Apple tools.

FormAzione Lavoro[58]: 6 videos and in-depth information to encourage job placement and professional growth: suggestions for choosing your professional path; advices on how to write your CV and face a job interview; strategies for managing your work activity in effective manner.

Univers@lità[59]: free e-learning path for an inclusive university. Training and information course for an inclusive university, on an e-learning platform, free and accessible to all. Particularly aimed at university students with DSA. Permanently active on the formaid platform. Divided into 9 modules.

AID offers the possibility of consulting and ordering schoolbooks in digital format (with speech synthesis programs to facilitate reading or software to create concept maps) via the LibroAID[60] catalogue, by entering the ISBN code of the desired book.

OTHER ONLINE DIGITAL TOOLS FOR SEN

Supermappex[61]: online tool to create multimedia maps at school or at home for inclusive and collaborative education. Also useful for Integrated Digital Teaching and Distance Learning.

SuperMappe EVO[62]: Online tool to create organized and tidy multimedia concept maps and present them on paper, on the screen or touch screen and on IWB whiteboards. Help students and people with SEN and learning difficulties to study, at school and at home.

OCR Anastasis[63]: The easy-to-use and affordable optical text recognition (OCR) program for scanning paper books and digital images, transforming them into digital text and making them available for reading with speech synthesis.

ePico![64]: Students can use ePico modules! including maps and digital materials, to study effectively at university. For students of technical-scientific degree courses, the student can

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[56] https://www.aiditalia.org/strumenti-compensativi-strategie-per-un-uso-efficace

[57] https://www.aiditalia.org/spazio-studenti

[58] https://www.aiditalia.org/formazione-lavoro

[59] https://www.aiditalia.org/news/univers-at-lita-percorso-e-learning-gratuito-per-ununiversita-inclusiva

[60] https://www.aiditalia.org/area-riservata/libro-aid

[61] https://www.anastasis.it/supermappex/

[62] https://www.anastasis.it/catalogo-generale/supermappe-evo/

[63] https://www.anastasis.it/catalogo-generale/ocr-anastasis/

[64] https://www.anastasis.it/metodo-di-studio-con-epico/

take advantage of the integration with MateMitica to easily write mathematical structures including operations, formulas, expressions. Video tutorials in Italian[65].

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[65] https://www.youtube.com/watch?v=Vxm-PenusM4
https://www.youtube.com/watch?v=LHwqhai0oPI&t=416s
https://www.youtube.com/watch?v=NeDN7yqsu4w

4. BODIES PROVIDING SUPPORT TO SEN YOUTH

This section of the presentation of the survey results includes information on public structures as well as private organizations, associations, and collectives active in the integration of people with special educational needs. It is worth mentioning that in most cases public/governmental structures do not focus on specific learning difficulties. They are responsible for the implementation of general policies for integration into education, the labor market and society at national level and, depending on the needs of each beneficiary, provide access to other more specialized structures.

On the other hand, many of the private organizations and associations operating at national or local level are more specialized and come to cover the gap in state services. Some of these private initiatives are not for profit and have been founded by active citizens and scientists who had people with special educational needs in their social environment. These organizations stand out for the passion, consistency and continuity with which they design, develop and deliver their services.

Private organizations also include many for-profit companies, such as speech and occupational therapy clinics. Although they share the same values and approaches to social, educational and occupational integration, their services are provided on an individual level according to the therapist-client relationship rather than the volunteer-beneficiary relationship.

Key findings of Chapter 4:

➢ The main areas of the Education Programme 2021-2027 of the Bulgarian Ministry of Education, Youth and Science are covered by the main objectives of the POWER UP project.

➢ In Bulgaria there is a non-governmental organisation of teachers who promote inclusion in education.

➢ A significant aspect of the Research Center for Inclusive Education in Austria is the establishment of a "Digital Lab for Inclusion", which will serve as an experimental hub for schools and universities, fostering the development of innovative teaching and learning methods that cater to diverse needs, particularly those of students with special educational needs.

➢ In Greece, the absence of a similar entity in the Administrative Region of Thessaly urged in 1998 a group of parents and friends of people with autism to create an association and to offer their services to the other Prefectures of the Region. Nowadays, their Association is active on a national scale.

> ➢ In all countries there is a range of public and private organisations (profit and non-profit) that provide information, education and treatment services for people with SEN.
>
> ➢ In Italy is based a remarkably active organisation that dedicates its services to people with dyslexia through a variety of activities.

4.1 Bulgaria

The Ministry of Education, Youth and Science, Bulgaria, the Executive Agency "Education Programme"[66] performs the functions of the Managing Authority of the Operational Programme "Science and Education for Smart Growth" 2014-2020 and of the Education Programme 2021-2027. In this capacity, the Agency is responsible for the overall programming, management and implementation of the programmes in accordance with the principle of sound financial management with all resulting obligations and responsibilities under national and European Union Law.

The **Education Programme 2021-2027** is one of the main instruments for the implementation of Priority 1 "Education and Skills" of the National Development Programme Bulgaria 2030, as well as the strategic objectives defined in the Strategic Framework for the Development of Education, Training and Learning in the Republic of Bulgaria (2021-2030) and the Strategy for the Development of Higher Education in the Republic of Bulgaria for the period 2021-2030:

- Promoting equal access of all children and students to quality and inclusive education with a focus on vulnerable groups in order to reduce early dropout from the education system;
- Expanding digital educational content, enhancing the digital competence and skills of pedagogical specialists, students and parents and effectively implementing the competency model in school education;
- Encouraging the introduction of innovative curricula and content and supporting the expression of students' talents, especially in remote areas of the country;
- Improving the link between education and the labor market through the development of vocational education and training, as well as the introduction of dual education in applicable courses in higher education, the development of students' entrepreneurial skills and student internships;
- Modernization and digitalization of bachelor and master programs, as well as development of doctoral programs and project doctorate related to labor market needs.

National Association of Special Education Teachers

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[66] https://sf.mon.bg/?lang=en

National Association of Resource Teachers /NARU/ Bulgaria[67] is a national non-governmental organization uniting professionals working for the full integration, inclusion and education of children with different abilities and needs in the general education environment.

The mission of NARU-Bulgaria is to contribute to the continuous improvement of the quality of educational and social services in support of the integration and inclusion of all children in Bulgaria.

The Association has the following objectives:

- To contribute to the promotion of the profession of resource teachers and other professionals in the field of resource support in society, as a significant component for the integration and inclusion of children and students.
- To establish and validate a professional standard in the field of resource support for children and students with special educational needs related to the changes in the legal framework.
- To adopt an ethical standard for those working in the field of resource support for children and pupils with special educational needs.
- To achieve sector representation of all professionals in the field of resource support related to the use of EU funds and programmes before the responsible institutions.
- To participate at expert level and as a civil society organization in policy-making within the sector.
- To submit proposals to the competent state bodies for changes in the regulatory framework concerning the sector, to establish rules in accordance with the relevant legal provisions, protecting the rights of the Association's members.
- To summarize the opinions and recommendations of all specialists in the field of resource support, teachers, parents, students, organizations of and for people with disabilities, etc. on changes in the practices of integration and inclusion of children and students with special educational needs.
- To protect the interests of all staff in the field of resource support, both before national and international institutions.
- To exchange professional experiences among members.
- To provide references for its members to other organizations and institutions.
- To introduce European and world experience in resource assistance and project management in this field.
- To contribute to the continuous qualification of human resources in the sector.
- To support the activities of state bodies and NGOs in activities that coincide with the objectives of the Association.
- To promote the experience of other local and foreign organizations with similar objectives and activities in solving common problems.

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[67] https://narubg.org/

UNICEF BULGARIA[68]

UNICEF is a global leader in promoting and defending children's rights in over 190 countries, including Bulgaria. UNICEF works with partners and government institutions, NGOs, other UN agencies and the corporate sector to ensure quality, inclusive preschool and school education for every child.

Access to early childhood education: UNICEF supports the development of flexible early childhood education models that ensure children from the most vulnerable families have access to quality education. The pilot model in Kotel is already being successfully funded with government funds, and UNICEF will continue to support the targeted integration of such models.

Inclusive education: UNICEF supports the development of inclusive environments in 35 kindergartens in the country. It enables children with special needs to learn and play alongside their peers. The model includes positive modification of the physical environment, skills development among teachers and educators, specialized support from psychologists, speech therapists and resource teachers, and active involvement of parents. UNICEF provides technical support to the Ministry of Education to develop and implement school violence prevention mechanisms that help schools build inclusive and safe environments.

Reducing school drop-out rates: UNICEF provides technical support to the Ministry of Education and Science for the implementation of the National Strategy for the Reduction of Early School Leavers.

UNICEF continues to support the development and targeted integration of innovative, technology-based educational approaches that aim to improve the educational outcomes of children at risk of dropping out of the education system.

Teacher training: UNICEF collaborates with universities, training centers and training organizations. This supports the development of training modules for initial teacher training and in-service teacher training with a focus on inclusive education, child rights and violence prevention.

Child rights education and youth participation: UNICEF supports the introduction of child rights education in the Bulgarian education system. This is done through the establishment of UNICEF clubs in schools, the provision of methodology and thematic materials on child rights and specialized approaches to promote child participation.

ASSOCIATION for Shared Learning ELA[69]

The One School for All Model to arrange school processes in such a way that inclusive school setting is present is actually a work model, a structured approach based on organizational

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[68] https://www.unicef.org/bulgaria/en
[69] https://www.ela-bg.eu/en

development. It is implemented at school level and managed by a school leadership team especially set up for this purpose, consisting of the school headmaster, his/her deputies and core teaching staff. It has been designed specifically with the Bulgarian context in mind and functions by considering the school as a system at all levels – culture, policies, practice, and by involving all stakeholders.

In every school there are children who need extra support, temporarily, for a longer period of time or permanently, to learn fully. For us, inclusion in education is an opportunity for schools to provide quality education to children regardless of their learning needs, ethnicity, socio-economic status or the constraints of the environment in which they grow up. Therefore, within the framework of the One School for All Programme[70], the Centre ELA (Association for Shared Learning) works in partnership with mainstream schools, supporting them in the process of building inclusive school environments.

Maria's World Foundation[71]

"Maria's World" is a foundation established for public benefit in February 2012 in Sofia by the family of Maria - a young woman with intellectual disabilities.

According to official data, there are 46.000 people with intellectual disabilities in Bulgaria, of whom 8.000 live in Sofia, but unfortunately, they are 'invisible' to Bulgarian society. People with intellectual disabilities are sometimes referred to as 'mentally disabled' or 'learning disabled'. These definitions describe persistent conditions characterized by significantly lower than average intellectual abilities leading to limitations in intellectual functioning.

The mission of Maria's World Foundation is to improve the quality of life for individuals with intellectual disabilities and their families, and to support their personal fulfillment by providing access to quality services, developmental education and appropriate employment.

The goals of Maria's World Foundation:

- To protect the human rights and support of persons with intellectual disabilities and their families;
- Overcoming discrimination and social exclusion of people with intellectual disabilities;
- Supporting their social integration and personal fulfillment through access to quality services, developmental training and appropriate employment.

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[70] https://www.ela-bg.eu/bg/OneSchoolForAll-BGN
[71] https://mariasworld.org/en/za-nas.html

4.2 Austria

NATIONAL LEVEL

The Research Center for Inclusive Education[72]

(RCIE) is a collaborative effort between three prestigious educational institutions in Styria, Austria: the University of Graz, the University College of Teacher Education Styria (PHSt), and the Private University College of Teacher Education Augustinum (PPH Augustinum). This partnership aims to pool their expertise and resources to conduct research on inclusive and digital education, both nationally and internationally. One of the center's key aims is to empower young researchers in this field. A significant aspect of RCIE is the establishment of a "Digital Lab for Inclusion," which will serve as an experimental hub for schools and universities, fostering the development of innovative teaching and learning methods that cater to diverse needs, particularly those of students with special educational needs. The center's focus extends beyond academia to encompass educators, organizations, and individuals interested in promoting inclusion and diversity. RCIE's approach to inclusion emphasizes ensuring that educational institutions are accessible to all, with tailored provisions to support every individual's participation. This is particularly crucial for students with special educational needs, who often require specialized support to thrive academically and socially. RCIE's role in supporting the needs of youth with special educational needs is multifaceted. Firstly, it conducts research to develop evidence-based practices that promote inclusive education. By collaborating with national and international partners, the center aims to influence policy and practice to create more inclusive learning environments.The center also provides support and guidance to young researchers, empowering them to contribute to the field of inclusive education. Through mentorship and professional development opportunities, the center nurtures the next generation of scholars dedicated to addressing the needs of students with special educational needs.

Atempo[73]

Atempo is an Austrian organisation advocating for people with disabilities for over two decades. They aim to create an inclusive world where everyone can live and work equally. Combining social ideals with entrepreneurial action, atempo develops digital products and services tailored for individuals with learning difficulties and disabilities.

One of their significant projects, SAID, trains individuals with disabilities as "DigiCoaches" to assist teachers in digital education, promoting inclusive learning environments and empowering students with digital skills. They also offer various services, including producing easy-to-understand materials, providing educational opportunities, and conducting research to evaluate social services' quality. Through collaborative efforts, atempo envisions a society where people with disabilities have equal rights and opportunities. They support youth with

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[72] https://fzib.at/en/
[73] https://www.atempo.at/

special educational needs by providing tailored digital education programs, training, and empowering individuals with disabilities to become educators themselves, fostering inclusive learning environments and ensuring equal access to education and employment opportunities.

REGIONAL LEVEL

Chance B[74]

Chance B is a private nonprofit organisation operating in the Eastern Styria region since 1989. The organisation is committed to ensuring that all individuals requiring support can live well within the community. They achieve this through a multifaceted approach, including service provision, advocacy, and creating favourable working conditions. They provide a diverse range of social services tailored to meet the specific needs of individuals, particularly youth, with special educational needs (SEN). These services encompass educational support, vocational training, employment assistance, and independent living skills development. By customising their services, Chance B ensures that each individual receives the necessary support to succeed, promoting their overall well-being and integration into society.The organisation adopts an inclusive approach to service delivery, ensuring that individuals with SEN are fully integrated into their programs and activities. Through fostering inclusivity, they promote social integration and reduce stigma associated with SEN, creating an environment where all individuals feel valued and empowered. As advocates for individuals with SEN, Chance B represents their interests within the community and advocates for policy changes and societal attitudes that promote inclusivity and equal opportunities. Through their advocacy efforts, they aim to create a more supportive and inclusive environment for individuals with SEN, enhancing their quality of life and opportunities for success.Chance B focuses on skill development, providing training in essential areas such as communication, social skills, vocational skills, and daily living skills. By equipping individuals with SEN with these skills, Chance B empowers them to lead fulfilling and productive lives, contributing positively to society. Chance B offers transition support services to help individuals with SEN successfully navigate key life transitions, such as transitioning from school to work or from dependence to independence. By providing guidance, resources, and practical assistance during these transitions, Chance B facilitates the integration of individuals with SEN into adulthood, promoting their independence and self-sufficiency.

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[74] https://www.chanceb-gruppe.at/de/Chance-B-Gruppe

4.3 Greece

NATIONAL LEVEL

The Centres for Interdisciplinary Assessment, Counseling and Support (KEDASYs) are responsible for registering, classifying and placing students in the appropriate learning environment.

The evaluation reports of the interdisciplinary committee of KEDASYs determine and describe the kind of special needs or learning and psychosocial difficulties faced by the student. Reports also describe the students' skills, competences and interests and suggest a suitable educational environment for integration. Accordingly, they may also suggest a change of school or propose psycho-pedagogical and educational support, as well as the necessary technical aids and educational material which makes education and communication easier for the student.

The evaluation-diagnosis comes with a proposed personalised educational programme (EPE), which includes a basic framework and suggestions. The framework is drawn up together with the student's parents or the students themselves, if possible.

As specified in law 3699/2008, the structures of school units of special education which pupils with disabilities and special educational needs can attend and their corresponding age groups, are the following:

For secondary education:

Lower secondary special education schools (gymnasia EAE): Pursuant to law 3699/2008, students may attend the preliminary year and grades A, B, C to lower secondary special education schools up to the 19 years of age. Graduates of primary education with disabilities or special educational needs can enroll directly in grade A of lower secondary special education school, following an evaluation from the competent KEDASY.

Upper secondary special education schools (lykeia EAE): Pursuant to law 3966/2011, upper secondary special education schools offer to students a preliminary year of attendance apart from the grades A, B, C. Graduates of lower secondary special education schools with disabilities or special educational needs can enrol directly in grade A of upper secondary special education schools, following an evaluation from the competent KEDASY.

For vocational upper secondary education:

Special needs vocational lower – upper secondary education schools (ENEEGy-L): Pursuant to law 4415/2016, special needs vocational lower – upper secondary schools offer attendance of grades A, B, C, D of lower secondary special education schools and grades A, B, C, D of upper secondary special education schools. Students with disabilities and special educational needs, following an evaluation from the competent KEDASY, may enrol in them. Students benefit from the timetable and curricula of the specific structure and may follow a post-upper

secondary education school structure and an autonomous or supervised professional experience.

By means of personalised and differentiated learning practices and educational needs, special education teachers in collaboration with the general education teachers or the special educational staff, depending on the structure of education and the type and degree of each student's special educational needs:

Implement special syllabi according to the personalised curriculum which is planned by the Centres for Interdisciplinary Assessment, Counseling and Support (KEDASYs).

Design and implement appropriately differentiated syllabi at both individual and small-group levels. KEDASYs make use of a wide range of special learning methodology approaches and strategies, such as breaking learning objectives into smaller units, direct instruction teaching, Braille writing system, guidance and mobility training for blind or visually impaired students, sign language for deaf students, new technologies, etc. There is also provision for recovery programmes conducted by psychologists, occupational therapists and speech and language therapists[75].

LOCAL LEVEL

Association of Parents Guardians & Friends of People with Autism Larissa Prefecture – Greece[76]: In 1998, a small group of parents, with the full support of their friends and scientists, established an Association aiming to support individuals with autism alongside their families in the Prefecture of Larisa. The absence of a similar entity in the Administrative Region of Thessaly urged them to offer their services to the other Prefectures of the Region. Nowadays, their Association is active on a national scale. They are persistent in discovering new ways and implementing new ideas to support individuals with autism and their families. They try to provide support to professionals, students, and the broader community in order to make it possible to better understand autism in a way that more individuals with autism are better supported and appreciated for who they are, the way they are. Every year they organize training seminars or workshops for parents, professionals and students and have organized at least three conferences in Larissa (2003, 2015, 2017). The Association operates and manages the residential structure "Eleftheria", a house for twelve adults with autism that operates twenty- four hours a day, all year long and two Day Centres (Hara I and Hara II) for children with autism.

Centres of Creative Activities for Disabled Children (KDAP AMEA): These Centres for disabled children (they accept also young people till 30 years old) are private or/and public facilities that provide support and services to individuals with disabilities or special needs. Specifically, they offer activities tailored to the needs of each individual aimed at socialization, education,

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[75] This information can be found here: https://eurydice.eacea.ec.europa.eu/national-education-systems/greece/separate-special-education-needs-provision-early-childhood-and

[76] https://www.autismthessaly.gr/?lang=en

skill development, and enhancing autonomy. KDAPs typically operate on a daily program basis and provide activities such as education, therapeutic support, social activities, as well as counseling and psychological support. In Larissa/Greece operate more than 15 private and public centres for disabled children (and youth).

Centers for speech therapy and ergotherapy for children, adolescents, and adults with dyslexia and learning difficulties: These are private centres aiming at the evaluation, rehabilitation and treatment of people who face social and learning difficulties due to syndromes that relate to speech and hearing processing disorders. In Larissa/Greece operate more than 4 private centres.

4.4 Cyprus

Social Services Provision Centre Andreas Sofocleous "KEPAKY"[77]

The Social Services Provision Centre Andreas Sofocleous "KEPAKY" was founded in 2008. The Foundation is a response to the need to have a structured system of provision of social services after years of philanthropic and charitable acts of the founder in the areas of youth, education, culture and sports. The aim of the Foundation is to improve the quality of life of people in need, especially young people, through targeted acts, campaigns and programmes.

Cyprus Dyslexia Association[78]

Charity Foundation dealing with informing and providing input about dyslexia and supporting youth with dyslexia. As a non-profit organization, they work on informing citizens about Dyslexia-related matters. They address parents, students, educators, and all specialists involved in the issue. Additionally, they collaborate with government services and decision-making centers to shape policies that ensure equal treatment for individuals with Dyslexia, safeguarding their basic human rights.

Cyprus Dyslexia Association goals are as follows:

- to assist individuals with any form of dyslexia, aiming for their full development of educational, intellectual, and other abilities, and generally promoting their well-being.
- to enlighten/inform/raise awareness among the public and relevant authorities about dyslexia.
- to mobilize relevant authorities to formulate and implement appropriate policies on dyslexia, aiming to properly address individuals with dyslexia and their families.
- to promote and organize training programs and provide scholarships for individuals interested in the subject.

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[77] https://www.sofocleousfoundation.org/
[78] https://cyprusdyslexia.org.cy/

- to collaborate with all communities, organized groups, or individuals permanently residing in Cyprus.
- to establish a Dyslexia Diagnosis and Rehabilitation Research Center in collaboration with any authority, both in Cyprus and abroad.

Directorate of Primary Education of the Ministry of Education and Culture[79]

The Directorate of Primary Education of the Ministry of Education and Culture is the governmental department responsible for the Special Education Sector. Ensuring equal access to and participation of all children in non-discriminatory and inclusive education is a key objective of the Ministry of Education, Sport and Youth (MOESY), which respects and recognizes the diversity of each child, as well as its fundamental right to education.

According to the current legislation and relevant regulations, and based on European and international standards, the MOESY takes the necessary measures to support pupils with disabilities or other special educational needs by providing them with the opportunity to maximize their academic and social development, in order to be able to adjust to the school environment and in society in general. The MOESY offers support services and educational programmes which effectively respond to pupils' individualized needs at an early stage and applies the appropriate therapeutic intervention.

The MOESY, despite the main provisions given to SEN pupils, such as special education, speech therapy, individualized education programme, special facilities and special technological equipment, also implements actions and inclusive educational policies, defined by the values of equality, recognition and acceptance of diversity.

Voice for Autism[80]

Voice for Autism is an NGO dedicated to securing human rights and empowering young adults with disabilities. Their mission involves advocacy, action, and support to promote independence and inclusion. Goals include establishing group homes, facilitating transitions, offering employment opportunities, creating high-quality programs, advocating for inclusive communities, and promoting education to recognize capabilities over disabilities.

4.5 Italy

Among the organizations that support SEN young people, families, operators and staff, there are both structures that offer free activities and services, as they are among the structures partially financed by public bodies, and those that offer paid services.

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[79] https://www.moec.gov.cy/eidiki_ekpaidefsi/en/index.html
[80] https://voiceforautism.org/who-we-are/

LOCAL (UMBRIA)

Centro Servizi Grocco – Perugia[81]

The Centro Servizi Grocco (which belongs to the USL Umbria 1) brings together a series of territorial services, including two residential facilities, in the Perugino District and a service of the Prevention Department.

- Neuropsychiatry and developmental age rehabilitation. Prevention, diagnosis and therapy of neuropsychomotor and sensory disorders from 0 to 18 years: child neuropsychiatric, neuropsychological, speech therapy, neuromotor, psychomotor, cognitive, sensorial, communicative-linguistic and individual or group neuropsychological rehabilitation;
- Neuropsychiatry and clinical developmental psychology. Treatment of mental and psychological disorders in minors aged 0 to 14: autism spectrum disorders and psychotic disorders, personality disorders, behavioral disorders.

Centro di Neuropsicologia Clinica Dell'età Evolutiva - Giorgio Sabbadini S.N.C.[82]

Healthcare facility accredited by the Umbria Region. Understanding the world of the child, adolescent, adult, family and contributing to creating a bridge between the different actors and the social contexts in which they are inserted, in order to encourage developmental trajectories, throughout life, that go in the direction of the well-being of the person as a whole.

Activities in the Umbria: first interview; clinical evaluation; intervention program; parent training; periodic interviews; school and training consultancy; specialist after-school program; socio-pragmatic strengthening training; starting use of digital compensatory tools; follow-up checks; psychotherapy (individual, group, family, coping power); therapy.

Centro Fare[83]

Carry out integrated work with SEN children that goes from assessment and rehabilitation to the psycho-pedagogical aspects linked to motivation, self-esteem, autonomy and the adoption of an effective study method. Teamwork with specialists, in active and lasting collaboration with parents, teachers, tutors and specialists from other services.

Activities: evaluation area; speech therapy area; psychology area; pedagogy area; training area.

NATIONAL LEVEL

AID – Italian Dyslexia Association[84]

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[81] https://www.uslumbria1.it/struttura/centro-servizi-grocco-perugia/
[82] https://www.cnee.it/cosa-facciamo/
[83] https://www.centrofare.it/
[84] https://www.aiditalia.org/cosa-facciamo-servizi

AID's aim is to inform and raise awareness among parents, teachers, healthcare professionals, companies, and in general all citizens about the difficulties and strengths linked to specific learning disabilities (DSA). Aimed to promote information on young people with SEN and help them acquire a greater degree of autonomy and awareness regarding difficulties and strategies.

- Conferences and meetings, both at local and national level;
- Testimony events, online and in person, to share the experience of boys, girls and adults with SEN. "I'll tell you… I'll tell you": video-recorded narrative project by young students and workers with SEN.
- National Dyslexia Week[85]: meetings, workshops, shows and training courses, to raise public awareness of Specific Learning Disorders (DSA). Each edition has a central theme. The events are free and open to the public.
- My Story: project created to give a voice to SEN boys and SEN girls.
- Do you know that…?: Awareness campaign with Edizioni Erickson: raise awareness and deepen knowledge about dyslexia and other specific learning disabilities. Posters; decalogues; webinars; live and chat; in-person events and workshops; decalogue "10 things that a person with DSA would like everyone to know"[86]; podcast "My way. Stories of life and dyslexia"[87].

Osservatorio Nazionale Autismo[88]

It promotes projects for the protection of health, the improvement of living conditions and the inclusion in social life of people on the autistic spectrum. Guidelines for all ages; Guidelines for assistance interventions; Early diagnosis coordination networks; Training and Interventions.

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[85] https://perugia.aiditalia.org/eventi/settimana-nazionale-della-dislessia-gli-eventi-a-perugia
[86] " https://www.erickson.it/it/mondo-erickson/articoli/dsa/10-cose-che-persona-con-dsa-vorrebbe-sapessi/
[87] https://www.erickson.it/it/mondo-erickson/articoli/dsa/a-modo-mio-storie-di-vita-e-dislessia/
[88] https://osservatorionazionaleautismo.iss.it/formazione-e-intervento

5. ENTERPRISES FOR/FROM PEOPLE WITH SEN

The general policy of inclusion of people with special educational needs in all countries is based on the legal prohibition of discrimination in all workplaces. In some countries privileges are granted to private companies that employ people with special educational needs (e.g. tax exemptions, benefits covering part of the salary and/or social security, etc.). These practices aim to empower private companies that undertake to create an inclusive working environment on their own. There are other cases where state support comes in the form of public sector recruitment of people with special educational needs. In these cases, the state takes direct responsibility for creating workplaces and training - retraining of workers.

Entrepreneurship education has the potential to benefit trainees in multiple ways. A sense of initiative and entrepreneurship is necessary for people:

- in dependent employment, who are hired by an employer as employees, in order to understand the context of work and cooperation and to be familiar with the concepts and functions of a company,
- who wish to start a business and become independent entrepreneurs.

In this section, we present both business initiatives that aim to include people with SEN as employees and some examples of social entrepreneurship started by people with SEN that showcase how entrepreneurship education can support the professional development in any form of activity.

Key findings of Chapter 5:

➢ The main business field dealing with ventures for/with people with SEN is the social economy.

➢ In Bulgaria, several systematic steps need to be taken in order for young people with SEN to have more job opportunities and achieve economic independence.

➢ In Austria we can find organizations dealing with the integration of people with SEN in the labor market, through support, training, networking and professional opportunities, and also in this area we see the application of the mixed inclusion approach (coexistence of people with and without disability).

➢ In Greece, several social enterprises have been established that offer employment and labour market integration to people with SEN.

> ➤ In both Greece and Cyprus, there are laws that prohibit discrimination in the labor market for people with disabilities. However, the evidence shows that these laws are mainly applied in the public sector.
>
> ➤ There is currently no information on private sector for business ventures with SEN in Cyprus.
>
> ➤ In Italy, a pizzeria with people with autism as staff (PizzAut), can highlight the ideal working setting for people with autism.
>
> ➤ In Italy there are well-developed initiatives for the professional integration of people with autism and dyslexia.
>
> ➤ The presentation of the situation in Italy is complemented by a table including companies that offer a dyslexia-friendly working environment.

5.1 Bulgaria

The process of EU integration has given a new impetus to the social economy and social enterprise in Bulgaria. It is worth noting, though, that as far as cooperatives with social dimension are concerned, and unlike what is the case in many other EU member states, their role remains limited in Bulgaria.

In Bulgaria, the main legal forms of social enterprises belonging to the social-business model are those of specialized enterprises for people with disabilities and commercial companies (SMEs registered under the 1991 Trade Law). These enterprises and companies combine the provision of goods or services with the primacy of a social mission.

According to the Law for the Integration of People with Disabilities (2004)15, specialized enterprises for people with disabilities are established under the Trade Law or the Cooperative Law and are registered by the Agency for People with Disabilities. Data published by this agency show that there are 242 specialized enterprises for people with disabilities in Bulgaria. These enterprises are active in various areas, most of them in tailoring; other—less important—fields of activity are the production of plastics goods, souvenirs and accessories, cosmetic products, web advertising and design, publishing, touristic services. Although there is such a huge number of social enterprises registered - there is limited information in the public sector about their activities, their contributions or engagements. Here it is a list of several active business ventures in Bulgaria:

TENEBRIS Restaurant - Dine in the dark[89]

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[89] https://www.tenebris.bg/en/#idea

Tenebris is a social experiment in which people with unpaired vision will introduce the guests in their world. The main idea is to experience the meal, the world in a different way using our other senses - smell, touch, sound and flavor. The concept was first introduced in the 90's by Michel Reihac, who later opened a theme restaurant in Paris. In the Balkans Tenebris is the first developing and exploring the idea.

The belief behind the concept is really to understand blind people by entering their world. In other words, we can never understand what it is to live in the dark by reading data, statistics and history but by personal experience and direct face-to-face contact.

Another goal of Tenebris is to create job opportunities for people with impaired vision. They create an environment where the vision is not a weakness but a flaw. They create a workplace where the impaired could show their strength and be accepted.

Bread Houses Network[90]

The social cause of the Bread Houses Network is most clearly expressed in the so-called Bread Therapy - free art therapy for disadvantaged people. It is aimed at overcoming the problem of social division and isolation of people with different status and special needs, which is that they often have no points of intersection unless a welcoming environment is created and a hand is given to them to "mix" freely. The Bread House strives to be such a space, open for all people - disabled, refugees, children at risk, people with addictions, the elderly, children and families at risk - to knead bread. At the same time, mixing needs a creative or therapeutic method that predisposes to unity and leaves differences in the background.

Karin Dom - Varna[91]

The Friends of Karin Dom Association is a non-profit organization that continues the activities of the Karin Dom Foundation, founded in 1996 by the hereditary diplomat and philanthropist Ivan Stanchov. 20 years after its establishment, Karin Dom is an organization with a leading role in providing professional services for children with special needs and their families. Their main activities are implemented through: the Center for the provision of services for children with special needs and their families (for children from 3 to 8 years), the Early Intervention Center (for children from 0 to 3 years) and through the Training and Resource Center (qualified training organizations and professionals). Karin's House supports over 300 children and families annually and trains over 1200 professionals.

In general

There are many other initiatives led by NGOs, private businesses and media, but we can certainly say that much more is needed to be done. On a political level - measures need to be taken by different policy-makers to improve the inclusion of young adults with SEN. On, social level, we need to raise awareness of the difficulties that young adults meet every day.

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[90] https://www.bread.bg/
[91] https://karindom.org/en/

Meaningful support is needed for young people in preparation for employment, professional qualification and the development of skills to achieve financial independence.

Very little activity and service engagement has been identified to provide employment for young people with SEN. Very often, the formation of skills for independent job research, presentation to an employer and especially compliance with work rules and retention in work are skills that young people with SEN have to build themselves. As a result, young adults with SEN are often not sufficiently prepared for independent job seeking and lack the necessary skills in relation to staying in the workplace and achieving financial independence.

5.2 Austria

Self-Empowerment Centre for Persons with Learning Difficulties (The *Selbstvertretungszentrum für Menschen mit Lernschwierigkeiten*), focuses on empowering individuals with learning challenges. Through various activities such as organizing events and participating in political discussions, the centre advocates for the rights and interests of its community. Its unique cooperative structure involves collaboration between individuals with learning disabilities and supportive staff members to foster inclusivity and empowerment within the organization (wuk.at). The employed team of the Center can be viewed on their official website[92].

In the main sector of ***wienwork***, inclusivity is practiced in gastronomy where individuals with disabilities and those affected by long-term unemployment work alongside those without disabilities or disadvantages. The inclusive vocational training program also provides opportunities for young people with learning disabilities and social disadvantages. Through these initiatives, employees and apprentices are given prospects for (re)joining the workforce and engaging in society (wienwork.at). The name of the restaurant that employs people with disabilities is **Michl's Café Restaurant - Wien Work**[93] Integrative Betriebe und AusbildungsgmbH (1010 Wien).

Disflex Albatross Agentur, Trendwerk GmbH[94] (1210 Wien) offers employment opportunities specifically designed for individuals with health limitations or disabilities. Accessible through the Chamber of Labour (AMS), this initiative aims to integrate and empower individuals facing such challenges within the workforce. By providing tailored support and promoting inclusivity, facilitates their meaningful participation in employment, fostering both personal and professional growth (wien.gv.at,2024).

AfB Charitable and Non-profit Society for the Creation of Jobs for Disabled People Ltd.[95] (1230 Vienna) is a non-profit IT system house that specializes in refurbishing and pre-installing

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[92] https://svz.wien/index.php/unser-team
[93] www.michls.at
[94] https://www.disflexalbatross.at/ueber-disflex
[95] https://www.afb-group.at/

software on used hardware. The unique aspect is that this process is carried out by teams inclusive of disabled individuals. This initiative not only provides employment opportunities for people with disabilities but also promotes their active involvement and skill development in the IT sector (wien.gv.at,2024).

Employment assistance, job coaching, and company service WIN VIENNA INTEGRATION NETWORK[96] (1120 Vienna) is a job coaching and business service are designed to facilitate the employment of individuals with disabilities, health limitations, or illnesses. These services assist disabled individuals in finding and maintaining employment while providing direct support in the workplace. Additionally, they educate companies about the benefits of employing individuals with disabilities and offer guidance on inclusive hiring practices. Overall, these initiatives aim to promote the integration and participation of disabled individuals in the workforce (wien.gv.at,2024).

5.3 Greece

Even though the Greek state gives significant incentives for employers to hire people with disability, these measures do not seem to have the expected results. For this reason, it is more common to find a disabled employee working in the public sector rather than in private businesses.

Despite that 24% of Greeks report some form of disability[97], it is hard to find people with disability in public for various reasons. Firstly, Greek cities are not easily accessible to people with disability to move around freely. Secondly, especially in closed communities like villages, families keep their disabled relatives at home to avoid "gossips" and "embarrassment." This was the treatment that many disabled Greeks faced throughout the years and still continues to this day.

Social Enterprises in Greece greatly serve the ultimate cause for these people: their social inclusion in society and leading meaningful lives. The following examples of social businesses are Greek role models, going against the existing cultural norms that want disabled persons locked up without opportunities for active life participation.

Myrtillo[98], which is the Greek word for "Blueberry," is a Social Cooperative Enterprise with a Special Purpose to integrate vulnerable groups into the labor market according to Greek law. It is located in the city center of Athens, in Ambelokipi, and it first opened its doors as a cafeteria and an arts center back in October 2013. Furthermore, it is an innovative self-

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[96] https://www.win.or.at/

[97] According to the findings of the Eurostat research for 2017, for "Population reporting long standing disabilities (% of population aged 16 or over)" which is presented in Greek here: https://www.amea-care.gr/eurostat-%CF%83%CF%84%CE%B7%CE%BD-%CE%B5%CE%BB%CE%BB%CE%AC%CE%B4%CE%B1-%CF%84%CE%BF-%CF%80%CE%BF%CF%83%CE%BF%CF%83%CF%84%CF%8C-%CF%80%CE%BF%CF%85-%CE%AD%CF%87%CE%B5%CE%B9-%CE%B4%CE%B7%CE%BB%CF%8E/

[98] https://myrtillocafe.gr/en/home/

supporting business and training entity, where all employees are jointly responsible for its viability. More than 90% of Myrtillo's employees are disabled with an opportunity to enter real life through honest work and have their own share of responsibilities as co-owners of this social business.

M.A.N.A.[99] Social Cooperative Enterprise in Athens was a private initiative of parents with children with special needs to create a space to enjoy life to its fullest. It is a place of understanding with expertise in keeping children with special needs entertained and tending to their vocational rehabilitation by improving their skills and cognitive abilities required in their daily lives. For that reason, M.A.N.A operates a café at its premises staffed by those same children with special needs. The café helps them train and learn new skills and at the same time to work in it serving their customers.

Epomeni Stasi[100], or "Next Stop," is a social enterprise for social inclusion in the northern part of Greece, Thessaloniki. It is located in one of the city's most iconic buildings in Thessaloniki, the "Modiano Market." This café gave a new vibe to the almost deserted market that now attracts visitors who don't mind ordering their drinks by showing them on a menu. Epomeni Stasi currently employs 8 deaf or hard of hearing people aged 25-35 years old, reportedly facing problems finding an occupation.

Me…nou[101] social enterprise is a traditional restaurant in Drama that helps with the social inclusion of people with disabilities in northern Greece. "Me…nou" has a playful name that sounds similar to "menu" but literally means "With…thought". So, "Me…nou" is a restaurant with its thought on the vulnerable members of our society as the people with disabilities. As servers at "Me…nou", customers will find Paschalis and Maria. Despite their disabilities, they face almost no difficulty in fulfilling their role as good as anyone would. Maria has Down syndrome, and Paschalis is legally blind. Still, their conditions do not deter them from going out there to face the real world. In an interview by Paschalis some time ago, he said that his condition taught him not to see… any problems.

In general

Based on the existing conditions of Greek society, these examples of social enterprises in Greece play a vital role in the social inclusion of people with disabilities. From the time they are born, this vulnerable group of people is told about everything they can't do without being offered options of what "they can do," with severe consequences to their well-being and self-esteem. Greek social businesses come to fill that gap by providing opportunities for work and training to people with disabilities. With their help, they can live a life as close to what a real-

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[99] https://www.noesi.gr/pronoise/mana

[100] Article for the social enterprise Epomeni Stasi, in Greek:
https://www.ethnos.gr/greece/article/169978/epomenistasikofoiserbitoroitoysenosetomerakigiazohkaiserbiroynanthropia

[101] https://www.vice.com/el/article/g5xbbm/se-ena-magazi-sth-drama-serbiroyn-enas-tyflos-kai-mia-kopela-me-syndromo-down

life should feel like with work, friendships, and experiences, without spending their precious time locked up in their houses in solitude and feelings of shame[102].

5.4 Cyprus

The public sector follows the directives of the law of 2000 on inclusivity (Law related to People with Disabilities: N.127/2000) wherein discrimination based in disability is not allowed. The relevant labour union for public servants has a mandate to observe that this law is followed and act accordingly. Within the private sector, each company has its own policy but given that Cyprus is an EU member, the general Directive on inclusivity has to be followed as well.

Nevertheless, there is currently no information on business ventures with SEN in Cyprus. So far it has been an unrepresented department of education and plans have been set in motion by the government as of 2023, to improve infrastructure and support to special education youth and educators, nevertheless, there are no new resources available. Given that entrepreneurship as such is not an industry included in education by public initiative and is a private initiative by certain NGOs only at the insistence of people looking into entrepreneurship, there is no available data.

Based on this general lack of information and follow-up on inclusive opportunities in Cyprus, various academics (Kitipi, 2015; Damianindou, 2015) have expressed concerns and a general discontent with the Cyprus government's lack of dedication to include special education individuals in the general economy and workforce.

5.5 Italy

PIZZAUT – Nutriamo l'inclusione[103]

PizzAut is the first pizzeria in Italy managed by autistic staff and a model laboratory for social inclusion. It introduces young people aged between 20 and 25 to catering. In the restaurants managed by PizzAut, cooks, pizza chefs, waiters and waitresses are all affected by autism and they have been chosen following each individual's inclinations, with the support of professionals such as psychologists and educators.

A tailor-made workplace was designed for them, to avoid relational and work isolation and to encourage professional inclusion. For example, in the restaurant annoying noises are avoided: the ceilings are soundproofed, and the furniture does not have doors that can slam. The lights are homogeneous and restful; they do not create shadow cones. Bottles and jugs are made of shatterproof polypropylene. The colors are few and evenly distributed.

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[102] https://ied.eu/blog/4-examples-of-social-inclusion-through-social-enterprises-in-greece/
[103] https://www.pizzaut.it/

Il Cerchio – Progetto NIL[104]

Thanks to the NIL Project, five young people with disabilities and autism signed their first work contract and began their new life as real workers. Activities: 35 hours per week of work to be carried out in the various social agriculture activities and laboratories (cultivation; production and packaging; product transformation laboratory; direct sale of vegetables and products).

The project provides paid work for children with autism: in agreement with the families, the five beneficiaries receive financial compensation.

OUT OF THE BLUE – Consorzio Sir[105]

"Out of the blue" is the first communication agency to employ the resources and particular skills of workers with autism spectrum disorders supported in their activities by professionals in the communication sector.

Activities: graphics; making videos; creation; restyling; website management; podcast production. Method of working with autistic children: theoretical approach; field activities to independently carry out assigned tasks; coordination with the professional team.

CYBER REBEL – Kirey Group e Fondazione Cervelli Ribelli Onlus[106]

Call for autistics between 18 and 29 years old who have a passion for IT.

Activities: organization of the day called "Cyber Rebel"; meeting with Kirey Group and some experts in the Cybersecurity area to learn about career opportunities in cybersecurity. Test in a selection process conducted by the Kirey Group Recruiting team, prepared for the correct reception of neuro-divergent people thanks to a training course conducted by Dr. Federica Giammello, psychologist and psychotherapist.

4w4i – 4 weeks for inclusion[107]

National event with over 400 companies (such as Tim; Amazon; Ferrovie dello Stato) and more than 300 events to network between companies with the aim of enhancing diversity and promoting inclusion. Webinars; dedicated events; telling corporate stories; exchange of good practices and experiences; strategies and methods for inclusion.

Specialitaesterne[108]

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[104]

https://ilcerchio.net/progettonil/?_gl=1*7jqb4i*_ga*MTgxNDgwMDk5Ni4xNzA4NTkxMTU2*_ga_B805D6RZP2*MTcwODU5MTE1NS4xLjEuMTcwODU5MTE3MS40NC4wLjA.#comefunziona

[105] https://outoftheblue.consorziosir.it/

[106] https://newsroom.kireygroup.com/news/kirey-group-e-cervelli-ribelli-ospitano-cyber-rebel-il-primo-incontro-fra-ragazzi-autistici-e-mondo-della-cybersecurity

[107] https://4w4i.it/

[108] https://specialisterneitalia.com/opportunita-di-lavoro/

Activities: it offers people on the autistic spectrum the opportunity to work in companies capable of valorising their talent. Collaboration with companies committed to promoting the value of neuro-diversity, interested in a training course on autism. Constant support from the coaches to the team, to the company management, to the people employed in the company.

Section of the site with a list that includes job offers for people with autism from partner companies located throughout Italy, as well as free academies aimed at job placement.

Riconoscimento Dyslexia Friendly Company

Analysis, training and definition of good practices for companies, aimed at promoting the job placement and professional growth of people with Specific Learning Disorders (DSA), within the company organisation, promoted by AID - Italian Association Dyslexia. At the end, recognition of Dyslexia Friendly Company.

The recognition certifies that the company is able to create optimal working conditions for SEN employees already present in the company; to understand employee needs and provide accessibility and inclusion solutions for all existing cognitive styles; to attract and optimally manage a greater number of human resources who possess particular characteristics such as dyslexia.

Dyslexia Friendly Companies in Italy		
Amplia Infrastructures[109]	Axia[110]	Micron
Orienta. Agenzia per il lavoro[111]	Intesa San Paolo[112]	Autostrade per l'Italia[113]
Tim[114]	IBM[115]	Alfaparf Milano[116]

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[109] https://www.ampliaspa.it/
[110] https://axiahrm.com/
[111] https://www.orienta.net/it/index.html
[112] https://www.intesasanpaolo.com/
[113] https://www.autostrade.it/it/home
[114] https://www.tim.it/
[115] https://www.ibm.com/it-it
[116] https://www.alfaparfmilano.com/it-it

6. PROJECTS SIMILAR TO POWER UP!

In the last decades, the education community (trainers, researchers, policy makers, learners) has been particularly supported by European Commission-funded projects and/or other relevant initiatives. These programmes enable experimentation, research and development of educational material that cannot be covered by government programmes. Often, the innovative approaches and solutions we seek can be found in the activities and results of consortia implementing such projects.

In the framework of this review research, attention was given to identify and present projects and initiatives that could be useful to the POWER UP project so that the development of the educational material would not start from scratch, but would be based on the results of other projects with similar objectives and methodologies.

The potential for cooperation and exchange of know-how with partner organisations of these consortia in each country is also an important issue for the next stages of the Power Up project.

Key findings of Chapter 5:

➢ From Bulgaria 3 projects are presented that are related to skills development both for professionals, trainers and staff working with people with SEN and for the development of skills of the end users themselves, through training, activities and mobility.

➢ Especially the INCLUSIVE BUBBLES project (from Bulgaria), which aims to develop skills on social entrepreneurship for young people with leaning dissabilities, can be very useful in the POWER UP project.

➢ The 7 projects presented by Austria focus on developing the capacities of trainers and practitioners in order to create more inclusive, mixed learning environments in practice.

➢ The ELLeN project (from Austria) presents the concept of the neurodiverse classroom through the creation of materials for teaching in English.

➢ From Greece 7 projects are presented, some of them focusing on autism and some of them focusing on creating a friendly learning environment for people with SEN.

➢ TUA- The Unexpected Artepreneur project (from Greece) developed an interactive toolkit that teaches young people with ASD/DS about art and social entrepreneurship.

> ➢ From Cyprus 3 projects are presented focusing on the transition of the educational system and the capacity building of the teachers, educators and practiocioners.
>
> ➢ The I_AM: "Inclusive education using Animation and Multimedia" project (from Cyprus) develops educational environments where people with and without SEN coexist in order to develop knowledge and familiarity.
>
> ➢ From Italy 2 projects are presented which are perfectly relevant to the objectives and target groups of the POWER UP project.

6.1 Bulgaria

STEAM4SEN Project[117]

Project period: 2019-2022

Objectives:

The project aims to increase the capacity of schools to deliver inclusive and effective STEAM education to students with special educational needs in order to enrich their experience and employability by developing educational materials and guidance for teachers, school leaders and students.

Aims:

To enable a holistic and integrated approach to the introduction of innovative technologies and pedagogies into school education by structuring an educational kit focusing on specific aspects of the practical application of STEAM subjects (with a particular focus on robotics).

Implementation of the educational kit with a focus on developing key skills for STEAM education, with additional emphasis on empowering students with SEN.

Target Groups:

The toolkit will address STEAM teachers and students (14-18 age), specifically focusing on the development of learning materials and activities that are also appropriate for students with special learning needs to enable inclusive and effective STEAM education.

Partners:

- Bulgaria - NART - National association of resource teachers
- The other partners are from Portugal, Malta, Greece, Italy and Lithuania

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[117] https://www.steam4sen.eu/en/

Video[118] about teaching young students about colors in 142 OU SOFIA. The video is part of the results of STEAM4SEN project. Also, here[119] you can find the results of the research in all participating countries about the STEAM Education for people with SEN.

SENPOWER Project[120]

Start date: 01.09.2022 - End date: 31.08.2025

Objective:

The main objective of the project is to take a step forward towards a more inclusive school, where better personal achievements of students lead to development and general progress.

Target Groups:

The project is aimed at pupils with specific learning difficulties, such as attention deficit/hyperactivity disorder and autism spectrum disorders, aged 6-11, from the primary stage of education, and their teachers.

Aims:

The specific aims are aimed at achieving higher levels of attainment in mathematics and science in order to improve each child's attainment and to engage them more actively in school life. Teachers will improve their competences to identify the specific learning needs of primary pupils; learn to develop specific models to support pupils and to adapt educational materials in mathematics and science to the needs of pupils with relevant difficulties.

Result of the project:

- SENPower Methodology, which teachers will be able to use to adapt the teaching and learning process in mathematics and science classes in primary education to the needs of students with specific learning difficulties, autism spectrum disorders and attention deficit/hyperactivity disorder.

- The Mathematics for All (M4ALL) Teacher Toolkit, which includes ready-to-use resources for teaching specific mathematics topics at primary school level

- Stage 1: SENPower project experts will initially create, in consultation at international level, models of resources on a range of topics. These topics will be selected taking into account the following criteria: (1) common topics in the primary school mathematics curricula in partner countries; (2) key topics for pupils' progress in the subject; or (3) identified as difficult to teach to pupils, in particular those with SEN.

- Stage 2: After the joint training events, participating teachers will create their own teaching materials on specific topics from the primary school mathematics curriculum. The resources will be tested and analysed, and finally modifications will be suggested to fully meet the SENPower methodology. The new learning resources will be added to the M4ALL Teacher

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[118] https://drive.google.com/file/d/195tpAQb0DrSsguDWMf2YqdkN3_gnQgRg/view
[119] https://www.calameo.com/read/007081479ec966d204f2d?page=41
[120] https://narubg.org/post/proekt-senpower-816.html

Toolkit.Science for All Teacher Toolkit (NS4ALL) - a teacher toolkit including ready-to-use educational resources on specific topics in science at primary school level.

- Stage 3: Similarly, following the short-term collaborative staff training activities, participating teachers will create their own resources for science teaching. The latter will eventually be added to the NS4ALL toolkit.

The project has a duration of 3 years and will end on 31.08.2025. The project is funded by the Erasmus+ programme of the European Union.

Partners:

- Bulgaria: Prosveta Foundation (lead organization)
- and partners from Portugal and Turkey.

INCLUSIVE BUBBLES: YOUNG ENTREPRENEURSHIP IN ACTION PROJECT[121]

Start date: 01.03.2021 - End date: 31. 08. 2022

Objective:

The objective of the project is to create a social entrepreneurship training programme for young people with intellectual disabilities based on good practices.

Aims:

- Improving the knowledge, skills and motivation for labor market participation in social entrepreneurship of 25 young people with intellectual disabilities in 5 countries;

- Increasing the capacity of 10 professionals in the provision of social entrepreneurship training and training in the creation of basic personal skills for independent living for young people with intellectual disabilities - two international trainings; 50 young volunteers to work with children with SEN at national level.

Target Groups: Young people with intellectual disabilities.

Partners:

- Bulgaria: National Association of Special Education Teachers coordinator
- Other partners are from Spain, Turkey, Poland and Slovenia

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[121] https://narubg.org/post/vkliuchvashti-balonchetamladejko-predpriemachestvo-v-dejstvieinclusive-bubbles-youngtrepreneurship-in-action-677.html

6.2 Austria

SEN (Special Educational Needs) – the road to inclusive schools in the Republic of Moldova[122]

The SEN (Special Educational Needs) project in the Republic of Moldova focuses on advancing inclusive education practices by providing support for the implementation of national strategies and legislation. The project aims to improve access to education and enhance the quality of education for children with special needs.

Austria plays a crucial role in this initiative by collaborating closely with Moldovan partners, particularly the Moldovan Centre for Psycho-Pedagogical Assistance and its 35 service offices across the country. Austrian experts provide specialized training on topics such as visual impairment, hearing impairment, and autism to enhance the capacities and functioning of these institutions. This collaboration contributes to the standardization and improvement of services offered by the service offices, ensuring their quality and effectiveness in promoting successful school inclusion.

Moreover, Austria's involvement includes publishing publications in the Romanian language on relevant topics related to special educational needs, thereby facilitating access to valuable resources and knowledge for professionals in Moldova. Overall, Austria's active participation underscores its commitment to promoting inclusive education practices and supporting Moldova's efforts to ensure equal access to education for all children, including those with special needs.

Digi-Skills SEN Project[123]

The Digi-Skills SEN project responds to the evolving landscape of special education needs (SEN) in the post-COVID-19 era by prioritizing the development of digital literacy and ICT skills among SEN teachers. Traditionally, SEN education has emphasized life skills alongside social and academic development, but the project recognizes the growing importance of integrating digital tools and methodologies into teaching practices.

Understanding the hesitancy of SEN teachers to adopt ICT due to concerns about time constraints and prioritization of other skills, Digi-Skills SEN aims to bridge this gap by providing comprehensive training and resources. The project's objectives include increasing awareness of digital literacy, enhancing competence in software and applications relevant to SEN education, and fostering motivation among SEN teachers to utilize ICT tools effectively.

Through collaborative efforts with partners across various sectors, including education, research, and social support, the project will deliver key outcomes. These include the development of digital resources and learning materials tailored to the needs of SEN teachers, the establishment of an online learning platform offering interactive curriculum content and

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[122] https://oead.at/en/cooperations/educational-cooperation-with-eastern-and-south-eastern-europe/priorities/social-inclusion-in-education-increasing-the-promotion-of-equity-and-raising-diversity-competence-in-the-field-of-education
[123] https://digiskillssen.eu/

technical webinars, and the creation of a mobile application providing accessible resources for digital skill development.

By empowering SEN teachers with the necessary digital skills and competencies, Digi-Skills SEN aims to ensure inclusive and high-quality education for students with special needs, regardless of the challenges posed by the rapidly changing educational landscape.

IN:CRIS project[124]

The project is foreseen between the Center for Teacher Education at the University of Vienna and the Special Education Development Center at Srinakharinwirot University in Bangkok, Thailand. It consists of two parts: Part 1 Outgoing for Project Activities in Thailand and Part 2 Incoming for Project Activities in Austria.

The project will produce research-based knowledge to inform teacher education modules and teacher educators in Thailand and Austria in terms of cultivating teaching-force that are trained to develop and maintain inclusive education practices during crises situations such as pandemics. Pre-service and in-service teacher education will be enhanced in both countries by the collaborative research and knowledge-exchange between the biggest teacher education institutions of both countries.

ELLeN project[125]

The ELLeN project focuses on teacher education, especially English as a foreign language (EFL) teacher education. It helps to prepare (future) teachers for the neurodiverse classroom by drawing on expertise within neurodivergent communities and expertise of stakeholders in inclusive education, utilizing an approach known as inquiry based learning.

A group is neurodiverse if it contains people of different neurotypes, while a person is neurodivergent if they belong to a minority neurotype, e.g., by being autistic, dyslexic, or by having ADHD.

Key outputs:

– teaching ideas and materials for using inquiry-based learning to prepare future teachers of English as a foreign language for the neurodiverse classroom

– a report reflecting on our implementations of these concepts and materials

– a book with interview transcripts that can be used in teacher education

– self-study materials on neurodiversity and EFL, for teachers & teacher education students

– visual summaries of key ideas

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[124] https://lehrerinnenbildung.univie.ac.at/arbeitsbereiche/inklusive-paedagogik/forschungsprojekte/abgeschlossene-projekte/incris/
[125] http://ellen-project.eu/

On the project website there is also a separate page[126] dedicated to projects on education for people with SEN.

PATHWAY research project[127]

The PATHWAY research project, conducted by the University of Vienna in collaboration with the Education Directorate of Vienna, the Church University College of Education Vienna/Krems, and the University of Luxembourg, aims to examine the socio-emotional and learning development of students in Viennese schools. It addresses three main research questions:

- How do students with and without learning disabilities attending different school settings (integration classes, regular classes, special school classes) differ in their academic performance, social participation, and school well-being at the end of the fourth grade of elementary school?
- How do students with and without learning disabilities attending different school settings (integration classes, regular classes, special school classes) develop in their academic performance, social participation, and school well-being during the school year (if there is a change of class in between)?
- Do the results of research questions 1 and 2 change when controlling for the two influencing factors of socioeconomic status and intelligence?

The three research questions particularly focus on two group comparisons:

- o Comparison of students with learning disabilities attending integration classes and students with learning disabilities attending special school classes.
- o Comparison of students without learning disabilities attending integration classes and students without learning disabilities attending regular classes.

The project aims to gain important insights into the integration of students with special educational needs in regular schools.

DIGIT4SEN Project[128]

In response to the challenges posed by the COVID-19 pandemic, the DIGIT4SEN project aims to address the disruption in education, particularly for primary school students and those with Special Educational Needs (SEN). Through a strategic partnership involving organizations from Lithuania, Turkey, Spain, and Bulgaria, the project seeks to empower teachers with the necessary skills and tools to navigate the transition to digital learning effectively.

The project recognizes the diverse needs of students and the importance of inclusivity in education. It acknowledges the economic and societal impacts of school closures, particularly on disadvantaged children, and aims to mitigate these effects through innovative educational approaches.

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[126] http://ellen-project.eu/related-projects/
[127] https://pathway.univie.ac.at/das-projekt/
[128] https://digit4sen.eu/

One of the project's central initiatives is the development of an e-learning course tailored to primary school teachers and SEN staff. This course will explore the pedagogical foundations of digital learning, providing participants with theoretical insights and practical techniques for designing and implementing digital lessons and unit plans. Skills to be developed include multimedia module design, material selection and adaptation, assessment strategies, and pedagogical flexibility to accommodate varying contexts and educational objectives.

By completing the DIGIT4SEN e-learning course[129], teachers will be equipped to enhance classroom practices, promote creativity, and foster meaningful interaction among students. Ultimately, the project seeks to empower teachers to navigate the challenges of remote learning, thereby ensuring continuity of education and promoting equitable access to learning opportunities for all students, regardless of their circumstances.

MAGIC SENS Project[130]

The MAGIC SENS project aims to address the challenges faced by students with Special Educational Needs (SEN) across Europe, where approximately 15 million children require additional support. These students often leave school with few qualifications, leading to higher rates of unemployment or economic inactivity. Despite this significant need, many teachers lack adequate training in supporting students with SEN, leading to gaps in their education.

The project seeks to enhance the skills and competencies of teachers, teacher trainers, and other educational professionals to better support students with SEN, including specific learning disabilities, language problems, ADHD, ASD, and borderline intellectual functioning. It will achieve this through several key actions:

- Comparison and cooperation between partner countries to identify effective tools, standards, and policies.
- Development of a SEN Toolkit for teachers, an Online Platform, and an Online Training program.
- Dissemination of project results through training courses, promotional campaigns, and social media.

By empowering educational professionals with improved skills and resources, the project aims to promote inclusive education and ensure better outcomes for students with SEN. Indirect beneficiaries include students and their families, educational authorities, school directors, mental health organizations, and professionals working with children. Through collaboration and knowledge sharing, the project seeks to create a more supportive and inclusive educational environment for all students.

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[129] https://edu.digit4sen.eu/?lang=en
[130] https://magicsens.eu/the-project/

6.3 Greece

Transform Autism Education[131]

Transforming Educational Practice in Autism: enhancing the skills, knowledge and understanding of teachers in the UK, Italy, and Greece, also known as 'Transform Autism Education,' is a three-year research and development project funded by the European Commission, through their Erasmus Plus programme, Key Action 2, Strategic Partnerships.

Aims of the project:

To gather a community of researchers, policy makers and practitioners in the UK, Italy, and Greece to research current educational practices in autism in those respective contexts and to create professional development programmes in Greece and Italy.

The project promotes equity and inclusion in autism education by enhancing the skills, knowledge and understanding of education and health practitioners who work with autistic children aged between 5 and 10. This builds on the ground-breaking AET schools programme in England. The AET programme was funded by the Department of Education (UK), commissioned by the AET, with the content developed by ACER, and the design of the materials undertaken by Genium. It consists of quality indicators describing the key factors common to current good practice in settings, three levels of training materials in autism education and a Competency Framework for practitioners. The programme has now been delivered to over 130,000 staff in schools, colleges and early-years settings.

Partners from UK, Italy and Greece.

Train-ASD project[132]

The Erasmus+ project Train-ASD empowers specialist teachers and other professionals to support the effective inclusion of children on the autism spectrum in education by providing them with vocational training on alternative systems of communication.

The objective of the Train-ASD project is to offer professionals training on methods of communication and teaching approaches for children on the autism spectrum, as well as on the systematic observation, assessment and management of behavior problems or deviations.

More specifically, the project aims to:

- Provide better quality training for the target groups.
- Facilitate and support professionals in refreshing their skills and validating procedures acquired from practice.
- Identify knowledge and practice gaps through comprehensive training needs analyses.
- Develop an e-training curriculum as a result of cooperation between 3 countries (Greece, Romania and Belgium) based on the results of the training needs analyses.

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[131] https://www.transformautismeducation.org/
[132] https://train-asd.eu/index.php/en/

- Develop an e-platform, accessible from any portable device to host the educational modules.

The Train-ASD e-Learning platform[133] includes state of the art learning practices and uses a modern approach to the systematic observation and assessment of autistic pupils.

This two-year project, launched in 2018, is led by the University of Macedonia and includes four other partner organisations from Greece, Romania and Belgium.

TUA – The Unexpected Artrepreneur[134]

TUA is driven by the need to develop curricula that can assist young people with mental disabilities, as well as the teachers, caregivers, youth workers, and healthcare professionals who support them. By addressing these challenges, we can work to reduce the overall marginalisation experienced by these individuals.

Objectives:

- To promote social inclusion and improve outreach of marginalised youth.
- To develop inclusive learning environments and curricula that foster equity, equality and respect.
- To increase the quality, innovation and recognition of work produced by young people with DS/ASD.
- To promote active citizenship among young people with mental disabilities and strengthen their sense of initiative in the regions they inhabit and broader contexts.

Activities:

- By developing a curriculum on how to support young people with DS/ASD to become agents of social change through art.
- By developing the Express Yourself Platform, an interactive e-learning platform consisting of (a) learning materials for professionals who support young people with DS/ASD, and (b) the 'Express Yourself' digital platform (Applied education) for young people with mental health disabilities.
- By developing an interactive toolkit that teaches young people with ASD/DS about art and social entrepreneurship.

Partners from Greece, Italy, Cyprus and Portugal.

Grow4Autism[135]

Creating and developing a network to strengthen the capacity and sustainability of civil society actors in the field of autism. The project grow4autism: networking - cooperation - empowerment - sustainability is implemented in the framework of the Active citizens fund

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[133] https://elearning.train-asd.eu/?lang=en
[134] https://www.tua-project.eu/
[135] https://kpechios.org/el/poioi-eimaste/programmata/programmata-synergasies-2/grow4autism

programme, with the Child and Adolescent Centre (KPE) as implementing body and the Hellenic Autistic Society for the Protection of Autistic People (EEPAA) as partner.

Objectives:

- The creation of a network of associations of people with autism, parents/carers and service providers for people with autism and their families
- The functional interconnection between members, exchange and development of good practices
- Strengthening the capacities of the network members
- The training of network members' staff

to:

- o Increase their capacity to seek funding and develop in line with their objectives
- o provide regular, systematic and accurate information to their members
- o further and systematically develop their available human resources through the development of their network of volunteers,

and, ultimately, improve the effectiveness of their actions and enhance their sustainability.

In the framework of the project a Handbook[136] on Autism "Quality of life for you and your families" has produced (unfortunately only in Greek).

Emotional intelligence: Identify, harness and manage emotions[137]

Objectives:

- Gain insight into how other countries and educational systems address young people's ability to deal with their emotions and conflicting situations.
- Provide the participants with skills to cope with the challenges that the future classroom will face.

Activities and methods:

The training course had a defined content and involved presentations by participants, lectures, discussions, workshops and role plays. Evaluations and reports were prepared. The course provided opportunities for meetings, networking and creating contacts for future projects.

Happy school – Home of active, positive and progressive youth[138]

To answer today's challenges, we feel the need to cultivate a HAPPY teaching and learning relationship, where the educator is also learning from the student. We aim to understand the importance of incorporating teaching and learning practices that promote the development

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[136] https://e-wall.net/38389/egcheiridio-gia-ton-aftismo-poiotita-zois-gia-esas-kai-tis-oikogeneies-sas/
[137] https://shipcon.eu.com/emotional-intelligence-identify-harness-manage-emotions/
[138] https://szabolorincgimnazi.wixsite.com/erasmus2015/2019

of emotional and mental wellbeing. We also seek to include more use of ICT during our lessons, use different apps or trusted online resources in order to move from an analogue classroom to a more digital one.

Objectives:

Cultivate a happy teaching and learning relationship in which the educator is also learning from students. This includes:

- incorporate teaching and learning practices that promote the development of emotional and mental well-being z use of ICT during lessons, for example apps and trusted online resources, to move from the analogue classroom to a more digital one,
- improving English- or German-language skills and learning about innovative practices.

Activities and methods:

The project involved work with other schools, institutions and fellow teachers to develop an understanding of active and progressive learning. During job shadowing, teachers learned how to integrate students with special educational needs into the regular school system, while acknowledging differences and disorders. Activities included drama and role plays, compiling video essays, and project-based teaching. Teachers acted as trainers and multipliers of 'happy school' .

Collaboration, education, success[139]

Preventing school failure by creating an innovative, student-centered, recreational instructional-educational process that reduces disparities, provides quality education and facilitates a successful school career for all students, especially from disadvantaged groups .

Objectives:

- Develop the skills of 70 % of teachers in optimising their activities with pupils from disadvantaged groups being at risk of early school-leaving.
- Increase the attendance rate of students at risk of dropout by 25 %.
- Improve the attitude towards learning for a minimum of 20 % of students.

Activities and methods:

Fourteen teachers, selected according to a specific procedure, took part in four training courses abroad for 5 days each, developing their skills to work with pupils at risk of early school-leaving.

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[139] https://scoala6tgvces.wordpress.com/

6.4 Cyprus

Actions for School and Social Inclusion+ (DRA.S.E.+)

The Project "Actions for School and Social Inclusion+ (DRA.S.E.+)" aims to upgrade the Education System of Cyprus, through the implementation of targeted educational Projects. The implementation of Project DRA.S.E.+ started in the school year 2021-22, having as its main purpose the mitigation of the negative consequences of the economic crisis in education. The Project is a useful tool to address contemporary problems and challenges (immigration flows, consequences of the pandemic) for the Education System in the coming years.

The Project aims to support students who:

- Are affected by the effects of the economic crisis and the pandemic or have an immigrant background.
- Face problems of social exclusion or discontinuity in their lives due to forced relocation.
- Are at high risk of becoming functionally illiterate or at high risk of dropping out of school.

Among other things, the following actions are offered:

o Free supportive teaching and creative activity Projects for students and parents, in the morning and afternoon time.
o Teaching the Greek language in the morning and afternoon time, for students and parents with an immigrant biography.
o Additional psychosocial support services for students and parents, through the creation and operation of Information and Psychosocial Support Centers.
o Supply of support/equipment and educational material to schools.

Expected Benefits/Outcomes

- Supporting vulnerable groups of the student population, who are particularly affected by the consequences of the economic crisis and the pandemic or who have an immigrant background and face difficulties due to the discontinuity of their educational course.
- Direct support for students (and by extension families) who face problems of social exclusion or discontinuity in their lives due to forced displacement.
- Supporting students who are at high risk of remaining functionally illiterate and graduating from school without the necessary skills for the modern knowledge society.
- Prevention and treatment of problems of delinquency, school failure and early school leaving.
- Offering alternative education programmes to enrich the experiences of the students of the participating schools.

Smart & Cooperative Skills project[140]

The project proposal is based on the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions "Tackling Early School Leaving: A key contribution to the Europe 2020 Agenda". The recent public health and social crisis caused by the COVID-19 has had a huge impact worldwide, also in the field of education. This produced many challenges, although these challenges differ according to the social context.

The project aims to develop and disseminate a pedagogical method, based on the theoretical foundation of "Digital Teaching Materials", with the objective of preventing and/or tackling the phenomenon of early school leaving with a special focus on SEN, using ICT as a key element for innovation and change in education.

Two are the central elements of this project:

- "Life skills", understood as skills to be strengthened in order to improve the relationship with oneself and therefore also with learning and with the school.
- Technology as a factor that enables cooperative learning, even at a distance, and as a factor that reduces distances between students with and without special needs. Both elements favour the improvement of school performance and the permanence of children with and without SEN in school.

I_AM: "Inclusive education using Animation and Multimedia" project[141]

The I_AM: "Inclusive education using Animation and Multimedia" project aims to support inclusive education of children with special educational needs and disabilities (SEND) through an innovative person-centred, inter-disciplinary and art-based approach, implemented in Greece, Cyprus, Hungary, and Poland.

The project utilizes multimedia resources and especially animation, through a blended learning capacity building programme, to develop a welcoming environment for children with SEND in mainstream schools.

Working together with school communities, it will promote the sharing of common values of social inclusion. Respect for children with SEND rights towards their equal access to education will be promoted, while stereotypes and discrimination will be combated.

Target Groups: Educational staff, Local school communities, Children and young people with and without SEND (age 9-14).

The children are going to be engaged in the inclusion process, through mechanism and methodologies developed by the I_AM project and implemented inside classrooms. On the one hand, students with SEND will benefit, from the inclusive approaches to teaching

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[140] https://scoopsproject.com/project1/

[141] https://inclusiveeducation.eu/about/

supported by the I_AM project, that will foster their education. Their parents will also be invited to participate in the project activities. On the other hand, students without SEND will be aware of the needs of learners with SEND and act as multipliers, creating a ripple effect across their classroom and their school's community that will promote a welcoming environment for students with SEND.

Core Activities:

- Mapping of the current situation regarding inclusive education of children with SEND and the needs of both educational staff & individuals with SEND.
- Development of effective and tailored tools, based on the research findings and an inter-professional learning framework, that will support educational staff to adopt inclusive education approaches and implement best practice techniques in the classroom.
- Capacity building of educational staff, through a blended learning programme, that will support them to promote the notion of inclusiveness among students in mainstream schools. Educational staff will obtain skills on emotional intelligence, inclusive education techniques, leadership & classroom management skills, as well as basic animation development skills.
- Video animation school contest to engage children, young people, and their communities in the promotion of inclusive education. Winning entries will be shown at the Animasyros International Animation Festival.

Expected results:

o Enhance the use of effective state-of-the art methodological approaches and tools, that support inclusive education.
o Increase the awareness, knowledge, and competence of educational staff to address diversity in the classroom.
o Raise awareness of inclusive educational approaches among the members of educational communities and support increased engagement.
o Effectively and efficiently promoted the inclusive education of children and young people with SEND in mainstream schools amongst policy & decision makers and relevant stakeholders at local, national, and European level.

6.5 Italy

SENPOWER - Empowering young adult learners with Special Educational Needs[142]

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[142] https://iboxcreate.es/en/senpower-entrepreneurship-and-special-education-needs-sen-project/

Starting from official European statistics, according to which at least 15.4% of the school population has a special educational need, the "Empowering young adult learners with Special Educational Needs" project (acronym: SENpower) aims to fill this gap by making a significant percentage responsible of young adults and VET students with special educational needs (SEN), through the concept of entrepreneurship. In the definition of the target, special educational needs are defined as: "any learning difficulty or disability that makes learning more difficult for some than for most other children and young people of the same age".

Project contents: development of the "Guide to education and entrepreneurship development for disabled students", a valuable tool for teachers and educators. Training programs focus on the concept of entrepreneurship and the skills of young adults and VET students with special educational needs.

The objectives of SENpower can be summarized as follows:

- o Extend and develop educators' skills;
- o Improve and extend the high-quality learning opportunities tailored to the needs of individuals;
- o Social inclusion of young adults and VET students with special educational needs;
- o Promotion of entrepreneurship education and social entrepreneurship among young people;
- o Promotion of empowerment and active citizenship of young people.

It is an Erasmus+ KA2 Adult Education Strategic Partnerships (2017) project. Italian Partner: Piattaforma Sud.

VRAILEXIA[143]

Partnering Outside the Box: Digital and Artificial Intelligence Integrated Tools to Support Higher Education Students with Dyslexia

European project created and designed to facilitate the academic path of dyslexic students, offering a new type of teaching outside the classic schemes and closer to the needs of children.

Contents: implementation of adaptive learning tools based on artificial intelligence to support dyslexic university students in their academic career; proposal of a Memorandum of Understanding for the creation of a network of university experimental centers to implement a real strategy of inclusion and equal opportunities.

Specific project objectives:

- Development and validation of "Be-Special", an e-learning platform that uses Artificial Intelligence to personalize contents, based on the needs of young SEN people (in particular dyslexics);

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[143] https://www.sinapsi.unina.it/progetto_vrailexia

- Development of virtual reality tests for the evaluation and monitoring process of the Be-Special system;
- Creation of two training courses respectively for university teaching staff (based on Universal Design) and for university students (with participatory hackathon methodology);
- Creation of an internal task force in each partner university for the transferability of skills;
- Creation of an OER repository with teaching and learning materials;
- Proposal for a MoU to promote a common and shared strategy of social inclusion in the field of university education.

It is an Erasmus+ KA2 Adult Education Strategic Partnerships (2020). Italian partner: UNIVERSITÀ di PERUGIA (Public Body - HEI) and TUCEP (No-profit Association – training provider).

CONCLUDING REMARKS

In all countries, independently of how widespread the Inclusive Education approach is, further steps need to be taken in order to achieve the goal of equal inclusion of people with SEN in formal, non-formal and informal education. POWER UP aspires to play an important role towards entrepreneurship education which occurs in most of the consortium countries with low priority, even in mainstream education. The project can make use of all the components found in mainstream education in all countries that play an important role in entrepreneurship education (such as the components of STEAM education that combines science, technology, engineering, the arts, and math to guide student inquiry, discussion, and problem-solving). In this way, it can be the missing link in the various educational systems of the consortium countries and fill in the existing gaps.

Although many approaches, methods and tools are proposed for the development of the POWER UP educational material, a very careful selection, adaptation and an innovative combination needs to be made. POWER UP aims to create a digital entrepreneurship education tool that will both give the greatest possible autonomy to the end-user (young people with SEN) but will also exploit all the benefits of a participatory learning environment that also contributes to the socializing and behavioral dimension of education.

The choice of visualised material, the use of appropriate vocabulary, the limited use of abstract ideas and concepts, frequent repetition and user interaction with the training material indicate the direction that researchers developing the material could take. However, the characteristics of an online platform place limitations on the benefits of a multisensory approach and may increase the need for simultaneous coexistence of learners with skilled trainers and/or caregivers. These issues will be discussed in the focus groups organised within the project with SEN education experts in order to ensure that the training material created has the maximum positive impact on the target group.

Important allies in this effort are the public and private organisations that provide educational, social and support services to young people with SEN, both at local, regional and national level, in the consortium countries. A mapping of these organisations was carried out as part of the survey and in many cases there was direct contact with their representatives who acted as informants for the survey. The networking already achieved through the research can - and should - be used in the next stages of the project (focus groups, material development, pilot trainings, dissemination and exploitation). The participatory approach can benefit the efforts of the consortium partners, aiming at the greatest possible benefit for the target groups of the project (trainers and young people with SEN).

The aim of entrepreneurship education for young people with SEN is twofold. Through the development of their skills, we aim to facilitate their integration into the labour market:

o   As owners and/or partners in entrepreneurial initiatives that make use of their talents, skills and desires,

o   As employees in existing business initiatives that have the capacity to adapt their production process and welcome a trained workforce.

The survey has collected information on both of these categories of professional activity, showing that in recent years there has been a growing trend of social entrepreneurship that creates a welcoming environment for the productive potential of young people with SEN. Selected examples of such initiatives could be included in the training material in the form of case studies and good practices discussion.

Finally, special mention should be given to the projects that share the same objectives as the POWER UP project and that broaden the range of local-national mapping, incorporating approaches and coordinated efforts that go beyond the borders of the participating countries of the consortium and bring to the results of the project the experience and innovation of other European - and not only - countries. Like the nationally implemented efforts for the inclusion in education of young people with SEN, the European funded projects reviewed during the research mainly emphasise the development of the teaching competences of the SEN educators. POWER UP will develop its educational material in - as far as possible - agreement with the identified needs of the practicionters of SEN education in order to go one step further, i.e. to deliver this educational material through its pilot activities directly to the end users, i.e. young people with special educational needs.

So, we invite you to stay tuned for what is to follow.

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