



A regional training and co-operation portal for teachers for the education of students with specific learning difficulties

The context for the use of ICT for Inclusion

The Italian Ministry of Education, Universities and Research (General Department for Students) Office VII issued recommendations in the notification with prot. no. 4,556, dated 1 June 2011, and no. 6,705, dated 19 September 2011, related to the planning of the Regional School Offices (USRs) as of the 2011/2012 school year for training on the subject of specific learning disabilities. In light of this, the Department of the VI Office of the Regional School of Apulia has structured an integrated training plan for approximately 3,600 teachers of all orders and grades employed in Apulian schools.

The initiative is part of the training plan proposed by the Apulia USR. It has already been organised in the form of conferences on territorial services for local school headmasters/deans – in collaboration with three universities in Apulia – and takes place in the form of master's degrees and improver courses directed at a significant number of participants.

One important contextual factor in the Apulian school system is the teachers' advanced age, which in most cases indicates that they are unfamiliar with technology. Although the Ministry organises various initiatives through training policies focused on ICT for inclusion, the analyses conducted by the USRs detected rather alarming data.

The policy context

Digital innovation provides a significant opportunity for schools to overcome the traditional concept of a class and create a learning space that is open to all, where it is possible to build a sense of belonging and to achieve smart, sustainable and inclusive growth.


A number of major ministerial actions have been ordered to implement a policy of inclusion through ICT and to reduce the digital divide at all levels. Among these, the following projects are particularly significant:

- Editoria Digitale Scolastica (Scholarly Digital Publishing)
- LIM
- Cl@ssi 2.0 (Cl@sses 2.0)
- @urora
- Oltre l'@urora
- HSH@Network

These specific projects perform their training activity at:

National level:

- Law 170/2010 and subsequent decrees (implementation measures of the Law dated 8 October 2010, 'New regulations on specific learning disabilities in a school setting' – Ministerial Decree dated 12 July 2011) oblige educational institutions to ensure the introduction of compensatory tools, including means of alternative learning and information technologies, as well as some exceptive performance measures that are non-essential to the quality of concepts to be learned.
- During the 2011/2012 academic year – on the basis of the Framework Agreement between the Ministry of Education and the National Committee of Deans of Education, dated 5 July 2011, and the Agreements issued by the Regional Education Departments – 35 master's degrees/courses, involving a total of about



4,000 teachers, were established in numerous Italian universities with the purpose of implementing the measures provided for by Law 170/2010.

The 35 master's degrees/courses not only aim to 'educate' teachers on the use of compensatory measures, but above all aim to train them on learning disabilities and possible teaching methods to be used in an educational context.

Regional level:

- A co-operation agreement was signed on 13 April 2012 between the General Department of the Apulia USR and the Department of Humanities of the University of Foggia for the creation of an e-learning platform for the Distance Learning Department of the Regional Training Plan for Specific Learning Disabilities, as well as a portal dedicated to specific learning disabilities.
- The establishment of an editorial board for the portal dedicated to specific learning disabilities, which is responsible for selecting and updating the content to be published. It carries out research and studies and shares and edits the website's content. Its term is two years.

Once the focus shifted to the training needs of teachers with inadequate skill levels in using ICT for inclusion, especially in the field of specific learning disabilities, the main stakeholders established a scientific committee on the regional subject of disability and educational technology.

The committee members come from various institutional representatives in the area, including local health authorities, the school and the university's regional associations. After careful analysis of teachers' situation regarding the identified educational issues, the Local Support Centres decided to design strategies for training, prioritising the widespread and continuous education of teachers through ICT on the subject of specific learning disabilities. Specific learning disabilities were only the first of the special educational needs to be addressed. Training through ICT is a vehicle for learning by doing, for innovative and inclusive teaching strategies made possible by ICT.

The training project in Apulia involved numerous recipients, including:

- Parents and family members affected by these disabilities
- Teachers (curricular and supply) and school administrators at all levels
- Health professionals (nurses, speech therapists, doctors, etc.)
- Psychologists, psychotherapists, educators
- Volunteer associations and unions.

The proposed and implemented projects aimed to promote significant change for the growth of a true community of practice (CoP) among teachers, with the goal of continuous improvement through a collaborative process of knowledge construction.

One of the CoP's distinctive qualities – for which the project strives – is the development of a high level of collaboration and mutual commitment among its members.

More specifically, the Regional School Department has promoted the creation of a digital environment of shared and participatory learning for education on specific learning disabilities. This portal is part of a series of strategic actions and initiatives established to promote opportunities for training focused on didactic renewal through ICT. The purpose of such actions, in accordance with the policy adopted by the Apulian Department, is to provide educators with tools for updating the teaching process (moving towards inclusive



education with integrated ICT), with the aim of achieving collaborative and participatory practice, which is the basis of inclusion.

The use of ICT

The USR training plans for Apulia and the design of the specific learning disabilities portal are actions that support education based on inclusion, more specifically by providing useful knowledge to the application of assessment tools and intervention, with reference to all special educational needs. It must be specified that the reference is a process of evaluating school learning only, and not a clinical assessment.

The training project involved the design and implementation of a virtual learning environment (VLE) (www.dsapuglia.it) connected to a Department content system, LMS (Department Learning System), which is associated with certain web 2.0 tools. Using these environments, teachers were trained to deal with the central issues of teaching for specific learning disabilities. At the same time, experimental peer learning and peer assessment activities, involving teachers and their classes in authentic assessment practices, were carried out. The experimental work involved students creating digital tools, such as e-portfolios for assessment and co-constructed rubrics for evaluation. Moreover, initiatives for co-assessment in the classroom were performed through the use of micro-blogging platforms.

Key outcomes and benefits

The project's goal was to create a community of professional practice through the design of learning environments, tools, techniques and procedures in order to foster meaningful, situated and ecological learning. A blended and diffused learning environment developed during this experience; in fact, the classroom is composed of numerous metaphorically open spaces that are divided between the physical world and the virtual world of the web.

Creating such an environment involved weaving together digital and analogue media, social networks and real-life contexts for reports and meetings, theories of educational and psychological matrices, objectives and teaching approaches, teachers and students, as well as roles and tools. The community allowed the participating teachers to become parties responsible for their own learning and skilled in the management of change. The virtual space available enabled the establishment of relationships and the sharing of knowledge and experiences. ICT proved valuable to the advancement of interactions within the CoP. An effective networking technology may foster the evolution of practice and inspire the co-construction of knowledge.

The training course has currently been extended for at least three years, so that all of Apulia's teachers can participate. Moreover, the project includes temporal management of the portal, which goes beyond the bounds of traditional formal education, in order to locate and supply information on helpful resources, programs to download, model lessons, literature and even food, so that it can keep up-to-date. The community is a tool and a space where every teacher can rely on a network of colleagues in similar situations in order to overcome the difficulties and discouragement that inevitably occur at some point in all teachers' careers.

Main challenges and obstacles

The introduction of technology as an educational support is a destabilising factor for the school, which responds with a strong resistance to change. The most common reaction is that of protecting and clinging to models based on the enhancement of traditional models. Most of the time, the teachers who are offered training opportunities like the one presented here assume an attitude of helplessness, which they tend to justify by citing a lack of time for the programme and its workload.



One widespread attitude – which was encountered in the project proposal for the portal and platform on specific learning disabilities – is fear about the lack of expertise linked to limited motivation to change established practices. To this end, support materials were offered to the teachers for the use of these new training tools. In some cases, training sessions with staff experienced in media education were uploaded. In other cases, resources were made available on the platform in the form of tutorials on the proper use of tools.

Another significant difficulty that was detected relates to language. The inclusion of technology in education requires a thorough review of media language, given that in most cases the teachers revealed gaps in their understanding of it. New technologies call for metalinguistic and metacognitive skills for the reading and subsidiary composition of written texts and multimedia images, with a focus on the negotiation of symbolic meanings that each student actively contributes. As a result, spaces for communication on the subject have been set up and made available among the specific educational resources handled by teachers with experience in the semiotics of new media.

An additional obstacle is the cost of operating and maintaining the portal and platform. A possible solution is the use of two powerful open-source software programs, Moodle and Joomla, which have been customised and extended according to specific needs. The use of open-source software has led to the elimination of all licence fees and means the project is constantly evolving. However, maintenance costs are still required so that experienced and competent staff can carry out constant updating and monitoring of the services and the content that is included or generated by network users. Therefore, actions that upgrade the platform to guarantee functionality and security are required. Furthermore, a periodic data back-up service is provided.

Additional information

For all information:

- Apulia USR – OFFICE VI Policies for students – Manager: Dr Anna Cammalleri;
<http://www.pugliausr.it/default.aspx?Page=Office&tipo=0&code=6>
- Website: www.dsapuglia.it
- E-learning platform: <http://elearning.dsapuglia.it/>
- Erid Lab, Department of Humanities, University of Foggia – Prof. Pierpaolo Limone;
www.unifg.it; www.design.unifg.it

Archive of the newsletters issued by the Apulia USR for the communication of the portal and the e-learning platform.