Tailored continuing professional development for working with students with special needs

The context for the use of ICT for Inclusion

In Portugal there is a major need for training of specialised educational staff in the use of general and specialist ICT in the special needs area. The training received in the initial stages of pre-service courses rarely includes the use of ICT, apart from some basic and often theoretical approaches to some concepts and material used in other educational contexts.

During the last few years, the Portuguese Ministry of Education and Science has made an effort to provide teachers with ICT training, mainly through the implementation of local Teacher Training Centres. However, the lack of funds in recent years has strongly decreased the operational status of these structures.

Nevertheless, schools are largely introducing ICT into the curricula, with the implementation of interactive whiteboards and digital projectors in the classroom, widespread Wi-Fi access, the use of learning management system software and changes to internal management and communication practices by making use of digital technologies.

The policy context

The use of ICT for inclusive practices is strongly encouraged and is evident in the establishment, since 2008, of 25 regional Special Resource Centres for Students with Special Needs in mainland Portugal (Madeira and the Azores have similar regional structures). These centres work closely with teachers, parents, the health service and school administrations to fulfil these pupils' educational and day-to-day needs by offering a large range of technologies.

The Special Resource Centres carry out the following duties, among others:

- assessment of students with special needs regarding the use of assistive technologies that contribute to their inclusion in the learning process;
- support and evaluation of the measures that are recommended in said assessments;
- training and information for teachers, parents, students and technical/therapeutic staff for correct use of these technologies;
- providing general information to the educational community about the benefits of ICT for students with special needs.

The use of ICT

The use of ICT to promote learning in inclusive settings is demonstrated by the number of students that the Special Resource Centres continuously evaluate and monitor. The centres maintain regular contact with the educational community in order to reflect on how successfully the mutually agreed measures have been implemented.

Joint work with teachers and families allows the Centres to identify ICT training needs. Therefore, it is possible to develop training plans, adjusted to individuals or groups, that can be implemented locally in schools or in nearby training centres.

Based on the identification of ICT support needs, the ICT Resources Centre (CRTIC) in Santarém has developed some areas where this kind of support could be implemented:

- Videos – some videos, related to the needs of teachers that use software in their classrooms with students with special needs, were produced and shared with the community: http://www.youtube.com/user/crticsantarem1

- Courses – a protocol was established with the local Teachers' Training Centre, resulting in the creation of two courses: 'The Use of Boardmaker and Speaking Dynamically Pro in Special Needs' and 'The Use of Free Software in Special Needs'. These are periodically open to the community (teachers, technicians and parents). They have a blended learning structure, combining distance and face-to-face learning, with the help of a Moodle platform. Priority is given to teachers who work with pupils already monitored by the CRTIC.

- Individual training – sometimes individual training is required for teachers or parents who need to use specific software or hardware that facilitates inclusive processes at home or in the classroom. In these cases, the teachers who work in the Special Resource Centre respond to this need by building a working plan with this teacher or parent, according to their needs and personal availability.

- Remote access and chat-based support on free software – other tools are used to facilitate interaction with teachers and students, to give rapid responses to some problems, or to explain certain processes that do not require physical presence. These include remote desktop access programs (e.g. TeamViewer, Chrome Remote Desktop, etc.) and audio/video applications (Skype, Google Chat, Windows Live Messenger, etc.). These can be an effective means of solving problems and explaining some functionalities quickly, allowing human resources in Santarém CRTIC to be optimised.

Key outcomes and benefits

Some of the benefits of this approach are:

- Schools receive support from a team of teachers with technical and pedagogical knowledge of tools and technologies that can contribute to a more inclusive learning environment.

- Action plans can be drawn up based on the specific needs of the 'clients'.

- Small teams can cover a large territory, thanks to distance communication tools.

- New tools that promote more effective learning are disseminated among teachers and other educational stakeholders.

Main challenges and obstacles

Some of the key challenges to ICT use in inclusion processes in schools are:

- Teachers' basic knowledge in this area is usually scant.

- The materials are sometimes expensive and the use of free software is residual. Specific hardware remains difficult to obtain and schools generally only have 'generic' material.

- In most cases, conventional learning materials continue to be used.

- Staff training is difficult, as legislative barriers mean that personal training must take place outside the mandatory daily schedule. The acquisition of new skills does not result in any benefits, as regards professional status.

- Technological progress does not take place at the same rhythm in the school.

However, the creation of the Special Resource Centres has helped to mitigate some of these obstacles, thanks to their close presence to students and teachers, the continuous demand for new materials and techniques to promote inclusive practices, and the on-going efforts to promote ICT among teachers.

Additional information

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Our Facebook page: https://www.facebook.com/crticsantarem

Our Twitter account: https://twitter.com/crticsantarem

Our YouTube videos: http://www.youtube.com/user/crticsantarem1

Our newsletter (Portuguese only) can be requested from crticsantarem@gmail.com