



INFORMATION AND COMMUNICATION TECHNOLOGY IN EDUCATION AND REHABILITATION OF CHILDREN WITH DEVELOPMENTAL DISABILITIES

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Abstract

The experts of the education and rehabilitation profile recognize the need for new ways and technologies for education and rehabilitation of children with developmental disabilities. The accelerated development of ICT not only encourages technology experts, but puts them in front of the final stage, and necessitates the necessary adaptation to work. Its application in Slovenia, Croatia, Bosnia and Herzegovina and Serbia in the education and rehabilitation of children with motor disabilities and chronic diseases, methods of work, and also the inclusion of children are the topics of this paper. We demonstrated the application and needs of children in education and rehabilitation processes, their education on the application of new ICT, and the existence and development of critical thinking.

The direction of the development of new technologies rests on the fact that the new technology, originally developed for the wider market, takes on the important role of integrating intelligent systems and robotics into the much-needed technology for children and adults with motor disabilities and chronic diseases of vital importance.

Keywords: Education, rehabilitation, new technology, inclusion, children with motor disabilities and chronic diseases.



INTRODUCTION

The professionals of the education and rehabilitation profile never cease to seek new ways and technologies for education and rehabilitation of children with disabilities. What provides education-rehabilitators, teachers and other professionals to better transfer knowledge to children with special needs and stimulates rehabilitation procedures lies in contemporary technology. The accelerated development of information and communication technology not only encourages professionals to apply technology to education and rehabilitation of children with disabilities but rather puts them in front of them and makes necessary adjustments in the work of experts.

ABOUT THE RESEARCH

We have studied which information and communication technologies are applied in Croatia, Bosnia and Herzegovina, Slovenia and Serbia in education and rehabilitation of children with developmental difficulties as well as working methods. We also studied the inclusion of children with motor disabilities and chronic diseases, their education on the application of new information and communication technology as well as the existence and development of critical thinking. New technology is implemented on a daily basis in the education and rehabilitation system in Croatia, Bosnia and Herzegovina, Slovenia and Serbia. It has a major impact on the process of education and rehabilitation of children with developmental difficulties. The education system encourages inclusive education, which implies inclusion of children with developmental disabilities into a regular educational system. On one hand, inclusive education is significant both for children with developmental disabilities and their parents, as well as for children of common development and their parents. It is also significant for the school, teachers for teachers, and the school's living and social environment. Previous research on education, rehabilitation and inclusive education was carried out by experts in the education and rehabilitation profiles and pedagogues, and research on the views of pupils with developmental difficulties on inclusive education was conducted using the questionnaire "My primary school" in 2013. The questionnaire was developed by the Center for Research on Inclusive Education (CSIE) in the UK.

RESULT OF RESEARCH

The research has shown that most of the information and communication technology is used by students with motor disabilities. The application and the needs of children with motor disabilities and chronic diseases on new technologies in education and rehabilitation processes is their everyday life. We have been reminded of the existing technology application that needs to be updated to make it more applicable to everyday life and to educate and rehabilitate children with motor disabilities in Croatia, Bosnia and Herzegovina, Slovenia and Serbia and propose the application of new technologies in education and rehabilitation.

CONCLUSION

Children with motor disabilities and chronic illnesses compared to the other population have a number of limitations in the application of new technology due to a number of limitations of physical function. Education and rehabilitation professionals have a key role to play in evaluating what they can do in spite of the difficulties they face. By assessing the possibilities it is possible to use one of the basic principles of the new technology, enabling technology to maximize the use of what the child can do. A new, advanced technology allows systems, face recognition, voice recognition, and speech recognition through their systems, and some of these examples of new technologies can be met and applied in everyday practice. Both systems also enable verbal or non-verbal control of electromotor wheelchairs. The development of new technologies is based on the fact that the new technology, originally developed for the wider market, takes on the important role of connecting intelligent systems and



robotization to the most demanding technology for children and adults with motor disabilities and chronic diseases that is of vital importance.

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