

# POLICY REFORMS FOR E-INCLUSION AND INTEGRATION OF PERSONS WITH DISABILITIES IN HIGHER EDUCATION

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## ABSTRACT

ICT is considered to be a very important factor to support high quality education for persons with disabilities. Namely, ICT in teaching and learning usually offers wider opportunities to implement an innovative approach for a better access to higher education and learning motivation. Hence, this paper is focused on perceiving the possible policy reforms aimed at promoting inclusive higher education through ICT implementation for persons with disabilities. This will certainly contribute to a better integration of these persons into the economic and social processes of the country. The expected research outcomes are to be as follows: (1) raising the awareness among policy makers to promote e-inclusion for persons with disabilities in higher education; (2) developing a list of key issues to be addressed by the policy makers. Proposing specific recommendations as regards the instruments and measures available to be incorporated into the policies for achieving the particular goals; (3) Suggesting ICT methods and approaches that will allow increased participation of this social group in the higher education process.

**Keywords:** ICT, persons with disabilities, higher education, social integration, e-inclusion

## Introduction

“Inclusion is a sense of belonging: feeling respected, valued for who you are; feeling a level of supportive energy and commitment from others so that you can do your best work.” (Miller, Frederick A. and Katz, Judith H. 2002)

The information and communication technology (ICT) has caused noticeable transformations in many domains of the society and has become one of the key accelerators of new reforms in the socio-economic living. In this direction, ICT has enabled overcoming the gender, racial, class and social barriers by using a new form of inclusion known as e-inclusion. Although the e-inclusion can be applied in many segments of the everyday life, it is often focused on solving the problem of providing education for everyone and reducing the social differences among various social groups. In this process of social inclusion and integration, the vulnerable social group of persons with disabilities has been often neglected, particularly when it comes to their inclusion in the higher

education. The possibilities for integration of these persons in the primary and secondary education are substantial due to its compulsory character, but they can be easily excluded from the higher education because of the non-existing technical capacities, didactic-methodological preconditions, as well as academic performances for their integration. As a consequence, the motives for such e-inclusion and integration of persons with disabilities in the higher education are multiple with respect to granting the right of higher education to everyone and creating an equitable and human society. In this context, the e-inclusion is generally focused on the ways of utilizing ICT in the education of persons with disabilities, such as: technology to train or rehearse, technology to assist learning and technology to enable learning (Abbott, 2007).

### **Literature review**

Many studies analyse the issue of social integration of disabled persons, including the aspects of their integration in the educational processes. Even though the majority of these studies are focused on the analysis of their inclusion in primary and secondary education, there are only few that are focused on researching the integration of this social group in the higher education. The OECD study focused on the higher education opportunities available for persons with disabilities points to the need of a distinctive approach in perceiving these opportunities due to the specific features of higher education (OECD, 2003).

The review of the related research consists of two parts. The first part relates to strategic frameworks and policy documents in this field and the second part refers to specific studies on university and college environments and students with disabilities. Thus, several strategic documents and policies have been adopted at international level beginning with the *Universal Declaration of Human Rights* (1948), followed by the *Convention against Discrimination in Education* (1960) and most recently, the *Convention on the Rights of Persons with Disabilities* (2006). Specifically, Article 24 of the last mentioned Convention highlights the relevance of the possibility to improve the education of disabled persons pointing out that “Though accurate figures are not yet available for all countries, the prevailing trend is that children and adults with disabilities tend to have much less access to education (at any level) than their non-disabled peers.” That is to say, it is mainly focused on the elimination of disability based discrimination in educational settings, as well as on the provision of inclusive education at all levels. The World Conference on Special Needs Education: Access and Quality, held in Salamanca, Spain, in June 1994 gave a significant contribution to the inclusive education of disabled person, resulting in the UNESCO Salamanca Statement and the Framework for Action in Special Needs Education.

The European Disability Strategy (2010-2020) promotes a similar approach related to the educational opportunities of persons with special needs. It clearly states that disabled pupils and students must benefit from an accessible education system and lifelong learning programmes. The Strategy therefore supports the accessibility of general education systems, individual support measures and the training of professionals working in education.

Many studies that have been conducted in the field of higher education and disabilities have discussed the difficulties that this social group faces in the educational environment. These studies are dealing with different aspects of this issue, such as academic and social integration of university students with disabilities, as well as awareness and attitudes toward them. For instance, Getzel, Thoma, E., McManus, (2005,

2008) have examined the levels of satisfaction with accessibility, special services, and accommodations at universities for disabled persons. Also, a survey conducted on the social support and barriers to higher education for disabled students indicates that the attitudes of the faculty and student affairs administrators toward students with disabilities are influenced by both institutional and individual characteristics (Lewis, L.Farris,E.1999). In addition, the role of the institution's disability support services in supporting their social integration is analysed.

Fuller et. al. (2004) has examined the difficulties that the students with disabilities faced at university and they indicated many obstacles in participating in discussions and answering questions, difficult access to the educational centres, and a lack of suitable computer programs and other ICT resources.

Another important study in this field analyses the issue of Dissabled Students and Multiple Policy Innovations in Higher Education (Riddell et.al.2004). Furthermore, the study entitled Supporting Disabled Students in Practice: A Tripartite Approach, (Griffiths et.al. 2009), points out that universities are required to make reasonable adjustments for disabled students.

Significant results regarding this problem were obtained in the research related to "Inclusion of Students with Disabilities in Higher Education: Performance and Participation in Student's Experiences", (Sachs & Schreuer, 2011). The main conclusion highlights of that data analysis indicate that students with disabilities invested more time to meet the demands of their studies, participated in fewer social and extra-curricular activities and used computers and information technology less. Higher education institutes still have a long way to go to reduce the gap in the social inclusion of students with disabilities and to adjust the academic standards for their needs. However, it is obvious that there is a lack of current research regarding the usage of ICT in the higher educational process, indicating that special attention should be put on this issue in further research and practice.

### **The role of ICT**

Recent studies indicate that ICT can facilitate the social, economic, and civic participation of persons with disabilities. Accessible ICT can level the playing field for persons with disabilities across life domains including education, employment, e-governance and civic participation, financial inclusion and disaster management (Raja D.S., 2016).

The issues related to the ICT implementation in function of improving the access of disabled persons to the educational services is receiving a growing importance. Yet, a small number of studies are focused on researching this issue. A UNESCO study about ICTs in Education for persons with disabilities emphasizes that "the application of ICT is very important as it plays an essential role in supporting high quality education for learners with disabilities. The advantages of ICT usage in the teaching and learning process are based on the possibilities it offers for alternative means of communications, providing access to educational resources in a more convenient way and to enhance learning motivation (UNESCO, 2011)." By overcoming the obstacles of time and space, supplementing vital human functioning and supporting the development of crucial skills, these technologies contribute to the increased effectiveness of the educational processes by enabling persons with disabilities to actively participate in the teaching-learning process (Martínez R. S., 2011). In this context, UNESCO identifies three main categories of ICT

uses: a) Compensation uses related to the usage of new technologies as a technical assistance that allows students with special needs to take an active part in the process of interaction and communication whereby the technology recoups or substitutes the lack of natural functions; b) Didactic uses where the ICT is used as a learning tool i.e. for implementation of new teaching and assessment methods for students with different educational needs; c) Communication uses through which the ICT eases and makes the communication possible (UNESCO, 2006).

In addition, ICT enables students with disabilities to take advantage of distance education. The ability to access course materials ahead of time via a course website, to participate in online discussions with classmates and the instructor, and/or to participate at home instead of traveling to campus afford many individuals with disabilities the chance to be productive and active learners when it was otherwise impossible or arduous (Jerome M.K, 2008).

Bjekic D., et. al. (2014) identify a wide list of benefits of developing e-learning courses for students with disabilities, such as: a) peer support by using computer mediated communication tools and possibilities for peer-to-peer collaboration and avoidance of social isolation; b) web-based education enables students with disabilities to be proactive and self-reliant, rather than reactive and dependent; c) controllability of learning; d) flexibility in time and space afforded by distance education modalities allows students to progress at their own pace; e) multimodal communication, or the wide range of e-learning communication tools allows presentation of information in the way adaptable to specific disability; f) individual student-teacher communications can take place efficiently and easily; g) asynchronous communication is the benefit for students with disabilities; h) the ability to work at home and to arrange the physical environment; hardware devices and software are adapted to the special needs of students with disabilities, etc. (Bjekic D., et. al. 2014 )

ICT is a core element of the inclusive educational technologies. In fact, ICT has significantly enabled the transformation of the traditional assistive technologies into inclusive technology which is “mainstream technology that can be used with either no or minimal adaption by a person with a disability as an accessible technology. It is also seen as technology that provides social inclusion, such as communication and interaction, for persons with disabilities.” (Hayhoe, S. 2014). Thus, Hayhoe points out that inclusive technology should enable equal opportunities for disabled students in the educational process i.e. they should not have a separate form of education. This brings the study of assistive technology in line with the educational philosophy of inclusion in education, one that states that all students should have social and cultural equality with each-other in all forms of teaching and learning (Hayhoe, S. 2014).

### **Policy-relevance and policy recommendation: focus on Macedonia**

During the past two decades, the process of economic and political reforms conducted in the Republic of Macedonia and other Balkan countries implied further marginalization of the persons with disabilities from the social processes. Despite the broad normative framework for social rights protection in the Republic of Macedonia, which also regulates issues regarding the possible improvement of the state of persons with disabilities, their social integration is being achieved very slowly. The legislation in this field comprises the following acts: Law on Social Protection, Family Law, Law on Child Protection, Law on Prevention and Protection against Discrimination, Disability

Organizations Act, Act on the Use of Sign Language, Law on Employment of Disabled Persons, etc. Moreover, several strategic documents have been adopted, among which special emphasis should be placed on the National Strategy for Equal Rights of Persons with Disabilities 2010 – 2018 and the National Strategy for Reduction of Poverty and Social Exclusion in the Republic of Macedonia. There is also a National Strategy for development of e-contents 2010 – 2015, which treats the issues for ICTs implementation in education in general, but it does not incorporate any important solutions related to the e-inclusion of persons with disabilities in the higher education.

The above mentioned documents and the defined legislative framework incorporate several aspects and dimensions related to the issue of persons with disabilities integration in the educational process. Yet, only few policy instruments and normative acts refer to the issue of greater inclusion of this social group into the higher education. Only the Law on Higher Education offers more favorable study conditions and benefits for the students falling into the category of blind, deaf and disabled. However, one should notice that there is no systematic registration or clear indicators about the students with disabilities participating in higher education in Macedonia, nor an adequate institutional framework and infrastructure opportunities through which they may meet their needs in terms of their inclusion into the higher educational process.

Recently, the young population in Macedonia has been increasingly interested in obtaining higher education. Notwithstanding, evidence suggests that there is no specific increase in the share of the persons with disabilities in higher education. Previous experience of the Macedonian higher education institutions indicates certain obstacles that restrain the effective integration of these students into the educational process, such as:

- The Faculties do not have adequate technical resources and appropriate equipment that correspond with the needs of the disabled students;
- The existing physical infrastructure of the universities is not adjusted to this category of students;
- There is a lack of computerized didactic material and other educational material adapted to the needs of persons with various types of disabilities;
- There is a lack of mechanisms for their integration into the students' social life and better communication and collaboration with colleagues.

These restraints hinder the progress in the field of higher education and thus the possibilities to improve the employability and professional development of these social groups in particular, as a basic precondition for their social inclusion and integration.

The above stated facts clearly indicate that researching this issue is particularly important for the implementation of further reforms in the system to improve the conditions for persons with disabilities, especially in terms of the benefits and advantages that ICT offers to strengthen their inclusion into the higher education. Therefrom, the main challenges for the forthcoming government interventions will be in the following domains:

- Raising awareness that persons with disabilities should be provided with an inclusive higher education whereby ICTs will have an important role;
- Promoting an e-inclusion policy as the most efficient and most accessible approach for wider social inclusion of the persons with disabilities;

- Proposing policy measures and possible amendments to the national legislation for increasing the participation of disabled persons in higher education;
- Developing physical and ICT infrastructure in accordance with the special needs of the disabled students;
- Promoting distance learning as a useful way for wider access of persons with disabilities to higher education;
- Supporting the development of adequate didactic material and other educational tools necessary for this group of students.

## Conclusion

ICT development has opened many possibilities for persons with disabilities to improve their access into the higher education. The lack of official data about the number of persons with special needs in Macedonia makes it impossible to talk about the rate of their enrollment in the higher education, notwithstanding it might be considered very low. Taking into consideration the current situation with the inclusion of persons with disabilities in higher education, it is evident that there is a wide scope for intervention through policy measures. The ICTs provide new opportunities for facilitating the access of disabled persons to higher education and improving their position in society. In this regard, the new strategy should provide a new paradigm for the treatment of these persons in society because educated people, regardless of which category they belong to, contribute to increasing the welfare of the society as a whole.

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