



INCLUSIVE AND E-LEARNING OPPORTUNITIES

Mohammad Milani^a and Vahid Rostami^b

^aDepartment Of Management, Arak Branch, Islamic Azad University, Arak, Iran

^bDepartment Of Management, Arak Branch, Islamic Azad University, Arak, Iran

Abstract

The authors discuss in this paper how information technologies and e-learning can support and improve inclusive education. This paper is divided into three parts: The first part is focused on different approaches to the concept of inclusive education and its relations to the similar concepts – social inclusion and educational integration. In the second part are considered the essential principles of inclusive education (principle of equal opportunities, principle of personal and individualistic approach, the principle of personal consideration and their different educational needs, principle of permanent education) as well as potential problems in their practical applying process. The third part is devoted to different opportunities and e-learning models as an function of inclusive education improvement. The researchers present an overview of the some recent projects and use their results to discuss advantages of using e-learning as an alternative opportunity and support to inclusive education. They concluded in the final part of the paper that new developments in higher education – from virtual universities and cross-border education to e-learning – all speak to the efforts on the traditional higher education community to address the challenges they face in new technology driven on-line environment. In addition, the authors findings suggest that without good policy and financial support there is no good interaction between inclusive education and e-learning.

Keywords: inclusive education, principles of inclusive education, e-learning, Serbia

1. INTRODUCTION

The topic of this paper presents the possibilities of support in different kinds of distance studies within the concept of inclusive education. The first chapter of this

paper deals with the understanding of the notion of inclusive education. In its narrow meaning, the notion represents an education which includes education of children with developmental disabilities within the mainstream school system. In a broader

meaning, inclusive education refers to the philosophy of such an education which is focused onto the adaptation of educational goals, curriculums and methods necessary for those who are taught. The second chapter presents the basic principles that promote the concept of inclusive education. Such are: the principle of availability of education for all, the principle of individual approach in education, the principle of active learning and the principle of pluralism of educational possibilities and values. The third chapter deals with the Possibilities and methods of the different kinds of distance learning in the function of advancing inclusive education.

2. DIFFERENT ORIENTATIONS IN UNDERSTANDING THE ESSENCE OF INCLUSIVE EDUCATION

There is a variety of approaches in defining the essence of inclusive education in the pedagogical and other literature, but, all of them can be grouped into two meaningful groups: inclusive education, in the narrow sense, which means including children with developmental problems into the regular school system and inclusive education, in the broader sense, as an educational philosophy which promotes the idea of quality education adopted to the needs of those who learn – no matter what the age, gender, ethnicity, language, class, disability, etc is.

2.1. Inclusive education as including children with developmental problems into the regular school system

All over the world, since compulsory education exists, there is an essential problem – what to do with children who are

not able to fulfill the acquirements and expectations of schools as they are? The solution has been searched for in two different directions. One was the foundation of special schools which work following a special curriculum and for which teachers are specially educated for. Therefore, a separate curriculum is organized for the children with less ability. The aim of this system is “education under protected conditions for children with intellectual disabilities in their intellectual development, children with sensor disabilities (sight, hearing) and more severe forms of invalidity” (Hrnica, 2007). In educating children in special schools the medical model of lessening the deficit was overruling. Unfortunately, some schools did not fulfill the expectations in almost none of the European countries. It turned out that there are too many children from socially and culturally underdeveloped environment. Instead of encouraging development, a form of discrimination was established, a form of segregation and exclusion. By accepting the Convention on Rights of Children (1989) and numerous documents based on the Convention, and particularly with the strengthening of the Parents’ Associations and their insisting on the rights of the disabled children to be educated alongside with their age mates, a powerful support was given to the educational integration, and, further on, to the inclusion of disabled children into the mainstream system.

The European educational policies are still searching for the answer to the question on what is the best interest of each disabled child. In that sense, two conception approaches stand out: integrated education and inclusive education.

2.1.1. Integrated education

Integrated education – the base of which is a collection of intervening programs of giving aid to a child of, mainly, medical-psychological type; the child is treated as a “problem”; the goal is to correct or lessen the developmental disabilities so that the child could be brought to a functioning level which would enable him to be successful in the context of the regular school as it is. The integrative model, in this sense, recommends the introduction of assistants into the mainstream schools, who would give assistance to these children and, as well, treatments in developmental counseling and specialized institutions. The right of the developmentally disabled child, in this model, is recognized, but would be achieved only for some children (of whose mental disabilities are of such a nature and degree of severity that their educational needs could only be fulfilled within the existing regular schools).

2.1.2. Inclusive education

Inclusive education – is a pedagogical model which is based on the basic curriculum of psycho-social support to the disabled child, based on the ideas of an Italian doctor and pedagogue, Maria Montessori, and, even more, the Swiss pedagogue Adolphe Ferriere and Edouard Claparede. According to them, schools should be completely adopted to the needs of the students, and not adopt students to schools. The main difference between the integrative and the inclusive pedagogical approach in educating developmentally disabled children is in the fact that, in the first case, the child is integrated into the existing, unchanged educational

environment, while the inclusive model demands transformation, adoption of the environment to the educational possibilities and needs of each particular developmentally disabled child. This means that the inclusive approach starts from the opinion that schools are necessary to transform (curriculum, methods, teachers’ education) so that the child with certain disabilities could successfully learn accompanied by their schoolmates.

2.2. Inclusive education as an education adopted to the needs of those who learn

Today, within the contemporary literature and the relevant international documents, inclusive education has a broader meaning – as an educational philosophy which promotes the idea of quality education, adopted to the needs of those who learn – not only to developmentally disabled children, and not only to children, but adults as well, no matter whether they have, or they do not, developmental disabilities.

The reasons for the inclusive approach, in the broader sense, can be grouped into three categories:

a) *Human Rights* – every person has the right to be educated alongside with others. Nobody is to be discriminated on any basis (age, gender, ethnicity, language, class, disability, etc.)

b) *Quality of education* – much better results are achieved within the inclusive education concerning emotional and social development, and approximately the same in cognitive development. Inclusive education enables the application of numerous didactic- methodological innovations, educational technologies and a better use of all educational resources.

c) *Social reasons* – any educational

segregation makes changing of prejudices more difficult and supports the same. Only inclusive education, starting at early age, can prepare the child and the environment for optimal co-living within the social community and life-long learning.

The international documents, which support member countries to accept the inclusive model of education, are:

- a) UN Convention on Rights of the Child (1989)
- b) UN Standard Regulations on equaling the abilities for developmentally disabled people (1993)
- c) UNESCO Salamanca Statement and Framework Principles of Action (1994)
- d) Worldwide Educational Forum, Dakar (2000)
- e) Education for all, Manchester (2000)

Inclusive education is for all. It cannot be equaled with educational integration, since integration means adoption of those who learn to the existing educational structures, procedures, processes and methods of the educational system. Inclusion emphasizes adoption of the educational system to the needs of those who learn. In this sense, all who would like to be educated are accepted without any limitations or barriers. Poverty, disability (physical, sensory or mental), geographical setting that are not easily accessible, minority groups can be barrier to inclusion (Ratra, 2005).

Inclusion, thus understood, contributes to a better understanding of education, its purpose and importance. It is most closely connected to educational, cultural and social values. In the same sense, it contributes to the increase of self-esteem, security and self-respects. Inclusive education is the framework “that aims at ensuring that all stakeholders can participate in a meaningful way in this common task, contribute in

different ways, and be valued and respected as equal members of the community of the educational institution. As a catalyst for change, inclusive education provides not only for institutional improvement, but also for an increased awareness of human rights and a reduction in discrimination. Essentially, inclusive education involves changes in attitudes, behavior and ways of working, and has the potential to make an effective starting point to address the right of learners in a range of cultures and contexts” (Moodley, 2002).

3. THE PRINCIPLES OF INCLUSIVE EDUCATION

3.1. Principles of availability of education for all

The key recommendations for advancing the educational system in accordance with the principles of availability of education for all are based on the availability to education, prevention of discrimination and increased inclusion of children and adults at all levels of education (an increased inclusion of pre-school education of all children, especially children from marginalized, socially excluded groups; ensuring universal inclusion into the primary education; improving educational conditions and development of poor children; ensuring continuity in advancing through the educational system, increasing the educational attractiveness and reducing the withdrawal of children and adults at all levels of education; widening the educational institutions’ network and support the development of an appropriate learning system using contemporary information technologies; establishing conditions for life-

long learning including all categories of the population into the permanent educational process).

3.2. The Principle of Individualized Approach

The principle of individualized work defines an education which is in accordance with the individual features of those who learn. This principle commits schools and teachers to adopt their educational goals, contents, methods, relationships towards the learners, their age and developmental level, to find out and esteem the qualitative and quantitative differences among learners, so that the educational process is more individualized and personalized, that the learner is enabled to learn the contents he is interested in by his own pace, in the suitable language in accordance with his own needs and cultural identity.

3.3. The Principle of Active Learning

The principle of active learning defines a learning in which the learner actively participates in acquiring knowledge, thus, enabling himself to have a better knowledge transfer, that is, the possibility to be taught to use the learnt the content more efficiently in different situations. Active learning refers to those forms of learning which demand a constant thinking activity from the learners, flexibility in thinking, creativity and independence (learning by observing, discovering, problem solving, etc). The inclusive education promotes the principle of active learning because the effect of such learning is far more positive not only in acquiring knowledge but in developing the learner's personality as well. Through an active relationship the learner comes across

with objects and people around him, the feedback information coming as a result of his activities, the learner, on one side, learns about the reality which surrounds him, and, on the other, examines his possibilities for acting in such an environment, that is, realize his own identity. The activities in the context of such learning are aimed towards goals which are important for the learner and in which he can recognize the meaning of learning.

3.4. The Principle of Pluralism of Educational Possibilities and Values

Inclusive education is based on the attitude that learning and education are broader notions than those of formal schooling and can be performed within the family, local community, within the framework of formal, informal and non-formal system. The real life necessities and interests of the individual are the key factor in conceptualizing and realizing the educational programs. In contrast to the traditional education, which emphasizes the importance of formal education in institutions of the educational systems (being mainly abstract, verbal and decontextualized, the concept of inclusive education is open for all possibilities and equally values different educational potentials in the society (school, family, media, church, age-groups, contemporary information technology, social organizations). A partnership of all relevant participants in the educational process is understood.

4. INCLUSIVE EDUCATION IN SERBIA

No systematic attempts have been undertaken, up to the present moment, to

introduce the basic assumptions of inclusive education into the educational system of the Republic of Serbia. There is a long tradition of special schools, as well as the high educational institution preparing most teaching personal for these schools, so that, by time, they have become two separate systems. In the special schools' education, there is an extremely high percentage of children from socially and culturally undeveloped surroundings (especially from the Roma ethnic group in schools for the mentally underdeveloped children). The medical model overruled in educating children with developmental difficulties in these schools. The alternative education in special schools more frequently occur in the integration model than in the inclusive one.

The educational system in Serbia is confronted with a number of difficulties, such as follows:

a) A low level of education: since 2002 the Republic of Serbia has been included into the International program for students' achievement evaluation (PISA) in the organization of OECD. The results from 2003. and 2006. show that the fifteen-year-olds are in the low level of achievement. In comparison to the average of OECD achievements the students in Serbia were 60-70 points lower in math and science literacy, and in understanding the read material about 100 points lower (our students would need an additional 1,5-2,5 years of schooling in the countries of OECD to catch up this drop).

b) The low level includes the Roma educational system. According to the data from 2002, 61.9 % of them did not complete primary school, 29 % completed primary education. 7.8 % completed secondary education and only 0.3 % acquired higher or high education. The later data show that there are still differences and that these

differences are the higher the higher the educational level is. It has to be taken into account that Roma are one of the nations who have almost never had an education their own tongue. When Roma children go to school, they attend classes in the language of the nations or nationalities who present the majority and for them it is the language which is not enough known.

(c) Not enough attention is paid to the needs of the poor children, concerning education – only in 2008. have serious steps been taken in granting scholarships from the National Investment Plan for 1000 secondary school students.

(d) There is an underdeveloped system of adult literacy education, requalification and professional development. The adult education strategy was accepted in 2006, but still has not been implemented (towards: Inclusive education; Development direction, National Report of The Republic of Serbia, 2008).

The following conditions were noticed, in the same national report, for applying inclusive education at pre-schooling to secondary level education, naming the following:

a) The network of kindergartens and schools is not equally distributed, so most of these institutions are concentrated in the bigger towns of Serbia. These institutions are not in easy reach to those from rural environments.

b) The inclusion of children into the pre-schooling education, which is not obligatory, is low, and endangered are the children from villages, those who come from less educated families, Roma children, children with developmental disabilities. 45 % of children from towns are included into the pre-school education and the percent of those from villages is only 14.4 %. The inclusion of

children from families who possess only primary education it is only 7.5 %, from the group of the poorest it is 7 %. For the Roma, from Roma inhabitants, it is only 3.9 %.

c) The physical approaching inability or the architectural non-adaptability of kindergarten buildings and schools, towards the students and those with disabilities, very often represent an obstacle to regular attendance.

d) Non-sufficient and non-adequate equipment of kindergartens and schools is evident

e) The lack of horizontal and vertical move between the regular and special educational systems for the developmentally disabled children unable these children to be included into the system of regular education, since they are at one time enrolled into special schools

f) The enrooted points of view in the society on the potentials of developmentally disabled children, the existing high rate of discrimination, the prejudice and non-tolerance, all endanger the human rights of these children. There is a lack of adequate cooperation between educational institutions, institutions of social and health care, the local self-management and the family.

g) The practice of using school entrance readiness tests, favoring children from urban areas and families supporting education, are insufficient for children from vulnerable environments (towards: Inclusive education: Development direction, National Report of The Republic of Serbia, 2008).

The obstacles to inclusive education can be grouped according to the causes of their existence. The causes can be found in the: psycho-social barriers (attitudes, prejudices, fears), physical barriers (inability of adopting environment to children with

moving disabilities) and institutional barriers (complicated procedures, a stiff system, bureaucracy barriers). The reforms of the educational system in Serbia are focused towards the reforming and adopting of the legal regulations in the educational field so that a development and the functioning, in accordance with the inclusive principles, could be ensured.

5. INCLUSIVE EDUCATION THROUGH E-LEARNING

E-learning is now an essential component of education. E-learning has changed the face of education, training and vocational learning forever. Draves (2002) provides a list of reasons why he believes the Internet enhances learning, including such advantages as being able to learn at a peak time of the day, learning at your own speed, accessibility to much information, an ability to track personal progress, and the capability to test personal learning efforts. He also believes cognitive learning via the Internet is actually better than in-person learning. Kerka (1997) mentions the time and place flexibility of the Internet in supporting SDL. Ruelland (2003), too, likes how the e-world provides flexibility in the learning rhythm. Candy (2004) stresses the liberating value of the Internet in terms of continuous access to information and no geographic boundaries or restrictions. Recent research has compared online learning to face-to-face learning (Hoben et al., 2002), explored the effectiveness of online tools such as discussion boards and chat rooms (Spatariuet al., 2004), addressed evaluating effective online instruction (Grahamet et al., 2001; Wentling & Johnson, 1999), and assessed the value of online courses in specific fields of

study (Carmichael, 2001; McCombs, 2000).

Online courses require participants to take on new and different teaching/ learning behaviors. Students are empowered to learn on their own. They are usually far more writing-intensive than traditional classes have ever been. In an online course, general discussions, requests for elaboration or assistance, answers to directed questions, group projects, most assignments, and many tests and quizzes are in writing. In addition, online education fosters self-motivated education, giving precedence to the autonomy of the learner. University of Phoenix's Flex Net goes one step further by using a common model (1/3 classroom, 2/3 online) to maximize utilization of its classroom facilities. This improves access by increasing the number of available courses and thus number of students served.

Most universities, polytechnics, and other training providers are presently using study-away approach capitalizing on the online potentials of the Internet programs delivery as and when services are warranted. More and more, learners completing a traditional degree and people who want to expand their skill sets are reverting to online programs. The selection is partly due to convenience and effectiveness and partly because the programs as a whole are affordable. As with in any other program, a certificate is earned upon the successful completion of the program as well as an official transcript of academic record.

Online programs range from 1-hour courses on self-development to an entire doctoral degree program. However, the most significant contribution of online programs is having the opportunity to self-pace within a desired time frame. Through the online programs, learners can complete projects whether at work, home, or selected locations.

On many occasions, a busy executive may not be able to leave the office, and yet, assignments, term papers and even research projects have to be finalized somehow; the magic of getting the assignments complete may be made possible through the online mode. Where programs are completely in online mode, all class lectures, assignments, tests and instructions are delivered through the Internet. Some programs have voice and/or video assisted delivery, and may also include PowerPoint and iPod presentations. That is the main reason that Internet service provider, a browser, and a computer with plenty of random access memory (RAM) are needed prior to an online course commencing to receive lectures from anywhere and any time.

6. DISTANCE LEARNING IN SERBIA

Serbia does not have extensive experience deploying online studies and virtual faculties. Forming an international learning network may enhance e-learning opportunities in Serbia as well as in countries that are developing or in transition (Radović Marković, 2006b). Because the functionality of the technologies and the benefits of virtual learning to learners and professors have been misunderstood, the entrepreneurial process although improved in Serbia has been impacted due to the lack of awareness (Radović Marković, 2006b). If Serbians or citizens of other nations become more familiar with the techniques, potential learners as well as educators may be able to effectively discern the pros and cons of how e-learning enhancing and improving education.

Professor Marković conducted a study in 2009 that aimed to measure the role of online

learning and how much the process has been accepted among learners and entrepreneurs in Serbia. Marković interviewed and asked 54 participants (34 women and 20 men) between the ages of 18 and 30 the following associated sub-questions:

a) What do you think about online learning?

b) What do you think about virtual professors?

c) What is the interaction between students, students and professors?

d) Does new technology isolate students from teachers?

e) Do you prefer online learning than face-to-face? Why yes or why not?

f) Does gender matter in online learning for entrepreneurs?

g) What are online learning outcomes vs. Face-to-Face?

Although the majority of participants (68 %), think that online learning is great as an new alternative for learning, the great amount of participants (63 %) are not familiar with online courses for entrepreneurs and are unsure how virtual faculties function. Although it is fair to state that virtual learning will not obviously inspire every learner, it is fair to state that since a lack of knowledge exists concerning the process, most learner will consider the alternative as means to achieve knowledge in most subject areas thereby stimulating human progress.

Thirty percent of participants stated that lots of reasons exist for taking online courses. Low cost was a primary reason. Several participants (45 %) proposed that women and elderly learners are more motivated to enrol in some online course because they are better at communicating

online and scheduling their learning. Seventy percent of opined, “anytime anyplace” nature of online learning suits female students more than male, whereby women are fitting their education in among their regular work. It is fair to conclude that women more so than men utilize management skills to complete their studies, driving human progress.

Although 50 % of the participants do not desire to have discussions with other learners and professors who cannot be seen, most participants (95 %) stated that computer literacy is the most significant for online studying. Although women choose some computing courses when offered in combination with other disciplines that emphasize social issues and computer applications, women think that online studying and virtual faculties are not so much popular in Serbia because of the lack of computer literacy, specially among women. It is fair to state that if women in Serbia as well as other nations are readily to enroll in virtual courses due to the low costs, women may not (a) readily participant in discussions due to computer literacy or (b) be open during discussions due to resistance, thereby, limiting human progress.

7. CONCLUSION

We can conclude that inclusion is not in the first place a matter of education or teaching, but concerns the respect of human rights that affect primarily the directions of general policies in any country. Social justice, social inclusion, inclusive education and e-learning would seem to be inextricably linked. Open communication and management approaches will become the driving techniques to enhance learning skills

in virtual environments, which will meet new requirements of societies. Building a more inclusive distance learning environment in Serbia involves making technological choices built on flexibility and an ability to respond quickly to changes in constantly evolving technology and informational resources. Collaboration, involving teachers, mentors, and instructional designers who truly represent hard to reach learners, and a willingness to invest monies in developing a cyber infrastructure that reaches all learners regardless of where they live will be crucial.

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