

Digital Exclusion and Lifelong Learning

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DOI: <https://dx.doi.org/10.47772/IJRISS.2024.8120345>

Received: 20 December 2024; Accepted: 25 December 2024; Published: 23 January 2025

ABSTRACT

The use of new information and communication technologies as an extension of human intelligence is causing social inequalities to worsen, insofar as the most disadvantaged social classes will be increasingly disadvantaged from a cognitive point of view compared to the more favored social classes, because they don't have the financial resources to use and take advantage of new technologies.

The fight against digital exclusion is becoming increasingly necessary. We are living in the information age, and anyone who doesn't know how to work a computer is considered technologically illiterate. Therefore, anyone who doesn't know how to enter, process data, interpret, transmit information and search for knowledge on the internet will be marginalized from a cognitive point of view - which will lead to social, economic and financial difficulties. Computers are increasingly at the center of economic activity. As such, it is essential to adopt the necessary measures for the technological literacy of the population. This literacy will aim to offer the population the possibility of living in a technologically globalized society, so that they can take advantage of the knowledge processed by the main sources of information and communication.

Disregard for the digital divide can maintain or aggravate a country's economic and cultural underdevelopment, caused by a lack of technological skills among the population; progressive growth in unemployment, the spread of ignorance; rising levels of poverty; a lack of access to communication and, consequently, to learning, research, socialization, integration into society, intellectual development and the evolution of the human being as a thinking being.

Keywords: Digital exclusion; Teaching; Lifelong learning; Communication technologies; Technological literacy

INTRODUCTION

To combat the digital divide and make the population technologically literate, it is necessary to invest in formal and non-formal technological education; computerize schools and training centers; municipal libraries, research and documentation centers, post offices, among others; prepare people to develop lifelong self-learning using new information and communication technologies.

EMPOWERMENT

The main causes of the population's high level of poverty are the inability to attend school due to a lack of economic and financial resources, the inability to access new information technologies, which is considered a major disadvantage for the most deprived populations, which can translate into a lack of empowerment on the part of the population to assert their interests and values.

Empowerment is a concept that involves several dimensions, which means giving individuals or communities the freedom, self-determination and autonomy to make decisions and solve problems, improving their well-being in various aspects, such as education, health, business and social development (1,2).

The starting point for developing the knowledge, skills and competences needed to exercise power is the primary

community, at local or organizational level (neighborhood, village, factory, office, school, trade union, community associations and party organizations). It is through active participation and autonomy in identifying problems (felt and experienced) and making decisions aimed at solving them that citizens gain power - empowerment. Empowerment is developed through the exercise of participatory direct democracy and experience-based learning, shared socially with other citizens in the same circumstances (3).

People living below the poverty line (social exclusion) are disempowered, i.e. they are excluded from exercising any form of power. The fight for social inclusion presupposes the empowerment of the poor. Social movements energised by members of communities, supported by community animators/educators/interventionists, play an important role in empowering them. However, local actions need to be facilitated, complemented and supported by appropriate actions at state level (4).

DIGITAL EXCLUSION

The fight against digital exclusion is becoming increasingly necessary. We are living in the information age, and anyone who doesn't know how to work on a computer is considered technologically illiterate. Therefore, anyone who doesn't know how to enter data, process data, interpret information, transmit information and search for knowledge on the Internet will be marginalized from a cognitive point of view - which will lead to social, economic and financial difficulties, as the computer is increasingly at the center of all economic activity.

Over time, capital has created a relationship of dependence on new information technologies. Suffice to say that financial capital can be transferred from one side of the world to the other via the computer networks of which financial organizations and central banks are a part. Capital is transferred throughout the world's financial markets in the form of bytes - information capital. Telematics (telecommunications + information technology) play a major role, as it allows capital to be transferred faster than ever before, thus avoiding losses caused by possible fluctuations in the market.

In addition to financial capital, the industrial sector has also surrendered to new information technologies, essentially establishing digital communication between head office companies and their subordinates. Money capital has been replaced by information capital. In this sense, we are moving towards a digital economy (5).

The use of new information and communication technologies in the economic and production system of companies has led to many workers becoming unemployed - technological unemployment - due to the replacement of many jobs by computer programs and barcode readers, since a large part of the repetitive tasks carried out by several workers are now processed by these specially created programs; the integration of robotics into large factories, to the extent that the entire system for designing and manufacturing parts is now computer-controlled, such as the assembly lines of drinks factories, the design and production of parts in car factories, among others; and the lack of skills on the part of many workers to operate these new technological systems (6).

As such, it is essential to adopt the necessary measures for the technological literacy of the population. The general aim of this literacy will be to offer the population the chance to live in a technologically globalized society, so that they can take advantage of the knowledge processed by the main sources of information and communication. Its specific objectives will be: to educate citizenship; to socialize the population technologically; to qualify people for easier integration into the labor market; to prevent poverty levels from worsening and, if possible, to reduce them; to improve the living conditions of the most deprived populations.

Disregard for the digital divide can maintain or aggravate a country's economic and cultural underdevelopment, caused by a lack of technological skills among the population; progressive growth in unemployment, the reproduction of ignorance; rising levels of misery and poverty; a lack of access to communication and, consequently, to learning, research, socialisation, integration into society, intellectual progress and the evolution of human beings as thinking beings - a situation that can lead to serious social conflicts.

LIFELONG LEARNING

To combat the digital divide and make the population technologically literate, it is important to adopt an educational policy geared towards using new technologies as an extension of human intelligence. In this sense,

educational policy should invest in formal and non-formal technological education; teaching how to search for information that produces knowledge; installing a network of computers with Internet access in schools, municipal libraries, research and documentation centers, post offices, among others; making access to new information and communication technologies an essential need, including for those belonging to the lower social classes, by creating telecentres in the most deprived areas that allow access to the Internet, as well as the possibility of setting up electronic mail; distance education in order to meet the needs of citizens, not only from the most deprived social classes, but also people who, for geographical, social and professional reasons, are unable to attend classes at an educational institution; development of digital inclusion projects that promote citizenship and solidarity through new information and communication technologies; preparing people to develop self-directed, lifelong learning using new information and communication technologies (7).

Access to the Internet is extremely important in the process of digital inclusion insofar as it enables: contact with anyone located anywhere in the world (global village); the development of intelligence/intellectual exercise; lifelong learning; the transmission of information and knowledge; the democratization of education - the existence of a computer network with Internet access in educational establishments/training centers, municipal libraries, information centers, research institutes, universities, among others, allows all learners, even those most in need, to have equal opportunities to access the new information and communication technologies and, consequently, to learn, cultivate, communicate and progress. Furthermore, the democratization of education and the school/training center is achieved through changes at classroom level, as well as at methodological level, democratic decision-making processes, political-educational areas, integrating values and defining objectives. It is therefore important to know the contents of the subjects, but it is also essential to include a transversal dimension in the curriculum. This dimension should address issues related to the education of values, attitudes, behaviors, procedures, ethical issues, moral and civic education, health education, peace education, education for equal opportunities between social classes and between both sexes, consumer education and environmental education (8).

For a school to be democratic, its educational and pedagogical practices need to be more democratic to create a pedagogically autonomous school. The pedagogy of autonomy implies democratic values (justice, co-operation, solidarity, tolerance, respect); values of the public domain, which refers to self-determination, self-government, social equality; training teachers so that they enjoy the necessary skills to be able to intervene and change something in society through education, making conscious and responsible decisions; defining objectives, which means that education and the educator are not neutral when it comes to their contributions to improving the world around us; the participation of students and teachers in the whole process; and pedagogical experience.

Therefore, it is not possible to educate without at the same time being concerned about professional, ethical and moral issues, as well as the repercussions that the political action we carry out may have. It is extremely important to interpret and critically analyze educational and pedagogical policies. A democratic school needs political education for educators that is critically orientated towards knowledge, creativity, democratic theories and values, cultural and civic training, participation and citizenship. The relationship between theory and practice must be constant in the exercise of pedagogy, since both critical reflection on practice and theoretical discourse are necessary. The integration of new information and communication technologies in educational establishments/training centers brings advantages for the student, the teacher, learning, the curriculum and the interaction between the school/training center and its surroundings.

In terms of learning, with the integration of new information and communication technologies into education, students and educators are faced with a new form of learning - interactive learning - which instils in students an ever-greater interest in knowledge. What's more, it appeals to the browser's participation and is characterized by being very dynamic. It encourages interculturalism and interdisciplinarity, as it allows contact with many navigators from very different socio-cultural backgrounds, and it also allows content from different disciplines to be interlinked.

Most of the time, students can interpret the content and learn on their own, without the need for help from the teacher. At the same time, the educator's role becomes secondary. In terms of the curriculum, the use of new information and communication technologies is advantageous in that it influences the didactic content to be taught, as well as the way it is approached and transmitted to the students. Educators can update, develop and

improve the subject content they teach, motivating students to learn not only the subjects but also the use of technological means, since they need to learn how to input, process and transmit information. In this context, educators play a decisive role in the world of telematics.

In terms of interaction between schools/training centers and their surroundings, the use of new information and communication technologies is very useful for both institutions. On the one hand, schools/training centers can pass on academic information, work and projects developed by their students to the local community. On the other hand, it allows for the transmission of information about the community in which the school/training center is located, as well as the collection of information about other communities. It also has the advantages of online contact with other personalities who are experts in various fields of knowledge, thus enriching educational resources and providing services in the field of IT to the community in general, on the part of the students who have been trained in this area.

The use of new information and communication technologies in adult education and training must comply with the following requirements: the training system must be organized in modules, in a flexible and open way, so that each trainee attends the teaching-learning modules that most interest them. Thus, each trainee will be able to follow their own training path; integrate educational responses to intervention in community life into their training plan; the teaching-learning process should provide correct guidance and support for the adult, so as to avoid situations of disappointment, frustration and, consequently, abandonment; provide teaching materials that facilitate learning, so that trainees feel motivated, for example using educational software created especially for teaching certain subject content; trainers must have adequate training and a professional profile that guarantees their competences at technological, psycho-pedagogical and didactic levels; material resources, institutions and training centres must meet the expectations of trainees, providing them with qualitative and quantitative learning. To this end, it is extremely important that trainees have the necessary equipment to use the new information and communication technologies.

CONCLUSION

To combat the digital divide and make the population technologically literate, it is necessary to invest in formal and non-formal technological education; computerize schools and training centers; municipal libraries, research and documentation centers, post offices, among others; prepare people to develop lifelong self-learning using new information and communication technologies.

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