



DISTANCE EDUCATION

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Abstract

This article is the result of a bibliographical survey on distance education, better known as EAD, which began with correspondence and television courses, but it was with the development of new technologies that this educational modality grew exponentially. Because it expanded and became accessible, the internet began to be used as an important tool for academic and professional training, being the predominant format of distance learning today. Distance learning is an educational modality in which teachers and students are basically physically separated. Contact between them and with the materials used in the courses is carried out through communication and information tools and technologies, generally via the internet. This possibility distinguishes distance education from in-person teaching and translates into greater flexibility of time and space for the student.

Keywords: Distance, education, technology, educational modality.

Introduction

In recent decades, much of what was written, said and done in distance education (EaD) was based on theoretical models originating from industrial economics and sociology. The importance of this debate is crucial, as these models have influenced not only the elaboration of theoretical models, but the EaD policies and practices themselves , with regard to both the strategies developed and the organization of academic work and the production of pedagogical materials. .

Contribution to distance education

Since the 1970s, Peters (rector of the Open University of Hagen, Germany, during the 1970s, and a great specialist in EaD) has been developing analyzes of the characteristics of EaD , based on comparisons and analogies with the industrial production of goods and services, which identify in EaD processes the main elements of industrial production processes grouped in what is conventionally called the "Fordist model": rationalization, division of labor, mechanization, assembly line, mass production, planning, formalization, standardization, functional change, objectification, concentration and centralization.

According to Peters (1983), EaD emerged in the middle of the last century with the development of means of transport and communication (trains, mail), whose regularity and reliability allowed the emergence of the first experiences of teaching by correspondence in Europe and the United States.

Among the principles of the Fordist model, Peters identifies three as the most particularly important for understanding EaD : rationalization, division of labor and mass production. Furthermore, the teaching process is gradually being restructured through increasing mechanization and automation.

Based on his analysis of distance learning as the most industrialized form of education, radically different from other conventional forms that still develop using artisanal methods, Peters proposes the following definition:

Peters' analysis was harshly criticized, especially by members of the English Open University , an institution of great national and international prestige. EaD representatives from Australia also participated intensely in the debate, seeking to outline paths and models of change and overcoming those based on industrial sociology paradigms.

It can be said that, since the 1980s, two predominant theoretical orientations ("philosophies") have clashed or coexisted in the field of education in general and Ealem in particular: on the one hand, the Fordist style of mass education and, on the other hand, the other, a more open and flexible education proposal, supposedly more suited to new social demands. These two trends coexisted comfortably, but from the 1990s onwards, industrialist logic began to lose ground, being perceived as a threat to

"less technocratic and more humanistic qualities" envisioned as possible based on theories of postmodernity and post-Fordist models of industrial organization. Most scholars agree that distance learning objectives and strategies are being redefined based on analyzes and criticisms guided by postmodern and deconstructionist paradigms. This redefinition is towards openness and away from "mass behaviorism".

To better understand what is at stake in this field of education, permeated by theoretical models from other

Campos, it may be useful to clarify some of these concepts, transposed from the fields of industrial sociology, economics and management to the explanation of educational phenomena.

Fordism was the dominant industrial model during the 20th century, until successive crises and transformations of the capitalist system demonstrated its exhaustion.

Fordism, which proposed mass production for mass markets, was based on three principles: low product innovation, low variability of production processes and low work responsibility.

According to the Australian experts mentioned above, with the crisis of Fordism, new models of industrial production emerged with the aim of increasing efficiency based on the intensive use of the new possibilities offered by technology and new forms of work organization resulting from this: neo-Fordism and post-Fordism. Fordism

Neo-Fordism, identified as the "Japanese model", relies on strategies of high product innovation and high variability in the production process but retains the strategy of low labor accountability from the Fordist model. A system of "greater labor exploitation in which employees suffer higher levels of stress and responsibility".

Post-Fordism appears as a form of capitalism of the future, "fairer and more democratic", and also proposes innovations in the first two factors: high product innovation and high variability in the production process, but it goes beyond neo-Fordism and invests in accountability of work.

To understand the influence of such economic and management models in the field of education, and in EaD in particular, it is necessary to remember that the great economic development of the post-war capitalist period was characterized by the increasing penetration of theoretical models and economic practices in other fields of social life. In that period of great expansion of capitalism, the industrial paradigm inspired the actions of the welfare state, meaning that public services were also organized on a Fordist basis, that is, in a rationalized, planned, large-scale, mass manner.

In the field of education, this "mass" logic will be evident in the expansion of education provision, universalization of primary education and then secondary education, and in the strategies implemented. Also part of this picture is the emergence of a new discipline, which will transpose industrial models into educational processes: educational technology.

The Fordist model extended beyond the limits of the production of consumer goods, becoming a political discourse, a form of State action, almost a lifestyle:

Education is no exception in this general picture of the prevalence of economic models and, in the specific case of EaD, it is a type of education in which Fordist models proved to be very appropriate, as Peters stated.

From the 1970s onwards, the Fordist model of industrial production was no longer able to ensure operational success for many reasons.

In education, the Fordist model seems less and less adapted to respond to new social demands:

One way to overcome this impasse would be to consider EaD not as a secondary sector activity, but as a

service provision activity. From this perspective, the logic of personalized adaptation to the customer's interests is predominant and replaces the logic of mass production of standardized products (TRINDADE, 1998).

Applied to the organization of distance learning systems, Fordist strategies suggest the existence of a highly centralized provider, exclusively in national distance learning, making economies of scale through the offering of standardized courses for a mass market and thus justifying a greater investment in more expensive materials.

As Peters (1983 and 1989) showed and Rumble (1989) analyzed e.g. criticized, EaD can be seen as a product and a process of modernity: its basic characteristics resemble the characteristics of modern societies with mass production and highly developed consumer and management cultures (EvANs, 1995; GIDDENS, 1994).

In the "new times" of capitalism, these different economic paradigms coexist in society, in the process of economic production, and their impact on education is characterized neither by exclusivity nor by a necessary and predetermined evolution (RENNER, 1995; STEVENS, 1995). As we know, the field of education is extremely complex and highly susceptible to change, and this confusion of orientations and paradigms signals the need to more clearly define the field of EaD and open learning (AA), seeking to escape economic models.

Farnes (1993) suggests that the different phases of production correspond to four stages of the educational sector: from the artisanal model to elementary mass education, followed by secondary mass education and, as an objective yet to be achieved, higher and continued mass education. According to this author, the high degree of industrialization of education interferes with assessments of the quality of teaching. Drawing attention to the fact that conventional education is also industrialized (mass), he highlights that failure to recognize this fact tends to exaggerate the differences between conventional and distance learning, which can lead to unjustified considerations about differences in quality.

Making an analytical review of this debate, in an article whose title summarizes the issue ("Have the shifting sands of Fordism results on the ground lost or ground gained for distance education?"), Stevens asks: if Fordism is not satisfactory for current economic conditions, what conditions are changing and to what extent are these changes relevant to EaD? His work seeks to reveal the conflict underlying EaD in its search for answers paradigm years of industrial sociology:

Due to its importance in distance learning practices, the role of the Fordist model in the field of distance learning has been criticized even by experts from universities considered typical of this model. As UKOU's Rumble (1995) rightly notes, the most important problem is the fact that few distance learning systems are actually serving mass markets. Although recognizing the positive aspects of the Open University in terms of cost/efficiency, this author criticizes the

"inflexibility of an exclusive and specialized provider (single mode), vertically integrated and draws attention to the fact that, in the practice of most distance learning institutions, pre- and post-Fordist artisanal practices coexist and mix with the Fordist model .

The application of industrial and behaviorist models to EaD not only means the passive character of the student considered as an object and as a mass audience, but also involves the teacher: "Proletarianization, deskilling, division of labor, democratization of the work space and production new are aspects of industrialized education that equally involve the teacher and the student" (RENNER, 1995, p. 292).

In general, new forms of open education use distance learning practices to meet the diversity of curricula and students and to respond to national, regional and local demands. The economic imperatives are present, since open education constitutes a specific market segment that has global potential.

With technological advances and transformations in work processes, the long-term trend is for education, including distance learning and conventional teaching, to become a complex organism of open education (RAGGAT, 1993; EDWARDS , 1995).

According to Edwards (1995), open education is a consequence of postmodernity. This author places the recent interest in the debates surrounding Fordism and post-Fordism in the midst of a crisis in the social sciences, which are suffering from a "loss of faith in their ability to describe the world as it is" and which should "go beyond the boundaries of disciplines" to try to "capture existing trends within the different areas of interest".

It can be said that industrial sociology models penetrated the field of open and distance education through two paths: on the one hand, changes in economic production and work organization caused changes in demand; on the other hand, there was a great influence of these models on the internal organization of educational institutions, with a significant impact on their conceptions and strategies educational.

From the 1990s onwards, social and economic transformations accelerated the gap between the teaching offered by educational systems and social demands. If in the post-Fordist model of industrial production work processes are increasingly governed by forms of flexibility, then greater emphasis is placed on the worker's need for multiple skills (multi-skilling), in nuclear and transferable techniques, in less segmented tasks requiring teamwork.

It is necessary to remember that the growth and diversification of the demand for education and training is part of the more general changes and puts pressure on educational institutions, creating difficulties in efficient service through traditional means, which leads systems to adopt more flexible forms of management in their internal organization and CV production and distribution strategies.

EaD model has been identified with the Fordist models of industrial production as it presents the following main characteristics: rationalization, accentuated division of labor, high control of work processes, mass production of "educational packages", concentration and centralization of production, bureaucratization. Critical analyzes by the aforementioned authors point out its main negative aspects: disqualification of academic and technical staff at institutions, dehumanization of teaching with the mediatization and bureaucratization of teaching and learning tasks.

Furthermore, in purely economic terms, this model would tend to be exhausted due to its inadequacy to the new demands arising from economic and technological transformations. In the same way that in the company, management models lead to changes in work and management processes, in the educational field, and in EaD in particular, the model of the large specialized provider, producing standardized education for a mass market, would tend to transform itself. if. Adapting services to the individual profile

can be achieved by dividing education and training services into smaller modules, which would facilitate the choice and composition of a personalized "menu" (TRINDADE, 1998).

Despite the discourse of experts in search of theoretical principles specific to distance learning , the relationship of influence seems to continue: new forms or new models of AA that intend to indicate the paths of this modality of distance learning will seek inspiration... in the paradigms economics and industrial sociology, particularly in post-Fordism which, with its great innovations — accountability of work, flexibility, smaller production units and segmented markets, appears as a more democratic and open form of capitalist production.

The post-Fordist strategy is characterized by high levels of the three variables: product innovation, process variability and work responsibility.

A post-Fordist model of distance learning would have to be decentralized and maintain integration between different modes of study (conventional and distance learning). The academic team should maintain control and autonomy over their courses and thus be able to quickly adjust curricula and methods, meeting the changing needs of students (CAMPION, 1993, p. 194).

Post-Fordism is characterized by the rupture of hierarchical and bureaucratized industrial structures. The process of decentralization and horizontalization of management is associated with a less bureaucratic and more entrepreneurial model of organization and an emphasis on autonomy, initiative and flexibility as opposed to the legal and rational routine of Fordism.

According to Edwards (1995), distance learning , with its emphasis on providing distance learning opportunities, is consistent with the Fordist model of mass production and consumption. Discourses on AA, on the contrary, place the emphasis on specific needs and/or available markets and the means necessary to serve these markets. This is the fundamental difference between these two models: the emphasis on demand, whether from the point of view of the production system or from the perspective of the demands and expectations of the student, considered a consumer.

" This may also mean that educational institutions incorporate forms of flexibility in managing work processes found in private companies. According to Trindade (1998), considering the provision of distance learning as an activity in the tertiary sector, services, and not as an industrial activity would better incorporate a logic of more individualized service to the interests of the clientele, from a perspective of offering diversified services that the student can organize according to their needs and expectations.

Although the emphasis on technology can be understood as a form of determinism, one cannot make the opposite mistake, which would consist of minimizing its importance, since today, more than ever, technical progress shapes the social and economic processes of globalization. , of transformation of time and space relations and many others that are located within a larger process, which is the restructuring of contemporary capitalism, with the flexibility of processes and labor markets, and the variability of products and consumption patterns.

The "new times" of capitalism mean a restructuring of the economy, based on post-Fordist principles, at the same time generated and made possible by the availability of new information and communication technologies (NICT), corresponding to the collapse of the "certainties" of the golden years of the post-war (GIDDENS, 1994; EDWARDS, 1991e 1995).

In such a context, it is worth asking whether the expansion of AA would not represent a similar change in the field of distance learning , a mere adaptive reflection of educational and training principles and systems to market imperatives. Which could mean that the progressive and optimistic discourses about the democratic and emancipatory possibilities of the AA would represent a new educational alibi, legitimizing the new phase of liberalism.

The new post-Fordist principles involve more flexible industrial production systems, design oriented to the desires and needs of consumers, dispersed in specific segments of a globalized market.

The economy's needs are, therefore, for greater flexibility and innovation, which leads to the emergence of new forms of work organization and management. "Flexible" workers with multiple skills appear to be the key factor in these changes. The consequences for the field of education are clear: the need to radically reformulate initial training, to develop integrated lifelong training actions, and to transform workplaces into learning organizations.

Analyzing the case of England, Edwards (idem) identifies three crucial areas in which the reflection of changes in the economy on education and training policies clearly appears: emphasis on the need for a "flexible" workforce, highly qualified and with multiple skills ; development of national qualification parameters, giving employers more power in defining qualifications; and guidance for the development of AA programs, to facilitate training in the workplace and in an individualized and "flexible" manner, avoiding meetings and discussions among employees.

The author presents some concerns regarding this

model. First, he favors increasing employer control of "post-compulsory" education and vocational training. Furthermore, AA appears to enjoy great popularity among employers because it allows employees to undertake training during their free time, without taking time off from work, and allows employees a significant level of control over relation to the training contents. He believes that saying AA is a progressive branch of education and training is a fallacy that needs to be challenged. For him, the AA "lost the innocence" attributed to it by its adherents "the AA provides the theoretical perspective and legitimization of this post-Fordist change" (idem, p. 39).

This vision of the future, typically neoliberal, which Edwards considers as "economic Darwinism", appears as ineluctable and requires education systems to adapt to it.

The data of reality, however, tend to contradict this optimistic vision of a radiant future modeled by neoliberal post-Fordism. A radical segmentation of the active population could correspond to the expansion of this production model: more pessimistic estimates calculate that only a minority (25%) of the workforce will be made up of workers with permanent jobs in large companies and protected by collective bargaining agreements; another minority (25%) will be peripheral workers, with low-paid, precarious and unskilled jobs; while around half of the active population will be underemployed, unemployed and marginalized workers, with occasional or seasonal work, mainly in the service sector.

If these predictions are true, this would mean that the model applies to a significant minority of the workforce, who would have to maintain their jobs through flexibility and continuous training, while the vast majority of potential workers will need to be extremely flexible to cope with their precarious situation of structural unemployment.

multi-competent workforce, building a more open and democratic capitalist mode of production, would then constitute a deception, in the sense that the "minority experience is being constructed with the norm".

The consequences of these issues in the field of education, and in EaD in particular, are extremely important, because, in the same way as in work processes, the individual would be considered responsible for their success or failure in adapting to the new rules of the work and technology, whether or not they are among the minority of privileged workers with jobs, also in the educational field the individual would be responsible for carrying out their own training, constituted à la carte, according to a wide menu offered by a set of producing and distributors of courses and materials.

In this framework of possibilities, by magic, structural unemployment and the weakening of the relative weight of the labor factor, essential elements of late capitalism, and the policies that favor them, are displaced from the public sphere to the private, individual sphere.

Learning Coordinator (Teacher)

The learning coordinator is a teacher with extensive knowledge in the subjects that make up a particular course. He may or may not be the author of the course.

The learning coordinator can be, at the same time, author of the content and coordinator of the learning process for virtual students.

Teacher-Tutor

It is up to the teacher-tutor to mediate the entire development of the course. He is the one who answers all questions presented by students, regarding the content of the subject offered. He is also responsible for mediating student participation in chats, encouraging them to participate and complete their tasks, and evaluating each person's participation.

Each person's doubts must be disclosed to all participants in an appropriate environment.

The tutor-teacher can also be given the responsibility of evaluating the students under their tutelage.

The evaluation criteria for non-undergraduate courses, given that art 7 of decree no. 2494/98 determines that evaluation be carried out through face-to-face exams, depend on the teacher's planning.

The evaluation may have as criteria the level of participation in chats and the forum, the time the student remained offline, the questions sent to the course, the work carried out, self-assessment, tests, exercises, etc.

Ideally, the educational institution should have uniform evaluation criteria for all courses offered.

Environment Advisor

The environment advisor is the computing specialist. He must have extensive knowledge of the virtual platform that the courses will use, as one of his functions is to guide students to use the course's virtual environment. Problems with access, printing documents, receiving and sending emails and everything related to the machine are related to the environment advisor.

Course Presentation

Normally the presentation of a course is sent using a specific form, containing:

- Course name
- Author's name
- Name of the responsible teacher
- Course objectives
- Justification
- Workload

- Content of the course subject or subjects
- Material for direct consultations
- Reading suggestions
- Bibliography

Types of Distance Learning Course

1. Open Courses

These courses, aimed at the community in general, university students, seniors, etc., offer content linked to general areas of knowledge. Normally, the prerequisites for taking them are minimal and depend on the content.

2. Update Courses

Aimed at professionals in general, higher education students and those who have already graduated, the content of these courses seeks to address professional development, corporate training, unions and associations, etc.

Improvement courses

The duration of these courses, aimed at professionals and focused on specific areas of knowledge, allows the student to later validate credits in lato sensu specialization courses or become professionally qualified in specific areas, in accordance with legal provisions.

4. Undergraduate Courses

These courses, whose prerequisite is completion of high school, are aimed at everyone who wishes to obtain training in Higher Education with qualifications in one of the various professional areas.

5. Specialization Courses

Aimed at higher education professionals, with an emphasis on specific areas of knowledge, the specialization courses are organized in such a way that they cover a workload of 360 hours, corresponding to 30 credits of 12 hours, distributed over the number of subjects according to the design of the course.

6. The Resources of an EAD Environment

The resources of the EAD environment can be organized into four groups of tools:

6.1. Coordination Tools

These tools organize and support the dynamics of a course and are used by the teacher to provide teaching material to support students' activities. It is possible to find several tools in virtual learning environments, which, in general, are named according to the functionality assigned to them. They offer resources to inform, guide and evaluate course development and can be divided into:

The. Course organization or process coordination tools

These tools are used to inform students about the following items, among others: course procedure, duration, course objectives, what is expected of students, evaluation. These tools include resources for the structure of the environment, course dynamics (course plan) and agenda (disclosure of the work proposal, which can be organized into modules, weeks, etc.).

6.2. Communication Tools

Include internal discussion forums, chat and mail to the environment.

6.3. Student Production or Cooperation Tools

Space for publishing and organizing student work, through portfolio and diary. These tools also include the wall (space for small messages) and the profile, a space for presenting course participants. The groups feature allows students to organize themselves and offers a common publication space, the group's portfolio .

6.4. Administration Tools

They are support tools for institutional managers in managing the administrative part of the course. Let's look at the main ones.

The. Course Management

It offers resources to the course coordinator and trainers to manage the course schedule, the tools available in the environment, registrations, etc.

B. Student Management

Provides access to reports on access, attendance at environment and use of tools by users.

w. Tutoring Support Tools

In the case of the teacher-tutor, they allow him to transfer all the teaching material he needs to the environment, update his agenda and enable other tools. In the case of the trainer, it also allows him to transfer all the teaching material he needs to the environment, update the agenda and dynamics and select tools.

Media-Education

Media-Education is a field of studies whose main objective is to analyze and understand the role that the media plays in society and the relationship between media and education.

It is also a field of practice, as it proposes the development of educational actions with the aim of improving the quality of relationships that people establish with the media. It arose from the need to produce reflections and actions in the face of changes perceived in society resulting from the participation of mass media in political, economic and social life and the strong presence of these media in everyday life (RIVOLTELLA, 2001). At the beginning of the 1970s, encouraged by organizations such as UNESCO, education and communication professionals, researchers and political activists decided to implement joint actions with the aim of neutralizing the negative effects of the ubiquity of the media in social life. At that time, the intention was to offer an antidote so that people could defend themselves from the media, that is, to teach them how to see, hear and read what is conveyed by the media, especially younger people, considered more vulnerable to influence. of the media (SIQUEIRA, 2008).

Until then, the press (newspapers and magazines with large circulation and circulation), radio, television and

Cinema were accused of standardizing tastes, lacking intellectual and aesthetic value, inciting violence and consumption, low creativity and predictable content of messages. Culture was thought of as "the best thought in the world" and was radically opposed to the so-called popular culture, for which the media would be the greatest exponent of society's decline.

In a movement that began in the 1980s, and was widely disseminated from the 1990s onwards, researchers began to develop studies and practices aimed at building a more reflective and critical view of the media, also taking into account the point of view of media users.

Among the studies that guide research in media education we find the Theory of Mediations, originally formulated by Jesús Martin-Barbero (1997) and later developed by Guillermo Orozco-Gomes (2002) and others, and the so-called Latin American Reception Studies. The perspective of these authors does not deny or despise the power of the media (CARLSSON; FEILITZEN, 1999a, 1999b), it only proposes to researchers an expansion of their point of view,

in order to understand what subjects do with the media, whether with the content, or the technology that supports them.

The paradigm shift results from partnerships, international events and monitoring the publication of reports and articles written by academic researchers and interdisciplinary research groups (from areas such as Social Communication, Education, Psychology, Sociology and Anthropology) whose results tend to contradict deep-rooted assumptions of the common sense (DUARTE; SANTIAGO, 2007; RIVOLTELLA, 2009).

The idea of childhood and youth as social constructions and not as universal conditions; the perception that there is no total uniformity among the public regarding what is shown on television; the demystification of the belief in the existence of a direct relationship between seeing images of violence and developing violent behavior, as well as the deconstruction of the thesis that the internet is causing the end of reading and the decline of writing, are part of the reflections provoked by these studies .

After all, asks Buckingham (2006), can it really be said that the media would be the dominant cause of problems such as violence, pornography, pedophilia and seduction into consumption? Would thinking about eradicating violence through the extinction of violence in the mass media be an effective solution or would planning alternative preventions, regulating the purchase of weapons, policies against racism and poverty, which often generate violence? Wouldn't pretending that Media Education alone is capable of changing trends and behaviors would be a naive view?

The strength of British and Latin American cultural studies was reflected in media-educational practices. David Buckingham, in 1998, published the article "Media Education in the UK: moving beyond protectionism ". In it, the author defends the abandonment of the idea that educating about the media consists of teaching how to demystify messages. For him, the view that children are just passive victims of the effects of the media should be overcome in favor of a new perspective according to which children form a more sophisticated and critical audience than traditionally thought. Instead of protecting them, it is believed to be better prepare them, train them, guide them, offering support, encouragement and mediation in the ways in which they relate to the media.

This is the perspective adopted by centers such as the Center for the Study of Children , Youth and Media' directed by Buckingham and recognized internationally. On the Center's internet portal, it is possible to access articles and complete reports on both completed and ongoing research. The Center is also involved in publishing guides, such as Media Relate.

Conclusion

we cover some aspects in online Distance Education (EaDOnline). We try to present in detail how it happens. We saw how the notion of humans-with-media can support a vision of EaDOnline that highlights the type of interaction we have with different interfaces used in learning environments.

In doing so, we defend a model for courses that is based on small classes with the possibility of intense interaction with participants. In particular, we show how such a model can have an impact on the face-to-face classroom by allowing the teacher to be practically simultaneously trying online courses and receiving support at the same time that brings innovation to their own practice. In any case, it is necessary to adopt a critical stance. We know that it is not often possible to take courses like the experiences we have had, with small classes and under the guidance of more than one teacher, etc.

We also deal with online practices that are not based on the notion of a course, as is the case of the Virtual Modeling Center, which can be seen as a virtual community under construction that thematizes an important trend in Mathematics Education: Modeling, which is understood as a pedagogical approach in which students actively participate in the development of problems that will be studied in the classroom.

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