The theory of distance education and its complexity

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Abstracts

English

The discussion about the theory of distance education in recent years brought about many questions and created new ones. The form of distance education and the modes of its implementation, especially with the development of technologies, changed its character. For a period of time, this created confusion to the people involved. However, what seemed as confusion was, in fact, no more than a 'bubble which burst' thereby revealing the parameters of a scientific field that is governed by a number of principles, axioms and pedagogical applications. The following text sets as an aim to process and document all these data, in order to put into relief the scientific and methodological dimension of a theory of distance education.

Greek

Η συζήτηση για τη θεωρία της εξ αποστάσεως εκπαίδευσης τα τελευταία χρόνια έχει δημιουργήσει πολλά ερωτήματα διαφόρων τύπων. Η μορφή της εξ αποστάσεως εκπαίδευσης και οι τρόποι εφαρμογής της, ιδιαίτερα με την ανάπτυξη των τεχνολογιών, έχει αλλάξει χαρακτήρα. Μπορούμε να διαπιστώσουμε την ιδιαιτερότητα ότι, ενώ δανείζεται στοιχεία θεωρίας και εφαρμογών από άλλες μορφές και εμπειρίες εκπαίδευσης, διαφέρει από αυτές. Από τη μία πλευρά, η ίδια δεν αποτελεί ένα ολοκληρωμένο τυπικό σύστημα ή βαθμίδα εκπαίδευσης, όπως η πρωτοβάθμια ή η δευτεροβάθμια εκπαίδευση. Δεν είναι εκπαιδευτική πολιτική ή τακτική, όπως η δια βίου μάθηση ή η συνεχιζόμενη εκπαίδευση. Ούτε ανήκει στη σφαίρα της εκπαίδευσης ενηλίκων, η οποία απευθύνεται σε συγκεκριμένες ομάδες πληθυσμού ή ηλικίας και, κατά κύριο λόγο, σχετίζεται με την δια βίου μάθηση και τη συνεχιζόμενη κατάρτιση. Επίσης, όπως και άλλα εκπαιδευτικά επιστημονικά πεδία, δεν αποτελεί ένα σύνολο με οδηγίες του τύπου 'πρακτικές οδηγίες εφαρμογής της' ή 'το αλφαβητάρι του καλού εξ αποστάσεως δασκάλου'.
Η εργασία αυτή έχει στόχο να εναρμονίσει θεωρητικά δεδομένα, τα οποία θα εντοπίσουν τη μεθοδολογική και επιστημονική διάσταση της θεωρίας της εξ αποστάσεως εκπαίδευσης.

Keywords

Theory, discipline, criteria, distance education

Topics of the paper

Introduction

This paper seeks to explore certain logical systems which together comprise a theory and a philosophical approach to distance education. Scientifically and methodologically, these logical systems form those measures, beliefs and values which in theoretical and empirical terms comprise the functional framework for a theory of distance education. As is true of every theory, this functional framework is typified by the existence, documentation and development of its complexity.

These thoughts on the theory of distance education lead us to define a broader-ranging field which, though influenced by a number of other scientific fields and disciplines, constructs its own ontology. This ontology renders it autonomous and independent, and documents a scientific field which bears the seal of the theory of distance education and its applications. In the pages that follow, we shall adopt an approach to distance education in which it is defined not on the basis of a single methodology and conception of realization, but on the basis of a process which allows it to function flexibly, to adapt itself to specific sets of conditions, and to adapt all the educational data it employs in its application to these conditions. This statement forms a point of reference whereby the flexibility of form displayed by this type of education constitutes a flexible approach to distance education.

A few words of clarification

The term 'distance education' was first used in the nineteen seventies. It was officially chosen in 1982 when the International Council for Correspondence Education changed its name to the International Council for Distance Education. The Council is currently called the International Council for Open and Distance Education.

Issues raised internationally in recent years as to the nature of distance education lead us to ask what constitutes a distance education system. Such a system consists of more than a pedagogical framework: there is also an integrated fragile subsystem that supplies the applications of distance education institutionally, organizationally and functionally.

At the same time, distance education applications have featured a large number of models, proving thereby that there is no one way in which distance education functions and can be applied, nor one way in which it can be implemented. This statement stems from certain theoreticians' approach to what distance education is, and from the various definitions and interpretations of distance education.

Distance education stands out in that, while it borrows from the theory of other forms and experiences of

education and their application, it is different from them. On the one hand, unlike primary or secondary education, it is not itself a complete formal system or educational level, and while it is not an educational policy or strategy in the manner of lifelong learning or continuing education, nor does it belong to the sphere of adult education, which is aimed at particular population or age groups and is generally linked to lifelong learning and continuing training. Moreover, like other educational academic fields, it does not comprise a whole with guidelines along the lines of "practical application guidelines" or "the A-Z of the good distance teacher".

On the other, it is neither defined as training requiring specialized capabilities for recipients and those involved, nor is it an educational technology in accordance with which specific techniques and technological teaching and learning applications are--at best—employed.

As a flexible educational application, distance education is linked to absolute freedom of choice when it comes to the means employed in communicating and conveying information. Moreover, in its management of these means and points at which teaching and learning processes are involved, distance education follows an independent route with choices that make it an autonomous scientific and research field within the educational sciences. That it also includes economic and psychosocial elements as well as involving educational strategy and policy only serves to highlight this autonomy. Defining distance education as education in which there is a physical distance between a source and recipients is at best simplistic, and leads to oversimplified misinterpretations of the sort common in the past.

Earlier still, Devlin (1989), in a critical reply to Holmberg regarding the extent to which distance education can be considered an independent discipline, notes that: "the concept of 'distance' is a self-evident though misunderstood point of reference. The concept should be replaced by its geographical and spatial interpretation and provided with a psychosocial framework". Along with the psychosocial framework, it is also in need of a pedagogical and educational dimension which would shed light on a number of teaching and learning issues as well as on educational choices of various types, and which would mark distance education out as an independent field within the educational sciences subject to clear and specific influences from other disciplines which we will analyze below. 'Distance' still defines the geographical and spatial capability of alternative choices; 'education' places it squarely in the sphere of pedagogics, educational institutions and the educational sciences.

Efforts to provide definitions for distance education have revealed its complexity and its ability to adapt to a large number of different forms of educational practice.

It is impossible to provide a definition of distance education which is acceptable across the board. What is possible is to identify certain core criteria for its educational, pedagogical, spatial and administrative form and, based on these, as we shall see below, to forge a definition to meet all possible needs. As we have already noted, the definitions proposed in recent years differ depending on the needs of those involved, and, of course, on the basis of the re-adaptation over time of the means of transferring information and the corresponding educational quests.

Perhaps the most significant criteria in terms of the help and information they can provide in categorizing the data for a definition of distance education, and of their use to a researcher engaged in moulding an application model, are as follows:

- The student
- The tutor / counsellor
- The learning process
- The teaching process
- The communication process
- The learning/teaching material (its design, development, production and distribution)
- The place
- The time
- The educational body
- Evaluation

All these criteria relating to the application of a distance education model are characterized by their flexibility, computability, user-friendliness and student-centeredness. However, their interpretation is defined and depends on the individual case and educational model in question.

Adopting an approach utilizing pedagogical and educational criteria to produce a definition that largely reflects the philosophy and logic of institutionalized distance education, as it has developed in recent years, defines it as "an educational process, which activates and teaches students how to learn, and how to function independently along the path of exploratory, inductive learning by using creatively all the resources available, as well as all the media transferring information in pedagogical terms" (Lionarakis, 2005).

The theory in outline

A leading Greek dictionary (Babiniotis, 1998) defines a 'theory' as "knowledge of how something happens", or more fully "the sum total of the proposals, hypotheses, principles and ideas organized into a logical system which describes or interprets a phenomenon, fact or mode of action". Which is to say that a body of positions stemming from theoretical and empirical approaches has the dynamic of a theory allowing for composition, hypotheses, principles, ideas and proposals with a view to defining an outline for open distance education. That is what our approach seeks to do: initially, to define the elements of which the theory is composed, then to explore the constituents of distance education, and finally to combine the two. This approach cannot be static and one-way from the start, meaning that the results of our approach will be dialectic and two-way. The concept of axioms and their utilization in exploring and shaping cannot be replaced by dogmatic definitions. Moreover, an analysis of the above elements reveals a continuous yet dynamic complexity typical of every attempt at outlining pedagogical and educational interpretations.

To hold, a scientific theory cannot be dogmatic in form (Russell B., 1971). It must take shape through the arrangement of axioms and thoughts which compose all the assumptions required for it to operate in theory and in practice. At the same time, it must be subject to an endless barrage of doubt from every academic angle, and tested in practice until a new improved theory emerges to enhance, replace or differentiate itself from it.

Demou (1990), interpreting Popper (1980) and Herrmann (1978) on the construction of scientific theories, stresses that "only a theory that has established itself and holds can be applied, which is to say that the technological (methodological) practices of the position can be revealed. These technological positions, which is to say the practical problem-solving measures, cannot be derived from a logical transformation of

the theory. Even when there is a current theory on practical problems, the solutions (technological positions) to these problems must emerge through research, apart from the theory, and not be deduced from it solely as a logical consequence". These solutions must to some extent be led by theoretical hypotheses. The technological positions, which also define the empirical methodology of the knowledge fields, must function and be applied and tested so as to be compatible with the theory in question. As Demou goes on to mention, the issue here is that should the theory, the technological positions and the methodology be incompatible, one of two things holds true: either the theory is not 'true', or the technology is not as effective as the theory supposes. He concludes by noting that for every current theory there must be an empirically and methodologically tested technology, or, put differently, every effective technology presupposes a current theory. Theories are always tested empirically as they take shape. To be tested, it must become operational: to define certain presuppositions that will permit it to function and to be applied.

Once science was established, scientists' first endeavour was to keep the positions and principles of every science separate, while simultaneously creating a common hub of research interest in the nature of the educational process (Carr & Kemmis, 2002). Although this process lasted many decades, because, stemming as it did from the development of psychology, education took time to establish itself as a structured theory, it succeeded in the early 20th century in developing in tandem with new sciences such as medicine, psychology and sociology.

Hirst (1966) defines the features of this educational theory thus:

- It is a theory within whose framework principles defining what must be done with regard to a series of practical activities take shape and acquire legitimacy.
- The theory *per se* does not constitute an autonomous form of knowledge or a science in its own right. It enjoys neither exclusivity, nor its own conceptual framework with its own logical features, nor special tests of validity. Many of its central questions are in actual fact ethical in nature, and relate to a specific level of generalization; meaning they are questions that focus on educational practice.
- Educational theory is not a purely theoretical sphere of knowledge since it aims at the formation of practical principles. Nonetheless, it is complex in nature, just like other, similar scientific fields.
- The legitimacy of educational principles rests entirely on forms of knowledge which drawn directly on fields such as the natural sciences, philosophy, and history. It requires no theoretical composition above and beyond these forms of knowledge.

In the case of distance education, with the exception of Holmberg's theoretical analyses, recent years have not witnessed the development of an analytical, philosophical approach to theory formation. The reasons why this is so may well also explain the lack of systematic philosophical analyses in general for a theory of distance education. These reasons focus on the nature of distance education, given that the emergence and—especially--the development of distance education stemmed from various scientific and philosophical views and practices. There can be little doubt, therefore, that distance learning began with the educational sciences, developed in tandem with theories of communication and the mass media, was enhanced by the development of new approaches to the educational sciences (counselling, adult education, anti-authoritarian and collaborative learning, lifelong learning, new issues raised with regard to theories of learning and teaching techniques/theories, etc.), before finally entering into an intense discourse with information and communication technologies (Figure 1). The main reason is the continuation, and ultimately the completion, of the quest for thematic convergence with regard to the nature of distance education, as well as its delimitation in a structured and clear theoretical and empirical dimension.

Before we embark on a journey through the complex aspects of distance education, we should clarify certain points that will help us have and understand a common language with common symbols and semantic references. There points are centred on the following thematic spheres:

- On the relations that take shape as part of education—conventional, but distance, too--pedagogics, theories of learning, communication, the sociology of education and its technologies;
- In the concept--interpretation—delimitation—definition of distance education itself;
- In the ways in which--and criteria with which--we select, employ and define concepts such as teaching, learning, education, open education, pedagogics, communication, evaluation, counselling, research, teaching materials, learning materials, learning and teaching environment, interaction, feedback, design and involvement, student, teaching, teacher, guidance.

It is very wrong to view distance education fragmentarily and independently of other scientific fields or academic disciplines. Just as the interpretation and understanding of conventional education and pedagogics reference and are akin to a series of other academic fields, so too with distance education. Being at a 'distance' does not legitimize it as something apart from conventional education. It is still education, and still contains all those elements that define it at every stage in its application. The difference is that the concept of 'distance' brings certain new elements into play that need to be defined with the utmost care, and which must satisfy the requirements and preconditions of any educational schema which functions at a distance. And there are many. They apply a strategy that forces them to create educational models adapted to their needs, whether these are open universities, distance education units within conventional universities, educational schemata at a primary or secondary level, or professional training. This is the only explanation for the wide range of distance education institutions which are often significantly different in terms of their infrastructure, teaching, student support, choices regarding the means of conveying information, etc.

It is these new elements that define distance education which we are called upon to define, analyze and differentiate so that the theory and practice of distance education can achieve integration as a structured and expanded scientific field.

Distance education is an amalgam of various forms of the educational act, which led, through a prolonged practice of application and through maturity, to a contemporary and integrated educational whole. Older educational forms including adult education, education by correspondence, anti-authoritarian education, open learning or open education, part-time education, lifelong learning, technology-assisted or based education, counselling etc. whose features developed gradually over time, led to a contemporary system of education capable of functioning with all the requisite features of a conventional educational system.

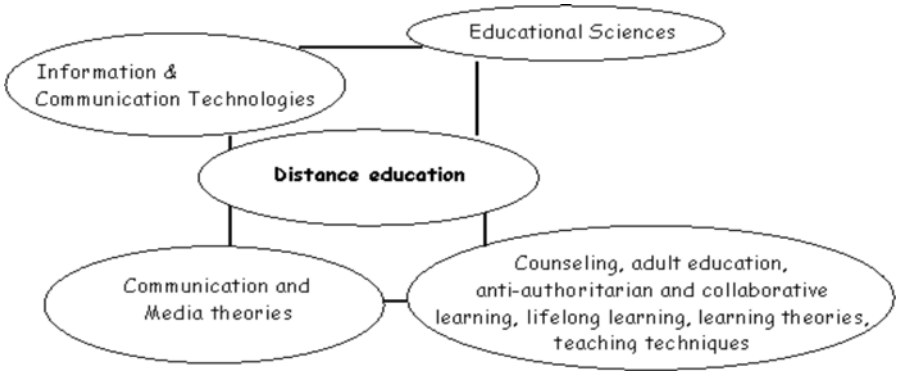

Figure 1.

Since the Eighties, theorists of education, and especially of distance education (Bääth 1979, Perraton 1981, Peters 1983, Stewart 1981, Holmberg 1986, Keegan 1983) attempted to create the knowledge base required to form the foundations of a theory of distance education. Holmberg (1986), in particular, writes that: "a theory for distance education can be defined as a series of hypotheses linked together logically to explain and calculate events and applications. These hypotheses are of the type "if A then B", or "the greater A is, the greater/smaller B is".

The rapid developments in distance education in the years that followed (1985-2000) witnessed attempts of this sort. The result was independently shaped by the pace at which distance education was developing and left little time for theoretical analysis. The number of academics and researchers involved in distance education increased sharply with the parallel development of technologies and the creation of far more direct links to education. The fact that a large number of researchers and academics from parallel or related scientific fields considered distance education close to them, or--looked at in another way--as a continuation of their academic activities, was sufficient to create a new environment marked by the obvious absence of a clear-cut academic identity. That is an especially powerful reason why a considerable proportion of distance education researchers come from spheres of knowledge beyond classical pedagogics. The results of the new – in the sense of its scientific identity – sphere of knowledge have led, and continue to lead, to the need to discuss an integrated approach to a documented, structured and clear-cut theory of open and distance education.

However strange it may sound, another reason we have ended up where we have is the label applied to the sphere of knowledge itself: "open and distance education". The three key terms--'open', 'distance' and 'education' (the first two, in particular)--are used broadly and without the user having to seek recourse to a specific framework for practical applications and theoretical developments. Indeed, these terms can be referenced with particular ease and without mention of science. Institutionalized bodies are neither equipped with monitoring mechanisms for illogical use, nor aspire to roles of this sort.

In 1983, Moore published a research paper in which he surveyed and analyzed 2000 articles relating to adult, open, independent, informal education. He concluded that all the above present two significant variables for research: infrastructure and autonomy.

Saba (2005) argues that most technological institutes in the US approach distance education through a natural sciences perspective and not as an integrated system. It is indeed the case that a perspective which begins in various technological institutes interprets distance education mechanistically as a practice in which the teacher and the learner are at a distance in spatial and temporal terms. Though this perspective is wrongly conceived, it does constitute a half truth. The contemporary interpretations and approaches of recent years define distance education in a social context. More specifically, the relationships that develop in an educational environment between those teaching, those being taught and the educational material, comprise an exchange which functions in social terms.

Factors which have affected the development of distance education

Carr & Kemmis (2002: 158) argue that "it is big mistake and a bad evaluation for us to assume that the solutions to educational problems can be explored in a theoretical environment other than the social and historical environment in which they belong". Consequently, educational problems cannot be solved by changing theoretical solutions into technical recommendations which can be applied passively and mechanistically.

Every educational application, prospect and development that has been applied in an environment commensurate with its goals is defined by the social and historical context from which it emerged. It is social and historical factors that have defined every educational application. Though this may have remained inactive in some cases, lost its impetus for various reasons, or developed over a period of time not defined by its creators, its identity in every case was moulded by particular social and historical factors. Incidentally, if these factors were accompanied by other influences not included in the curriculum or in their initial plan, this would constitute a clear historical coincidence which over time aligned itself with the initial factors.

The historical reforms introduced in socially active periods are of particular interest to the researcher delving into the history of distance education, and played their part in creating a climate of social and educational change.

Saba (2005) refers to the factors affecting the recent development of distance education in the US and focuses on three interlinked events:

- technological maturity
- the end of the Cold War
- the recession of the 1990s

These three factors produce a microscopic--though also macroscopic--interpretation, which is worthy of

note because in it the social dimension of distance education is made clear in a given geographical area. However, these factors are not of relevance to the US alone, and provide various applications and explanations on an international level, too: The maturation of technology relates to its global market mobility and has indeed influenced a number of educational applications, while the end of the Cold War not only affected US economic funding and the arms industry in general, it also opened up a large new market in Eastern Europe for every branch of technology and encouraged economic migrants, but also people with specialized knowledge in various industrial and technological fields, to emigrate from East to West.

Finally, as Saba (2005) notes, the economic and political recession in the US led to a drastic reduction in defence spending as well as the mass laying off of scientists, engineers and middle management. Various educational institutions which relied on local and state societies for the bulk of their funding found themselves on the brink of financial disaster. Education was one of the first sectors to experience cuts in funding. However, given an increase of some 10% per annum in the student population in most US states (Office of the Chancellor, California State University, 1993), a number of state governors were forced to seek out alternative forms of education. New distance education units were thus brought into being by the drive to increase productivity and cut costs, while a number of institutions of higher education were encouraged to refocus their activities on distance education formations.

Open and distance education: an established scientific field;

From the early Eighties on, education theorists (Holmberg, 1986 and Keegan, 1983) were referring and documenting the existence of a structured and established scientific field answering to the name of 'distance education'. The term 'open' was generally used with reference to the functioning of open universities which applied the strategy and policy of education differently. The scientific field of distance education it describes is defined by two tried and tested academic coordinates:

- scientific research carried out in the field in question; and
- the curricula of institutions of higher education in the same field.

Holmberg (1986) notes that in 1982, there were fifteen recognized fields of research within the sphere of distance education. When describing a scientific field, it is also necessary to identify its goals and to outline the research conducted with a view to understanding it; when integrating it into an academic curriculum, it is doubly essential to describe its educational/pedagogical element, too, in terms of its being taught in institutions of higher education.

His 1982 categorization into research fields and educational academic programmes identified the following subjects:

- A general analysis of distance education, its philosophy and theory
- Undergraduate and graduate studies, as well as student motivation
- Curriculum design and study goals
- Curriculum development
- Media
- Chronologically spaced, not continuous, interactive communicational tutorials
- Lifelong lessons
- Counselling
- The design, organization and administration of educational institutions
- The economics of distance education
- Evaluation
- The history of distance education
- Distance education in the developing world
- Guidance for distance education teachers
- Research into research

It is fascinating to view the fields of research into distance education as they stood in 1982 in light of the current situation and the host of new factors—especially, though not only technological--that have emerged and enriched the field. Of course, the fields have been reshaped: new multidimensional elements have emerged, and old elements have now acquired a separate or different role.

An enormous number of fields of knowledge and disciplines have played a central role in making full use of the above points and their academic practices. Approaches from the spheres of pedagogics, the educational sciences, sociology, organization and administration, economics, communication and information technology have all boosted distance education along with its research and educational applications.

Criteria for a theory of distance education

According to Popper (1980), theoreticians and researchers aim to locate and explore explanatory and interpretative theories based on true logical thoughts; which is to say they aim to explore theories which describe structured qualities of the world and which, with the help of certain initial preconditions, allow us to make conclusions that demand explanations.

Demou (1990), interpreting the models proposed by Popper (1980), Albert (1972) and Opp (1972), states the need for certain preconditions and elements without which we are not in a position to establish a scientific theory. Accordingly, a theory must "inform", must be "true" and "clear", must be in the form "if this, then that", and be "free of social and moral rules and values". We shall return to these preconditions once we have examined the approach taken by Holmberg (1986) with regard to the formation of a theory on distance education. Holmberg's approach is primarily of interest in allowing us to examine the specific features of distance education. We shall have to approach Demos' preconditions on the basis of the features to be analyzed in order to be ready to draw up a plan of action. A nodal point in both approaches is the consistency of "if A then B" or "the larger A is, the larger/smaller B is" hypotheses.

It would be at best unfair to omit to mention that Holmberg's approach is based on principles current in the early 1980s, when certain preconditions of an educational nature were in force which also shaped his philosophical approach. Fully aware of the significance of this, we should note that a series of fundamental principles and conditions then current have since acquired a different weight. And there is something else: key elements of distance education defined on the basis of the educational background of Anglo-Saxon societies in the planet's Northern hemisphere and considered self-evident educational criteria at the time are not self-evident in the southern hemisphere or in other areas with diametrically opposed educational backgrounds and academic environments.

Holmberg sort the points involved in producing a theory of distance education into three categories:

- General principles
- Methods and means of distance education
- Organization

Though we will not dwell on these points, which are beyond the ambit of the current paper, we can take time to define those points which have been largely responsible for moulding the core of distance education in recent years, and which are not a functional element of Holmberg's approach. That he does not touch upon issues relating to the use of communication and information technology in the distance education process is typical and understandable given when he was writing. Also typical—though not, in this case, understandable—is his point to mention not the interaction between those being taught and the tutor/counsellor/educational institution, but the interaction between those being taught and the teaching material. Although he does refer to the special educational features of the developed world, he does not focus on typical features of distance education in terms of interactive teaching material and, more generally, on the methodological and qualitative prerequisites of the material. The academic environment and educational background are assigned an importance whose consequences we have witnessed in a number of languages / countries, too. I am referring, as Holmberg seems to be doing, to the lack of structured analytical and scientific writing with references to the Anglo-Saxon methodology which focuses on the explanatory clarity of academic discourse.

Let us return to the approach outlined in Demou (1990), which lists certain prerequisites for our being in a position to establish a scientific theory. According to Demou, a theory must "inform", must be logically "true" and "clear", must be in the form "if this, then that" and be "free of social and moral rules and values". What we do is to implant certain elements of distance education amidst these elements with a view to mapping a theory of distance education for the first time, though with one difference: we clearly diverge from Demos' last point in relation to the theory of distance education. An educational theory cannot and must not be exempt from social and ethical rules and values. Distance education theory is a critical theory which circumscribes all those elements of social thought that define people's values, crises and ethical rules. The theory exists in a context which is addressed by the social sciences. At the same time, the theory of distance education does not conform with normative generalizations which can be used to make specific predictions of a technical nature. Not does it conform to the desires of certain social groups by producing desirable situations and directed critical thought. Rational thought remains scientific thought and cannot be deprived of values, moral laws, or critical and evaluative constituents. In the sphere of social scientific principles, the theory of distance education is clearly rational, demands scientific thought, and forms values and social givens into critical theory.

The theory of distance education is, first of all, **true**, because the positions with which it informs and functions hold as events and facts. They hold, because the history of distance education theory, which is limited to a few decades, has worked effectively and productively while being enriched both by our experiences and by historical discoveries made during those decades (radio, television, video, information and communication technology, enhanced printed material, effective studies and specific curricula, effective evaluation of the act of education and its methodology etc.). Distance education has functioned effectively on the basis of its independent and critical scientific field, which has been enhanced by related scientific fields and by the application of specific tried and tested criteria, methods and means.

It also **provides information** on the whole range of its activities, on the field of knowledge it negotiates, and on the educational conditions and experiential applications with which it works. Together, its research, theoretical approaches and integrated academic functions compose a knowledge field which has provided samples that go a long way towards documenting and explaining phenomena, events and problems.

The theory of distance education is **clear** with respect to the manner in which its particular features and content are depicted. Its contribution to the points of clarity became boundless when the theory began to function and develop worldwide, having delimited and interpreted a series of concepts, key words, learning and teaching processes and educational terms which form the core of its tools.

Distance education theory is in **the form "if this, then that"** because it is clear that the 'if' precisely determines the 'then'. At this point, the dimension of measurability--a prerequisite for its efficacy--imposes a logical consistency beginning with its theoretical and empirical points of reference. In the formation of a scientific application, distance education records the "if this" and ensures that it is availability when it comes to confirming the "then that" in practice.

As a critical social theory, the theory of distance education **is not free of social and moral rules and values**, and can be described in advance or in retrospect as good or bad, beneficial or not, proper or improper.

In addition, it can be assessed in terms of its determinism in relation to moral questions, because, being independent of rules and values, it also functions as a specific scientific field with specific educational applications. Interpreted in social terms, it boasts a potential which assigns it a social role and a responsibility to achieve its goals and maximize its effectiveness. Its availability in lifelong learning and its functionality in the formation of democratic educational practices in issues relating to its accessibility and flexibility to the benefit of students, makes it intensify its presence and its necessity. Yet this *ab initio* potential in no way effects its moral rules, actually rendering it independent and autonomous in its scientific activities and applications.

A theory on education is also a social theory which defines a series of social actions and which must respond to the major issues facing society. At the same time, however, we have reached the final point which determines the social conscience of a scientific theory. The exchange between a scientific and social theory on the one hand and social facts, moral laws and accepted values on the other, does not legitimize arbitrary action taken in the name of scientific thought; it makes it the judge of social and educational applications. The application of and search for scientific thought is not a technical matter; it does not seek to answer "what happened" or "how something happened". A structured theory of distance education provides an answer to the question "what should happen", "why it happened" or "what should have happened"

Conclusion

This attempt at outlining a distance education theory synthesizes theoretical approaches and experiential applications which have arisen from the research conducted by the international academic community and out of the first stages in the creation and operation of several Open and Distance Universities. This approach undoubtedly constitutes a step towards the formation of a theory of distance education, which is apparently passing from childhood to a prestigious maturity of proven scientific applicability. Its academic

substance will inevitably be enriched by the steps it takes in the future; steps which will certainly render it more effective. Moreover, its educational practices and all that they entail will allow an analytical and interpretative mapping of distance education theory to be drawn in the near future.

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