Ph.D. Nevenka Tatković
Teacher Training College / Faculty of Philosophy, Pula
Maja Ružić, prof
Faculty of Philosophy, Pula
Sanja Tatkovic
Faculty of Philosophy, Rijeka

OPEN DISTANT LEARNING: PEDAGOGICAL TERMS OF REFERENCE AND DILEMMAS

Abstract
The paper first presents the essential viewpoints of general caracteristics of open distance learning (OLD) and the short historical origins. The second part presents some pedagogical terms of reference for Open distance learning as the quality of ODL, the criteria of successful ODL (planning, successful interaction, work and emotional climate, satisfying needs and collective interests), the legal standards required for its realization. Open distant learning is then viewed in terms of its possible application to particular levels of education. In accordance with the European processes of integrated and homogeneous education, the third chapter presents the essential viewpoints and dilemmas covering the establishment and development of new models of open distant learning in Croatia.

Key words: open distant learning, advantages, practice, dilemmas, pedagogical references.

INTRODUCTION

The ever-increasing interest towards open distant learning has already begun to change the face of education. World experts have predicted that distant learning will be the next major wave in education in the near future, taking into consideration that this form of education is already developed in some countries. Open distant learning is not only a challenge for its users, but for the people who create learning programmes. Results gathered form numerous studies into this field show that open distant learning has successfully overcome the shortcomings of traditional methods of teaching and learning, as well as revealing the many advantages of distant learning, the most significant being practicality, flexibility and effectiveness. In addition to learning at their own tempo, students also choose the time and place to learn which best suits them, discover programmes which interest them, and get to participate in the most prestigious and quality programmes created by internationally renowned experts. Distant learning students have the opportunity to choose a learning strategy most suited to their abilities, while education is streamlined to meet the needs of the individual in question.

Distant learning has incited major changes in traditional education, making it more interesting. distant learning has provided the answers to old questions regarding education while posing new ones:

- What can be done to make distant learning available to everyone?
- How can technology be used to achieve learning goals?
- How can we identify our own learning goals?
- How can we maximize learning success and achieve maximum results? (Dringus, L.P. 1995, pg. 10)

1. GENERAL CHARACTERISTICS

Open Distant Learning, or ODL, has often been defined in literature as a collection of new approaches regarding the distribution of learning material for students spatially distant from their professors. The main idea behind ODL was for learning to be organized in such a manner that the greater portion of the teaching process be realized outside of educational institutes. Moore and Kearsley state that ODL is planned learning which is normally performed in a place distanced from learning institutions, whose results require the application of special education and communication technology, and is executed through the application of electronic and other technologies (Moore, M. and Kearsley, G., 1999, pg. 6).

In the *Maryland Institute of Open Distant Learning*'s definition (2000, pg. 3) of ODL, the emphasis is placed on the diversity of models, whose common characteristic is the physical distance of professors from all or some students. This type of learning is built upon several central notions of the learning process: the working out and presentation of subject matter, the preparation of materials and their practical application.

Definitions pertaining to this phenomenon are various. However, according to the majority of definitions attributed to ODL, all embrace the following criteria:

1. Students can be in various grades in the same school or in totally different locations, kilometres from each other;
2. Subject matter, information and instructions are conveyed or presented by written or voice messages, video messages and other various computer technologies;
3. Materials are practically applied.

ODL programmes or courses can be adapted to meet students' characteristics, and vary according to the technology in use by the student as well as programme structures and level of supervision of the student.

Taking into consideration the manner in which it proceeds, ODL can be carried out either in a *synchronized* or *unsynchronised* manner. Synchronized refers to both the teacher and student exchanging information at the same time; this can be accomplished by means of a two-way video conference, where both participants send transmissions of their voice and appearance on a back and forth basis live. Telephone conversations, which fall under the category of synchronization, are much simpler in terms of technology.

In comparison to synchronized, unsynchronised exchanges of information do not take place simultaneously. Material can be sent either by means of video messages, computer communication (e-mail, web sites, etc.) or in any other manner, while the student later sends return information to the teacher.

Table 1.

Synchronized and unsynchronized technology for the broadcasting of information

	SYNCHRONIZED	UNSYNCHRONIZED
Video	Video conference	Video cassettes Television shows
Audio	Audio conference	Audio cassettes Radio
Information/Communication Technology	Internet chat (conversations) Video conferences	e-mail CD - ROM

The choice of technology depends on the structure of the group, teaching plans and programmes, and the length and manner in which the learning process will develop.

Historical Origins

Even though Open distant learning is most often mentioned in the context of modern information technology, it actually originated long before the invention of the computer. The first form of ODL on record are Isaac Pittman's correspondence courses, which began in the

1840s. In 1892 the University of Wisconsin printed the first catalogue of correspondence courses (Instructional Systems Inc. 1998). It can even be argued that Gutemberg's invention of the printing press in 1454 made possible the first forms of ODL.
The advancement of various forms of media have also given support to this form of learning, both in theoretical and practical knowledge, and has supported the development of ODL.

ODL has gone through three phases of development:
The *first phase* of ODL was characterized by the distribution of printed material by mail between the student and the teacher. Due to this form of communication, interaction between students and teachers was very slow, and direct contact between these participants in the learning process basically did not exist except for in rare occasions. This form of learning was called *correspondence learning*.

The *second phase* of ODL differed in that various forms of media were employed to communicate. Along with postal communication, ODL was brought to realization through sound and/or video signals (i.e. telephones, radio, TV). Interaction between student and teacher was limited to the use of these forms of communication. Communication between these participants was limited to one-way (except in the case of telephone conversations).

The *third phase* of ODL has come as a result of advancement in the areas of technology and education. A combination of one-way and multi-link communication (written material, television, video conference, computer networks, e-mail, internet, computer conference, tutorial work with a direct contact) is used in modern ODL. This generation of ODL education is known as *computer technology supported learning*. Learning in this phase has transported the learning process from the school classroom to a virtual classroom. Teachers have ceased to be the base source of information, and learning has been directed towards the learner.

2. SOME PEDAGOGICAL TERMS OF REFERENCE

The quality of ODL

The development of communication technology has expanded the knowledge market, which is directly related to the question of quality in ODL.

Quality ODL can be defined as such: Quality ODL is instructional interactive communication between student and teacher that is realized through the aid of modern information and communication technology. It has its own didactical, logical and methodical articulation, its own purpose, causes and effects, its own strategies and objectives, resources which are realized through teaching plans and programmes for the sake of achieving maximum attainment and satisfying the needs of the individual.

ODL is successful if there exists a stable co-relation between content, method or manner of presentation, motivation and the expectations of the student. In order to secure quality ODL, results must be evaluated by other experts and students. Evaluation criteria must be posted at the onset of an ODL course.

When quality is in question, ODL should satisfy **defined criteria**:

1. Planning as a criteria of successful ODL
2. The criteria of successful interaction and interactive communication
3. The criteria of work and emotional climate
4. The criteria of satisfying individual needs and collective interests

1. Planning as a criteria of successful ODL

The most important factor upon which the success of ODL depends is **planning**. Strategic planning is not just a choice – it is a necessity in ODL. Without exception, a successful ODL programme begins with careful planning, knowing exactly what the programmes objectives are, and being in tune to the needs of the students. Appropriate technology can be correctly chosen only after all of the details of the programme and all the elements it entails are understood. Realization of the entire process requires an extremely serious approach by both individuals and institutions – students, professors, administrators, co-workers in the same field and all others included in the process of creating and working out the programme, as well as the eventual learning phase, when all of the above are put to use.

The planning process can be divided into five steps:

1. Analysis of the needs and expectations of the students and teachers
2. Defining of tasks and objectives in regards to the need of the students

3. The creation and working out of teaching materials,
4. The application of new modes, methods and models of learning.
5. Implementation
6. Evaluation of the results

In order to achieve the desired level of quality in ODL, **students** need to adequately prepare themselves for distant learning, as well as acclimatize themselves to this method of teaching and learning. Effective interaction and return information are the keys to success, because they make it possible for professors and course organizers to recognize the individual needs of students, in addition to gathering information in regards to making suggested changes to the curriculum in order to improve the quality of the course. During this process, teachers are also expected to:

- Encourage cooperation between students
- Encourage active learning
- Supply return information in time
- Respect and accept individual strategies for learning

(Saltiel, I.M. Sgroi, A. & Brockett, R.G., edc. 1998, pg. 22)

In creating programmes and during the process of teaching, teachers must pose themselves the following questions:

- How to use technology with the objective of collecting the most up-to-date information (content)
- How to use technology for the purpose of communication with world experts
- Which intelligent programmes should be used for the creation of modern data banks

ODL can be complex, but it should not be overly complicated for implementation. Evaluations must be performed, taking into regard whether the needs of all participants – students, schools or faculties, administrators, employees and the entire community – are satisfied.

2. The criteria of successful interaction

One of the possible criteria in regards to achieving quality in ODL is the question of interaction between students and teachers.

Anderson (2000) states that eight questions, in connection with interaction between students and teachers, which need to be raised during the process of distant learning. They are:

1. Is the frequency of interaction during ODL optimal?
2. Is interaction in some groups more important than in other groups?
3. Is interaction more important in some types of learning than others?
4. Does interaction have an equal influence on retention and transfer?
5. Does interaction increase subject understanding?
6. Does interaction always result in the satisfaction of the participant?
7. Which form of interaction is least applied?
8. Which form of interaction needs to be changed during an ODL course?

(Anderson, T., 2000, pg. 48)

In order to establish the best possible interaction and communication between students and teachers, it is necessary to incorporate the best choices in regards to teaching strategies and technology.

Even though interaction does not mean "face to face" contact, human elements of communication must be present during interaction. At the very onset of the programme students should be given instructions in regards to the use of technology, be introduced to the various models of communication, available technology, etc.

According to *Peters and Amstrong* (1988, pgs. 78-79), from the teacher's aspect, during the course of the learning process there are three possible forms of interaction:

- Teacher – content
- Teacher- teacher
- Content – content

In their paper the authors recommend teachers three types of learning and teaching:

1. Teach transmission, learn reception
2. Teach transmission, learn cooperation
3. Learn in relations: student – student, student – group, group of students (teachers are only cooperatives in learning, because each member of the group is in possession of knowledge and they take over the responsibility for that which occurs during the learning process)

In the process of ODL more than one form of interaction is important. In their paper on this subject *Anderson and Garrison* (1995, pgs. 27-45) talk about the significance of interaction between the teachers themselves, as well as the interaction between the various forms of content.

Terry Anderson (2000, pg. 79) considers it important to emphasize the social dimensions of learning, not to mention advancement through interaction with the environment. Social interaction is formalized through various types of learning, that is to say as collaborative and cooperative learning. *Cranton*, P. (1998, pg. 87) stresses the importance of the varying needs of students, including the need for personal interaction with other students and the feeling of belonging to a group or community.

3. The criteria of work and emotional climate

Regardless of the size of a group, in order for ODL to be successful, some authors have emphasized the significance of the working climate that is represented by the overall relationship and results that emerge from the interpersonal communication of the participants in the learning process. The working climate is also comprised of and made complete by the emotional climate (atmosphere, relaxed dispositions, tolerance, democratic attitude) present in the learning process. Along with the process of creating a stimulating climate, Brookfield S.D. (1987, pgs. 91-105) emphasizes the importance of:

- Encouraging critical thinking by the students and discovering alternative means of solving problems
- Openness and frankness in interaction between the participants
- Solidarity and friendship between members of the groups
- The organization of investigative and creative work
- Including students in the process of evaluation and self-evaluation

Research by Poulsen and assoc. (1995, pgs. 91-98) indicate that cooperative work within the group presents students with greater opportunities to exchange experiences, set up a support system, create a community, and influence group needs. This form of cooperation simultaneously nurtures the idea of independence.

4. The criteria of satisfying needs and collective interests

Common interests unite in the official teaching plan and programme, as well as in the effectiveness and prompt conclusion of the actual schooling.

The results from *Cranton's* research (1998, pgs. 87-99) indicate that ODL participants can have specific expectations in the following areas:
Participation – students must be able to exhibit their ability to apply their knowledge, risk showing their ideas publicly, and show an interest in the learning experiences of others.
Responsibility – students must make constructive feedback possible, share positive comments and observations with others, and actively participate in various dialogues.
Affective feedback – during the course students should have an idea/feeling of community and a need for belonging, exercise patience, pay compliments and create a positive working atmosphere, extending support and assistance when necessary.
Focused messages – employing brief online statements or summaries, while avoiding inappropriate messages that are not suitable to group learning.

On the occasion of analysing these necessities, it is necessary to consider the manner of organizing ODL from the aspects of:

1. the student
2. course contents
3. visual presentation of course contents
4. quantity and quality of interaction
5. technical conditions and tools necessary for learning

(Cranton, P. 1998, pgs. 87-94)

3. OPEN DISTANT LEARNING IN CROATIA IN THE CONTEXT OF THE EUROPEAN INTEGRATION PROCESS

As part of the criteria for entry into European integration and the process of general globalisation, all members of the EU will have to follow a planned strategic objective of increasing the use of modern technology in all areas of education. Structured changes, which are in fact taking place in countries in transition, must be directed towards root changes in the structure and organization of education, in order to (in the most painless manner) overcome

the risk of falling behind countries already developed in the employment of computer technology in education and in the use of ODL as a form of education. The gradual realization of a dynamic and open European system of education is the basic starting point and principle on which the following three dimensions will be built:

1. Knowledge – In order to become included in and actively participate in the process of change, European citizens (especially the young) will have to develop and expand their knowledge through constant education during the course of their entire lives.
2. Improving and strengthening Civil rights – Increasing the feeling of belonging to a common cultural and social sphere will also increase each citizen's sense of membership within the community, solidarity, and understanding of cultural and other differences between the members.
3. Competence and Ability – On the basis of lifelong learning creativity, flexibility, adaptability and the ability to learn and overcome numerous problems must be promoted, in which ODL, in the context of technological changes in education, will play an integral role.

Endeavours made in the Republic of Croatia towards the increase of computer literacy at all levels of education as well as the projection of informatics development in the coming years are the basis for the realization and affirmation of ODL, which would greatly assist in overcoming the shortcomings of traditional methods of teaching and learning, as well as opening the way to obtaining and reciprocating knowledge bases in Europe.

Over the last few years there has been increased activity by Croatian institutions towards the formation and application of new development strategies that would bring Croatia closer to the developed world. We will take this opportunity to site the most prominent examples:

1. Proposal of development strategies for the Republic of Croatia, "Croatia in the 21st century",
2. e-Croatia; Proposal regarding informatics strategies in the Republic of Croatia;
3. Strategy elements for the development of an information society in Croatia, as a supplement to Development Strategies of the Republic of Croatia, "Croatia in the 21st century";
4. Croatian Programmes for the development of innovative technology.

(Croatian Programmes for the development of innovative technology

www.mzt.hr/mzt/hrdjelatnost/tehnolog/tehno_htm/28.82000.)

By increasing the rate of computer literacy and availability of education in Croatia, the education structure of its citizens would also be improved, and ODL would offer a realistic chance for the realization of the planned strategies. The computerization (that is, the implementation of computers and educating students in their use) of educational institutions has become an important segment of general social development. Its starting point is the general goal of computerizing Croatia in which, along with the other aspects mentioned, emphasis is placed on the need for every citizen, home, office and school be connected to the Internet in order for our society as a whole to enter the digital age, therefore making it possible for all of Croatia to be computer literate, a Croatia which will be dominated by enterprises, freedom, initiative and openness towards new ideas. Financing, which will come from the nation's budget, has been planned for the introduction of computers with Internet access in all educational institutions by the end of 2003 (in phases, from elementary to university level schools), the inclusion of courses and programmes in schools for the express purpose of educating and creating a computer literate population, as well as major increases in resources and capital invested in the foundations of all knowledge societies – education and science.

In this manner a hypothesis is created for the realization of the numerous advantages that ODL has to offer, such as:

- Greater efficiency in education and a reduction of the time spent on educating
- Increased capacity of educational institutions
- Education adapted to meet the needs of education with work
- Balanced distribution of education and accessibility to areas outside the realm of educational and economic centres
- Increased access of smaller educational institutions to educational resources

In Croatia there are many justifiable reasons for the organization of ODL, some of the most significant being:

- Its numerous islands and other badly connected and isolated regions
- Many smaller educational institutions would be able to improve their quality of education by being affiliated with educational institutions in the larger centres through ODL

- The great number of employed and unemployed citizens who wish to or are in need of supplementary education but cannot attend courses at traditional educational institutions due to time restraints or distance from these places
- Hospitalisation of students who cannot attend regular classes due to illness, etc.

It is necessary to put forward the following questions: how much has been done in regards to the organization and implementation of ODL, and under whose supervision is the organization and implementation of ODL being conducted? Furthermore, are enough resources being allotted for ODL, and are there enough competent institutions and personnel involved in the effective realization of ODL?

In terms of post-secondary education, we indisputably have enough experts whose quality does not lack behind other experts in the same fields of education throughout the world. The above questions pertain more to educators in the elementary and secondary schools throughout Croatia. Research has indicated that very few elementary schools have personnel on their staffs that are capable of working with or teaching the use of modern computer technology. Taking this into account, the same can then be said for the organization and implementation of ODL.

Taking into account Croatia's needs and the many advantages of this form of education, ODL becomes ever more attractive. However, many unanswered questions and dilemmas related to ODL remain, such as:

- Do the laws and regulations of Croatia recognize and make possible ODL, and if so, how and in which manners?
- Does ODL isolate or connect its users?
- Will other institutions recognize ODL diplomas and certificates?
- How will ODL influence the formation of its students' character?
- How does the aspect of privacy affect ODL's users?
- How does ODL influence and / or affect the culture of educational institutions?
- How do physical and psychological distance from educational institutions affect the ODL learner?

4. CONCLUSIONS

In so far as ODL is included into the educational process, it serves as a supplement to the "classical" form of education, supported by information technology in a unique system of ***flexible education*** that makes possible:

- learning through flexible and individual programmes and strategies of learning
- encouraging active and creative learning, as well as the forming of premises for conceptual learning
- simplification of the system of delivering educational material and its use on various operational systems, as well as easy access to fresh information in the fastest way possible
- a decrease in the cost of printed material, due to the fact that all materials are available in an electronic form

Open distant learning has not only achieved good results, but has brought about the realization of many educational objectives and tasks.

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