

The field study as an educational technique in Open and Distance Learning*

Paraskevi Vassala, Hellenic Open University, Patra, Greece

* Paper presented at EDEN 2006 Annual Conference, Vienna, 14-17 June 2006. First published in "Turkish Online Journal of Distance Education - TOJDE", V. 7(2006), n. 4. http://tojde.anadolu.edu.tr/tojde24/articles/article_1.htm Reprinted with permission.

ABSTRACT. The main characteristic of Distance Learning is that the student is taught and learns without his/her tutor's physical presence in the classroom. The opportunity for a direct (face to face) communication between all members of the educational group [Tutor Counselor (TC) and students] in Distance Learning is offered by the Tutorials/Contact Sessions (CS). Although these CSs are not compulsory, it is estimated that they are of high importance, since among other things, they help in clarifying difficult-to-understand points and they also help in the cognitive subject becoming more fully comprehensible by the student (Holmberg, 1995).

For the discussion of the various issues at the CSs many different educational techniques within the framework of adult education such as teamwork, short lectures, debates, questions and answers, case studies, simulations, role play, etc. are used in combination. These are techniques raising the student's interest, facilitating his/her participation in the learning process and developing interaction between TC and students and between students themselves. They also create a learning and research environment; encouraging the students to work in a group and to learn by acting (Kokkos, 1998).

One of these educational techniques is the field study, which is the subject of this paper.

To this day, no research has been carried out for the possibility of implementation of this technique in Distance Learning nor have any results of such implementation been studied.

This paper comprising of three parts contains a general presentation of the field study as a teaching technique in the first part, while in the second part the successive stages of development of this technique in Distance Learning are analyzed; finally, in the third part the students' views of Hellenic Open University on this technique are presented.

KEYWORDS: *Distance Learning, Educational techniques, Field study, Hellenic Open University, Tutorials/Contact Sessions (CS).*

The field study as an educational technique

Field study is one of the outdoor education methods (Hammerman, 1980; McRae, 1990; Priest, 1993; Hammerman et al., 2000), which, according to Watts (Papadimitriou, 2002) are rooted in fields such as philosophy, epistemology and naturalism. Many educationists such as Pestalozzi, Froebel, Dewey, etc. have been influenced by these fields, and applied many of the ideas expressed therein in their teaching practice.

Since the end of the 19th century important educational movements have been developed in various countries, focusing on the environment (the natural, in particular) as a learning field. Nowadays field study forms part of the curriculum of courses from a broad spectrum of sciences including geology, biology, archaeology, history as well as from various social sciences, while it is often implemented in formal tuition and adult education programs as part of the practical exercises undertaken by the students.

The field study relates to students' activities taking place in learning environments outside the traditional (conventional) classroom, such as office environments, historical areas, monuments and museums, national parks, zoos, wetlands, seaside, wild life areas, etc.

It is based on the supposition that the most valuable experiences of the students are gained through images taken by the senses. It is connected with most educational techniques and it often forms part of a project. It allows students to participate in the design of the educational activity and to acquire in situ experience and knowledge through the research process (Kern, Carpenter, 1984; Moles, 1988). More particularly, it helps the students acquire new knowledge and skills, and formulate interest attitudes towards the study subject; in other words, it contributes so that the changes through learning take place in knowledge, skills and attitudes levels (Rogers, 1996; Knapp, 2000).

The work that the students undertake in the field can vary since they may be involved in the description of a place, the comparison of visual or other data, in some kind of research or a survey in general, in other words, things which cannot be achieved as effectively in the traditional classroom (Davidson, 1981).

However, many teachers consider the field study as a waste of time. They maintain that using less time in the traditional classroom, e.g. by means of a lecture supported by suitable audiovisual material,

such as a film or slides, the students can achieve better results in the cognitive fields, not to mention that they do not have to move (Jacobson, 1986).

On the other hand, however, as it is evident from the results of many researches, the students learn particular subjects of various cognitive areas faster and more efficiently if they find themselves in an appropriate outdoor environment rather than in a traditional classroom (Mason, 1980; Kern, Carpenter, 1986).

Adopting the field study as a suitable educational method in distance education depends on the learning object, the aim and objectives of the learning process, the learning styles and the educational characteristics of the students, the competency of the TC, the learning environment, the time available and the particular moment, as well as the resources available.

In any case, however, it is useful since it can relate to many of the conditions for effective learning in adult education such as the active participation and the activation of the students' existing schemata (Kokkos, 1999).

More specifically, in field study the students are offered ample opportunity for active participation since they are called upon either in groups or individually to plan, implement, apply, re-plan and evaluate certain activities relating to the theoretical background of their studies. The learning aimed at through field study is concerned both with consolidation of knowledge acquired, and the acquisition or development of skills and attitudes.

Some distance education institutes organise field studies relating to their programs during the CSs or even on weekends. On environmental issues, for example, the students have the opportunity to observe and collect data from the study area, exchange their views with members of environmental organisations, representatives of the Local Authorities as well as the residents, thus ascertaining the differences in views (Filho, 1998).

Furthermore, the students' involvement in field studies could be achieved by enriching the activities suggested in the course books (and the assignments) with subjects for which field study is necessary (Blackmore, 1998). In this way studying becomes more active and experience-related with emphasis on the local environment (Clover, 1998).

Like all participatory techniques, the field study requires systematic and careful preparation on the part of the tutor. In order for the

field study to be effective the tutor must take care so that the work be well defined, the students' activities be clear and well planned in advance and the output be well prepared (Orion, 1993; Priest, 1993).

Process of application

As in traditional education (Orion 1993; Orion, Hofstein, 1994), in distance learning, field study comprises of three stages: preparation, implementation, and composition-presentation.

In this section we are describing these stages with reference to the role of TC and of the students.

This description refers to students who participate for the first time in field study. Alternatively, if they have already experience with this technique, it is expected that they take initiative in the organization as well as in the implementation stages of the field study.

Stage I: Preparation

Preparation involves action on the part of the TC within and outside the CS.

More specifically, the TC:

Outside the Contact Sessions

- Studies the course books and locates subjects suitable for field study.
- Studies the places of the students' areas of residence and explores all possible places for field study in those areas.
- Locates those areas within the town where the CS takes place, which are suitable for study.
- Creates an archive containing the name and place of the area, as well as what this area can offer in terms of learning together with any other useful information.
- Makes a preliminary visit to «the field study» in order to familiarize himself/herself with the study object, should it be exploited by the entire group of the students or during the course of a CS.

- Prepares activities for the students together with a list of the required materials.
- Secures co-operations and selects the best time for implementation.
- Secures the relative permit/s (if necessary) for the visit and explores the best possible way of transportation together with the cost involved.

Moreover, the TC can inform the coordinator of the module as well as cooperate with other TCs.

It should be noted that, depending on the object of the study, the TC could ask for the students' opinion on the fields suitable for study within their area of residence.

In the Contact Sessions

The TC explains the field study technique and sets the rules.

More specifically, the TC organizes a preliminary discussion for the determination of:

- the subject of the field study;
- the aim and the goals of the field study;
- the place where the field study is to be carried out;
- the activities to be carried out (if group work is involved, every group must be assigned certain activities);
- the duration of the field study;
- the sources to be utilized;
- the final product.

Moreover the TC determines his/her role and encourages the students' active involvement.

Finally, prior to the visit to the place to be studied, a relevant projection (either in the form of a film, CD-Rom, or slides) can take place within the CS. This is quite important since thus the students' interest can be raised, and they could start processing the questions to be answered as a result of the observations to take place in the field (Falk, Balling, 1980).

Stage 2: Work on the field

On the field, the students, either in groups or independently, are assigned certain activities.

These activities can vary, and their nature depends on their aims and objectives, as well as the opportunities offered by each particular field. Activities on the field can include observation and comparison, mapping, sample taking, taking of photographs, etc.

Stage 3: Composition and Presentation within the Contact Sessions

After the on-the-field work has been completed, processing of the data collected follows leading to composition (analysis and interpretation of the collected data).

During this stage, the students could either carry out one or more activities included in their course books, or prepare a report containing the basic points of their research, draw up a brochure containing photographs, diagrams, sketches, plans, histograms, or they could merely exhibit the material they have collected by means of written texts, and so on.

The electronic or otherwise communication between the students is considered important at this stage (Vassala, 2003).

The students for their assignments can use elements from the field study. The presentation of these assignments in the CS is considered exceptionally useful.

The research

In order to ascertain the students' views on field study, a small-scale qualitative research was conducted with a group of 30 students attending the "Open and Distance Education" Module of the Postgraduate Program in Education offered by the Hellenic Open University.

This research was carried out during the 3rd Contact Session (12 February 2005).

The students who participated in the survey were those present in the CS. They were 24 of whom 11 were males and 13 were females. Almost all of the students were teachers in Primary or Secondary Education. Most of them (23 students) had attended traditional adult education programs, while 10 of them had been involved in adult education as trainers. 15 students used field study once or twice a year as instruction technique for the teaching of

conventional education subjects (mainly in Secondary Education and in adult education programs). Most of them had already gained some experience in distance education as students, since they had already successfully completed their studies in other modules with the Hellenic Open University. However, none of these students had participated in activities involving field study. Our research focused on the analysis of the contents of the students' answers and aimed at:

- ascertaining their experience in field studies as trainees in conventional education;
- ascertaining their views on the possibility of using this technique in distance education and their willingness to participate in such a process.

The results of this research are as follows:

Field study in conventional education: the experience of the students

Sixteen students had this experience mainly during practice, which followed their studies in conventional education, once or twice a year (either in Secondary and Tertiary Education or in seminars carried out by Vocational Training Centers). Application of this technique was often not successful due to unsuccessful organization.

For example, one student reported: "Lack of preparation and careful planning, the students did not visit the field as a group, no assignment or conclusions were presented".

Two other students reported: "Lack of any substantial preparation and support from the teachers in charge resulting to lack of evaluation and control of the whole process. Merely looking at some places does not offer enough knowledge to cover the subjects of the training course", and: "the poor planning and organizing of the field study resulted in a simple visit rather than a study visit".

However, the students believe that field study has a lot to offer, if properly carried out: "Field study is useful because it is an experiencing technique. It studies what is happening at the moment and the place it is happening. All senses are involved. The desired parameters are recorded, conclusions are extracted, and finally, with the composition process, we are able to get a final product".

Field study in distance learning: the views of the students

The students were of the opinion that field study can be applied in distance learning in almost all courses and modules. Especially in "Open and Distance Education" module, they believe that field studies could be carried out in organizations offering distance education, in warehouses where materials are collected and distributed, in the offices of the administrative staff, in places where educational material is produced.

It is worth mentioning that most students set conditions for the successful application of the technique.

The most usual conditions they set relate to the careful planning and organization of the field study (selection of the most suitable field, the goals and stages of application explicitly determined, etc.) both on the part of the TC and of the students.

The students believe that their place of residence as well as their various commitments must be seriously taken into consideration. The students are willing to participate in field studies as they consider them very useful, since as two of them pointed out "the student gets out of the house and observes the theory becoming practice"; "they are helpful in acquiring knowledge and skills as well as in applying such knowledge in practice".

The students' anxiety relating to the success of the attempt is however evident: "Yes, as long as I gain more and deeper knowledge on the subjects of the module I am studying", and: "the object of the field study should be within my priorities and interests".

However, there are cases in which the students would like to participate in field studies, in order to understand the technique better, with a view to applying it at their schools. "[...] Except the other I would like to learn the technique, in order to apply it at my school, with my students".

Insofar as the advantages of this technique are concerned, the students pointed out its substantial contribution in truly furthering their knowledge, and in raising their interest on the subject they are studying through work in a real environment.

They also stressed the contribution of the field study in the development of their various skills. One student said: "Its basic advantage lies in the possibility it offers to the student to come in direct contact with the subject to be studied, and in this way to get thoroughly acquainted with it in its real dimensions".

Among the disadvantages mentioned are: the time-consuming

preparation it requires for its implementation, and the difficulties in the students getting together, due to the nature of distance education.

More specifically, some students pointed out: “Getting the adult students together is a real problem, if we take into account their commitments and the various places they live in”; “a time-consuming process, which requires serious and careful preparation, as well as careful selection of the field and the place, something which is often difficult”; “it can put extra load on the student, with extra obligations [...] the student might feel that a field study is unnecessary, taking up his/her valuable time”.

Conclusions

The field study is an educational technique, which makes the educational process more active, helps the students work in real situations, and develop skills, competencies and positive attitudes, through activation of their existing ones. Nevertheless implementation of this technique requires very good planning and enough time.

For these reasons our students did not have a very good practice experience as teachers/trainers within the traditional education. In distance education in particular, field study can be carried out with the students working in groups or individually, with or without their tutor’s presence.

The students of the “Open and Distance Education” module not only consider the technique important for all modules, but they are willing to participate in field studies, despite the difficulties that may exist (time-consuming preparation and implementation, physical presence, different places of residence and time available), as long as these studies are well prepared and organised, not only by the TC but also by the students. Of course they stressed the importance of thorough preparation both on the part of the tutor and on the part of the students, in order for the theoretical background gained through the study of the relevant module to be substantially furthered.

References

- Blackmore Chris (1998), *Environmental education through distance education and open learning in the UK*, in Filho Walter Leal, Tahir Farrukh (Eds), *Distance education and environmental education*, Germany, Peter Lang GmbH, pp. 21-41
- Clover Darlene (1998), *Developing international environmental adult education*, in Filho Walter Leal, Tahir Farrukh (Eds), *A sourcebook for environmental education - a practical review based on the Belgrade Charter*, Carnforth, Parthenon Publishing
- Davidson C. M. (1981), *The field course as an instructional medium in community studies*, "Journal of Geograph", V. 80, n. 5, pp. 176-179
- Falk John, Balling John (1980), *The school field trip: where you go makes a difference*, "Science and Children", V. 17, n. 6, pp. 6-8
- Filho Walter Leal (1998), *Environmental education and distance education*, in Filho Walter Leal, Tahir Farrukh (Eds), *Distance education and environmental education*, Germany, Peter Lang GmbH, pp. 9-19
- Hammerman William M. (Ed.) (1980), *Fifty years of resident outdoor education. 1930-1980*, Martinsville, American Camping Association
- Hammerman Donald, Hammerman Elizabeth, Hammerman William (2000), *Teaching in the outdoors*. 4th ed. Danville (IL), Interstate Publishers
- Holmberg Börje (1995), *Theory and practice of distance education*, Routledge
- Jacobson W. J. (Ed) (1986), *Module for in-service training of science teachers and supervisors for secondary schools*, "EE Series 8", Paris, Unesco, pp. 103-104
- Kern Ernest L., Carpenter John R. (1984), *Enhancement of student values, interests, and attitudes in earth science through a field-oriented approach*, "Journal of Geological Education", V. 32, n.5, pp. 299-305
- Kern Ernest L., Carpenter John R. (1986), *Effects of field activities on student learning*, "Journal of Geological Education", V. 34, n.3, pp. 180-183
- Knapp Doug (2000), *Memorable experiences of a science field trip*, "School Science and Mathematics", V. 11, n. 2, pp. 65-71
- Kokkos Alexis (1998), *Instruction techniques in Contact Sessions/Tutorials, relationships between tutors and students*, in Kokkos Alexis, Lionarakis Antonis (Eds.), *Open and distance education*, Vol.B, Patra, Hellenic Open University, pp. 125-149

All URLs checked May 2007

Kokkos Alexis (1999), *Adult education*, Vol.D, Patra, Hellenic Open University, pp. 55-57

Mason Jack Lee (1980), *Field work in earth science classes*, "School Science and Mathematics", V. 80, pp. 317-322

McRae Keith (1990), *Introduction to the purposes and practices of outdoor education*, in McRae Keith (Ed), *Outdoor and environmental education*, South Melbourne, Australia, Macmillan

Moles Jerry A. (1988), *The classroom and the field: a necessary unity*, "Journal of Experiential Education", V. 11, n. 2, pp. 14-20

Orion Nir (1993), *A model for the development and implementation of field trips as an integral part of the science curriculum*, "School Science and Mathematics", V. 93, n. 6, pp. 325-331

Orion Nir, Hofstein Avi (1994), *Factors that influence learning during a scientific field in a natural environment*, "Journal of Research in Science Teaching", V. 31, n. 10, pp. 1097-1119

Papadimitriou B. (2002), *The use of environment in the educational process and the "practical theories" of the teachers*, in Bagakis George (Ed.), *The teacher as researcher*, Athens, Metaixmio, pp. 349-356

Priest Simon (1993), *Important components of outdoor leadership*, "Pathways: The Ontario Journal of Outdoor Education", V. 5, n. 4, pp. 13-16

Rogers Alan (1996), *Teaching adults*, Open University Press, pp. 114-115

Vassala Paraskevi (2003), *Communication between the students of the module in "Open and Distance Education" of the Hellenic Open University*, in Lionarakis Antonis (Ed), *2nd Panhellenic Conference on Open and Distance Education Conference Proceedings*, pp. 296-306

Sintesi

La formazione a distanza permette di utilizzare strumenti di comunicazione digitale e telematica per realizzare momenti di condivisione della conoscenza

volti a facilitare l'apprendimento e la comprensione di concetti complessi. Tra le metodologie didattiche applicabili a corsi di formazione telematica, il Field study (Studio sul campo) rappresenta una risorsa ancora parzialmente inesplorata. Lo studio sul campo è una metodologia educativa che prevede lo svolgimento di attività al di fuori dell'ambiente tradizionale della classe e trova applicazione nei più diversi campi di studio. Gli studi sul campo rafforzano la naturale disposizione della formazione a distanza verso l'apprendimento collaborativo, in quanto ciascuno studente viene assegnato a gruppi di studio che devono svolgere in comune compiti prefissati. Per garantire la massima efficacia delle esperienze educative sul campo è necessaria una accurata gestione e organizzazione delle attività preparatorie, per le quali la formazione a distanza offre numerose possibilità. In particolare, prima di ogni intervento di formazione sul campo è necessario prevedere una "Contact Session", in cui vengono presentate agli studenti informazioni strutturate sull'argomento che affronteranno e definita la divisione in gruppi di lavoro con precisi compiti di indagine. Tali occasioni possono essere gestite mediante l'uso di tool interattivi di comunicazione a distanza come chat, forum per la condivisione di contenuti e documenti o videoconferenze. È possibile, in questa fase, realizzare anche delle simulazioni digitali, per fornire agli studenti le informazioni necessarie per gestire al meglio il lavoro. Questa prima fase precede l'"implementazione" (lo studio sul campo vero e proprio) e la "composizione/presentazione" dei dati raccolti durante il field study. Nella fase di composizione/presentazione il ruolo degli strumenti di comunicazione telematica a distanza diventa fondamentale, permettendo agli studenti di confrontare i dati acquisiti e lavorare ad un progetto comune da presentare alla classe. Anche per la presentazione dei lavori conclusivi è possibile utilizzare strumenti di comunicazione sincrona o asincrona e materiali didattici interattivi o multimediali.

Una ricerca qualitativa su 30 studenti del modulo "Open and Distance Education" della Hellenic Open University ha misurato il gradimento di questa metodologia da parte degli studenti. Questi hanno espresso l'opinione che gli studi sul campo possano facilitare l'apprendimento dato che offrono conoscenze situate e favoriscono l'integrazione delle conoscenze pregresse con le nuove nozioni acquisite. Condizione sine qua non della reale efficacia dell'approccio field study, però, è l'accurata progettazione e preparazione da parte degli insegnanti di veri e propri learning object. Secondo i partecipanti al sondaggio, inoltre, tale metodologia è adatta ad affiancare i corsi a distanza con erogazione online: nel caso del corso sull'Open Distance Education gli studenti hanno proposto studi sul campo in organizzazioni dedite alla formazione a distanza, agenzie di produzione di strumentazioni multimediali e di contenuti per il web, reparti di gestione dei corsi online ecc. Allo stesso tempo, sono stati individuati i possibili svantaggi che includono: la necessità di tempi lunghi di preparazione e organizzazione delle attività didattiche e, fattore particolarmente rilevante nel caso di corsi a distanza per studenti adulti, la difficoltà di conciliare gli impegni di tempo e gli spostamenti necessari dal luogo di residenza degli studenti.