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**Conceptualisations of
Educational Technology
in Distance Education**

with special reference to

**THE BRITISH OPEN UNIVERSITY,
THE SPANISH UNIVERSIDAD NACIONAL DE
EDUCACION A DISTANCIA,
AND THE PORTUGUESE UNIVERSIDADE
ABERTA**

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Ph.D. Thesis

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and
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ABSTRACT

This research addresses the question of what is the concept and role of educational technology in relation to distance education. This question is approached through an examination of three distance teaching universities: the British Open University (OU), the Spanish Universidad Nacional de Educación a Distancia (UNED), and the Portuguese Universidade Aberta (UA).

A socio-cultural analysis explores the history, philosophical assumptions and applications of educational technology at each of the universities. Thus educational technology and distance education are discussed as interdependent and overlapping concepts. The socio-cultural approach is applied within a multi-modal systems theoretical framework. Along with these, the concept of world-view in intercultural communication is of central importance.

On the basis of this theoretical scaffolding the research has sought to avoid any comparative judgements of the relative 'superiority vs. inferiority' of the various distance teaching universities that might hinder meaningful interactions among them. As a qualitative inquiry the research rejects models and attitudes of assimilation ('cultural domination' or 'sub-cultural imperialism') and seeks to show the value of dialogue between, and the recognition of diversity among, the participating institutions.

Field work, including interviews and documentary analysis, has been conducted at the three major sites: Lisbon, Madrid and Milton Keynes. The interview data has been analysed using the GABEK (Ganzheitliche Bewältigung von Komplexität - Holistic Processing of Linguistically Represented Complexity) method. The analysis not only identified a number of key issues about educational technology and distance education, from a multicultural perspective, but it also gave rise to a new definition of educational technology in terms of *curriculum and power*.

The social function, along with the academic *raison d'être* of these institutions, has been further explored and contextualised. Among the prominent topics that emerge from the various analyses is that of ethics: a relatively unexamined area in the field of distance education and educational technology. An effort has been made to introduce ethical concerns on the agenda for reflection among educational technologists and distance educational practitioners. I suggest that this topic has special relevance both to international collaborations and to the current engagement of the three universities in question with the promotion of distance education in developing countries. Finally, a proposal for the building up of communities of discourse in distance education in the various languages of this research is discussed.

To my family co-learners:

*Dorina,
Daniela (10)
and Estefanía (6)*

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ABBREVIATIONS

- CA = Centro Asociado (UNED's Study Centre)
- CENTED = Centro de Ensino a Distancia [Centre for Distance Teaching] (UA)
- CITE = Centre for Information Technology in Education
- CMC = Computer Mediated Communication
- CT = Course Team
- DE = Distance Education
- DL = Distance Learning
- DT = Distance Teaching
- DTU = Distance Teaching University
- ECTS = European Credit Transfer System
- ET = Educational Technology
- ETist = Educational Technologist
- HEFC = Higher Education Funding Council
- ICDL = International Centre for Distance Learning
- ICD-DE = International Communities of Discourse in Distance Education
- IET = Institute of Educational Technology (OU)
- IUED = Instituto Universitario de Educación a Distancia (UNED)
- KMI = Knowledge Media Institute
- MODE = Master's Programme in Open and Distance Education (offered by the IET)
- MST = Multi-Modal Systems Thinking
- ODA = Overseas Development Agency
- ODL = Open and Distance Learning
- OL = Open Learning
- OU = The Open University
- OUW = Open University Worldwide
- RAE = Research Assessment Exercise
- S-C = Socio-Cultural Perspective
- SRC = Student Research Centre
- UA = Universidade Aberta

UAIA = Universidade Aberta Internacional da Ásia

UNED = Universidad Nacional de Educación a Distancia (Spain)

V-C = OU Vice-Chancellor: Sir John Daniel

WB = World Bank

WV = Worldview

Where is the wisdom
We have lost in knowledge?
Where is the knowledge
We have lost in information?

(T.S. Eliot, from "The Rock")

In its non-violent transivity
the very epiphany of
the face is produced.

*(E. Levinas, from
"Totality and Infinity")*

Chapter 1

Introduction and Background

Chapter 1 - Introduction and Background

Background

This research originates in my experience as a student at the Spanish Universidad Nacional de Educación a Distancia (UNED), where for eight years I trained in education while also being head teacher of an international school in Seville. I completed these studies in 1992. It was in the context of these studies, within the Faculty of Philosophy and Sciences of Education, where I first came across the concept of educational technology. I became interested in the relevance of this concept for reshaping the teaching-learning process in our strong audio-visual and increasingly digital culture and also by the implications it would have in the rethinking of educational practice and in various aspects of curriculum design.

This study sets out to explore the concept of educational technology from a multi-cultural perspective, that of the British Open University, the Spanish Universidad Nacional de Educación a Distancia, and the Portuguese Universidade Aberta. It seeks also to come to grips with the nature of educational technology and its potential as an academic field. During the course of this research a series of inter-related questions have arisen which serve to illuminate the topic of research:

- (1) How is educational technology conceptualised by people working in distance education? [What do these people understand by educational technology?]
- (2) Does this conceptualisation vary in different distance education institutions and/or cultural contexts?
- (3) To what extent, and in what ways, is the use of educational technology informed

by ethical considerations?

(4) Is educational technology an essential component of a distance education system?

(5) Are we moving towards the technocratisation of education?

(6) How educational is educational technology, could it be, or should it be?

(7) Is there a threat of cultural imperialism in distance education?

This interest in educational technology combined, during my studies at UNED, with a desire to use the systems approach for understanding innovation and the historical and political dynamics that accompany it. Furthermore, I felt at home with the area of comparative studies of educational systems based on my experience of different cultures and of the learning that takes place through a process of dialogue among educators from diverse cultural backgrounds.

A Change of Learning Cultures

Given my personal background as a distance learner it felt strange to become involved in a full-time student capacity, and to do this *in situ*, in a distance teaching university. Having enjoyed the benefits of studying from home and maintaining my normal professional responsibilities, the opportunity to examine the intricacies that configure a learning system, like the OU, was an enriching and complementary experience. This immersion into a distance teaching university culture was indeed important to the purpose of this research. As someone coming from a rather different culture and geographical latitude to the UK, I had to rise to the challenge of having to learn and understand the ways of my host institution; its various idiosyncrasies (these have been, no doubt, a process of mutual discovery and occasional surprises), and to cope with very different climatic conditions.

Introduction

The research question (what is the concept and role of educational technology in distance education?) emerged from this personal and academic background in conjunction with a review of the literature (chapter 2) which gave further support to the relevance of this research question. Major lines of reflection as well as changes in direction have taken place with respect to the original conception of this research.

Through the research it became evident that although the institutional frames of the three universities are clearly distinct, along with their cultural and historical settings, their educational technological dimension is not so easily identifiable within each of the universities. There is one exception, however, which has proven of the greatest significance in shaping the direction of this research. There is nothing comparable with the degree of elaboration and development in educational technology that the OU's Institute of Educational Technology (IET) represents, which has no adequate counterpart in the other two universities studied.

The strength of the comparative method (see chapter 3) in bringing to light major systemic differences among the institutions has been explored, as well as its capacity to identify and bring to focus some of the central issues concerning the topic of research. The major drawback I experienced was the occasional response, and pervasive feelings, that 'to compare' implies the unpalatable connotation, even the ideological twist, of making pronouncements on relationships of 'superiority vs. inferiority'. "So tell us how we are doing in the ranking of distance teaching universities?" I was asked several times with unmistakable irony. This epistemological difficulty attached to the term 'comparison', and its particular connotations, led me to stress the qualitative nature of this research. This realisation, together with an inadequate basis for comparability due to the different stages of articulation of educational technology among the universities studied, provoked a change in the direction of the research which was reflected in a shift

Chapter 1

from using the word “comparative” in the title of the thesis, as originally intended, towards using the expression “with reference to” the various institutions which have been studied. By doing this, I wanted to signify that I did not wish to make mechanical comparisons, neither to measure an institution against another – at least not in any constrictive and deliberate manner - nor to set up any particular institution as the criterion (*Tertium Comparationis* *) for the others. Much rather I have sought to promote a form of inter-cultural dialogue among them and to listen carefully to the type of issues which appear more relevant to each of them, and which may be shared among them. Nevertheless, once I identified the basic conceptions of educational technology at each of the universities, it became apparent that a major need of educational technology is of a theoretical nature, 'what do we actually understand by it?' Thus the comparative approach was supplemented by a Multi-Modal Systems analysis of the structural normativity of the field, along with a Socio-Cultural Approach (see chapter 3) which has offered useful applications with regards to the building up of international communities of discourse in distance education, and which constitutes a concrete proposal resulting from this research.

The literature review (chapter 2) provided the canvas on which some of the major themes of distance education and educational technology were presented. Against this background I was able to situate the research question and project and contrast the issues that emerged particularly in the process of the interviews.

My efforts at conceptualising educational technology were based on the conviction that one must seek to characterise education first, and more precisely the educational relationship in its various inter-personal and institutional levels, as being the essential

(*) In the comparative research literature, *Tertium Comparationis* refers to the criterion by which comparisons are made between different units.

Chapter 1

qualifying function of educational technology. We would then need to understand something of the fundamentals of technology ('its structural normativity' to borrow the term from Multi-Modal Systems) and, finally, explore the ways in which they may establish some positive relationships between them. In this way undue interference, or reductivist impositions, of one on the other could be checked and redressed when necessary. Indeed the research points out certain indications where technology – or rather choices people make towards it - ceases to be useful and a blessing to humanity and becomes technocratic, assuming an all-determinative role, and how this hinders its vital contribution towards educational development in helping to overcome barriers and distances. As education becomes more technologised, mediated by increasingly sophisticated forms of technology and technological processes, it becomes incumbent for educators to reaffirm, rethink and rediscover the uniqueness of the educational modality, less education as such becomes yet another illusion of digital virtuality.

The quality of the interview data obtained through this research (chapters 5 and 6, and appendices 5, 6 and 7) has, I believe, special significance. A reason for this being that I have sought to capture the know-how and fundamental mind-set and experience of the first generation of educational technologists at the OU - a number of whom have retired or are approaching retirement within the time frame of this research. Initial presentations of the data for discussion purposes met with approval and recognition from colleagues in the sense that it had a certain 'ring of truth' to it. My gratitude must go to those who kindly and frankly shared with me, and were willing to struggle with the not always easy questions we discussed. Furthermore, I was intent on structuring the qualitative data so it could 'speak for itself' as much as any methodology would allow and in such a way that it would facilitate a constructive dialogue among practitioners in the field. To pursue this objective I eventually made use of GABEK ('Ganzheitliche Bewältigung von Komplexität', a German acronym for 'Holistic Processing of Linguistically Represented Complexity) as a method for the analysis of some of the interview data. This has resulted

education, substantiating them with the original interview statements (see conceptual matrices in appendix 5). I had already done most of my interviews before I came to know about GABEK. Had I known about it at an earlier stage, I would have selected and framed my questions differently and I would have been better positioned and equipped to be able to establish some proper comparisons among the three universities. As it happened, the exploratory character of my interviews, of a semi-structured type, sought to draw out from each interviewee the distinctive reflection and experience that were uniquely his or hers. As a consequence no strict comparisons could be established in terms of the qualitative data from each of the universities. Nevertheless GABEK, through the process of Gestalt construction, can elicit the condensations of meaning from the analysed data.

The issues thus identified led to the 'thematics' phase of the research (see chapters 5 through 7) seeking to elucidate the research question on the basis of the data analysis and interpretation. By doing this, I have sought, as a reflective practitioner, to develop a form of 'connoisseurship' of the field. The term 'connoisseur' (Eisner, 1979, p. 193) seems a felicitous term applied to this type of comparative-qualitative inquiry. Not only does it carry with it the pleasant association of a 'catador de vinos' (Spanish for a 'wine tester') but refers to one who could assist others in discerning, or appreciating more deeply, the quality in distance education and educational technology wherever it may be found. Additionally, it could also provide expertise towards sensitively contextualising and implementing new configurations of distance educational systems.

Among the relevant 'thematics' identified is that of ethics in educational technology and distance education, which has been mainly addressed in chapter 5. Admittedly, ethics is not a 'safe' theme. Nevertheless, according to David Hawkrige (1996), the days are gone when educational technologists, could simply dispense with ethical issues and regard their practice as merely a set of neutral tools in delivering educational packages and support systems. Leadership in global distance education (see chapter 7) calls for the

essential quality of integrity, regarded here as a definite aspiration – certainly not as an absolute achievement in our less than perfect temporal condition. Yet, to the extent that individuals and institutions embrace certain ideals at heart, and are faithful to such commitments (for example the OU original values of being ‘open as to people, places, methods, and ideas’) a process of incarnation of such values can be effected which would make a substantial difference in any context where they are consistently pursued. The question of ethics is further explored in relation to a case study on IET's MA Programme in Open and Distance Education regarding intercultural and linguistic issues in global online education (chapter 7).

The research challenges educational technology, increasingly in the limelight, to take a critical look at its own success; to discern what might be true, or less than true success, with regards to its contribution towards educational developments, and how much of that success may be a mere reflection of the dominant world-view within a technological society. In other words, to distinguish its true success from its more circumstantial and thus fragile underpinnings. As educators in educational technology we must constantly ask others, and ourselves how educational is educational technology, how educational could it be, or should it be.

Conclusion

This chapter has set the stage for the inter-related nature of the research question with regards to educational technology in distance education. It points out that for the aims of the research the existence of the IET at the OU constitutes a singular development that finds no equivalent in the other two distance teaching universities of this study. However, this study, initially conceived as a comparative research, eschews the setting up of a particular academic institution as the standard by which to judge the others. Each

institution enjoys its own cultural and academic identity and its unique dignity within the context in which they operate.

The aspiration of this study is to promote a constructive dialogue by pursuing a better understanding of the nature of these institutions and the particular role that educational technology plays in them. This does not mean that the research will not challenge the various institutions as to how they attempt to provide the best possible educational service to their respective students and to society at large. Besides seeking to avoid unfairness in comparisons, the thesis also tries to identify and circumvent reductivist tendencies. This has been a major reason for adopting a multi-modal systems approach, together with a socio-cultural perspective, into the theoretical framework. The next chapter will explore the relevant literature related to educational technology in distance education in order to situate the topic of research.

Chapter 2

Educational Technology in Distance Education: A Literature Review

Chapter 2 - Educational Technology in Distance Education: A Literature Review

Introduction

This chapter reviews the literature in order to provide a historical overview of the development of educational technology and distance education. It critically examines the implications and the role played by technological progress in the conception and practice of distance education. It discusses various theoretical issues associated with the experience of educational technology, deriving from them some general hypothesis. It also contextualises modern educational technology analysing significant trends. The chapter closes with a discussion of the concept of world-views and of the relevance of comparative research as it contributes to the understanding of distance education in our dynamic global environment.

Precursors to Distance Education

The general approach to this review has been to examine what has been written about educational technology and distance teaching universities firstly from a historical perspective in order to situate those issues in the field that appear more prominent to the research. A general delineation of the historical development of distance education (Trindade, 1992; Tait, 1994a; García Aretio, 1994; Daniel, 1996) reveals a close connection between the application of available technology to educational purposes.

The earliest form of distance education can be traced back to the Sumerian and Egyptian cultures (Graff, 1980). The first major breakthrough for distance education must have been the invention of the alphabet. The alphabet made possible the move from

iconographic inscriptions (usually under the control of some priestly elite) to a more democratic access to knowledge by the general population. It could properly be affirmed that this type of instructional exchange was launched with the first written letter in which there are explanations given with an educational intent. We may think here of Plato's letters to Dionisios as well as those of Plinio to his younger homonym. The 124 letters by Seneca (*Letters to Lucilio*) constitute a comprehensive treatise of stoic philosophy. In his overview of distance education developments, Daniel (1996, pp. 47-50) chooses to start by making reference to the teaching methods used in Apostolic times and, particularly, the epistolary medium so successfully employed by the apostle Paul. The introduction of this medium generated an asynchronous, yet dynamic, educational relationship with readers that extends itself to the present day. His epistles were intended to function as circular letters, so that the diffusion of his message was also complemented by a synchronous dimension, as the local gathering of believers (*ecclesia*) listened to the reading of the letters and discussed them.

John Amos Comenius (1592-1670) is often called the first modern educator. From the point of view of educational technology a special mention must be made of him. It was Comenius who popularised the picture book for educational purposes and who wrote the first textbook that employed pictures as a teaching device (*Orbis Pictus*, 1638). His innovative, graded Latin textbooks and his books explaining how to improve the teaching of languages (*Janua Linguarum Reserata*, 1631) reached such success that it was translated - and we are speaking of the seventeenth century - into twelve European languages as well as into Arabic, Persian and Turkish. In a survey of the History of Education it is probable that there is no worthier forerunner for an educational technologist than Comenius. His major work *The Great Didactic* (1632, 1971) is a compendium of educational wisdom setting the agenda for ideas, which are still being discussed. In its preface, which I have translated from the Spanish version, this is how he introduces *The Great Didactic*:

“The setting forth of the whole art of teaching all things to all people. A certain inducement to set up such educational institutions in which the entire population of both sexes, none excepted, shall, *Quickly, Pleasantly, Thoroughly* become learned in the Sciences, pure in Morals, trained in Piety, and in this manner instructed in all things necessary for the present and for the future life”.

(Capitals and italics as they appear in the original)

Then he states the object of his 'educational technology' in terms of "seeking and finding a method of instruction, by which teachers may teach less, but learners may learn more, by which the learning environment may be the scene of less noise, aversion, and useless labour, but of more leisure, enjoyment and solid progress". Just these few remarks present us with a series of issues, i.e. access, learner focussed, design of instruction, etc., that are still very much at the core of educational technological reflection, including its wider ethical, social and scientific dimensions.

Two technological developments - the invention of the printing press and the introduction of the postal service - permitted distance education to expand substantially by meeting people's educational needs in their own homes. Correspondence Education is discussed in most literature as the immediate predecessor to modern distance education. Glatter and Wedell (1971) characterised the status of correspondence education in the U.K., in the century between 1850-1950, in the following way:

- Its nature as a system dealing with those excluded from conventional systems, and for vocational subjects.
- Its tendency to deal with adult learners, long before the idea of continuing education was influential (although it must be said that it was Comenius who introduced, as an integral component of his educational system, the 'life long learning' concept).

- Its perceived second class nature.

A comprehensive chronology of the history of distance education is presented by García Aretio (1994). Likewise a relation of the prominent events in contemporary distance education developments worldwide is presented by Trindade (1992). Tait (1994a) presents a perceptive reflection on some of the major distance teaching systems from the view of ideological influences at work in them.

The task of identifying the 'essence' of this modality of education has puzzled theoreticians of every cultural background, and is likely to continue to do so. The expression 'open and distance education' is a not too well defined expression which has been used with many different connotations (McKenzie et al., 1979, p.17). Rumble (1989) also addressed the problematic use and misuse of the terms 'open' and 'distance'. Peters (1993) compiled a series of denominations applied to distance education such as *correspondence education or correspondence study*, which has been in use now for over a century; and *Fernunterricht*, a German term that emphasises the physical separation between teacher and learner. The concept of *Open Learning* emphasises a greater degree of autonomy and self-directed study. McKenzie (1979, p.17) qualifies the concept by making reference to the OU as 'an open hand, widely open, an open house', implying the reduction of restrictions regarding access to academic education. "Open as to people, as to places, as to methods and to ideas" has remained the core of the mission statement of the OU since Lord Crowther's Inaugural Speech in 1969 (Daniel, 1995b, and Appendix 1). A distinguishing trait of this definition of openness continues to be the absence of requiring previous academic qualifications from its students. Nevertheless this innovative factor is only present in about 20% of distance teaching institutions many of which call themselves 'open' universities (Kaye, 1988). *Study without leaving production* is another expression that was particularly used in the former Soviet Union and reflects the economic advantages attributed to this form of instruction while at the same time affirming the link between work and study, between theory and practice. The expression

guided didactic conversation emphasises the conversational relationship between the teacher and the learner. Dialogue is seen as a fundamental requirement for education by Holmberg who is credited with the coinage of this expression. *Independent study underlies* the student choice as to where and when he or she proceeds with the learning provision. Distance education was characterised as an *industrialised form of instruction* by Peters and has served to highlight the current discussion of Fordism vs. Post-Fordism, which will be taken up later in this chapter. The term gives particular attention to the technological processes that impregnate (or determine?) the whole practice of distance education. There seems to be no shortages of definitions of distance education in each of the languages of this research, which lends itself to some comparative analysis as it has been advanced by García Aretio (1994) and Trindade (1992).

Distance Education: Its Dependence on Technological Developments

"Technological developments have determined the progress of distance education" (Daniel, 1996, p. 50). This statement clearly characterises distance teaching universities as educational technological systems. But the mere existence of the technological possibilities does not ensure application to educational purposes in an educational way. Values and beliefs, a certain vision and a world-view are required to harness technology (especially communications technology) to an effective educational use. Nipper (1989) and Bates (1996) have similarly described distance education along technological lines. Farnes (1993) has described the development of distance education in terms of a parallel between Nipper's three generations of distance education - broadly characterised as correspondence education, multimedia supported education, and networked computer-based education - and the various modes of production. This would seem to support the view that distance teaching universities are educational technological operations. They exist in the form they do because certain technologies have become available and have been employed in promoting educational developments. Distance teaching universities

have placed a special emphasis, and to a large extent succeeded, in extending access to the adult population. While such development is much celebrated from an educational perspective, it does become problematic if the technology begins to be regarded as the driving force over educational considerations. There is a felt risk that a shift towards a technocratic and instrumentalistic vision of education is taking place with alarming celerity (Postman, 1985,1992,1995).

Sewart (1990) argued that conventional mass education also depends on industrial principles. Technology exerts a crucial influence on modes of production as well as on the organisational forms of education, particularly of distance education. If distance education, and in particular the educational technological function within it, entails the effective technologising of education, then we need to consider what may be the implications of such process. Technology, within a technocratic mindset, becomes the central dimension. From this perspective a chain of dependant functions could be identified in the sense that educational issues come to be regarded as ultimately technical issues, in which case education as such 'vanishes into the air', to borrow a felicitous Marxist expression.

Callinicos (1989) has aptly described Fordism with regards to its standardisation, economies of scale, division of labour, routine performances, standardised output, fragmented specialisms, etc. With regards to Neo-Fordism he particularly calls attention to contrasting the position of the core workforce vs. the peripheral workforce which is 'hired and fired' at the convenience of the technological establishment. The core workers have multiple skills and technical knowledge updated through education and training which suggests that the ultimate good of education and training is to update technical capability. By contrast the less fortunate peripheral workers might have to make use of training 'to help them cope with unemployment, early retirement and stress' (Edwards, 1991). Their horizon is effectively closed to education, particularly to what may broadly be described as liberal education, an education which is valuable for its own sake.

Finally, the above dichotomist grouping between the core and the peripheral workforce suggests a foreboding resemblance to the kind of scenarios depicted in *Walden Two* (Skinner, 1948), *Brave New World* (Huxley, 1932) and the like, with their technological (even bio-engineered) caste system. Such movement towards the forming a new elite in the emerging technocratic society comports significant ethical implications. Finally, Edwards (1991, see also Farnes, 1993) poses the question, "Are we going to see post-Fordist education for core workers and narrow training for the rest, except when they need education to help them carry the responsibilities of coping with being on the periphery and poor - or can we use the new technology and organisational changes to increase and support large numbers of people in a flexible system of mass higher and continuing education?" This seems to him the crucial issue at the present time.

Badham and Mathews (1989) discuss the move from mass production to flexible specialisation - Fordism to Post-Fordism - and provide the basis for a rich debate about distance education and its present and future possibilities. According to Farnes and others, second generation distance education is predominantly Fordist but has important Post-Fordist features, particularly course teams, project work and flexibility in time and place. Bates (1996) raises the question as to whether existing distance teaching universities, mainly operating in a basic Fordist mode, can regenerate and re-engineer themselves to become Post-Fordist institutions. The question may be particularly relevant to the OU since, in contrast to most of the other Mega-Universities (Daniel 1996), it lives and moves within one of the most advanced Western technological environments.

In the larger socio-cultural context a move towards a technology-based Open and Distance Learning (ODL) has been recognised in the specific shape of computer networks. This corresponds to Nipper's concept of a third generation of distance education. Bates (1996) points out the existence of a parallel between the revolution represented by the launching of the OU, just over 30 years ago, and the recent revolution provoked by the emergence of the Internet in the global educational context. Daniel

(1996) defends the thesis that the opportunities that new technologies afford the distance teaching universities would allow them to maintain competitive advantage with respect to conventional universities, which are increasingly making use of the same technologies to expand their educational provision. However, Rumble (1992), has brought to the open the concern that distance teaching universities may find themselves in a rather vulnerable position as they face the competitive avalanche of a wide range of academic institutions that are adopting the thinking and the methodologies that once were pioneered by the OU.

The course team approach, characteristic of the OU for the production of its courses and one outstanding element of the recognised quality of the system, constitutes an important Post-Fordist anticipation. Nevertheless it remains to be seen whether the rather laborious, and administratively complex process of established course production routines in the OU can evolve towards more flexible, and less time and resource consuming, approaches while retaining - or even improving - the quality of its courses. This posits a very direct challenge to educational technologists concerned with making as efficient as possible the design of distance teaching systems and materials. Bates appears sceptical as to the real options distance teaching universities may have to successfully compete in the new learning environment. He foresees new Post-Fordist models emerging in their own right to maximise on the possibilities afforded by the new technologies.

In considering the implications of the virtualisation of new learning environments, Bates emphasises the educational need for real people to be involved in the process and that it is not a matter of reduction of personnel. Yet the implications of what the new digital culture brings to the question of what does it mean to be human can not be underestimated. The very title of Negroponte's "Being Digital" (1995) has ontological proportions. What does it mean to learn in a digital environment and how do teachers and students interact on a digital basis? The distinction between personal and non-personal seems to be at risk and may become increasingly blurred. When we consider educational

technology do we start from the educational or from the technical? Bates suggests that educational technologists are being forced to re-think their roles.

Having revised what the literature has to say about the dependence of distance education on technological developments, I would focus my review next on educational technology itself.

Educational Technology

While reflecting on the development of educational technology in the United Kingdom, Hawkrige (1993) takes into account the developments in the field that have occurred in the United States, since in his view the United Kingdom has followed a similar pattern, though on a delayed time-scale. He points to the influence of behaviourism and programmed learning under the leadership of Skinner (1954, 1968). Other contributing influences on educational technology in the North American scene have been the training expertise developed within the industrial and military environment; also the personalised learning movement (Parkhurst, 1922; Wasburn, 1932). One of Skinner's colleagues, Keller (1974) devised the Personalised System of Instruction, and Glaser (Cooley and Glaser, 1969) developed Individually Prescribed Instruction. Finally there was the Individually Guided Education (Klausmeier, 1975). In general the various experiments in programmed learning did not lead to large-scale adoption by educators, in spite of extensive government funding in the '60s and '70s.

Computer-assisted instruction also has its roots, according to Saettler (1990), in the behaviourist soil, much of it being programmed learning transferred to computers. During the 1980s a debate arose concerning the definition of the field. According to Saettler (1990, p. 509) the Association for Educational Communication and Technology's definition of educational technology (1974) was considered obsolete and the need was

recognised to extend theoretical and research horizons. That original definition referred to educational technology as *"a complex, integrated process involving people, procedures, ideas, device and organisations, for analysing problems...involved in all aspects of human learning"*. In 1994 the following definition was issued by the same official body: *"Instructional Technology is the theory and practice of design, development, utilisation, management and evaluation of processes and resources for learning"* (Seels and Richey, 1994).

In the context of that debate Heinich (1984) expressed his understanding of educational technology as being rooted in technology, not in education, asserting to an all out technologising of education. On their part Ely and Plomp (1986) defended an eclectic problem-solving model of educational technology, based on a systems approach but drawing on a wide range of techniques from many disciplines. Then in 1991 arose an important debate over constructionism in the Educational Technology Journal. The general positivist view of education taken by the behaviourists had its interpretative opponents. Best known among them is Eisner (1967, 1979, 1991), a professor of Art Education at Stanford University and a recent president of the American Educational Research Association. Eisner perceived, and rejected, behaviourism as yet another technological manifestation of the means-ends model of thinking. Hawkrige (1993) also comments on how the US has remained extremely stable in its educational technology approach, sustained by the same dominant paradigm for about forty years.

Other relevant contributions include Eraut (1989a) who was the editor of 'The International Encyclopaedia of Educational Technology'. Later, Eraut (1989b) provided a good overview of conceptual frameworks and historical developments up to 1980. Holloway's (1984) 'Educational Technology: A Critical Perspective' was a 60-page survey of technology in education, raising many questions about its purpose and success, but not about how it can be integrated into educational technologists' thinking. Nunan (1983) wrote 'Countering Educational Design' in which he declared that educational

design, a rather central facet of educational technology, must be countered least the classroom teacher should lose control to professionals who base their work solely on operative precepts. Nonetheless the behaviourist tradition is strongly represented by such works as Percival and Ellington's (1984) 'A Handbook of Educational Technology', and Romiszowski (1981,1988) who combined behaviourism and the systems approach in his 'Designing Instructional Systems'. Romiszowski understands educational technology as instructional systems design. His overall design being based on analysis of needs and resources; design of objectives plus choice of teaching strategies and tactics; development of materials and organisational structure required; and, finally, implementation and evaluation through trials. His general approach is mechanical and decidedly a-theoretical.

Gagné (1987) edited 'Instructional Technology: Foundations', a valuable collection of papers that review the history of educational technology and its psychological basis; Spencer's (1988) 'The Psychology of Educational Technology and Instructional Media' provided a useful collation of theory and research; Saettler's (1990) 'The Evolution of American Educational Technology' builds on his much earlier (1968) book, 'A History of Instructional Technology'; Hlynka and Belland's (1991) 'Paradigms Regained: The Uses of Illuminative, Semiotic and Postmodern Criticism as Modes of Inquiry in Educational Technology' touches on important recent trends. Finally, the revised edition of Briggs's 'Instructional Design Principles and Applications' (Briggs, Gustafson and Tillman, 1991) remains faithful to its behavioural origins.

As already stated, Educational Technology in the UK has been significantly influenced by its development in the US. Perhaps one of the major differences being that in the UK educational technologists have become more sensitive towards ideological issues arising from the Continent, particularly under the impact of the Frankfurt critical school of thought. It is interesting to observe that although philosophical and theoretical developments in the UK have traditionally kept a perceptible distance from those in the

Continent - while at the same time maintaining a sympathetic kinship to those in North America - nevertheless, via Australia, a major challenge to traditional educational technology and distance teaching is being presented through the 'Critical Reflection' of Evans and Nation (1989) among others.

Derek Rowntree is widely acknowledged as one of the outstanding educational technologists in the UK. He is probably the best-selling author in the field on this side of the Atlantic, and the most generally read educational technologist outside the US. He views educational technology as 'essentially a rational, problem-solving approach to education, a way of thinking sceptically and systematically about learning and teaching' (1974, p.1, the underline is mine). He conceives curriculum development as the fundamental function of educational technology.

One of the major influences within the British educational technology scene is that of Gordon Pask's Conversation Theory and Systems. Pask (1969) proposed that 'teaching systems should be conversational in form' and proposed that [teaching] strategies are matched to individual competence (p. 266). Pask remains an influential figure within this field in that his conversational theory has resonated in different forms in various sectors of educational technology and distance education. Laurillard (1993) took up his notion of conversational theory and evaluated educational media in terms of their potential to support this kind of dialogue in educational relationships. Very perceptively, and most relevant to the new learning environment that calls for collaborative learning, Pask contrasts education to indoctrination in so far as with the former the teacher learns as much, or more, about the learner than the learner is supposed to learn from the teacher. 'Agreement, again, includes agreement to disagree, by far the commonest outcome and the most productive if accompanied by mutual responsibility. Conversation can and often does give rise to conflict, but also leads to conflict resolution when there is mutual respect' (1969, pp.18-19). Such mutual respect and mutual responsibility indicate foundational educational values that go well beyond the mere political power struggles

and managerialistic interests that taint much of the current educational discourse. Pask's ideas invite an ethical reflection that can support the view of the learner as a person, rather than being instrumentalised as a functional unit within any particular educational system.

The Old, the New and the Next Educational Technology

Just as it is difficult to define distance education, the search for a definition of educational technology poses problems for practitioners in the field. The general approach, after transcribing and briefly commenting on historical definitions, is to quickly move on to a 'functional' definition of the term. Morgan (1990, 1997) seems to be one of the relatively few that are willing to specifically raise the question 'What is educational technology?' Furthermore he emphasises the importance of raising such issues as, in his words, "there are many simplistic and caricatured descriptions of educational technology in the literature". The general trend one encounters, when confronted with the need for a definition, is to describe 'what educational technologists actually do', and the description proceeds in such generic terms that the concept becomes homoeopathically diffused.

There can be little doubt that educational technology has had (and still does have) a considerable influence in distance education. According to Morgan (1990, p. 7) "the role of educational technology has been very influential in the OU both in determining the nature of the pedagogy and also the style and approach of much of the research and evaluation". Educational technology is at the centre of the course planning, design and production process, and as a result it exerts a major influence on the types of research and evaluation carried out in distance education. Therefore it appears essential to address the question, **What is educational technology?**

The work of Derek Rowntree, as already mentioned, is pivotal with regard to the practice of educational technology within the OU. Educational technology for Derek Rowntree constitutes a problem-solving approach to curriculum development. This rational systematic approach to educational technology has four basic strands: (a) identify purposes, especially in terms of objectives, (b) develop the necessary learning experiences, (c) evaluate the effectiveness of the learning activities in achieving purposes, (d) improve the learning experiences in the light of the evaluation. In the second edition of his book (Rowntree, 1982) there are references to knowledge structures, cognitive models and borrowings from humanistic theories of Carl Rogers' freedom in learning. However the foundations of the approach remain basically the same: it sets out educational technology as a technocratic approach to course development. In this technocratic approach objectives seem to be the pillar to developing good distance teaching materials. Furthermore, educational technology is portrayed as a set of neutral and value-free procedures. The essence is 'whatever you want to teach we'll help you teach it better'.

More recently, Rowntree (1992) has added to the description of the 'tutorial-in-print' concept in educational technology that of 'reflective action guide'. The tutorial in print reflects the traditional, highly structured distance teaching text of educational technology, in a sort of soft-behaviourist approach to which Morgan referred as 'neo-programmed learning' (1993). The 'reflective action guide' model of educational technology aims 'not to have the learner master a body of knowledge, but to attain personal insights or practice towards some kind of competence' (Rowntree, 1992, p. 135). This kind of post-behaviourist understanding of learning poses no fewer complications and gives rise to some critical questions about the teaching-and-learning process, for if there is no 'body of knowledge to be mastered', by default all that we are left with is the assumption that all there is to learning is the 'mastery' of process as process where 'nothing of substance has to be learned' (Rowntree, 1992, p.136).

The technocratic approach in educational technology has led also, in Morgan's view, to 'an hegemony of survey methods', and has placed the whole system on rather problematic empiricists foundations. In 1987, David Harris launched a major critique of the OU from the approach of critical theory, in his book 'Openness and Closure in Distance Education':

In developing rational principles of course design intended to provide all applicants equally with the same high quality standard courses, certain other possibilities and outcomes have to be closed off (p.3).

In a previous book he points out that,

The only kind of communication with the central institution takes place via frequent assignments, which often call for a personal response, while being graded according to impersonal objective criteria (Harris and Holmes, 1976, p.84).

According to Westoby (1988) this 'technified view' of evaluation, grounded in the 'culture' of traditional educational technology, makes no allowances for issues related to the micro-politics and sub-cultures of organisations. For his part, Donald Schon (1984) uses the term "technical rationality" which finds the relationship between research, evaluation and practice as an unproblematic continuum. He finds this technical rationality inadequate to explain how professionals act in practice and he proposes the idea of 'reflection in action' as a more realistic way of understanding practice and how professionals interpret their research findings.

In the last few years there has been a marked move away from the technocratic model referred to towards a new paradigm in educational technology, 'The New Educational Technology' (see Farnes, appendix 2) for a contrasting chart of the Old and the New Educational Technology). Several factors have influenced this transition. On the one

hand there has been a number of theoretical changes promoted by Computer Mediated Communication (Mason and Kaye, 1991). They highlight the situated nature of learning as context-dependant, as well as its dimension as a social and dialogical process. Out of this grows the need for the construction of a community of shared knowledge (Wegerif, 1995). A new domain in terms of collaborative learning seems to have been identified through this process. But there have also been challenges of a more philosophical nature involved in this transition. One of them is the approach of critical action research proposed by Carr and Kemmis (1986), which is based on the critical social science of Habermas. Their aim is to develop a critical educational science. Burt (1989) has sought to develop a field of inquiry which he refers to as 'Cultural and Ideological Technology'. He has also been critical of educational technology for its consistent tendency to ignore ideologies that underpin the educational debate, 'with its attention to means-rationality and its denial of ideology, [educational technology] often seems to turn a blind eye to society'.

A major development of recent years in the field of educational technology has been the way in which Evans and Nation (1989) have introduced the concept of 'critical reflection' emphasising both reflection and change as the educational *leit motifs*. They acknowledge to their being influenced both by critical theorists (Carr and Kemmis, 1986, - ultimately Habermas) and by the sociological ideas of Giddens (1984). The way they define critical reflection is as follows:

Critical reflection is the process through which human beings use their analytical powers to assess elements of their lives against their explanatory frameworks (theories). Critical reflection is the precursor to change because, through the recognition of human agency, it encourages people to seek to improve lives in their own terms.

One implication of their concept of educational change is the promotion and recovery of the idea of 'a community of researchers' seeking to counter the fragmentation that technocratisation has brought on the educational process and social interactions.

More recently Evans and Nation (1996) established an analytical distinction between 'instructional industrialism' and 'dialogue'. They see dialogue as central to the educational relationship and the proper medium by which students should be encouraged towards deeper approaches to learning, that is, to go beyond the information presented to them.

Morgan (1997, p. 5) makes the comment that most people in the Institute of Educational Technology now operate under the "New Paradigm" and that the OU's MA Programme in Open and Distance Education launched in February, 1997, by the institute is significantly influenced by this model, supported by the "Critical Reflection" approach. Yet, it is intriguing that in reflecting on this transition Morgan refers to the "old" as being good as far as it goes, but that it doesn't go far enough. The question then arises as to whether this transition is just a matter of length or distance from the 'old' while still operating on common epistemological foundations. It would be helpful to further the reflection as to what may be the common foundations for both paradigms, what is being retained and what is being abandoned in the transition. The justification presented by Morgan that 'the old provided only a partial view' appears to be rather problematic. For indeed the new may be committed to expand as much as possible a holistic view of the learning experience, but to indicate that it is actually reaching and embracing the confines of the whole might be a too ambitious pretension. Although he refers to the 'New' as taking into account social contexts, there may still be wider and deeper issues of a philosophical nature that would need to be considered in consonance with a holistic approach.

A relevant issue within the field of educational technology is the validity (or otherwise) of the deep vs. surface learning approach (Marton, Entwisle and Hounsell, 1984, Entwisle, 1992). This has constituted a major element in Morgan's (1993) configuration

of a model for improving student's learning experience. The discussion is particularly significant in the distance teaching-learning mode where the 'industrialising of education' (Peters 1983) generates suspicions as to how fragmented, mechanical or merely functional, may be the learning experience in this context. Consequently, models are proposed that advance conceptions of learning on a more holistic, meaningful and deeper level.

The New Educational Technology incorporates group processes in course teams, ideological critiques and qualitative-phenomenological studies. These developments do represent a major advance with respect to the rational-technicist conceptions of the Old in that it expands its areas of concern to social, political and ideological contexts. Within the New Educational Technology, Woodley's work (1993) on institutional research taking into consideration micro-political issues, provides a good example of the 'reflection-in-action' methodological approach which characterises aspects or trends of this new paradigm.

Morgan sees the New Educational Technology advancing towards the concept of assisting the student in 'the construction of meaning' which 'goes beyond the information presented', and which takes full account of the 'human agency' as central to our understanding of education. He values Bruner's (1990) insights regarding the dual key factors of *reflexivity*, and the 'dazzling' capacity of humans to *envision alternatives* as integral to the educational process. The dynamic that these two concepts generate parallels Giddens's (1984) formulation of his 'structuration theory' in which he emphasises the dialectical relationship between 'structure' and 'human agency'.

All these views emphasise a need for recovering and reaffirming the centrality of the person in the teaching and learning situation, and to 'rescue' it from the loss of humanness caused by mechanistic approaches. Educational concerns cannot be properly addressed merely on the basis of technical solutions. This point highlights the importance of

'dialogue' (Evans and Nation, 1989) in the New Educational Technology. Finally Morgan resorts to Rogers (1969) to suggest that the true role of the educational technologist within the New Educational Technology is that of a facilitator. One who is able to create opportunities for reflective learning and to accommodate whatever teaching material (of whatever degree of structure) may be seen appropriate to the learners' needs. Also Morgan embraces Rogers' proposition that "the goal of education, if we are to survive, is the *facilitation of change and learning*. The only person who is educated is the person who has learnt how to learn". But is this goal of learning how to learn in itself not a technical definition of education? Furthermore, this absolutisation of *process as process* where 'no knowledge is secure', is it not a dogmatic assertion itself? How sure can one be that there is nothing to know for certain?

Regarding the 'Next Educational Technology' we will need to consider Hawkrige's (1996) views of the mega-trends as well as those of Simon Buckingham Shum of the Knowledge Media Institute affecting the field of Educational Technology.

General Trends affecting Educational Technology

Simon Buckingham Shum, quoted in Daniel (1996, p. 102), has made explicit the ways in which media technologies shape knowledge as follows:

"In oral cultures 'you know only what you can recall'. Knowledge is dramatised, repetitive, concrete, situated, participatory, personal, historically fragile, with prominence of ritual and story-telling. With the discovery and use of writing, knowledge is no longer subjected to human memory limitations, abstract reasoning is facilitated. Then the printing press makes knowledge reproducible *ad infinitum*; objective and precise, indexible, central to scientific development, linguistic/literary styles are refined.

Radio/TV make knowledge instantaneously accessible to large audiences, image based, passively absorbed, increasingly packaged and filtered, with the multiplicity and speed with which audio-visual impressions are made meaning tends to become elusive.

Global Hypermedia knowledge no longer implies the solid content associated with it in the past, transient (digital), perspectivised and relativised, interlinked, open-ended, public not private, breadth at expense of depth. Information dominated culture (not necessarily wiser), loss of linear modes of reasoning, loss of lineal model of history. Conclusion: if the media we use in our communication shapes both language and thought, then the question arises as to how will globally linked, digital, interactive media shape the way we formulate, communicate and acquire knowledge?"

Hawkrige (1996) has identified five major trends in general culture affecting the development of educational technology, and indeed anticipating what he calls "The Next Educational Technology": globalisation, electronification, commodification, domination and liberation. The basic thread of these concepts according to Hawkrige is as follows: The global village predicted by MacLuhan is becoming more of a reality from one day to the next. This knitting together of global intertwinings is made possible, and significantly enhanced, by the impressive development of electronic communications. The Internet provides much of its infrastructure. Audiographics, videoconferencing, digital broadcasting (both terrestrial and by satellite) will have significant repercussions in educational environments. Multimedia packages are possibly the most significant form of knowledge products since the book technology, since they combine text, sound, still and moving pictures. Commodification is the merchandising of any and every cultural 'product'. Everything is marketed so as to become an item for sale. This is the latest version of economic reductionism. Increasingly the educational agencies are becoming more sensitive and dependent on marketing's swift changing winds/ moods. According to Hawkrige, these trends taken in conjunction seem to present an ideal platform for new forms of cultural domination. How much in the WWW can one find of knowledge products that are not in English? Or compare the number of sites in the US with those

elsewhere? How successful can one be in trying to reach academics in developing countries via the Internet?

It is hard to ignore the implicit, and sometimes blatant, cultural imperialism connected with these developments. All of these trends seem to converge and lend themselves rather agreeably to utopian aspirations and fuel the faith (dynamic by its very nature) in finally being able to establish the perfectly designed, albeit digital, paradise on earth. Yet the history of utopian thinking and action has demonstrated with unusual consistency its intrinsic authoritarian, and even totalitarian bias; that what once was a seductive dream becomes something of a nightmare. Against this perplexing and daunting background could it be reasonably considered that these new technologies be employed in a humanising and liberating manner? Again, Hawkrige suggests that liberation will occur if and when students around the globe, including the Angolans and Zambians can access the latest educational software. That liberation also takes place as electronification overcomes barriers of time and space and the poor across the globe are offered true opportunities for accessing all levels of education, as the significant success of distance teaching universities across the planet, strongly dependent on the use of educational technology, seem to indicate. Hawkrige goes on to emphasise that liberation will occur when we experience an increase of international understanding and unselfish co-operation and when minority cultures are not at a disadvantage.

But, it could be asked, on which basis can these humanitarian aspirations be realistically pursued? All these considerations desperately call for a careful reflection and critique about the ethics attached to these developments. One of the troublesome axioms I discern in the technocratic ideology can be stated as: "If it can be done it must be done, regardless of any other considerations to man's highest interests. If it is technologically possible, then it must be implemented". Thus we find ourselves in the rather frightening cul-de-sac of technological power being regarded as the absolute, without an absolute ethic to speak into it. The absolute need for a normative approach to technology, and indeed to every

realm of human concern, is reflected in the corollary that if there is no absolute standard by which to judge technology, then technology has *de facto* become that absolute.

Hawkrige's analysis points to a distinctive feature of 'The Next Educational Technology' which will be a concern for ethical issues as they relate to the educational technology profession. In such a case the pertinent question will be on what philosophical basis can such values, which would make possible a substantial difference towards liberation, be reaffirmed or recovered? A constructive dialogue of this topic will require a discussion of world-views at presuppositional level, and the need for developing a sense of the historical unfolding and interplay of the various ground motifs (belief systems) that have shaped our civilisation.

Jarvis (1993a) has argued that distance education is symbolic of late modernity and as such characterised by the hallmarks of "separation of time and space; the development of disembedded mechanisms; and the reflexive appropriation of knowledge" (Giddens,1990). Under these dynamics there appears an emphasis on individualisation and a concomitant erosion of community values and commitments. Simultaneously there has been a move towards a global economy devoid of check and balances which would increase the potential violence on the powerless. Jarvis is equally concerned with how distance education, being exported by Western distance teaching universities and traditional universities embracing distance teaching models, will affect smaller, uncompetitive-in-the-global-market, indigenous universities in the developing world, giving rise to new forms of cultural imperialism.

Tait (1994a) reflects that "Open and Distance Learning (ODL) was driven by activists who were often in opposition to the main currents of society through the support of and advocacy of marginalised sectors of the population. The analyses of individualism, Post-Fordism, commodification and consumerism now suggest that this is no longer an adequate account, and that ODL has now taken on a modernising role within current

dominant ideology" (p. 33). "Missionaries or mercenaries?" was a question with which Hawkrige alerted the audience during one of his lectures in September, 1996, regarding these trends and their implications for ODL in general and for the OU in particular. During the same lecture the audience was also informed that in the discussion about what should be the priorities of the recently constituted Open University Worldwide, the top priority, though not without debate, was finally assigned to "making money", to exploit the possibilities of the market anywhere in the world where there may be an opening for OU educational products. This may pose some problems, from an ethical point of view, regarding the aims of an educational institution and the type of relationships it generates with the 'consumers-clients' at the receiving end. The pursuit of a genuine understanding among people, places, cultures, methods and ideas in a global context is ill served when commercial interests become the dominant motivation.

In reflecting on general trends Fägerling and Saha (1989) identified four main theories of reform: evolutionary and neo-evolutionary; modernisation; dependency and Marxist-socialist. They highlight the point that a country's educational system is "dependent upon, but also influences, the economic, political and cultural/ideological dimensions of the society [in which it exists]" (p.148). They do not accept, however, the view that successful educational reforms were a mere matter of technicalities. Hawkrige (1993) insists that educational technologists need to know where they stand politically on educational reform, because whatever theory is espoused will influence strategies being deployed. Paulston (1977) has formulated some of these strategies, that when analysed in relation with the theories of reform propounded by Fägerling and Saha (1989, p. 147), generate the following typology:

a) Evolutionary and neo-evolutionary theories call for "the adaptation of education to fit the new needs of society, i.e. curriculum change, increased participation and specialisation".

b) Modernisation theories promote "the expansion of a 'modern' educational system, including high participation rates and standard curriculum for needs of the future direction of societal development".

c) Dependency theories demand "educational and curriculum reform stressing nationalism, self-reliance, and technologies appropriate for the development needs of society".

d) Marxist-socialist theories lead to "education for consciousness and awareness of needs for structural change; preparation for participatory democracy". (Perhaps the authors, when talking of 'participatory democracy', are drawing some distinction with other versions of Marxism of a more totalitarian character).

In the context of this theoretical background, Hawkrige suggests that he and a large number of educational technologists with him, would see themselves as "essentially philanthropic in our outlook, in that our stock-in-trade is a set of ideas and practices aimed at benefiting teachers and learners" (1993).

The Idea of World-View

Since this research deals with several cultures, a world-view thinking approach can be usefully applied. Such an approach should give special attention to the presuppositional basis, 'the tacit dimension' (Polanyi, 1967), that shapes the theoretical discourse and practical manifestations of educational technology in each of the contexts of this study. In this way it is possible to elucidate what they may have in common as well as how they may diverge through a comparative analysis. Tom Wright (1992) describes World-Views as:

The basic stuff of human existence, the lens through which the world is seen, the blueprint for how one should live in it, and above all the sense of identity and place which enables human beings to be what they are. To ignore World-Views, either our own or those of the culture we are studying, would result in extraordinary shallowness. (The emphasis is mine).

The history of the concept of 'World-View' is well charted by Albert Wolters (in Marshall, Griffioen and Mouw, 1986, pp. 15 and ff.). The term *Weltanschauung* originated in Germany, where it was first coined by Kant. It became a key word in the thought-form of German Idealism and Romanticism. By the 1840's it had become a standard item in the vocabulary of the educated German, denoting a global outlook on life and the world -akin to philosophy but without its rationalistic connotations. By the end of the nineteenth century the notion of *Weltanschauung* had made its way into virtually every country in the Western world. In English the term has been assimilated in two ways: the Anglicised equivalent, "World-View", documented since 1858, and the borrowed word, *Weltanschauung*, is often used as well.

Weltanschauung (World-View) conveys the notion of a set of beliefs that underlie and shape all human action. It is thought of as a comprehensive framework for all of life, that is, it purports a universal validity and applicability. A given world-view will offer a more or less ample space for testing a diversity of 'paradigms'. Basic to the idea of *Weltanschauung* is that it provides a point of view on the world, a perspective on things, a way of looking at the cosmos from a particular vantage point. Most importantly, the idea of world-view has helped highlight the fact that philosophy - and theoretical thought in general - depends upon pre-theoretical visions that function much like religious commitments (Clouser, 1991). Not only does each human being possess a World-View but that his or her World-View is alive and active in every form of scientific and theoretical reflection. "Any scientific statement is ultimately a personal statement, and it cannot be divorced from the belief system of the scientist", Polanyi (1973). Gaining such

awareness would be crucial not only for making sense of our own presuppositional commitments but also in liberating us from dogmatically absolutising them. Meaningful interactions with people holding beliefs contrary to ours will then be possible and would generate a constructive space for *dialogue*, where the freedom of agreeing to disagree can provide a basis for true collaborative learning.

Having said this, how do we escape giving in to a total relativism of World-Views, whereby one World-View is supposedly as valid as any other, as Postmodernism seems to propose? The answer to this important question may be along the following lines: We need to ask of any World-View whether it raises and answers the fundamental questions that have confronted humanity since the dawn of time. Put simply, Who we are? Where do we come from? Where are we going? How can we know anything with certainty? What has value? How are we supposed to live personally and in corporate and social relationships? There is nothing new to these questions which philosophy traditionally refers to as epistemology, ontology, axiology, etc., and also with the way institutional structures are organised depending on the answers given to them.

These questions appear to be integral to our experience as human beings. They not only are raised but must be answered, and are being answered, either by design (through personally testing the validity of the various World-Views) or by default (merely taking on the answers that the surrounding culture instils in us). Not only should we ask of any particular World-View whether it raises and answers the interrelated questions, but most importantly if it does so in a way that can be lived out with integrity: does it stand up to the test of our shared human experience of reality as we know it? If such is not the case we will be forced to conclude that we are dealing with an ideology, in the ideological sense of the word, and not with a system of belief and practice that is true (that truly corresponds) to the horizon of human experience, and that consequently it is coercive rather than liberating, reductive rather than expansive, closed rather than open. In later

chapters it will be shown how a world-view presuppositional approach can elucidate and inform a critical understanding of educational technology in distance education.

Multi-Modal Systems Thinking

Multi-Modal Systems Thinking (de Raadt, 1991) represents a serious effort to expose the fatal flaws of the reductivist mind-set, and its tragic consequences both in historical experience and in theoretical discourse. It makes a significant and discerning contribution as to the opportunities and threats manifested in our technological society, seeking to open doors for a humanising and enriching cultural environment. With these aspirations in view, Multi-Modal Systems Thinking provides a theoretical framework aimed at bringing humanity and technology in an increasingly harmonious relationship.

In sharp contrast to the technocratic approach which makes technology the central aspect of a system, determining the organisational structure and displacing the person towards the periphery, Multi-Modal Systems Thinking posits a different approach to educational-technological design. First, it starts with the person, rather than with the non-personal elements of human environment. Second, it integrates technological, organisational and cultural design into one single methodology. The educational-technological dimension does not exist in a vacuum but rather is part of the broader social system within which it operates.

The Multi-Modal Systems Thinking methodology proposes two fundamental hypotheses: (a) that there is an ordered universe where there is both form and freedom, and where each sphere of reality, in its ontological sense, is governed by a particular set of non-arbitrary laws or principles which provide it with an inherent structure, and (b) that there is truth in the absolute sense, autonomous from subjective or cultural perceptions. While the human intellect is limited and subject to error, truth is not completely elusive and it is the task and responsibility of humankind to seek out this truth and live under its guidance.

Furthermore, this search for meaning is the strongest motivational drive that orientates people, regardless of the object to which they end up ascribing ultimate significance. By denying such presuppositions one must succumb to relativism. One must also surrender the idea of human learning and progress and the notion of ethics and responsibility. There is no possible platform from which to speak, condemn and correct injustice, cruelty, exploitation or any other evil. Moreover, there is no reason why educational technologists should not contrive their practices to serve vested ideological interests, thus vacating the meaning of the highly valued notion of openness.

Comparative Research

In this section I will introduce a conceptual discussion of the comparative approach along with some of its inherent difficulties and a historical overview of its development. This will be followed by some examples of comparative research in distance education in order to illustrate some of its challenges and possibilities.

The nature of the comparative approach is reflected in the following quotes:

The comparative perspective is more than a scientific technique - it provides a basic intellectual outlook that helps one overcome natural inclinations to view the world through egocentric or ethnocentric lenses. When this liberating perspective is pushed too far, it opens the door to bottomless relativism, but, as we shall see, the comparative perspective has a tendency to curb this danger itself.

(Etzioni and Dubow, 1970: viii)

The term comparative in its most general sense means inspecting two or more educational operations in order to discover how they are alike and how they are different. An operation in this context refers to any act associated with learning

and teaching. Therefore we are engaging in comparative education when we analyse two ways of teaching a single mathematics lesson as well as when we simultaneously inspect the entire education systems of two dozen nations.

(Murray Thomas, 1990)

There is in the above quotes an implicit recognition of continuity, of common features among the operations selected for the comparative research, while at the same time being particularly attracted to their differences. Such differences constitute the mayor focus of research inquiry for the uniqueness of character that they reflect and the contribution they make to the universe of discourse. What kind of conditions generates different responses and what facets of creativity and innovation do they elicit from the people engaged in them? This emphasis on the differences is paramount to Comparative Research and is clearly underlined in Kandel's definition of the purpose of Comparative Education: 'to discover the differences in the forces and causes that produce differences in educational systems' (Kandel, quoted by Halls, 1990).

In acknowledging and valuing the differences of the educational 'operations' being inspected, Comparative Research seeks to embrace the richness of complexity they manifest, avoiding simplistic and reductivist explanations. For this reason, Comparative Research tends to resort to systemic and interdisciplinary approaches to come to grips with the operation as a whole and the dynamics of its internal and external relations. Diversity, being thus valued, lends itself quite naturally to interpretative methodological analysis that pursue an understanding of the heart, motivation, world-view, identity and coherence of the operation being inspected. According to Halls (1990) this approach cannot merely or exclusively be pursued in terms of quantifiable empirical phenomena, rather it:

...systematically researches the historical, social, cultural, political, religious, economic and philosophical forces that partly determine and are partly determined

by the character of education systems, and compares the resultant outcomes in two or more systems, areas or even globally.

Historical Overview of Traditions in Comparative Research

Before discussing some examples of comparative research in distance education, I will mention the historical phases through which the comparative discipline has evolved, thus providing some useful perspective in situating the way in which the current research has been approached.

1. "Travellers' Tales" - descriptions of educational practices in other countries. Often such descriptions provided a justification for introducing innovative changes at home.
2. Educational "lending and borrowing", which aims at transferring practices among countries in the hopes of implementing educational reforms.
3. "Historical/Cultural Studies". Such works sought to understand how history and culture have influenced the development of education in different areas of the world. An example of this type is how language and culture affect what children learn at school as well as the pedagogical methodology employed.
4. "Promoting international understanding" in response to humanitarian concerns. This trend is reflected in the involvement of comparative education researchers in efforts to improve education in less developed regions of the world.
5. Attempts to build a "science of Comparative Education". A tradition that emerged in the 1960s pioneered by George Bereday, and significantly developed by Noah, Eckstein, and Anderson to the point where the "scientific" approach to Comparative Education

dominated the field in North America through the 1970s. They believed that a “science” could be developed only through use of methodologies borrowed from the social sciences that consisted of hypothesis formulation and testing and the use of quantification and statistics. The goal was to discover scientific laws governing educational and societal relations that could guide policy decisions. During the same period, in Great Britain scholars such as Brian Holmes and Edmund King doubted the possibility of doing so, while at the same time attempting to develop scientific approaches on different lines.

There have been seasons, particularly at the beginning of the ‘70s, where the advantages of social sciences on Comparative Education have been stressed. However valid, this orientation has not been dominant in the long research tradition of this field, which is increasingly characterised by a variety of different research orientations. No longer are there attempts to define a single methodology of Comparative Education, and few would argue for one single method to be developed as a canon. The tendency is to adopt a range of methodologies and approaches in order to develop innovative ways of dealing with complex research issues and in analysing educational data creatively in a trans-cultural frame.

Examples of comparative research in the field of distance education are provided in order to illuminate some of the challenges it comports. Keegan and Rumble (1982) assessed the success or failure of DTUs using a four-point evaluation scheme of their effectiveness. Their evaluation focused on the following categories:

- 1) The quantity of learning achieved.
- 2) The quality of learning achieved.
- 3) The status of learning achieved.
- 4) The relative cost of learning achieved.

Each of these categories was later subdivided in a series of specific topics. They applied these criteria to five institutions:

- * Centre National d'Enseignement à Distance (CNED), France.
- * The Open University of the United Kingdom (UKOU).
- * The Department of Independent Study of the University of Florida at Gainesville.
- * Die Fernstudiumabteilung der Karl-Marx Universität Leipzig (Distance Education Department of the University of Leipzig).
- * The Department of External Studies of the University of New England, Australia.

The UKOU has undertaken numerous consultancies and feasibility studies for implementing distance education in all levels, around the world. For example, in Central and Eastern Europe (CEE), the present phase of transition towards market-orientated economies must take into account the global shift from industrialised-hierarchical-Fordist modes of production towards Post-Fordism with its flexible networking structures. There seems to be a fundamental cross-roads of decisions as to what type of models these societies should adopt to be able to compete and integrate themselves within the general trends of the European Union (Farnes, 1996a).

In the context of this quickly changing scenario, Farnes (1996b) suggests that developments in Australia in the early '90s, with the setting up by the central government of an Open Learning Agency (OLA) that serves to co-ordinate national developments in a field, and which is strongly operating on a networked-consortia approach, may serve as a paradigmatic model for Open and Distance Learning in CEE. Although Farnes sees many advantages in this Australian model and states that much can be learned from it by CEE countries, he also recognises that difficulties to establish a credible system of distance education in these countries, in a post-Fordist mode, may be difficult to overcome. In spite of the disparity or otherwise between Australia and the CEE countries and the

possible options open before them, Farnes (1996a, p.13) affirms that 'many of the fundamental issues are similar'. He also affirms the value of 'comparative research to explore the interaction between wider political, social, economic and educational change in order to illuminate the changes and processes involved as well as to evaluate the consequences of alternatives choices'.

Rumble, formerly an OU Planning Officer and a Director of a Regional Centre of the University, has also been a consultant in many countries. In a personal interview he expressed his view that the fundamental issues of comparative research in distance education are not so much to do with methods or models, but rather that "the essential comparison is pretty mundane really: are there conditions - economics, politics, trends in general culture - that make distance education a viable approach? The questions you pose, and seek answers to, are almost universal. There may be an awful lot of differences in the answers, but there are givens (the emphasis is mine)". This last word reveals a fundamental issue in comparative studies, just like Farnes' point above, there can not be meaningful comparisons made where there are no universals, at least at an operational level. This should cause us to reflect as to what may be the structural normativity within the field of distance education, what makes it be what it is, and what provides the basis for unity and diversity in terms of the different responses people choose to give to a generally identified set of fundamental criteria.

The European Commission through its funding programmes has generated a rich new framework for collaboration in ODL among its members and has been issuing a substantial number of publications focusing in ODL (see especially 1992, 1996). They state the rationale and recommendations for advancing transnational developments in this domain. This new context brings to the fore the significance of Comparative Research with regards to developing the understanding and modes of collaboration along the proposed lines. Established and well-reputed institutions in the field can provide valuable leadership as catalysts of viable forms and processes for implementing this vision.

In 1992, Universidade Aberta organised in Coimbra, Portugal, a Conference under the title of 'Distance Education for Europe: Terms of Reference for a European Distance Education Structure' (Trindade, 1992). The participants addressed the challenge of how to integrate so many and diverse institutions, how to give them adequate motivation, as well as the means and the operative methodology to embrace a fuller collaboration. During this same Conference Erling Ljoså (pp. 274-275) commended Trindade for his analysis of the emerging needs for development in CEE, and how the experience of Portugal's own transition towards a Western democracy constituted a valuable reference from which to suggest recommendations to this particular area of the European society. Fandel, Bartz and Nickolmann (1996) in the workshop proceedings "University Level Distance Education in Europe - Assessment and Perspectives", analyse a wide range of themes, many presented from a comparative approach, with the stated objective of promoting understanding of European networks in the field.

Daniel (1996) offers a profile of eleven Distance Teaching Mega-Universities in the context of his contention that these universities need to take full account of the challenges that the new technologies confront them with. He suggests that these universities should prepare themselves to take the necessary steps to accommodate these technologies within their systems, and ideally to regenerate themselves after the new technological paradigm. The necessity to maintain their 'competitive advantage' in the face of the proliferation of Open Learning providers, and the increasing adoption of distance education methodologies and structures by conventional universities, will probably stir up a substantial debate. These Mega-Universities, and particularly those operating in a more advanced technological environment may be vulnerable and there is some doubt whether these Institutions, significantly established after an industrial-Fordist model will be able to stand the 'assault' of new Post-Fordist initiatives (Rumble, 1992; Bates, 1996).

The Spanish Mega-University, UNED, which is predominantly Fordist in its operations, has suddenly been awakened to this threat by the birth of the Catalonian distance teaching

university. This university is fully embracing the Post-Fordist style and the possibilities that telematics afford for the delivery and support of their courses (i.e. all tutorial assistance is conducted via computer mediated communication). Thus the Iberian Peninsula presents an opportunity to study the contrasting different expressions, and generations (Nipper, 1989), of distance education, both in terms of magnitude of students as well as modes of institutional and educational operations.

Conclusion

This chapter has presented a critical overview of the historical development of educational technology and distance education and the various attempts at characterising this mode of education. Significantly, it has pointed out the acknowledged dependence of distance education on technological developments and how recent shifts in economic theory have questioned the foundation and viability of older distance education systems. The discussion of Post-Fordism is particularly relevant in this connection. Furthermore it has contextualised educational technology and it became apparent that, in terms of the literature, educational technology is distinctively an Anglo-Saxon concept. A number of sources reflect a concern that educational technology has a tendency to become technocratic, and that it could be regarded as a neutral, ideology-free, set of tools to assist in the implementation of distance education in whatever cultural and political context. Proponents of the socio-critical perspective, discoursing from neo-Marxist presuppositions have addressed this simplistic attitude. Educational technology has sought to free itself from its behaviourist and programmed learning origins and to conceptualise a new form of educational technology, more responsive to social and political issues and more flexible in terms of its methodology. This new educational technology has been expanded to recognise the relevance of ethical issues in what Hawkrige (1996), the founding director of the IET, has referred to as the Next Educational Technology. It has been suggested that the complexity that educational

technology and distance education entails would require a robust world-view approach in order to identify the cultural roots and dynamics that have produced these phenomena, and that this process could be assisted by introducing a comparative approach. The background is in place for considering in the next chapter the methodological issues that have informed this research.

Chapter 3

Methodological Issues and Framework

Chapter 3 - Methodological Issues and Framework

Introduction

This chapter gives an account of the various methodologies that have informed this research. In constructing a methodological framework use is made of comparative research in relation to educational developments. The comparative perspective calls for a systems approach not only to circumvent reductivist tendencies of the phenomena under study but also for doing justice to the richness and complexity of transcultural considerations. Multi-modal systems thinking is expounded along with other complementary methodological perspectives such as the socio-cultural, educational criticism and world-view analysis. Together, it is argued, they provide a useful set of tools for situating and guiding research in distance education and educational technology within a multicultural frame of reference.

Phases of the Comparative Method

Comparative methodology can involve the following steps: description, interpretation, juxtaposition, and evaluation and recommendations (Beredey, 1969; Hilker, 1964; García Garrido, 1982; Raventós, 1990; Todeschini and Ziglio, 1992, etc.).

1) Description:

In this first stage, researchers seek to acquaint themselves in the most precise way as possible with the realities being compared, whether educational systems, methods, materials, etc. This knowledge requires not only documentary information and the personal experience of, and if possible immersion, in such realities.

2) Interpretation:

Once the data has been collected, and often presented in some form of synoptic chart, there follows the stage of interpretation that seeks to unveil the causes and interrelations that would allow an explanation of the phenomena being studied.

3) Juxtaposition:

The juxtaposition stage is regarded as being most typical of the Comparative Methodology. It usually consists of presenting (often in the form of tables) the most relevant data according to the selected criteria. Generally speaking, in one of the axis might be the units that are been analysed, i.e. the countries or geographic units, or several historical times, and in the other axis those criteria that have been used to obtain the data, i.e. number of students, courses, budgets, types of educational materials, etc. Such synoptic vision allows for a quick glance at capturing similarities and differences.

4) Evaluation and Recommendations:

This leads to a selection of what seems particularly relevant to a given situation and some recommendation that may be conducive to beneficial innovations.

Some Difficulties in Comparative Research

Comparative research must be sensitive to a rich complexity of multicultural and transcultural considerations. This will make it very difficult to establish the validity of a quantitative based approach in transcultural contexts, except for aspects like economic, personnel, numbers of courses, programs, budgets, etc., which can be expressed in quantitative terms. However, for the purpose of the research, and the contribution it hopes to make, is less concerned with these aspects as with conditions of creativity and cultural idiosyncrasy that favour innovative educational responses to the opportunities and risks attached to our technological civilisation.

It is very doubtful, if one looks at the absolute and relative number of people actively contributing to educational technology developments at each of the three Universities in this study, that there will be an adequate sample to enable any significant degree of statistical validity. Consequently, in this approach an emphasis is being laid on maximising the possibilities of communication networks (Rogers and Kincaid, 1981) in which the particular role of the researcher is seen in providing a catalyst function that facilitates a dialogue among educational technology practitioners from the different Universities. It is expected that these exchanges will be conducive to improvements in their respective operations (Guba, 1985).

According to Trethewey (1976, pp. 41 ff.) one of the main tasks confronting researchers in applying various methodologies is to find ways around certain common problems or pitfalls so that valid comparisons can be made:

1) The gathering of reliable information becomes complicated by the fact that material has to be sought from several countries, provided in different languages. As a basis of accurate information is vital for the interpretation and comparison, a number of checks and tests of credibility must be applied. What is the “real situation” according to the different perceptions of the actors involved? The pitfall here is a too ready acceptance of both the sources and information without the necessary questioning and corroboration.

2) The need to ensure comparability. The following questions will illustrate the various forms this problem takes:

(i) Do identical, formal terms carry the same meaning? This involves tuning in to the different intellectual traditions, in the respective countries, where the concepts are used.

(ii) Are similar groups being compared so that there is a basis for carrying out the comparison?

3) How do we take different purposes into account? The comparativist must guard against the tendency to employ measures that assume similar purposes or rationales among the various educational settings being studied, or which give weight only to particular purposes. Educational systems function on quite different assumptions in societies which themselves have very different bases. A particularly instructive contribution of Comparative Education has been its insistence on the need to examine educational practices, obviously extensive to educational technology developments, in their cultural contexts and to avoid rush comparisons which consider them *in vacuo*, and so fail to take into account the different purposes they are expected to serve.

4) The generality-specificity issue. This expresses itself for instance in the question: How much must one move beyond description and content analysis of distance learning printed materials, to analysis of the contexts in which they have been produced?

5) The choice of systems, countries or cases for comparison. Decisions in this area are obviously dependent on, and must be coherent with, the purposes of the comparison.

6) Bias. Problems of bias are inescapable and insidious. Despite the assumed intention of being as objective as possible, it is inevitable that the reading or experience of other systems or operations will, by the mere fact of coming through our own beliefs filter, be partial and biased. Differences of perception, interpretation and existential commitments are unavoidable, and are irredeemably incorporated into any research. The task of comparative education researchers (and, in fact, one of their contributions) is to be as aware of and open as they possibly can with regards to their own belief system. They must also seek balance in taking into consideration other perceptions and interpretations of reality in order to procure a basis of shared knowledge in a productive and truly intercultural dialogue.

Trethewey (1976, p. 52) remarks:

The instrumental value of comparative study is great provided one can avoid the three main traps of foreign observation: the Pago-Pago fallacy, which tends to say of everything, "How quaint!"; the Victorian lady-in-waiting fallacy, which leads us to wrinkle our noses in disgust and exclaim, "How wrong!" and the Judy O'Grady fallacy, which dismisses the wide variety of human experience with the easy plea, "It's the same the whole world over!"

Especially in studying aspects of foreign nations and cultures, bias is inescapable, whether it stems from an effort to prove one's own country's superiority or inferiority, or from a subconscious imposition of data and conclusions of merely personal or parochial values implicitly assumed to be universal. Only when a determined effort is sustained in the direction of open and honest dialogue among the people of the various cultures involved in the research, and given the assumption of certain supra cultural normative values that can serve as an axis to articulate a constructive reflection, can the effect of biases be mitigated.

Educational Criticism

Educational Criticism is a research method which seeks to facilitate rendering vivid description, interpretation, and appraisal of the intentions and practices of the Distance Education Systems under consideration. An educational criticism is grounded in knowledgeable perception which, in arts, is referred to as *connoisseurship* (Eisner, 1979, p. 193). For the educational connoisseur the job is to consider the significant qualities of educational events, methods, and the situation as a whole. Using Eisner's method, the educational critic works within four interrelated dimensions: description, interpretation,

evaluation and thematics, which strikingly resemble the above mentioned phases of Comparative Methodology.

Description seeks to enable the reader to visualise what a system and its processes are like. "Seeing in the mind's eye is not the only important effect of descriptive writing; the text should also enable readers to participate vicariously in the events described. That is, it should enable readers to get a feel for the place or process and, where possible and appropriate, for the experience of those who occupy the situation" (Eisner, 1991, p. 89).

Interpretation reveals the understanding of the meanings, the rationales, and the outcomes of the events under consideration. "Educational critics are interested not only in making vivid what they have experienced, but in explaining its meaning; this goal frequently requires putting what has been described in a context in which its antecedent factors can be identified. It also means illuminating the potential consequences of practices observed and providing reasons that account for what has been seen." (Eisner, 1991, p. 95).

Evaluation is the explaining and justifying of the educational significance of the events and systems being studied. "The evaluation is what is seen as vital. Unlike the so-called detached observer who, somehow, is capable of simply describing, educational critics have the task of appraising as well. The reason for performing this function is clear. To describe an educational situation without being able to determine if the processes involved are miseducational, noneducational, or educational, is to describe a set of conditions without knowing if those conditions contribute to a state of educational health or illness" (Eisner, 1991, p. 99).

Thematics is a drawing out of the essential themes perceived as critical within the systems and their interactions which have been analysed. "Every classroom, school, teacher, student, book, or building [indeed every educational system, including a distance

teaching institution, *my insert*] displays not only itself, but features it has in common with other classrooms, schools, teachers, books and buildings. That is, every particular is also a sample of a larger class. In this sense, what has been learned about a particular can have relevance for the class to which it belongs. The theme, embedded in the particular situation, extends beyond the situation itself" (Eisner, 1991, p. 103).

By highlighting the universality that is present in any given unit of analysis, educational criticism reinforces aspects of the comparative method where evaluation could be interpreted as the assessment of one unit by establishing the other/s as the normative standard. The 'thematics' view breaks away from such reductionism and turns the evaluative process into an opportunity for affirming the situated, unique, nature of each unit while at the same time valuing its contribution towards an understanding of the wider implications of the themes that have been identified.

World-View Analysis

The concept of world-view has been introduced in chapter 2 and is now further discussed regarding ways of implementing it in the context of inter-cultural research. This type of analysis could be applied to the particular culture where each educational technology operation is situated. Tom Wright (1992) identifies four basic components in portraying the world-view of a particular community:

The **Story** tells the history of the community, and hence of its world-view,

- When it arose?
- Where it arose?
- With whom (person/group) the World-View originated Who are the prime movers of the particular culture: its heroes and heroines as well as its major detractors?
- How the WV is propogated and developed?

- What are the people after: wisdom or power? And how do they define these?
- Who are we?
- Where are we?
- What is wrong?
- What is the remedy?

In seeking to understand a particular educational technology culture it is important to listen carefully and extensively to peoples' own Story, as those who are part of it would tell it. In a very real sense it is learning the language of the people (along with their thought-forms and hermeneutical grids), truly understanding them from within their unique culture.

Symbols are those characteristic features (both concrete and abstract, both artefact and event) of a culture and society that reflect its answers to the **Questions**.

Practice means the customs and traditions, life-styles and life-aims, actions and behaviour, arts and sciences, that are characteristic of a culture or society.

Furthermore, other relevant questions could be raised:

What is the personal World-View of the researcher?

What is the World-View implicit in a particular educational technological operation?

It is a research challenge to make explicit world-views that function mainly at a pre-theoretical level. Our world-view may be incoherent and inconsistent, but it will still mould us. Even if we are unable to articulate it, it will still govern how we think and live.

Multi-Modal Systems and Cultural Ecology

The Multi-Modal Systems approach has been introduced in chapter 2 and is now further explored and exemplified. De Raadt (1995) conceives cultural ecology, as comprising human systems and the universe at large, along two interrelated axes: one systemic, and the other modal. In the systemic axis lies the bonds that unite one social or natural system with another, while the modal axis comprises seventeen modalities or aspects defined by the Dutch philosopher Herman Dooyeweerd (1958, 1975). These modalities are arranged in the following ascensional order: analytic, numeric, spatial, kinematic, physical, biotic, psychologic, historic, informatory, epistemic, social, operational, economic, aesthetic, juridical, ethical and credal (pertaining to belief).

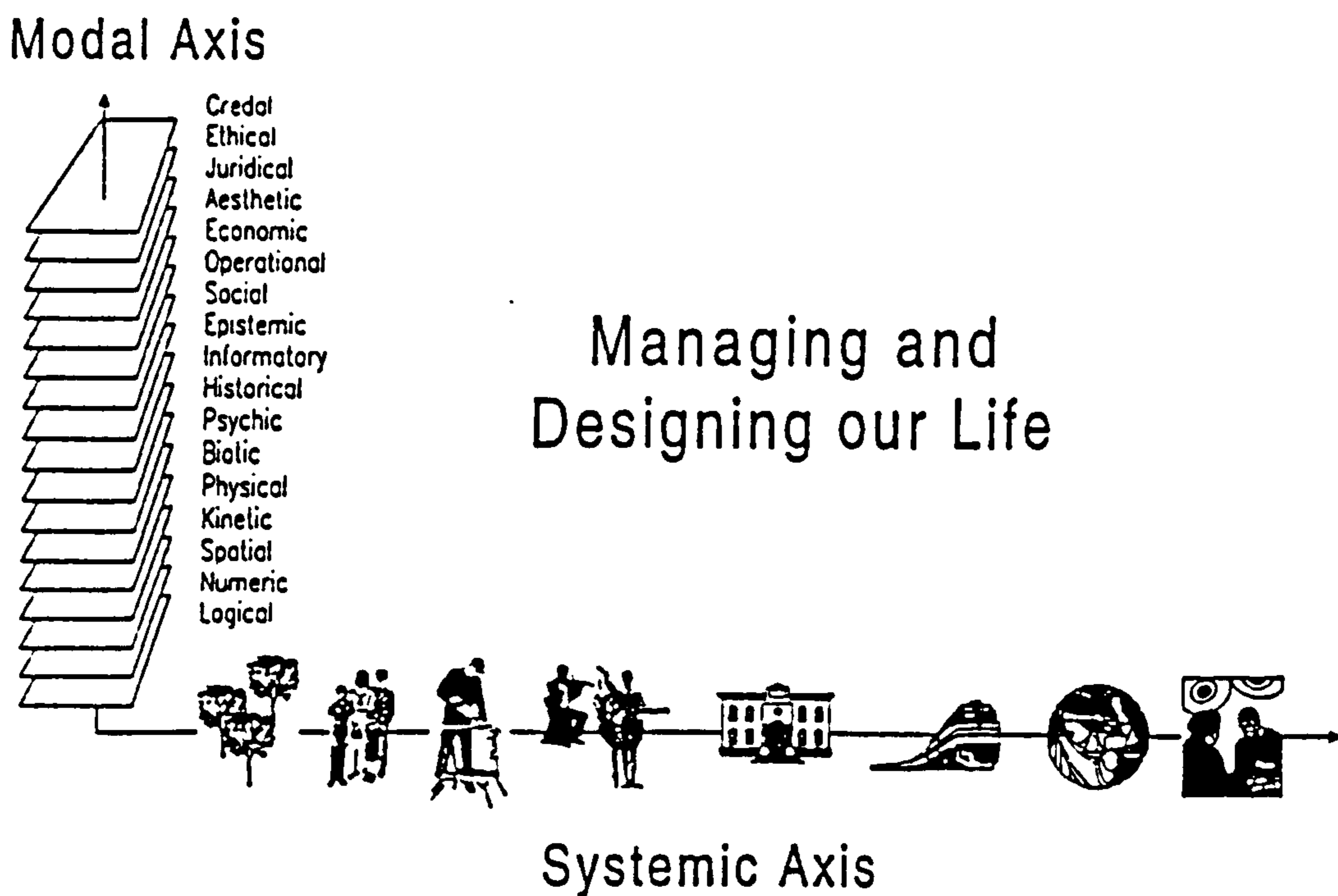


Fig. 1: Multi-Modal Systems View of Culture

Our everyday experience of reality is concrete and seamless: we meet people, relate to institutions, experience events as a whole rather than encountering the diverse aspects of that reality in their differentiated mode of being. Yet in abstracting from that wholeness,

we are seeking to discern the different basic ways in which things function. Each of these modalities is unique, yet while unique, each is interpenetrated with the others forming a rich multi-modal thread that links both human and natural systems into a humane cultural ecology.

In Dooyeweerd's and de Raadt's view everything which is concrete in temporal reality displays these aspects. The modalities indicate the rich variety in human life and the universe, flowing as it were, through channels which, though diverse, maintain an essential integrity (Hart, 1984). These ontological categories provide a comprehensive analytical tool that can be applied to gain an understanding of the various institutions, and educational technology settings, by systematically eliciting issues that would have otherwise lain dormant, particularly in the upper categories related to ethics and beliefs. It can be helpful in identifying the particular modality/-ies that characterise educational technology.

To illustrate the ways that these modalities can be applied we would consider the OU's Institute of Educational Technology (IET). We start by recognising that it is a distinct academic unit (analytical) - not a technical support department - among a number of other academics units. There are well-defined procedures for the smooth running of the institute and the structural and organic relationships among the different centres. It has a certain number of people working in it (numeric). The IET occupies some premises within the university (spatial). People also move around the place to meet with other people and carry out different tasks (kinematic). The IET requires various forms of energy supply to make possible its activities (physical). People at the IET have to have a certain level of biological health in order to come to the premises and conduct their normal work. In some offices one can find plants and flowers, which also represent the biotic modality (biotic). People in the IET express a variety of emotional reactions (psychological) to a wide range of factors, from the conditions of the weather to the death of a colleague or to the celebration of some notorious academic achievement. The IET

has existed for a number of years experiencing changes of people and functions and it has made strategic decisions that have shaped what the institute is today and what it could be in the future. It has developed certain ways of organising things; it has placed emphasis on certain technologies and neglected others (historical). The IET's knowledge and communication is expressed mainly through the means of linguistic symbols (informatory) in the form of propositional statements. There are other forms of language used - visual, iconographic, etc. - mainly to complement written symbolic language. The IET has developed its own specialised knowledge as an academic unit. This knowledge proceeds from its research activities and is published for general dissemination. It also carries out its own teaching, mainly through its MA Programme in Open and Distance Education (epistemic). The IET personnel relates among themselves at a number of levels, from sharing an office with a colleague to attending events like a concert by the university's choir, or the many occasions of sharing a meal together or enjoying a beer at the university's pub (social). The IET has its own system for setting up and accomplishing its goals. It has defined its various forms of authority and accountability along with its checks-and-balances to ensure that the work is done to the highest possible standard (operational). The IET personnel are paid regularly according to their contractual arrangements. Equipment, software, furniture, etc. also have their economic value (economic). The use of language and the combination of media in producing educational technological resources may have a greater or lesser aesthetic quality (aesthetic). The IET has its own legal responsibilities. It is also part of an institution created by Royal Charter, and as such carries out relationships and partnerships with other institutions, i.e. the BBC (juridical). The respect that is expected and demanded in interpersonal relationships; a sense of responsibility and even love for the profession; an awareness of people's different beliefs and cultural backgrounds; its policy of open access and equal opportunities are all manifestations of the ethic modality (ethic). Finally, the people who founded the IET were moved by a certain vision. They were possessed of a certain kind of faith as to what the Institute could or should become. They were inspired by the challenge of widening access to educational opportunities to as many of the

population as possible, and to establish the academic credibility of the university through its distinct methodology. This modality would also express itself through the mission statement of the institution (credal).

Modalities

Each of these modal planes are governed by their own order or set of laws, a fact that led Dooyeweerd also to refer to modalities as "law spheres". Each law sphere or modal order being unique and irreducible, that is, one cannot properly understand one modal order in terms of another, which justifies the need for a distinct intellectual discipline to study each of the modalities.

Modal laws are fulfilled in two different manners. The first is determinative, that is, the law always exerts its own fulfilment. For example, within the physical modality, the law of gravity is always obeyed. The second method of law fulfilment depends on human volition. Within the juridical modality, the law stipulates a maximum speed limit on a road, yet the fulfilment of this law is contingent upon the will of the people to obey or disobey it. These modalities become more normative towards the upper end of the scale and more determinative towards the lower end of the scale. A way of referring to the modalities in the upper half of the scale is as soft modalities in contraposition to those in the lower half referred to as hard modalities.

Homomorphism and Interdisciplinarity

Though each modality has its unique order there is a certain degree of correspondence or homomorphism with the other modalities. This homomorphism makes possible to use one modality as the symbolic representation of another. For example, one can use

numbers (numerical modality) to express economic behaviour (economic modality). Thus this homomorphism (symbolic meaning) constitutes the nucleus of the informatory modality. This informatory modality is of a special importance to comparative research in educational technology for it covers the complete spectrum of storage and communication of information in any educational-technological format. Likewise it comprehends every process carrying a clear educational intention presented in every type of physical support, printed and/or digital.

It was never Dooyerweerd's aspiration that the modalities should pretend to describe all of reality or human experience in any exhaustive way. Nevertheless, the multi-modal framework brings to our attention two important considerations. First, it has the wholesome effect of reminding us that reality and humanity show a variety of discrete aspects which cannot be reduced, without seriously distorting the whole picture, to one single modality. That is, reality is not merely a matter of energy or numbers; likewise humanity is not just biology, psyche or social intercourse. Approaching the understanding of educational technological operations and design from a Multi-Modal Systems Thinking perspective may take us into a richer field of discovery and application than restricting them to the rather limited (and limiting) components generally resorted to in educational technological reflection and generally conducive to a certain sense of technocratic determinism.

Secondly, Dooyerweerd - together with von Bertalanffy (1971) - draws our attention to the fact that the integrity, and inter-relatedness, that exist in human life and in reality at large should also be present in scientific pursuits. The interplay among the various modalities (homomorphism) has the virtue of opening a door for an increasing dialogue among the diverse sciences, recovering a unity and diversity, freedom and form balance, and pointing towards what might properly be called wisdom. Such wisdom may hopefully provide a liberating focus to those involved in educational and technological developments.

Therefore, based on this idea of multi-modal order, educational technology may offer new and valuable contributions towards a more humane and cultural ecology, in which all participants may know, enjoy, express and develop themselves with a greater measure of harmonious balance throughout the full scale of modalities, without any particular modality dominating (dictating) over the others. This requires that educational technology design should be carried out within the context of three forms of integration: (i) the integration of organisational structure, at various levels, and educational technology; (ii) the integration of the modalities through their homomorphism, with a special reference to those modalities more clearly active in educational technological processes (informatory, epistemic, operational, economic, ethical...); (iii) the integration of educational technology design with other systems in its environment. Consequently, according to this view, good educational technology design ought to lead to an increased Multi-Modal understanding of the systems in which Educational Technology functions.

A Socio-Cultural Perspective on Distance Education

The socio-cultural perspective finds its inspiration in the seminal work of Vygostky (1978), which has been expanded by Bruner (1986, 1990), and which is gaining increasing recognition in the educational field. Applications of the socio-cultural approach to education in schools have been made by Maybin (1994) and Mercer (1995), and is now beginning to be applied as well to the pedagogy of Distance Education (Mercer and González Estepa, 1997; Northedge, in press).

At the core of the socio-cultural approach is the recognition that successful teaching and learning rarely consists merely in a direct transmission of information, but rather in a joint negotiation of meaning. In order to teach effectively, the teachers need to know the initial knowledge of their students and then to monitor the progress they are making. It is in this context that the concept of “scaffolding” propounded by Jerome Bruner (1986,

1990) is an especially useful one. Bruner considers that in order to achieve an effective learning experience the teacher must provide the type of support that would enable the student to advance intellectually beyond the level of what they might be able to reach just on their own, that is, to extend the 'zone of proximal development' to use Vygotsky's terminology (Cole, 1985). To express this somewhat metaphorically, an effective teacher would train her students to swim so that they can go a bit further beyond where they can stand in the swimming pool of intellectual activity, offering adequate support and guidance to prevent the students from 'drowning' and thus to enable them to progressively swim by themselves into deeper intellectual waters. The best educational processes require the students to perform an active role as the protagonists of their own learning. Thus the process of teaching-and-learning is conceived not merely as the transmission and acquisition of information, but as the joint construction of knowledge by students, tutors and the central academic team who share the understanding that good teaching is a guided process, and that this process is inherently both social and communicative.

Methodological Implications of the Socio-Cultural Paradigm

- Communication is at the heart of education and of educational institutions.
- Knowledge is being socially constructed.
- Language is the primary tool by which educational communities are formed and used in the social construction of knowledge.
- Central to human knowledge is that it is shared. Out of the joint construction of knowledge emerge Communities of Practice. They operate in the flow of continuity of historical time and in dynamic interaction within concrete socio-cultural contexts.
- These Communities of Practice are in the final analysis Communities of Discourse.

'Communities of Practice' is a term introduced by Lave and Wenger (1991) in their book *Situated Learning*. It refers to social groupings which share common purposes and who are engaged in joint activity. Belonging to a community of practice is characterised by being/becoming participants in the ongoing process of knowledge construction and shared understanding through language and action. Central to being/becoming a member of a community of practice is developing the ability to 'speak the discourse' of that particular learning community, that is, of having assimilated and become competent in the use of the distinct form of conventionalised and specialised language of that community. Consequently, community of discourse is an integral and interdependent concept with that of community of practice. There can be no community of practice that is not supported and made alive by a community of discourse. The discourse being, so to speak, the bone and marrow of such community. Simply stated 'discourse' refers to the way language is used in a particular historical context to carry out the social and intellectual life of a learning community (Mercer, 1995, p. 79).

The basic unit of analysis and reference point for these communities of practice are not individuals *per se*, but the relevant community of practice in its own right. A consequence of this refocusing is that methods used for socio-cultural research must enable researchers to capture the essence of development in their own local and cultural contexts....'of capturing the meanings that participants transmit or carry by way of discursive activity' (Coll and Onrubia, 1994, p. 7). Research related to this process could orientate itself in the following levels of analysis:

1. Cognitive: What kind of intellectual processes take place at each International Community of Discourse in Distance Education (ICD-DE), and how are they represented in observable activities?

2. Pragmatic: How can we best describe the ways language, non-verbal communication and joint activity are used to share and jointly construct knowledge, and to induct new members in the community of practice?

3. Social: How can we account for the fact that the development of each individual member is embedded in the social relationships of the community, in which each past meaningful learning experience provides the basis for new ones in a discernible historical continuity?

4. Cultural: How can we investigate the impact of cultural factors - communicative conventions, traditions of teaching and learning - on the process and outcomes of each particular International Communities of Discourse in Distance Education?

Some Preliminary Clarifications Regarding the Interview Process

In order to gain an adequate familiarity with each of the institutions, the interview process was preceded by a documentary analysis based on the resources of the International Centre for Distance Learning (ICDL) of the Open University (this Centre contains the largest documentary collection on Distance Education world-wide). The use of interviews was considered appropriate as a dynamic and interactive means for eliciting educational technology and distance education practitioners' views as to how they think and talk about this particular field. The next stage consisted of the fieldwork, which included observation, interviewing and further gathering and analysis of documents. Observational and interview records were maintained for further analysis. The fieldwork also provided a large number of institutional documents unavailable at university libraries. The documents being investigated include minutes of meetings, institutional publications, review reports, evaluation reports, newsletters, statistical information, planning documents and printed course materials.

There were some limitations related to the time constraint of the present study. For instance, visits to the institutions had to take into consideration the availability of those I wanted to interview and it was not always possible to agree on an appropriate schedule.

The major part of interviews conducted in Madrid (UNED) and Lisbon (UA) took place during a period of three weeks (at the end of May and beginning of June, 1996). In November 1997, I made another, shorter visit concluding my interviews at those universities. The interviews I made at Milton Keynes (OU) extended over most of the period of my research, between March 1996 and March 1999. In preparation for my interviews at UNED and UA I was assisted by colleagues at both institutions who arranged the interviews according to a protocol describing the topics I wanted to cover with the purpose of seeking to elucidate the concept of Educational Technology held in their respective institutions. I indicated to them my desire to meet with key individuals in specific positions of responsibility and with some involvement in Educational Technology, i.e. Vice-Chancellors, Heads of Departments (Audio-visual) and Units of Research in Distance Education, Institutional Researchers, and Lecturers (their names and institutional positions are given in the List of Interviewees, Appendix 3). These arrangements proved very fruitful within the time frame I had. For interviews at the OU I took the initiative to contact and make appointments with the various staff members.

Each of the interviews took approximately an hour and was normally conducted at the office of the interviewee. Occasionally they also happened at lunch or out walking, within a more peripatetic tradition. The interviews were recorded on tape, while at the same time I would jot down sporadic remarks. Although my initial intention was to discuss the same questions with every interviewee at each institution, however, for reasons that I will explain below I felt this became inappropriate and I adapted the questions to suit the particular location and interviewees. Notwithstanding, these questions were consistently asked to each of the interviewees at the OU. As I had anticipated, the concept of "Educational Technology" held by colleagues interviewed at

UNED and UA is quite different from views expressed by their counterparts at the OU. There seemed to be a notorious terminological (and conceptual) difficulty surrounding it. The preferred term being used at UNED is "Informática Educativa", while at UA: "Comunicação Educacional Multimedia". "Educational Technology", being of course the term used at the OU.

I soon became aware that the questions I had selected and the general structure of the interview as I had conceived it, were significantly shaped and flavoured by my active involvement at the Institute of Educational Technology, and the Open University, my immediate context of research. Thus whenever I tried to constrain myself to this scheme of work, I was perceived as being "too British" (*un hombre de la Open*), a position of estrangement which made me feel rather uneasy.

I decided that I could derive greater benefit from the interviews via a different approach. I abandoned the initial rigidity and formalism (rather alien to the Iberian spirit) and while maintaining in the background the general configuration of my questions, I consciously sought to elicit and maximise the information that seemed particularly relevant to the educational technological practice and vision of each interviewee.

Initially, a third of these tapes were transcribed in full, while the rest were carefully listened to and transcriptions were made of relevant selections of interviewee's statements. (I felt familiar enough with the content of the interviews to not need to do a full transcription of the rest). Interviews conducted in Madrid and Lisbon were recorded in Spanish and Portuguese respectively. Three of these interviews in each language were transcribed and translated in full, while with the rest I followed the same procedure explained above. In transcribing these interviews I thought it appropriate to omit such features as slip of tongue, hesitations, etc. as I was intent on reproducing their content where they showed a direct relationship to the issues of the research. This is the reason

why interview quotes generally appear in the form of grammatically correct and punctuated sentences in English.

The Interview Questions

As already mentioned when introducing the multi-modal analysis of the Institute of Educational Technology, the various analytical categories of the multi-modal systems approach were applied in order to gain as comprehensive an understanding as possible of the issues relevant to the topic of research. These covered a wide range of issues that I wanted to explore with the interviewees. I then had the task of converting them into particular questions. The questions I derived from those topics were the following:

- 1) Please describe your present role. Do you regard yourself as an educational technologist? (Operational and historical modalities).
- 2) How would you define educational technology? What domains does it comprise? (Epistemic modality).
- 3) What contribution does educational technology make towards the advancement of distance education? (Historical modality).
- 4) How do you see the relationship between education and technology? (Epistemic, historical and operational modalities).
- 5) In your opinion, who are some of the people that have had the greatest influence in developing educational technology? Who have been some of its detractors? (World-view approach and historical modality).

6) What have been some of the major issues your institution has had to deal with in the development of educational technology? (Historical modality).

7) Could you tell me some examples of innovative successes in educational technology that your institution has experienced? Alternatively, some failures? (Historical and operational modalities).

8) What trends do you see emerging in educational technology? How do you see its future? (Historical and credal modalities).

9) What are some of the relevant ethical issues affecting educational technology? (Historical and ethical modalities).

10) Have you had experience in working with colleagues, in some area of educational technology, from other countries? How satisfying was it, and why? (Inter-cultural and Social modality).

Analysis

I was concerned to find a method for analysis that would open up the data in such a way as to allow the data 'to speak for itself'. My desire has been to permit not just the researcher but any interested reader to form a valid opinion of the meaning of the data, and to be able to deal with the qualitative data in a way that is not exclusively dependent on the selection provided by the researcher. If this were possible it would generate a whole new domain that could stimulate a rich dialogue among contrasting interpretations of the universe of data. I understood from the start that both (a) how I would gather this data, i.e. to what extent the conceptual framework guiding the interviews was

appropriate, and (b) how I actually thought about, analysed, structured and presented the qualitative findings, would be of central significance to the research.

I feel grateful and indebted to the interviewees for the level of trust and engagement in dialogue they honoured me with. Also on this account I sought to find the best possible way of 'honouring the data'. On my first opportunity to present the initial findings based on the interviews, the audience responded favourably with a sequence of 'ahas!'. I had thematically organised and contrasted a number of original statements, and the audience, members from the IET, could make immediate sense as the data 'spoke to them' and in some cases 'about them'. But was this 'aha' response the best I could expect from presenting the qualitative data? How could I stimulate alternative interpretations that would promote an illuminative dialogue on the body of the data itself? Wouldn't this require the universe of the data to be accessible to the critical reader? What technical difficulties would this entail?

Selection of Method of Analysis

Positivism represents an effort to extract principles and generalisations from the data, even as a set of laws of a probabilistic and/or predictive nature. In this way, positivism propounds a supposedly 'value-free' approach to the scientific task, but which has been generally discredited (Polanyi 1973, Patton, 1990, Moustakas, 1994). By contrast, phenomenology stresses the value of the individual's accounts relying often in case studies as well as on ethnographic approaches. In this way, phenomenology recognises the meaning individuals attribute to their world of experience not only at a perceptual, but also at an ethical level – that which is perceived as right or wrong by the individual.

Phenomenography (Marton, 1981; Marton and Booth, 1995) has also informed the approach, which seemed relevant to the research since it focuses on understanding

people's way of experiencing the world. Building on the philosophical assumptions of phenomenology, phenomenography has attempted to give it an empirical orientation. It has sought to break away from any dualistic ontology not only with reference to the 'thing in itself' but also in relation to any notion of the 'text in itself'. From their non-dualistic ontological perspective there are no longer two worlds, in the form of a real objective world on the one hand and a subjective world of mental representations on the other. Rather the link between them is to be found in human experience, this being understood as the manner in which 'something is perceived in some way by someone'. This approach then supported the interpretation of the interview data that was based on 'interactionist' methodology, as described by Silverman (1993 p.90), who questions any attempt to treat interview questions and answers as passive filters towards some truths about people. Instead, "...interviewer and interviewee actively construct some version of the world appropriate to what we take to be self-evident about the person to whom we are speaking and the context of the question...". This means that, rather than treating the words of the interviewees as evidence of something that they thought or felt, they were looked at the terms in which both interviewer and interviewee constructed the issues that were under discussion. Thus phenomenography becomes a useful approach to describe variations on how people experience some shared reality and in this regard it led me into a search for a way of implementation in response to the following questions:

How to obtain a rich description of the phenomena being studied in this research; how to proceed inductively in data analysis so that descriptive and explanatory categories are generated from within the data itself? It was in connection with these objectives GABEK was used as a holistic processing of linguistic Gestalt (the plural form of the word Gestalt in German). The Gestalten would seem to allow a fair and rich representation of a particular field of discourse, in this case of educational technology in distance education. This decision to use GABEK was contrasted with other possible methods and to which I would refer briefly before expounding on the way GABEK was used in this research.

NUDIST (Non-numerical Unstructured Data Indexing Searching and Theorising) was considered as a possible resource for the analysis of the qualitative data. It had the advantage of being an 'approved' package officially supported by the Open University. However, after examining it and discussing its applicability - both the possibilities and constraints it afforded - with several users, it became apparent that it was more cumbersome (not efficient enough, especially if a large volume of data needed to be processed) and less suitable for the purpose I had in mind for the qualitative study. This purpose was seen as facilitating an expression of the mind and values of a community of practice, that of educational technologists, in their own authentic voices, foregrounding the data so that the major meanings that educational technologists attach to their own practice would be revealed.

ATLAS/ti came to my attention at a later stage. In contraposition to GABEK, ATLAS/ti appears to be based in an a priori commitment to view the data primarily as a source for developing 'ground theory', closely following Strauss and Corbin (1990, p. 57) conception of it. This seems to me somewhat restrictive in contrast to the way GABEK unfolds the qualitative data. However, I found a number of useful similarities between both approaches. Both methods support the qualitative analysis of un-structured verbal data, codifying the data by similar techniques, and both seek to generate conceptual maps interrelating concepts and categories as they have been identified in the process of the analysis.

A significant advantage I found in GABEK is the relative ease, once the method has been thoroughly assimilated, with which it allows the researcher to construct and configure various nuclei of meaning - 'representative statements' - emerging directly from the original data. In this way, a holistic representation of conceptual maps empowers readers and analysts to navigate and engage in productive dialogue on the data thus disclosed.

GABEK Methodology

GABEK (Zelger, 1993-1996) is a German acronym for 'Ganzheitliche Bewältigung von Komplexität' - Holistic Processing of Linguistically Represented Complexity. It has been developed by Professor Josef Zelger from the Institute für Philosophie, Innsbruck University. The basic epistemological reason for using GABEK in this thesis was that it treated qualitative data in a very similar way to the intuitive approach I had been using, yet it added the considerable advantage of enabling me to actually carry out the analysis with greater amplitude and coherence, thus enhancing what I had began to do in very rudimentary manner. GABEK seemed particularly suited to advancing the aims I had initially identified for the comparative research:

- a) To provide a substantiated empirical basis, within a rich philosophical foundation, that would illuminate decision making processes in the field of Educational Technology and Distance Education.
- b) To favour the development of a consensus (building of shared understanding) that would strengthen the field of research, i.e. Educational Technology in Distance Education.
- c) To assist with conflict prevention and resolution, with a particular focus on international collaborations.
- d) To help in theory building by identifying the thematics of the field as they emerged in the process of dialogue.
- e) To expose, and constructively deal with prejudices, stereotypes and discriminations increasingly problematic in a global educational environment. This is particularly

relevant in situations where strong tendencies towards mono-cultural domination have been noticed, as it is the case with the prevalent technological mind-set.

f) To provide understanding in the process of implementing changes in the field.

Furthermore, GABEK makes possible a holistic and systemic understanding of the data by extracting what people really think and feel in their own words; representing these thoughts and feelings and their interconnections, substantiating these findings, and, finally, disclosing a wealth of possible actions to guide the implementation process. GABEK is based on a philosophy of Gestalt-building, 'We form linguistic Gestalten in analogy with Gestalten of perception. Therefore the results can be understood very clearly, even using the very words of the people questioned' (Zelger, personal communication).

The majority of interview data analysed through GABEK (approximately 70%) came from interviews conducted at the OU. This was a choice I made based on the accumulation of evidence I gained in the process of the interviews themselves that the concept of educational technology is far more elaborated and institutionalised at this university, and that consequently a richer field of thematic connections could be obtained by concentrating on the analysis on the OU experience. It is also the case that this proportion keeps some correspondence with the number of interviews I was able to carry out at each location.

The concept of GABEK as a method of analysing qualitative data is fully explained in Appendix 5 and which is essential to understand the function of GABEK in this research, its field of applicability, how representative statements in the form of Gestalts were obtained as well as the epistemological status given to them. Consequently, this Appendix needs to be considered an integral part to the workings of the thesis and has been placed on the appendix section for the sake of structural convenience in order not to

interfere with the unfolding of the argument by the need to explain this particular methodology.

The use of GABEK in this research has also been unique in that it is the first use thereof within a British academic environment. Also it is the first occasion in which GABEK has been applied to the field of international comparisons in Distance Education. Indeed there was the interesting combination of using a German-based methodology by a Spanish researcher within a British context and applied to three different cultural-linguistic institutions.

The decision to apply GABEK to the analysis of a proportion of my qualitative data brought with it a number of challenges. First, I needed to learn it, which was by and large an exercise in the German Language (indeed the PC-programme is so far only available in German). Simultaneously, I needed to familiarise myself with the workings of a PC, as until that time my computer work was solely based on an Apple Macintosh platform. Implications of these factors led to occasional frustrations, like losing some work through misunderstandings of the commands and consuming a significant amount of time, which needed to be balanced within the constraints of the thesis. Due to these factors I could not apply GABEK to the extent that I would have desired. Furthermore, I discovered GABEK after I had already collected a large amount of interview data and begun my analysis of it. Had I known about this method at the beginning of the research, I would have been able to construct three relevancy pyramids, one for each of the Universities of the research and then to have generated some form of simulated dialogue between them. It would also have simplified considerably my task - typically GABEK resorts to about three open questions which I could have addressed at each university. However, I feel that this research would have missed some of the "strong quality of its data" had I used GABEK in the conventional way. Nevertheless, the results obtained from the sample to which GABEK was applied have, I believe, justified the time and effort invested into it.

In my search for an adequate methodological approach, I had set for myself the following guiding principle: that I would ask of any methodology, especially a qualitative one, to reveal an adequate balance between (a) the body of data itself, (b) the intervention of the researcher, and (c) the procedures followed in dealing with the data. In other qualitative methodologies to which I have been exposed, I had found a less satisfactory relation, or justification, of these elements, while GABEK has complied positively with these criteria. Out of the balance of these three elements I hope that GABEK has demonstrated to be a valid methodology with regards to:

- its measure of integrity in dealing with the data in its original form,
- the openness and transparency of the process,
- the presentation of its results,
- and, finally, its adequacy to the purpose for which I have used it, i.e. to elicit some of the key themes in Distance Education and Educational Technology, and to relate them in a coherent picture, while presenting them with a measure of resolution.

In the case of GABEK, the intervention of the researcher has consisted of:

- selecting the subjects.
- designing the general theoretical framework and approach.
- posing some questions guided by his perception of the field and expectations.
- deciding how much data to process applying GABEK.
- identifying and selecting the key terms or expressions that seemed relevant in the original statements.
- composing the representative statements of the Gestalts.

To achieve this, GABEK has assisted the building process of the Gestalts through its various computer-based capabilities. We then find that the whole universe of the data itself is open and ready at hand to test, and to promote various interpretations. Thus a clear distinction is established between interpretation and representation of the original

statements, by which the data is always allowed to ‘speak for itself’- and indeed it becomes the protagonist in the construction of meaning.

I am convinced of a real potential of GABEK to facilitate rich dynamics of inter-cultural dialogue as well as of being able to support the building of International Communities of Discourse in Distance Education, which constitutes a major outcome of this research.

Finally, GABEK could also serve as a useful tool for reflection and knowledge representation as well as for collaborative learning. In spite of my not having been able to apply it to its full capabilities, I have found the results highly rewarding at the crucial level of revealing and illuminating the thematics of the field and with regards to the question of the meaning of Educational Technology.

However, at present, GABEK, has the important limitation of being available only in the German language, and it is still in the process of being refined as to its technical capabilities. It would be therefore difficult to ascertain whether the experience derived from its use in this thesis could find wider applicability in the field of comparative research in DE. Furthermore, I have some concerns that, on account of its exclusive availability in the German language, this may entail some cultural difficulties if and when seeking to translate it into other languages and cultural contexts. It would be important to explore whether the application of GABEK to transcultural studies of an interdisciplinary nature, as in this study, could find further confirmation or, alternatively, if any inherent restriction in the methodology for this kind of topic could be discovered.

Iterative Process regarding Methodological Implementation

The iterative process of the research maintains a close parallel with the documentary research and the methodological sequence presented in this chapter, each of the methodologies contributing to the subsequent ones thus configuring the general

methodological approach that was adopted in the research. In chapter 2, I explored some of the literature on the nature of comparative research seeking to understand its basic presuppositions and its potential applications to this research. It soon became apparent both the complexity inherent in this type of studies and the difficulty of using solely this comparativist approach for the purpose of this research. As already stated (see chapter 1, 'Introduction'), the primary service of the comparative methodology consisted in identifying the main characteristics of educational technology in each of the distance teaching universities studied. It also brought to the fore the uniqueness and distinctive role that educational technology holds in one of them, namely the Institute of Educational Technology of the Open University. From there on the comparative methodology was supplemented by other methodological approaches.

Ethnographic and educational criticism (Eisner, 1979, 1991) could be implemented given my full time immersion in the IET for the duration of the research. Particularly educational criticism provided a gentle and meaningful transition from classical comparative research methodology towards a more phenomenological approach in seeking to identify and engage with the more subtle and complex issues. Each of the distance teaching universities represents and operates within three different cultural settings. In order to make sense of their cultural embodiment, it seemed appropriate to apply conceptual tools that would account for larger cultural values and that may throw some light on their educational practices and preferences. Hence the inclusion of worldview concepts and ways of analysis that would inform the interview process and research understanding of the various institutions.

Then, once I identified the major comparative traits of the three institutions with respect to their educational technological conceptions, Multi-modal Systems Thinking provided an analytical framework for inquiring into the nature of educational technology as such. This was done particularly by creating an awareness with regards to actual, and potential, reductivist trends that the research may encounter when seeking to theorise educational

technology. Multi-modal Systems analysis was applied to the IET and supplied valuable theoretical insights that shaped a new definition of educational technology arising from the research (see chapter 6).

Methodological accounts of a phenomenological nature tend to have a strong self-referential character that I felt needed to be balanced by presenting other accounts as given by practitioners of educational technology in their own words. To this end GABEK furnished the research with a suitable instrument to group and represent original statements in a meaningful way. As a result, the analysis of the data drew from both phenomenological and GABEK's linguistic Gestalten perspectives. A more conventional approach to interview analysis of students' perceptions was applied to the case study on IET's MA Programme in Open and Distance Education (chapter 7) regarding intercultural and linguistic issues in global online education.

The inclusion of the socio-cultural approach was initially justified as an alternative, with wider sociological and cultural implications, to the socio-critical model to which reference was made in the literature chapter. The particular limitation noted there was a concern that for the socio-critical approach educational processes become understood, and ultimately reduced to, political processes. I recognised there some important contributions made by socio-critical analysts, particularly in relation to the central role of dialogue, the importance of taking into account various interpretative frameworks (a concept analogous to that of world-views) as well as raising awareness of the significance of power issues in educational contexts. Their conception of power, however, appeared severely constrained by giving it a fundamental political interpretation. The socio-cultural approach allowed, on the other hand, a grater scope to explore power relations not only as matters of political concern, important as they are, but also in terms pedagogy - of personal and social transformations - as well as power that emanates from improved inter-cultural communications and the pursuit of shared understanding. Basically, the literature review identified a gap in conceptualising technology in relation to distance

education. By and large, technology has been perceived and taken for granted as it were as an autonomous 'power', unproblematic and indifferent to cultural and ethical implications as a transferable commodity – technology needs no justification.

Conclusion

The methodological and theoretical scaffolding of the thesis evolved with the progress of the research. My initial understanding of the research was that it would have a strong comparative nature, hence I focused at first on the comparative methodology, discovering a special affinity with that of educational criticism. However, the comparative method, *sensu strictu*, had to be abandoned once the realisation of the disparity of the conception and academic status that educational technology receives at each institution became fully apparent. My approach to institutional research was inspired mainly by world-view analysis and the multi-modal systems conceptual framework. (The contribution of multi-modal systems will be further considered in chapter 6). The significance of world-view analysis in trying to elucidate the process by which the particular world-views of cultural communities, which generally operate at pre-theoretical level, can be made 'visible' has been further explored. Multi-modal systems is seen as a major theoretical tool that can guide a non-reductivist approach to educational phenomena. Its theory of modalities suggests a variety of hypotheses for understanding the interplay between the human and the technological aspects of reality. However, this study constitutes the first attempt in applying multi-modal systems to the field of educational technology and distance education, and further research is needed to corroborate its potential usefulness. Finally, the socio-cultural paradigm became prominent while I was reflecting on the possible outcomes of the research, particularly with regards to a proposal for building International Communities of Discourse in Distance Education (chapter 7) as well as giving general cohesion to the various methodological models. It is also the first time that the socio-cultural approach has been applied to this field and it has uncovered new

research possibilities to the understanding of educational technology and distance education. It is against this scaffolding that the actual interview analysis took place using GABEK (Ganzheitliche Bewältigung von Komplexität - Holistic Processing of Linguistically Represented Complexity), which informs the following chapters and is presented in full in appendices 5 through 7.

Chapter 4

The Three Universities

Chapter 4 - The Three Universities

Introduction

This chapter presents a general description, based on documentary analysis and direct observation, of the three universities comprising three levels of analysis: institutional, departments and MA courses associated with educational technology at each of the universities. This is followed by a synthetic characterisation of the three universities with respect to various areas, i.e. demand, offer, learning support, etc. These accounts are not comprehensive but focus on aspects that seem relevant to understanding issues related to educational technology in the context of these universities. In-depth descriptions were initially prepared (before the change in the direction of the research due to lack of comparability regarding educational technology) for each of the universities and a case study on Universidade Aberta (UA) is provided as an example in Appendix 4. The purpose of this chapter is therefore to provide an informed reflection based on the researcher's observation and experience of the three universities as a background to the interview process and the theoretical analysis resulting therefrom.

Institutional Level

UA was established in the context of rapid and recent changes, although it was preceded by a long history of visionary efforts and piloting processes that did not crystallise until 1989. Its creation was ultimately justified as an emergency solution (having to do with the urgent need to provide a way of access to accreditation to a large number of teachers who lacked them) rather than as recognition of its social usefulness. Also the educational policies within the Portuguese panorama were divergent, if not contradictory at times, questioning the whole continuity of the UA once established. Only in March 1994 were

its Statues approved, granting UA the same juridical status with the rest of the Portuguese Universities.

UA as an institution stands firm in its commitment to promote the Portuguese language and culture, both at home and abroad, and to do this not only as an educational thrust but also from a political stance. Its first years of operation were mainly concerned with enabling teachers to obtain their academic qualifications in accordance with the commissioning of the Ministry of Education. In terms of its background, the UA constitutes a unique case in the history of educational politics. It was officially established in the mid-seventies, its operations subsequently suspended *sine die*, and in spite of this mere 'virtual existence' for a number of years managed to keep an active presence in the international world of distance education, even becoming a founding member of the European Association of Distance Teaching Universities (EADTU). The university was then 're-born' and launched as a fully operational university in 1990. UA has specialised in areas of multiculturalism.

The OU has a well-established international reputation of excellence in distance education. It not only re-defined the concept of distance education, but established a solid academic credibility within the rather conservative British higher education establishment. Its successful implementation inspired the creation of other national distance teaching universities, among them UNED and UA. The Open University has not only demonstrated significant organisational competence, but also an ability for connecting with market orientations in the British society, as well as with global market trends as it seeks to internationalise its operations. The OU has broken new ground for educational innovation exploring and exploiting the educational possibilities of available technologies. In this respect, its partnership with the BBC proved crucial in order to establish an image of excellence in the educational use of broadcasting media. However, the more widely recognised and radical innovation of this university has been of giving access to higher education to any individual, without requiring previous academic

qualifications. This is an innovation of tremendous proportions in the history of education and toward the goal of universal access, thus raising a flag and making a statement of major educational consequence and possibilities. Furthermore, its real genius has been not simply in stating this ideal of open access but in making it viable by putting into place the necessary systems and processes to enable its students to achieve the recognised standards of academic excellence. Due to this original policy of access, the OU was bound to be seen as a 'bird of a different kind' not only in contrast to traditional British universities, but also with regards to the majority of distance teaching universities worldwide that do require prior academic qualifications from students that wish to gain access to their educational provision.

The political will for the creation of the OU rests firmly on the vision and commitment of a prominent political figure, Prime Minister Harold Wilson, This vision was only later adopted by his Labour Party. The university has a central headquarter and a number of regional centres, plus an extended network of study centres using the facilities of other academic institutions. The OU demonstrates aspects of an industrialised form of educational 'production system' as characterised by Peters (1984), i.e. rational organisation, carefully planned programme of production and marketing, division of labour, standardisation, economies of scale, etc. The sophistication by which this university exemplifies these characteristics sets it apart, in comparative terms, from the experience of the other two universities.

UNED represents not so much a break with the conventional Spanish university culture but rather a successful extension of it. Its creation met a deeply felt need in Spanish society and was warmly welcomed in the educational landscape. The network of Associated Centres that emerged across the country did so through the local initiative of people and institutions that saw in UNED the possibility of adopting it as their own local or regional university. These Associated Centres were in fact financed through local initiative which provided facilities, resources and funds to sustain academic and

administrative costs. UNED like the OU is a large university in terms of student numbers. UNED has a comparable size of student population to that of the OU, even in spite of the fact that UNED does not offer an open access policy to its students, neither the sophisticated administrative and support systems, nor the quality of its instructional materials. In spite of this, UNED has established a notable presence and reputation among the Spanish Universities. Its success is achieved through the determination demonstrated by its students from sectors of the Spanish population for whom the university represents a previously undreamed of opportunity.

From its early stages in the 70's UNED has attracted significant numbers of doctoral students both in Spain and Latin America. These links with Latin America have been strengthened over the years with a solid development of international programmes supported by Spanish and Latin American governments. In spite of these strengths, UNED has still to develop a university wide strategy of improving the quality of its distance learning materials with the needs of the distance learner in mind. Apart from recurrent recommendations and workshops that seek to engage academics in innovative forms of distance learning methodologies, there is no unifying criteria for course productions and the quality of materials within and across the different Faculties shows great disparity. To some extent this reflects upon a rather individualistic academic culture that would have difficulty embracing the course team approach characteristic of the Open University.

UNED presents an organisational structure which is heavily centralised (in its programmes, material production and systems of evaluation), and yet is significantly autonomous regionally in terms of the administration of its teaching, carried out in 'Centros Asociados' (Associated Centres). UNED was born with strong political support and a widely shared recognition of its social usefulness. This is also reflected in the extraordinary response of local Institutions to develop partnerships with UNED in order

to establish Centros Asociados (which could be considered as some sort of university level community education projects).

Departmental Level

Relevant to this research is the consideration of any departments associated with educational technology in each of the universities.

The Institute of Educational Technology (IET)

In the OU, the IET represents the most notable expression of educational technology within the institution. Its creation with the status of an academic faculty – not as a mere technical support unit – constitutes a major innovation as it was originally designed by the first Vice-Chancellor of the University (Perry, 1977 pp. 81,82). The IET attracted academics from a rich variety of academic backgrounds. The initial justification for this was the need to contribute educational technological expertise to different faculties in the development of their courses, with the obvious advantage of educational technologists sharing similar academic experiences with the faculties they were to assist. Just as the OU represented a ‘bird of a different kind’ amidst British universities, the IET became another such ‘bird’ within the Open University itself, and has encountered significant resistance to becoming fully accepted by the other faculties. The academic prestige and status of the IET has been enhanced by its repeated successes in recent Research Assessment Exercises, in which the Institute has received the highest recognition as a world class research centre. Since 1997 the IET has been offering an MA Programme in Open and Distance Education, electronically delivered and attracting students from all over the world.

Instituto Universitario de Educación a Distancia (IUED)

Institutional and methodological research for distance education in UNED is met by the IUED. This is a relatively small department made up of academics seconded from two faculties - Sociology and Sciences of Education - that contribute to the functions stated above. The director of the IUED has always been an academic from the Sciences of Education Faculty. The IUED activities result in recommendations that seek to improve the various aspects of the university but which carry with them no decision-making power. The Institute maintains a documentary centre and develops guidelines for the production of Audio-Visual and Printed Material. The Institute is also responsible for co-ordinating an annual International Course on Distance Education with participants from Latin America.

Centro de Ensino a Distancia (CENTED)

CENTED at Universidade Aberta was conceived as an experimental unit in order to develop and test prototypes for use in distance education, such as the production of advanced multimedia Portuguese language courses or the development of expert systems to carry out discourse analysis of their own teaching materials. The Centre is linked with the Institute of Multimedia Communications, which is responsible for implementing the production of the university's teaching materials. The CENTED is also the academic basis from which an MA program in Educational Multimedia Communications is being offered.

MA Programmes

From the point of view of this research on educational technology in distance education it is of interest that each of the universities is currently offering an MA programme in related areas of educational technology, and this a rather recent development.

UA was the first of the three universities to offer a type of MA called **Educational Multimedia Communications**, launched in the first year of the university's operations (1990). This reflects the importance attributed to the programme, a role defined in the university's Statutes. Its purpose is to contribute to the development of an educational technology culture for the university at large through a strategy described as 'diffusion', that is of permeating the institution rather than the setting up of a separate unit of educational technology. Consequently, a majority of the university's personnel have been participating in this MA. The programme itself has been offered face to face only in Lisbon, but with the recent incorporation of videoconference is now being followed at other university locations in the country.

UNED – MA in Educational Informatics was launched in 1996 and constitutes an initiative undertaken by two academics based in the Science of Education faculty, one of them a lecturer in educational technology, which incidentally is one of the disciplines offered within the Science of Education curriculum. This MA has been designed predominantly with teachers of primary and secondary education in mind seeking to stimulate the incorporation of new information and communication technologies in the different curricular areas. The programme attracts many students and the Spanish Ministry of Education endorses it by making available a number of studentships. Furthermore, the MA has a large proportion of its students in Latin America with centres in Buenos Aires, Argentina and Santiago, Chile.

OU - The MA in Open and Distance Education benefits from the international prestige of the IET as a centre of academic excellence in educational technology. It also has an extensive consultancy experience in helping to design distance learning systems and materials in different parts of the world. This MA became a reality through the vision of Professor David Hawkrige, the founding director of the IET, who had anticipated since the beginnings of the IET that it should offer distance courses in its own discipline. The MA, launched in 1997, has served to some extent, as a catalyst for the IET to articulate its own expertise and know-how in the area of educational technology, as well as providing an opportunity to take a critical look at its own curriculum. It may also constitute the needed basis for developing the theory of its own academic field. As it stands in 2001, it comprises three courses of very different pedagogical nature. It has a wide range of styles, from the more established distance education approaches to a highly interactive and a constructivist web-based design. This curriculum highlights the diversity of experience and understanding of educational technology across the members of the IET, but at the same time it reveals the gaps existing in the conception of its curriculum as well as its position as a contested field, due to its internal ideological tensions.

Each of the MA Programmes have a very different target group. The UA's is primarily focused on the internal university personnel. In UNED it is directed mainly to teachers in first and secondary education. And for the OU it is very much conceived for professionals already active in distance education and training both in academic and corporate sectors.

Other Characteristics

The demand for UNED's services has developed consistently over the years with an impressive increase in student numbers and diversification of its students profile, with more students following courses on a full time basis. Also within the Centros Asociados themselves there has been an increasing demand for specific, non-degree courses (with an Open Admission policy) to respond to felt needs within the local communities.

UA's demand, within the first five years of its existence, fluctuated in accord with the commissioning of the Ministry of Education to attend urgent and politically pressing needs, i.e. the accreditation of large number of teachers. This particular constraint had the negative effect of making it difficult for the University to develop its own curricula, and to choose and attract its own students. It was only in its fifth year that the University was able to develop a strategy of diversification and to establish its own strategy of sustainability for its student population.

OU serves a majority of students who are in full-time employment. In its early years it also attracted a large contingent of teachers in need of accreditation. The university was keen from its inception to develop extensive and diversified curricula across the academic disciplines. In recent years it has been recruiting an increasing number of students from abroad, particularly from continental Europe, reflecting a policy of institutional expansion in accordance with global educational trends.

Curriculum Design

UNED's *carreras* (the whole curriculum of a particular professional qualification) are rigidly structured in *asignaturas* (subjects), *cursos* (an academic year, usually comprising five asignaturas), *ciclos* (Diplomado: three academic years; Licenciado: five

academic years; and Doctor, usually four more years). Only recently the Nuevos Planes de Estudio (the latest Educational Reforms) are introducing a measure of flexibility in the curriculum, with more options for students to choose from and the incorporation of a system of *créditos* (credits), following the Anglo-Saxon model.

UNED's fundamental teaching material comes in written and audio form (both tape and radio broadcast). Its Unidades Didácticas - specifically designed text materials for this mode of Distance Education- are generally perceived as one of the weak aspects of the system, and there has been some tendency to abandon their production and to resort to existing textbooks supported by Study Guides. It constitutes an area of major concern within the institution itself. Face-to-face tutorials are provided at the Centros Asociados, although students can also access their Professors (who are at the same time responsible for the final student evaluation), through personal visits, letters, and more extensively, by telephone. These Professors are based at the Madrid Headquarters and have a required weekly group consultation of about five hours in which they are available to assist students.

UA's offer is based on a flexible design of the modular type, with a system of credits as its *modus operandi*. Each subject is presented as a multimedia package with written and audio-visual materials. The educational support is offered via telephone tutorials from the teaching team at the Lisbon Headquarters, with the additional possibility of the student receiving some face-to-face tutorial assistance at the Support Centres of the University, presently existing in a rather limited scale.

OU effectively created a new standard regarding the quality and development of instructional materials (thus breaking away from the poor reputation attached to correspondence tuition) by bringing together academics across the various fields into course teams, in which educational technologists, BBC producers, editors and designers advise and comment at each developmental stage of the course materials. External

assessors further ensure that these materials are consistent with the standards in the respective academic fields. This course team approach is quite distinct with respect to the academic cultures of the two other universities.

Learning Support

UNED's network of Associate Centres, operating very much as a peripheral campus represents one of the most dynamic elements within its system. It generally enjoys a strong local support and has demonstrated its great capacity as a focus for cultural development within its particular area. Financing is undertaken by the local Patronatos (Board of Trustees) constituted at the time of the creation of the Centre.

UA, on the other hand, conceives its support network rather differently, that of having a supplementary and secondary role. The whole system is designed to render the students as autonomous as possible in their own learning experience. To this end special care is given to the quality of their instructional materials, as multimedia packages, along with the tutorial support via telephone with the teaching staff at the Lisbon Headquarters. Consequently, the role played by its Support Centres is rather weak, with little attendance by the students who mainly use them as a place where they take their examinations. The financing of this network is wholly assumed by UA.

OU has also developed a national system of Regional Offices responsible for organising tutorial support, continuous assessment and, to some extent, counselling that allows for interaction between students and tutors in a variety of ways. Tutors mark assignments submitted by students and support students through tutorials, day schools, while also being available for contact by telephone or, increasingly, via computer networks. Residential schools, usually held during the summer for one week or at weekends at other times of the year, are an integral component of some OU courses.

International Activities

UA's commitment to international involvement contrasts with the situation of UNED, which though being an older and significantly larger distance teaching university, has shown some limitations in making its institutional presence felt in the international scene. A notable exception to this being UNED's major role towards Latin America (i.e. its Iberoamerican Course). The remarkable success of UA in the international arena may be credited, to a large extent, to its Reitor (Portuguese for Vice Chancellor) Trindade in the realm of inter-cultural relationships. So far no Rector (Spanish equivalent of Vice Chancellor) of UNED has demonstrated comparable linguistic and/or political ability in this area. A factor that would account for this situation may be that, just like the OU in English, UNED has found itself sufficiently challenged, and relatively at ease, by the large Spanish speaking community. Yet, overdependence for institutional reach based on the linguistic factor may prove, in the medium-long term, a handicap. Professor Garcia Garrido (in personal conversation) has pointed out that institutional monolingualism may cripple the ability to grow and participate constructively in the global dialogue. The internationalisation of the OU and its aspirations for global leadership in distance education will be further explored in chapter 7.

Some Risks and Challenges

The following are some perceived risks and challenges as expressed by informants during research visits to these institutions:

UNED seems to be facing the risk of becoming a legacy of the industrial society, unless it succeeds in reinventing and repositioning itself within the new social and global environment. Also the increasing demand for face-to-face provision brought about by the growing number of younger, full time students, generates heavy demands on its system as a distance teaching institution. Another factor of challenge, and potential opportunity would be to address the monolingual nature of UNED's formal courses, offered only in Castilian Spanish, and not in other languages, such as Catalanian, Basque or Gallego that enjoy a significant population. Finally, there is a need to efficiently respond to curricular diversification and flexibility required by recent national educational reforms.

During its formative years (1990-1994), UA was faced with an absence of consistent political support. This greatly conditioned its ability to establish itself with the necessary initial investments as well as its strategy to reach their own target populations within the country and abroad, as well as having to cope with the stress entailed in the continuous effort of persuading the political authorities as to the validity of the model. During the first years of its operation the university had a rather limited academic offer, circumscribed mainly to areas traditionally recognised as the 'Humanities', which produced an impression of an immature institution, yet its curriculum has significantly extended and diversified in following years. Finally its tutorial support network remains particularly weak.

OU is also facing a number of challenges. Among these are: the growing competition from conventional institutions also adopting open and flexible learning methodologies and offering their courses in a dual delivery mode; the additional competition from non-

UK based universities that offer their programmes in the English language, making use of computer and information technologies. The difficulty of maintaining the level of student numbers at home brings the challenge to recruit students abroad, and with it the challenge of meeting the educational needs of those from a multicultural background. The university must also develop academic partnerships with academic institutions abroad. It must reposition itself within the UK society as being at the forefront of educational and methodological innovation in the age of the Internet. From a more philosophical perspective there is also the need to reconcile (or at least alleviate) the internal tension between the commercial thrust of the university to sell its courses world-wide, and the academic ethos of the university, with it the necessity to re-think its international policy in the light of its institutional values (exporting 'products' versus sharing values).

Opportunities

UNED can boast of a strong social legitimisation in the country, which coupled with a high academic reputation provides two pillars on which to build further developments. A major opportunity for UNED, as a mega-university, is seen in its potential to reengineer its organisation to meet the educational needs of the 'Information Society' and to share in the leadership of the globalisation process.

However, it remains to be seen whether UNED will be able to improve the quality of its Unidades Didácticas, to become more "student friendly", and thus empower its students. Furthermore, a better use and deployment of its various educational media (*campus telemático*), including the use of local radio and of regional TV, plus a more extended use of CMC, may prove decisive if UNED is to position itself advantageously in the new post-industrial educational environment.

UA has built its credibility and academic excellence based on the reputed good quality of its pedagogical materials. It has also to its advantage a more flexible curricular model, which would allow it to expand its offer at a relative low cost. Its rich experience in national and international partnerships is recognised as an invaluable asset. It needs to strengthen its role inside and outside Portugal, thus serving the Portuguese-speaking communities around the world.

OU enjoys an international recognition as the institution that re-defined distance education in the seventies and gave it a solid foundation of academic credibility. The quality of the course materials is widely acknowledged, not least by the extensive use made of them by other UK universities and abroad. It has also demonstrated great competence in managing its complex operations – for an institution of such dimensions – while at the same time maintaining a strong human support of its students through its extended network of Associate Lecturers (Tutors). It boasts of having severed the link between exclusivity and academic excellence that prevailed in UK academic culture until quite recent times. Certainly the OU has not been lacking in critics, most of them, understandably, raised in conventional universities that perceive the success of the OU as a threat to their own academic styles, or even as an ‘unfair competitor’ in the technological society and the way that funding agencies would seem to endorse its systems and procedures. Yet the university may not lean too heavily on this ‘love affair’ with the technological culture, e.g. the way in which anything technological is favoured with prestige and funding may create imbalances within the broader educational mission of the university and provoke the neglect of important educational and ethical areas for the sake of more pragmatic, short-term objectives.

Conclusion

This chapter has configured some of the main traits of the three universities giving especial attention to their educational technology dynamics. Their experiences show that they have become, in spite of significant resistance from conventional political and educational sectors, effective instruments for the development of human capabilities and for overcoming barriers of social and geographical distance in the service of their respective student populations. Furthermore they have proved the viability of their educational model, some of their methods and approaches being increasingly adopted by the wider academic community. The function of educational technology in support of distance learning methodologies can be discerned in each of the universities, particularly at the departmental level. However, no comparability can be enacted between them since it is only at the OU where educational technology is fully established as an academic unit in its own right. In spite of this, it is noteworthy that the educational technological functions are identified and reckoned with, to some extent, in the other universities. An indication of this being the MA Programmes in related areas of educational technology that each of the universities is offering and which reflect a desire not only to extend the know-how of distance learning systems but also an aspiration to articulate its own distinctive curriculum. On the international front, each university has significant involvement in regions of the world where their languages are spoken. It would be interesting to see whether these institutions would be prepared to explore ways in which they could co-operate, and pull together their significant resources and expertise, to advance educational developments in developing countries, even for the sake of reaffirming the social and humanitarian values that inspired their creation.

Chapter 5

Educational Technology in the Context of the Three Universities

Chapter 5 - Educational Technology in the Context of the Three Universities

Introduction

Building on the interview data and the GABEK analysis, this chapter identifies various conceptualisations of educational technology in each of the three universities. Other findings derived from the GABEK analysis provide a wider socio-cultural context for positioning educational technological issues and highlighting specific themes for further investigation. This chapter also addresses the issue of the relationship between educational technology and other faculties, particularly in the context of the OU and introduces a discussion on ethics as it affects the development of the field.

Most of the interview data drawn on in this chapter has come from members of the OU. This is justified in the light that educational technology has its most solid and rich institutional manifestation within the context of the OU, as it became clear through the interview process. Nevertheless, interview data from UA and my own personal experience of UNED has also been used to characterise approaches to educational technology in those institutions.

Conceptualisations of Educational Technology

Educational Technology in Universidade Aberta

In UA the function of educational technology seems to focus on bridging the gap between the author and the distance learner as the following Gestalt indicates:

Gestalt 15 UA-Master-Organisation

One of the main aims of the UA's Master's Programme in Multimedia Educational Communication is to permeate the entire organisational structure of the university with educational technology. This is done by encouraging as many staff as possible to take the MA. This has had the effect of making the team more cohesive. An important role of educational technologists in UA is to create a bridge between authors and distance learners by adapting the academic content to various media. One of the organisational concerns at UA is to withstand the strong international pressure coming from information technology corporations in order not to lose control of their own institutional decisions.

It should be noted that this Gestalt, along with the other Gestalts presented throughout this chapter and in other parts of the thesis, constitutes a phenomenographic representation of a number of authentic and original statements from interviewees that share among them relevant information and have a certain coherence and interrelated meaning among them. A full description of the process by which these Gestalts are obtained is offered in Appendix 5 as well as the detailed configuration of each individual Gestalt.

The UA's conception of educational technology and the role of the educational technologist are well illustrated by these remarks from one of my interviewees:

Our educational technologists are colleagues who have completed the Master in Multimedia Educational Communication. One of their major functions is to accommodate (transform) the text from the author to our style, to create a bridge between the author and the distance learner by adapting the content to the various media.

*(Director of the Center for Distance Education (CENTED)
and Founding Member of the University)*

This 'author', in the singular, of UA course materials is usually a well known specialist who performs his or her academic duties as part of a conventional university and finds it quite difficult to relate to the particular conditions of distance education. The author would find it difficult to anticipate the difficulties that distance learners may encounter, or to think of what activities could be meaningful to their learning experience, or what language might be more conversationally engaging and what learning strategies may best support the students. These are questions which appear quite remote from their habitual teaching practices. Naturally, it is at this point where the educational technologist's contribution comes into play. But this is still far from the course team concept of the OU, where authors are expected to accept guidance and constraints from other course team members, as reflected in this quote from the Director of the CENTED:

Authors are not following the recommendations we give them for the production of distance learning texts. No one respects the norms! I was so astonished! The only cognitive processes the authors expect from the students are to observe something and to analyse it. Nothing more.

As this quote makes clear, the task of bridging the gap with the specialist academic is not always satisfactory, and the educational technologist contribution may be reduced to that of offering recommendations. This would flaw significantly the quality and suitability of their materials for distance learning purposes.

In order to assist the author in following more closely the guidelines for producing distance learning texts, the Director of CENTED believes that presenting them with an Expert System computer package could positively challenge them while avoiding unpleasant personal confrontations. (In some cases authors may be so displeased with modifications the educational technologist may have introduced to the text that they may refuse to endorse it with their authorship). This 'desimbedding' implied by the process of extracting the academic expectations and social relations of the university with the course

author and then re-implanting it as a computerised expert system is a characteristic of late modernity according to Jarvis (1993a). It also implies a transferring of 'faith' on the quality of the process to a digital format and arguably detracting from the interpersonal dimension that should exist in any teaching-and-learning situation. In this way, a sort of distance learning system for the authoring of distance learning materials is put into place as the Director of the CENTED explained:

One of my goals (as Director of CENTED) is to produce a computerised Expert System to ensure that the authors follow the prescribed norms for the production of distance learning texts.

The aspirations for educational technology in UA with relation to the learners are summarised by the Director of CENTED in the following way:

What I am trying to do is to put more and more the learning in the hands of the students. I don't believe we can arrive at independent learning, but semi-autonomous, yes. To give the students many choices as to the media by which they want to learn, accommodating to their learning styles, etc.

We see that their aim is to cultivate in the students an independent approach to learning while also providing them with a diversification of learning formats so that the student may have choices to fit their own personal learning styles. In this context, however, the issue as to what 'cognitive processes' the authors are giving almost exclusive preference to becomes particularly crucial with regards to the type of learning expected from the students. If indeed 'assessment drives the system', then the learning activities students are asked to pay attention to and eventually to be assessed on, will determine significantly the type of learning that takes place.

Finally, the general attitude of UA towards educational technology has been one of trying to permeate the system with an educational technology mind-set. This has been done mainly by requiring its personnel to follow the Master's Course in Comunicação Educacional Multimedia rather than by creating a separate Unit of educational technology. The following quotes from the Director of Planning and Teaching illustrate this:

The introduction of new technologies lends itself to generating tensions among different departments. There is not a Unit of Educational Technology as such. Of Distance Learning, yes. And it is normal in this context to study new technologies and ways to use them. The general strategy for Educational Technology is diffusion, rather than creating a separate Unit. The function of the Master's Course in Multimedia Educational Communication is to permeate the different layers of the University with the end of shaping the whole organisational culture.

The benefits of this approach are seen in avoiding potential tensions by setting up what could be perceived as a sort of privileged group, or elite, possessive of the secrets that makes for an effective distance education system. It is interesting in this connection to note that the same interviewee pointed out that, in the course of a visit to the OU, he had perceived tensions between the IET and the Faculties, and he was surprised to learn that yet another, even more sophisticated high-tech educational technology Unit, the Knowledge Media Institute (KMI), had been recently created.

When I visited the OU in 1991 I felt a certain tension between the IET and the Faculties. I didn't feel that for instance in Holland, where the lecturers work in a much more integrated manner, even though there is a department of educational technology there. It was more a question of style, there was a great integration among the course teams and no rivalry among them.

In summary, educational technology in the UA is seen primarily as the function of bridging the gap between the authors of the various courses and the distance learners, with the concomitant difficulties attached to this process and to which reference has been made above. It would seem also that UA has a determination not to create a separate unit of educational technology but rather to promote a general culture of educational technology throughout the institution and that their Master's Course in Multimedia Educational Communication is fulfilling this role.

Educational Technology in Universidad Nacional de Educación a Distancia

As I have pointed out at the beginning of the chapter, this section on UNED is mainly derived from personal experience as a student at UNED and observation during my research visits to the institution. The reason for this is that I could hardly gather significant interview data in response to my questioning about the concept and role of 'educational technology' within the institution, and after several blank faces from interviewees I ceased using that expression.

Educational technology? You mean video-conference? You know that we have in UNED the largest video-conference network for educational purposes in the whole of Europe ...and educational TV has recently been started.

(Director of Telematics attached to a Pro-Vice-Chancellor Office)

At UNED there is not a defined role of educational technology and of educational technologists at the institutional level. The closer perception of the concept is in relation to audio-visual materials in support of a text-based curriculum. Nevertheless, there are two expressions of educational technology which I would like to comment on. One refers

to a subject entitled 'Tecnología Educativa' [Educational Technology] that is imparted within the Faculty of Sciences of Education (the Spanish equivalent for the English Educational Studies). The other is the more recently created Máster in Informática Educativa [MA Programme in Educational Informatics]. On both of them I can report from personal experience.

As an UNED student I took the course on Educational Technology. Here I was introduced to the concept of systems thinking in relation to the teaching-learning process as a whole. Nevertheless, there was not much emphasis on course design or curriculum development as a distinct field of educational technology. About half of the curriculum was dedicated to the exploration of the audio-visual culture and semiotics. An objective of the course was for the students to become 'audio-visually literate' and develop some competence in generating audio-visual educational resources. The activities of the course often revolved in elaborating some audio-visual presentations for school age children. I was particularly attracted to the systemic view of the educational process and also to the implications that the introduction of the new technologies in the school context as well as in the general Spanish culture may have.

Besides the extensive video-conference system mentioned above, another major attempt to position the university in the map of educational applications of new technologies of information and communication is the 'Máster en Informática Educativa'. This MA was launched in 1995 and is having a significant projection both in Spain and internationally, especially towards Latin America. It came about through the personal initiative of two lecturers from the Faculty of Sciences of Education: a lecturer in Educational Technology, Dr. Catalina Alonso, and a lecturer in Educational Organisation, Dr. Domingo Gallego. They succeeded in setting up a large team involving not only colleagues from UNED Headquarters and the Centros Asociados, but also from other universities and organisations. This in itself constitutes a significant development within the individualistic Spanish academia.

The Master's Programme is strongly interdisciplinary and interinstitutional. It is also the result of a multi-partnership between UNED, the Spanish Ministry of Education, and the Fundación Universidad-Empresa, which provides the legal framework for its operation. This Foundation is an organism that promotes relationships between the Universities and the Corporate Sector and which tends to facilitate the functioning of these courses without the habitual encumbrances encountered in academic bureaucracy. There are several other UNED Master's Programmes similarly functioning under this umbrella, i.e. the Master's Programme in Environmental Education and the Master's Programme in European Studies. Although the Master's Programme in Educational Informatics has a firm footing in UNED it has effectively crossed a number of interdisciplinary and administrative barriers. At the time when I began this thesis, Dr. Gallego was appointed deputy Director of the Instituto Universitario de Educación a Distancia (IUED), and it was in this capacity that I met him and discussed educational technology in the context of this research.

The content of the Master's Programme builds substantially on the areas of academic expertise of both Dr. Alonso (a specialist on learning and teaching styles) and Dr. Gallego (who specialises on the organisational aspects of educational institutions). Around these areas are built, among others, various courses on computer and multimedia competency, and a comprehensive array of the didactics of the various academic disciplines (Maths, Languages, History, etc.). This Master's Programme has been very much conceived with teachers of Primary and Secondary Education in mind. It focuses on the New Technologies as a tool for generating new, and presumably richer, learning opportunities for the younger generation while seeking to integrate them meaningfully in the larger pedagogical framework of the curricular strategies of the Spanish government. In this sense the Master's Programme seems to be specially concerned with assisting teachers to make informed selections, and creative use of informatic educational packages within schools. It is also concerned with the applications of informatics within

the school organisational cultures in general, rather than with any sustained theoretical reflection as to the implications for either domination-liberation attached to these New Technologies. Neither it is thought of as a vehicle through which to generate any major structural transformation of the institution or for opening up new perspectives in terms of educational technology for the university as a whole. The Master's Programme has since its conception achieved a significant success with regards to students numbers, not only in Spain but also throughout Latin America where there is a larger demand for places than the current support structure is able to cater for. The Master's Programme operates two associated centres, one in Chile and another in Argentina.

In summary, educational technology in UNED seems to be a peripheral concept. It is thought of mainly in relation to audio-visual components in support of a predominantly text-based curriculum. Even though the institution has invested considerable resources in introducing the New Technologies in recent years these innovations are not intended to transform or rethink its traditional teaching and learning model.

Educational Technology in the Open University

Having explored these conceptualisations of educational technology in UA and in UNED, I will be concentrating hereafter on the interpretation of the OU experience where educational technology finds its most complex and diversified expression, and particularly in its IET. This focus, however, will not prevent the intertwining of further reflections on UNED's and UA's educational technology aspects where appropriate. Of the three distance teaching universities of this research, the OU is the one in which educational technology has the highest profile. It represents a crucial institutional innovation with the establishment of an Institute of Educational Technology (IET) from the early stages of its operations. Furthermore, this institute was constituted as an academic unit, enjoying the status of a faculty, rather than as a technical support

structure. Its members were originally enlisted for the specific purpose of ensuring the viability of the teaching system as a whole, including its course team approach to distance education.

Through the GABEK analysis, and by making reference to the conceptual matrixes (see Appendix 5), it is possible to gain an intuitive view of what are the major interconnected topics related to educational technology in the OU such as Distance Education, Systems, Course Teams, Politics, Ethics and Technology. The following Gestalten, derived mainly from interviews at IET, give us some insights as to the mind-set of the OU with regards to educational technology.

Gestalt 30 Techniques-ET

Educational technology is not about any particular technique or piece of equipment. Technology might consist of a set of techniques rather than a set of tools, something like the skill of performing a certain activity. The educational technologist uses techniques that can be justified in terms of scientific evidence and underlying theories. The justification for the choice of a particular technique is that it must work, it must be effective in achieving some purpose or desired result. According to this it is suggested that educational technology might be defined as the application of justified true techniques in education.

Gestalt 22 Failure-Tech

The world seems to be going down the 'high-tech' path, with people such as Gates (the Microsoft University) making extravagant claims that sound good to people who actually do not know much about educational matters, i.e. policy-makers. It is easy to be carried away by the flashy latest technologies. One suggested approach was to think critically about them, to not hurry, and to learn from others' mistakes. For instance, one sometimes hears the comment: 'I had

problems with my traditional course. People seemed to be a bit bored, so I decided to connect everybody to the WWW and students love it!' Technology is useless if it doesn't help students to learn. Neither can it replace the role of the teacher - there is always a hidden teacher in the technology. Technology can never be neutral.

Gestalt 23 ETist-Problemsolving

Educational technology is seen as a rational problem-solving activity that centres in a systems approach to the analysis of the educational process. Likewise the type of learning that it tends to favour is regarded primarily as a problem-solving activity, both by teachers and students, rather than pumping information into people. The origins of educational technology in the OU were marked by a certain missionary zeal, the feeling of being part of a movement, of being at the cutting edge of educational developments.

Gestalt 19 ET-Assessment

Educational technology has to do with three major areas: curriculum design, evaluation and monitoring, and knowing who the learners are - especially where there is an open access policy. Course design seems to be the core of educational technology, along with exams and assessment, because assessment drives the system. The need is for appropriate technology that places the emphasis on ends - the philosophical, educational and existential goals - rather than on the available instruments. There do not seem to be many theoretical people who are thinking deeply about assessment, educational policy, etc. Yet it is suggested that the real test of genuine effectiveness in educational technology is the extent to which the world is changed as a result of it.

Gestalt 13 Systems-IET

Distance education is only possible from a systems approach. Cybernetics and management are very important in setting up a learning organisation. The Institute of Educational Technology is systemic by its very nature. Yet the question is, “what type of system is needed?” It cannot be merely mechanical. The best distance learning material will fail unless the personal and organisational support is adequate. The IET in the OU has sought to apply a systems approach to the educational process. Nevertheless, it has tended to become more technologically oriented at the expense of making space for people of more theoretical orientation.

Gestalt 9 ET-DE-Systems

Educational technology is an essential part of any distance education system, a necessary condition to develop a meaningful educational relationship at a distance. Educational technology is about the process of teaching and learning and how to apply it in a given context. It is not about any particular technique but rather a systems approach to education concerned with how the different bits fit together as a problem-solving activity. The term 'technology' in educational technology seems to misdirect people, as they tend to think first about technology.

Gestalt 2 Course-team-DE

Distance education is an innovative, materials-based learning system. The institution should invest significantly in the production of the best possible

system. It needs support, for example, well-trained personnel and the necessary investments. The course team has proven to be essential to the quality of the system.

The evidence from GABEK suggests that educational technology in the OU is characterised by a strong systems approach to the educational process as a whole. This manifests itself in a sequence of problem-solving activities aimed at operationalising and making viable a distance education system. There is an awareness that technology per se cannot provide an adequate justification for leading educational developments. Finally, that educational technology has an essential role in course design and in institutional research, and that the course team is a fundamental component within the institution.

In his valedictory lecture (September 1998), Professor David Hawkrige, the Founding Director of the IET, explained the nature of IET in the following terms:

It is based in a problem-solving approach, oriented in three directions:

a) support of course development, b) institutional research, and c) post-graduate courses.

It would seem that IET must be credited with a significant contribution to the OU success in terms of its academic credibility as a system through the quality assurance of its courses, the follow up of students experience, the evaluation of educational possibilities of new technologies, as well as being a focus of international projection for the university through a consistent flow of consultancies worldwide. However, for all its contributions to the OU expertise in distance education, the IET has for most of its history led a precarious existence; it has been a unit at risk. This means that its continuation has been questioned with disquieting recurrence, facing the possibility of being restructured or even cease to exist as an independent unit. Understandably, these occasional threats have created a certain sense of defensiveness in the psyche of the Institute, and criticism of its

operations tends to be seen with some measure of suspicion. IET has often felt misunderstood by other Faculties, and has not always found it easy to justify its existence - the more reason why this struggle for survival has to be reckoned as a meritorious effort - and to make itself better understood.

Another professor and founding member of the institute commented in the course of the interview that he found, as an individual, considerable appreciation from the faculties he worked with, but that this would often be coupled with a disregard for the IET as an academic unit. The remarkable successes of the IET in relation to the very influential Research Assessment Exercises (RAEs), in 1992 and 1996, has provided a much needed recognition, both within and without the university internationally. But this extended breath of life has not resulted, for reasons that will be discussed in following chapters, in the IET articulating its *raison d'être*, deepening its philosophical assumptions or making a definite case as to the fundamental contribution it has been making to the quality of the institution as a whole.

Thus far, the research seems to substantiate the hypothesis that the more complex and systemically integrated a distance education institution is, the more prominent a role is accorded to educational technology. Consequently, given the research interest in seeking to understand the nature of educational technology and its role in distance education, the OU experience is clearly the one that affords the most promising ground for carrying out theoretical reflection in this field. Already my exploration of the literature (chapter 2) has shown the relevance of educational technology and distance education sources in connection with the OU.

Other Findings from the Interview Analysis

This section presents some other findings derived from the interview analysis in the form of textual narratives, and offers a wider context to the issues discussed with informants at the three universities. What we find in these narratives is a landscape of opinions and perceptions derived from original statements obtained through the interview process. These findings have been arranged by disclosing and interrelating the various Gestalts with respect to a number of topics arising from the analysis itself and conceptual matrixes (see Appendixes 5 through 7 for the full GABEK study). These narratives need to be qualified by the fact that, as explained in chapter 3, the larger proportion of interviews analysed using GABEK has come from the OU.

Findings with regards to Educational Technology

Educational technology is not about any particular technique or piece of equipment. Technology might consist of a set of techniques rather than a set of tools, something like the skill of performing a certain activity. The educational technologist uses techniques that can be justified in terms of scientific evidence and underlying theories. The justification for the choice of a particular technique is that it must work, it must be effective in achieving some purpose or desired result. It is suggested that educational technology might be defined as the application of justified true techniques in education. Educational technology is seen as a rational problem-solving activity that centres in a systems approach to the analysis of the educational process. The origins of educational technology in the OU were marked by a certain missionary zeal, the feeling of being part of a movement, of being at the cutting edge of educational developments.

Educational technology has to do with three major academic areas: curriculum design, evaluation and monitoring, and with knowing who the learners are - especially where

there is an open access policy. Course development is the core of educational technology, along with exams and assessment, because assessment drives the system. Assessment is a key function in educational technology. It drives education. Objectives (though not a currently fashionable term due to their behaviourist connotations) are at the heart of an educational system. There is an absence of theoretical people who are thinking deeply about assessment. This absence is seen as an institutional weakness within the OU. The need is for appropriate technology that places the emphasis on ends - the philosophical, educational and existential goals - rather than on the available instruments. There do not seem to be many theoretical people who are thinking deeply about assessment, educational policy, etc. Yet it is suggested that the real test of genuine effectiveness in educational technology is the extent to which the world is changed as a result of it. Educational technology is seen as an essential part of any distance education system; a necessary condition to develop a meaningful educational relationship at a distance. Educational technology is about the process of teaching and learning and how to apply it in a given context. It is not about any particular technique but rather a systems approach to education concerned with how the different bits fit together as a problem-solving activity. The term 'technology' in educational technology seems to misdirect people, as they tend to think first about technology. It is not intrinsic to any particular medium that it has to be used in one way and not another. People champion certain uses in preference to others. In the USA, the concept of instructional design is largely based on the cognitive science view of getting things correct in the first instance. A problem encountered by UA is that course authors neglect to follow the norms for producing suitable distance learning materials, and the cognitive processes they focus on are very limited. A major function of the educational technologist in that situation is that of adapting the text to the various media and to create a bridge between the author and the distance learner. There is a need for appropriate educational technology rather than the high tech hype and the sort of digital utopia one encounters in the corporate sector. The fundamental educational questions need to be addressed, and the real test must be seen in the quality of learning experienced by the learner.

Findings with regards to Distance Education in relation to Educational Technology

Distance education is an innovative, materials-based learning system. The institution should invest significantly in the production of the best possible materials; otherwise it will end up being an extension of the conventional system. It needs support: for example, well trained personnel and the necessary investments. The course team, particularly within the OU, has proven to be essential to the quality of the system. The essence of education is of a relationship between a teacher and a learner in which the learner is assisted in understanding pre-existing forms of knowledge. It is about making sense of information, ideas, and principles, which get to be incorporated within the person's own understanding of the world. It is at the point of putting things together into some meaningful whole where the interpersonal dialogue becomes essential. A person may not become wise just because of being more educated, although education might provide the means to become wise. Essentially education enables people, through knowledge and skills, to enter and become active participants in certain communities of discourse. Dialogue is part of the perennial problem of distance education, which has often been regarded as almost a one-way delivery process. On the other hand, people dispersed geographically, even dispersed in time, may have more significant dialogue than people coexisting in one place at the same time. Dialogue is only a part of the educational process. There is also a certain amount of imparting of information and knowledge, so that people do not need to reinvent the wheel. It is at the point of putting things together in some form of meaningful whole, when dialogue with other people becomes an essential factor. Computers can enable students to have a critical and mutually supportive educational relationship, thus enlarging the universe of discourse where various kinds of verbal interactions can take place.

Distance education is only possible from a systems approach. Cybernetics and management are very important in setting up a learning organisation. The Institute of Educational Technology (IET) is systemic by its very nature. Yet the question is what

type of system is needed for it cannot be merely mechanical. The best distance learning material will fail unless the personal and organisational support is adequate. IET has sought to apply a systems approach to the educational process. Nevertheless, it has tended to become more technologically oriented at the expense of making space for people of more theoretical orientation. Although immense amounts of information are made available through new technologies, it is what one does with them that is important. Information isn't knowledge, it isn't learning, and it isn't education. Education is rather about using that information purposefully in a wise way. In practice however, it doesn't seem that education can offer much wisdom. What it can give at best is knowledge and the means of constructing it jointly by giving access to particular communities of discourse. Distance education could be seen as a means to transform society - not simply to provide information but actually get people to discuss issues and take action.

Findings with regards to Ethical Issues in Educational Technology and Distance Education

Ethics in distance education and educational technology seem to be centred on access and the financing of education. Yet there is general acknowledgement of uncertainty regarding ethical issues in this field. There are ethical implications in the choice of technologies, in whether students are given a fair chance to succeed, and whether the institution is committed to upholding academic standards. Ends as well as means need to be justified - means do not justify the ends. It would be a pretty dangerous kind of technology that had no moral awareness about the purposes to which it is applied. In the context of international collaboration, the ethics of access - making education accessible to as many people as possible - do not seem to be universally shared. An educational technologist is one who is thinking technologically about the educational process, about the rational adjusting of means to ends. At the same time there needs to be a moral awareness about justifying ends as well as means, although not all educational

technologists would seem to agree with this. A distinction is made between educators and educational technologists - as those having a supportive role towards educators - and the suggestion that educational technologists may function more effectively if they work in an actual teaching-and-learning context, seeing their contribution as a part and not as the whole. Educational technologists would need to put the emphasis more on the educational rather than on the technological.

Access is the biggest ethical issue in Open and Distance Education. Along with it is the issue of financing, as to whether people can afford it or not. In international circles there are perceptible disagreements as to what the purpose of higher education should be. For instance, when the Free University of Iran was first created, its primary motivation was to keep people at home. There is also a moral responsibility towards students in offering them a reasonable opportunity to succeed, while at the same time never compromising on academic standards. The financing of education carries with it an important ethical dimension. The most unsuccessful innovation was, perhaps, the introduction of a sort of Thatcherist type of economics (within the OU) whereby each Unit needed to justify its existence in terms of its financial success. This had a bad effect on organisational culture because of the loss of the sense of solidarity. It was related to the introduction of the Funding Council assessment of each Unit. Now you can attract customers and funding if you use the ultimate technological gadget, even if the learning could be done better through traditional technologies. To become financially successful has become the first and foremost criteria for academic Units, just as it is the top priority for the International Division (OUWorldwide).

Some Financial, Linguistic and Political Considerations affecting Educational Technology and Distance Education

The selling of the soul of academia to corporations took place through language - the surrendering to business language represented a paradigm shift. The need to be financially successful has become the first and foremost criterion; hence the expression 'cheque-led courses', and the setting up of a self-financing approach. Nevertheless the educational world is not primarily regarded as a commercial institution and therefore commercial indexes of success do not properly assess education. There is a strong potential for new forms of domination through the new technologies and the economic and corporate interests pushing them. We need to understand the type of healthy collaboration that should exist between academia and the corporate sector. This involves developing mutual knowledge and respect for the proper areas of influence and decision-making of each, as well as for the particular form of the language they use. In terms of academic partnerships with the corporate sector it is essential to ascertain what each can offer. The aim should be for a symmetrical relationship: partnership is not surrender of specific identities and missions. Already a surrender has taken place, with academia increasingly adopting a business approach and form of language. The Community Education Programme of the OU was a case of successful partnerships with sympathetic groups in general society; nevertheless it began to be perceived as a threat by other sectors in the institution. With regards to international collaborations, the OU has tended to play a 'messianic' role. Colleagues from Spanish, Italian and Portuguese institutions have experienced holding working conferences where the participants used their own language. This has created an awareness of linguistic compatibility that could help strengthen their academic partnerships.

Political issues play a major role with regards to the implementation or otherwise of innovation. Innovations are usually perceived as a threat by existing institutional structures. Decisions concerning the allocation of finances constitute one of the ways of

responding to a threat. Governments (in the context of the European Union) have endorsed a market-led approach to determine which courses will be offered to the students and this has resulted in a consumer-oriented education. In the UK, in 1985, with the creation of the Open Tech, the government was indicating that Open Learning was to be a major trend in the future. Seeking to maximise audience becomes then a matter of survival for educational institutions in order to attract government funding. Consequently, market research becomes imperative. This has led to mass education although this does not necessarily entail a superficial learning experience. A typical legacy of Thatcherism has been a 'customers' trend towards a market-led education. Internally, the OU Units have been redefined as more autonomous and needing to balance their own budgets. This has negatively affected the solidarity within the institution and has set up a kind of competitive spirit, sacrificing the sense of being a community of scholars. It has also rendered the institution less flexible. All this process is reflected in subtle changes in the use of language. The birth of UA (and by extension of each of the Distance Teaching Universities of this research) constitutes a good case study for political science. There is a strong political aspect to setting up an educational institution of national scope. There is a view that distance education can be used to transform society, but this reflects more on the individual's political stance. Policy-makers seem to be particularly responsive to extravagant claims of people such as Gates with regards to the technological direction the world is taking. The institutional effects of Thatcherism, and the adoption thereof in the OU, are related to the introduction of the Funding Council assessment of each Unit. It seems to have been a survival strategy at the time. In the context of the Community Education Programme of the OU, whoever decided the direction of funding had a major determinative role. Yet this particular programme succeeded at first, in spite of little institutional support, because of the strong political support of the head figure of the university.

Findings with regards to the Internationalisation of Distance Education

Internationalism is a major issue in distance education, especially in relation to developing countries, yet it has not been a matter of much discussion and debate in the OU. There are problems with respect to partnerships. This is sometimes shown in an institution seeking to play a 'messianic' role - said with respect to the OU by a member of this same institution. In the third world, international agencies prefer to support developments in primary education rather than in tertiary. There is also the problem that staff from conventional institutions does not have much understanding of distance education. The comparative method can be very helpful as part of a programme of institutional self-discovery. It can provide us with information that we do not possess in our habitual space. It can help us to understand a particular institution through the 'mirrors' of other organisations and cultures. It provides an effective tool to counter ethnocentrism and eurocentrism. Distance education is a global phenomenon and we can learn much from others. One of the interesting problems in comparative research is that often one encounters different measures of effectiveness, nevertheless the essential comparison seems to be quite simple: Are there conditions where distance education would be a viable approach?

UNED is generally perceived as a very traditional Spanish University. In its conception of curriculum it is very different from the OU. The OU has been regarded as a major innovation especially because of its open admissions policy. While colleagues at UNED express great admiration ('at a distance') towards the OU, the OU looks at UNED in wonder - an intriguing model - for its success as a mega-university. UNED differs from both the OU and UA in that it is mainly text based for its delivery of instruction. UA is very active in the area of multi-culturalism, and has partnerships with various Spanish and Italian universities in developing a European MA in Intercultural Relationships. UNED and UA have come to realise that Spanish and Portuguese languages are actually quite compatible; at various joint events they have successfully used their respective

languages without mediating translation. There are important similarities among distance teaching universities in that they have to operate on the basis of certain givens: production facilities, distribution facilities, academic experts, etc. The first years of Universidade Aberta were very much the personal achievement of Rocha Trindade. He has always been very active in international circles. He has succeeded in creating an awareness of the linguistic compatibility among southern European nations. A major international achievement, under his initiative, has been the creation of the International Open University of Asia, based in Macao and functioning as a partnership of three different educational models (English, Portuguese, and Chinese). He believes that distance education is the answer for massive retraining of the population in places that are experiencing rapid social changes. Nevertheless there has been criticism that under his leadership UA had become a very hierarchical institution. The first generation of OU staff were willing to take risks, but they are now retiring. The second generation are half/half between innovators and others being of a more conventional, less committed type. The contextual pressures are quite different now.

Findings regarding Trends and Debates

The world seems to be going down the 'high-tech' path, with people such as Gates (the Microsoft University) making extravagant claims that sound good to people who actually do not know much about educational matters, i.e. policy-makers. It is easy to be carried away by the flashy latest technologies. A suggested approach was to think critically about them, to not hurry, and to learn from others' mistakes. For instance, one sometimes hears the comment: 'I had problems with my traditional course. People seemed to be a bit bored, so I decided to connect everybody to the WWW and students love it!' Technology is useless if it doesn't help students to learn. Neither can it replace the role of the teacher for there is always a hidden teacher in the technology. The introduction of new technologies lends itself to generating tensions between different departments. In the UA

there has been a preference for a strategy of diffusion rather than the setting up of a separate Unit for educational technology as such. The incorporation of new technologies in distance education carries with it a whole set of different meanings to different people (it is conflictive). If the emphasis is too strong on technology, there is an inclination to operate on a 'delivery mode' approach. There are large regions in the world that cannot afford the high technologies, but this doesn't mean that distance education is not a viable answer to their educational problems; rather it means that high tech solutions cannot be imposed across the world.

The danger of technocratic tendencies is that sometimes people think that a form of technology can or should replace the teacher, that you have learners and all you have to do is provide them with resources. But technology can never be neutral. There seems to be a trend for administrators to take over a more significant role than educators. In practice, when people are wearing an administrative hat they think: 'How can we use technology to get materials to the widest number of people in the cheapest way?' As an example of this trend, the OU began calling its students 'customers', which reflects a change of ideology in management circles. The OU became a rather rigid organisation (this was not so in its pioneering days). Although management is very important for a distance education system, it is very hard to find good managers. David Harris made some useful initial critiques of the OU, but this is not the case with his more recent judgements. Still the debate he raised about 'openness and closure in distance education' is one that the University has never tackled upfront. There has also been little debate in the OU about the creation of the Knowledge Media Institute (KMI) or the question of internationalism. The absence of debate is attributed to the lack of theoretical people in the institution and perhaps to a problem of leadership. The creation of the Knowledge Media Institute (KMI) stirred up no small controversy in the institution. A colleague from UA raised the question of whether KMI is involved in providing educational training for other Units within the University, as a concrete way of being useful to others rather than these feeling threatened or marginalised. KMI may go down avenues that are not

particularly fruitful. The much celebrated KMI Stadium appears to be little more than a televised lecture. It seems that people in KMI may not be particularly suited to bringing 'blue-sky' research to specific instances in course development.

In summary, the above narratives provide us with an illuminative background to some of the issues relevant to the topic of research and allow us to gain some critical insights into the "thematics" (Eisner, 1991) of the educational technology field. The remaining sections will apply these insights to the area of the relationship of educational technology with educational studies as well as ethics.

Educational Technology and Educational Studies

A major issue in educational technology discourse appears to be its relationship with the traditional realm of Educational Studies - after all, both share the same term 'education' in their definitions. Educational technology is a curricular subject in the Faculty of Sciences of Education (the preferred Spanish denomination) at UNED. The members of this Faculty have consistently occupied positions of leadership in the Units dedicated to audio-visual productions as well as in the Instituto Universitario de Educación a Distancia (IUDE), the directorship of which has always been held by a member of that Faculty (likewise many educational technologists in UA are members of the Faculty of Education). This situation is at variance with the problematic relationship encountered between IET and other OU Faculties, particularly with the School of Education. In this section I seek to contextualise IET within its institutional framework as well as to illuminate certain aspects of the nature and potential of educational technology in the OU. Coming from an UNED's background, it strikes me as somewhat unusual that in the OU there is significant absence of relationships between the IET and the School of Education and, during interviews, some tensions were expressed in this connection,

‘(Someone) *defected* (from the IET) to the School of Ed.’

(A Founding Member of IET)

The following Gestalt illuminates the fundamental, and problematic, relationship that exists between Educational Technology and Educational Studies at the Open University.

Gestalt 7 ET-Pedagogy-DE

Technology may be part of an answer to an educational problem. But in so many cases people are just 'prodding' things by adding yet another gimmick rather than having an educational rationale for doing it. To be useful, educational technology will need to be pedagogically located within an actual teaching situation. Technology per se may be a necessary, yet not a sufficient condition to have educational technology in the service of distance education. There is a need for appropriate educational technology rather than the high tech hype and digital utopia one encounters in the corporate sector. The fundamental educational questions need to be addressed, and the real test must be seen in the quality of the learning as experienced by the learner.

A criticism expressed by a Professor from the OU's School of Education is that educational technologists tend to see themselves less and less as part of a team, increasingly detaching themselves from the faculties that they are 'supposed to serve' and focusing more on their own independent interests, i.e. as a teaching Unit now offering its own MA in Open and Distance Education. But this could be regarded as part of a trend within of the OU culture, with its new funding system, which has resulted in a promotion of internal competition within the institution - each Unit fighting for resources in the light of the impending next Research Assessment Exercise. The following Gestalt reflects and contextualises some of these tensions:

Gestalt 16 OL-Innovate-Generations

The first generation of OU staff were willing to take risks, but they are now retiring. The second generation are half/half between innovators and more conventional, less committed type. The contextual pressures are quite different now. To prove to be financially successful has become the first and foremost criterion. The Thatcherist type of economics has produced an increased rigidity in the relationships between the different Units. In its initial phase, the OU was regarded as innovative because of its open access policy and also because of its well-prepared teaching materials, which have also impacted many conventional systems.

This perception of IET as a privileged unit received comments from various colleagues among other OU Faculties:

IET has always been seen as a privileged Unit, where people are not constrained by the schedules of Course production and presentations. Neither are they financed in the same way as the Faculties.

(A Senior Member of the Technology Faculty)

[IET] ... it's being financed by the Faculties, yet we don't get from them what we used to get.

(A Senior Member of the School of Education)

The educational technological expertise at the OU has, to a significant extent, been shared across the Faculties, even to the point where it has become the exception when new course teams engage a member from the IET. Likewise consultancies for implementing distance education methods elsewhere are carried out by staff across the Faculties and not exclusively by IET personnel. However, a question arises as to

whether, intrinsic in the nature of educational technology might be the need for educational technologists to be involved in course teams and whether this is not a central means by which educational technology could be more pedagogically situated.

My own feeling about educational technology is that it has to be pedagogically located within a teaching situation. That educational technologists will probably function much more effectively if they were to be working in an actual context in which their expertise is only one element and not the embodiment of the entire process.

(A Professor from the School of Education)

There is a perception that there has been a steady decline over the years of IET members participating in course teams, which used to be its primary function in the early days of the university and part of its original justification. It was also this initial commitment to course teams that brought together IET personnel from a diversity of academic backgrounds. In this way they were able to relate to the various Faculties and contribute to them their specific educational technological expertise. IET, however, and although being one of the richest interdisciplinary cultures of the university, has yet to realise this potential for interdisciplinary work. Rather IET is perceived in the words of one of its founding members as:

Being a collection of individuals, not so much a team. We lack a corporate feeling. We have failed too at passing on the torch to a new generation of educational technologists.

This is regrettable because IET could well pioneer within the OU a culture of academic interdisciplinarity for which the course team approach could prove an essential component. Yet, the question remains as to what may be required to bring about such scholarship of interdisciplinarity - or even interculturality given IET active involvement

in the international scene? Could IET generate a dynamic of intercultural and interfaculty dialogue as part of its mission within a distance education system?

Ethics in Distance Education and Educational Technology

One of the themes elicited through the GABEK data analysis is that of ethics in the field of distance education and educational technology. There is a marked neglect of ethics as a topic within the relevant literature. An exception to this being Jarvis (1997, p. 12) who emphasises that "underlying educational practices is an ethical dimension" and dedicates a chapter of his book on "Ethics and the Education for Adults" to distance education.

There is a danger, when thinking in terms of distance education, to unwittingly portray the view that it works just as well under any regime, be it democratic or totalitarian. This certainly is the case when distance education is conceived merely as a delivery mechanism of instruction, and/or indoctrination, rather than as an open system where there is room for valid disagreement on contending issues. The following quote stresses the point of the need for moral awareness as to the purpose for which educational technology is put to use.

Educational Technology involves being rational about both ends and means. Both have to be justified, although I am not sure that all educational technologists would agree that justifying ends is part of the technology. It would be a pretty dangerous kind of technology that had no moral awareness about the purposes it is applied to.

(Founding Member of IET)

To do so the OU at large, but very especially the IET, would have to deepen its commitment to educational development and reflection on the ethical and philosophical

presuppositions that underpin its foundational values. Alternatively, failure to come to grips with the significance of these matters may leave distance education in a sort of ostrich position comparable to that of Werner Von Braun. He would excuse himself from his contribution to Nazi Germany in WWII by insisting that his responsibility rested exclusively in ensuring that rockets took off, and not with where would they land. This would seem a rather interesting blindness of the technicist-fragmented world-view pervasive in any society that worships technological power.

[What about ethical issues in educational technology?]

I don't know, I really don't know about that one, I have to admit. I think a lot of people involved in higher education aren't actually particularly well versed in educational issues at all.

(Senior IET Lecturer)

It is interesting to note that although the interviewee was asked specifically about ethical issues, his reply incorporated ethics as an integral part of educational issues at large. In the spontaneous flow of this conversation, his remarks seem to indicate a recognition of an ethical dimension as being inherent in any educational provision. The kind of ethical questions that arise in the context of distance education and educational technology can be expressed in the following manner:

Why should we pursue a course of action and not another?

What are our criteria and how do we determine them?

What guides our decisions concerning what is relevant or not in distance education and educational technology?

How priorities are established?

What principles guide the allocation of limited resources?

How faithful, in practice, are we toward values we claim to hold?

How do we cope when we fail to live up to our commitments, both at institutional and personal levels?

How do we handle power in our midst? And so on.

All these issues are implicit in our day-to-day professional experience and practice and are always at work whether we are aware of them or not. In the process of research a significant number of ethical issues have been encountered. However, my intention is not to present an exhaustive list of them in any sort of ethical casuistry, but merely to suggest ways in which this difficult topic may be approached.

“The next educational technology should surely be based on careful reflection about ethics. Its practitioners need to avoid a rhetoric that sounds objective and value-free. They too have sets of beliefs that guide their actions. They have to consider whether, since they are participating in globalisation, electronification and commodification, these will lead to domination alone [or rather] they may decide to aim instead for liberation”. *(David Hawkrige, 1996, p.12)*

“A post-industrial society cannot provide a transcendent ethic....The lack of a rooted moral belief system is the cultural contradiction of the society, the deepest challenge to its survival.” *(Daniel Bell, 1973)*

The above quotes contextualise ethical concerns for educational technology but also in relation to the technological society as a whole. Whereas in the past educational technologists would appear to have projected a value-free rhetoric, there now seems expected from them to gain a more reflective appreciation of their own beliefs that guide their practices less, if only by default, they find themselves contributing towards 'domination' rather than 'liberation'. Furthermore, a heightened awareness of ethical issues carry a bearing on the general trend of our culture and the transformation processes that an ethically informed educational technology may contribute to.

In pursuing this topic, it is illuminating to re-visit Lord Crowther's Inaugural Speech of the OU (Appendix 1). Are not the 'Open as to People, Open as to Places, Open as to Methods, and Open as to Ideas', ethical values at heart? In examining the discourse of Crowther's Speech it could be concluded that these ideals could be viewed as being embedded within a Christian frame of reference. To explore this frame of reference however would be beyond the scope of the present research. Nevertheless, a brief discussion expressing the author's personal view on the content of the above mentioned document is included as part of the same appendix.

Openness to the OU, first and foremost, means Access, the power to choose and to enjoy a valid possibility to participate, to gain a voice, in an as previously exclusive a field as Higher Education.

The OU, in its first phase, was regarded as an innovative institution and its innovations were of two main types: First, the open access policy, innovative in the context of Higher Education in the UK, and making it available on a part time basis to anyone that would like to come along. This innovation didn't have to do necessarily with educational technology, but with the sort of philosophy of the institution. Second, the production of these well prepared teaching materials which could reach students in their own homes.

(Senior IET Lecturer)

Educational Technology in the Implementation of "Access" and other Ethical Values

This ideal of open access would have remained an alluring 'pie in the sky' had it not been adequately harnessed and supported by a suitable systems design and specially by

the quality of the learning materials and personal support. In this respect the OU has demonstrated a special ability in being able to follow up its philosophy of open access with a philosophy of openness as to 'methods' and to 'ideas'. It is within this frame of reference that the IET was brought into being (Perry, 1976, pp. 80, 81). Its overarching purposes being those of implementing a truly open and distance learning system, of industrial proportions, and to carry out ongoing research on the life of the system. And to do this, very distinctively, as an academic unit rather than as a technical support department - the typical conception of educational technology in most other distance teaching universities.

Distance education is a materials-based learning system as opposed to classroom or people based. Yet, the best materials will fail unless the support, personal and organisational, is adequate. Other places tried to get into distance education soon after the OU started but they didn't have the sort of structure in terms of those things being accessible to people: transmission, or postal service, or existing networks of educated people to act as tutors, and this is vital. The OU would not have succeeded were it not for the tutors that are engaged with the students at the ground level. It doesn't just have just to do with having a self-contained distance education system.

(Senior IET Lecturer)

In this last statement we see the recognition by a senior staff at Walton Hall of the invaluable, and irreplaceable, role of the OU 'army of tutors'. It is at this crucial point where the cherished expression of 'supported open learning', as descriptive of the OU model - often employed in its advertising and promotional materials - comes into perspective. Certainly these tutorials cannot be 'Oxford style', yet the OU has had an influential role in UK Higher Education through its educational technology and the widespread use of their 'distance' learning methods and materials (Laurillard, 1993).

Course production is the core of educational technology, along with exams and assessment, because assessment drives education. OU does certain things better than Oxford, i.e. Course Team production - most conventional universities use OU materials as a resource - yet it has the weakness that it cannot provide tutorials Oxford style. Each university is better for a certain type of learning.

(Founding Member of IET)

But the success of the innovation was the fact that it took what had been solely taking place with a group of people sitting in front of a teacher, making it available to a large number of people in different places and spread over time and doing this in a way that was accessible so that people could engage with it in a relatively easy way (student friendly) rather than being done as an elitist sort of activity.

(Senior IET Lecturer)

Again it is in this, previously unheard of, triumph of access - however qualified it may need to be (Harris, 1987; also Woodley's article 'Has the Open University been an Unqualified Success?', 1987) - that the OU has established a new standard within academia. To express it with the words that Sir John Daniel used during our interview: "The OU has changed the image of what a university is by breaking the link between quality and exclusivity".

Next to access, and inextricably linked with it, the financing of education has significant ethical implications and this not only for students but also, internally, for the organisation.

Oh, the biggest one [issue] surely must be around access - access and the financing of education. Are we genuinely open to people who cannot afford it

because they are low paid or are we not? That is my perception of ethical issues and there would be people who wouldn't see that as a problem.

(An OU Regional Director)

We can see that the access issue is unavoidably an ethical issue. Access for whom? Who can afford the access price, and on what criteria are prices fixed? Are people who should be benefiting from an open learning system excluded because of excessive financial demands? Furthermore, should not an Open University be concerned with the educational welfare of the whole community beyond its most circumscribed academic mission, less it risk becoming yet another form of elitism?

Some of us believed that in the founding documents of the University there was a commitment to Community Education. The Community Education Programme took off with very little finance, yet we found a number of sympathetic groups in general society, such as the Playgroup Association. Once the thing took off it began to be perceived as a threat by other sections within the institution. Thanks to the personal support and involvement of Walter Perry things were facilitated considerably.

(Senior IET Lecturer)

It should be noted that reference is made once again to the fact that these values are not universally shared across the institution, nor in the larger world of distance education. Still the issue remains as to what extent an adequate funding and pricing are of an intrinsic value to an open learning university. Multi-Modal Systems Thinking makes a plausible interpretation of the relationship between economics and ethics that will be discussed in the next chapter.

But the way of financing provokes strong institutional repercussions within the organisation itself. The introduction of 'Thatcherist economics' has been referred to by a

number of interviewees as having major implications for the OU culture. Their comments carry grievous undertones concerning its effects on the cohesiveness and solidarity within the institution. Are people pulling together in the same pedagogical direction, or rather has seeking to survive financially become the all-important consideration?

The context pressures are very different now [in contraposition to when the OU was started], with less room for experimenting. 'You have to prove to be financially successful.' This has become the first and foremost criterion.

(Senior IET Lecturer)

The different Units [under Thatcherist economics] are becoming more autonomous and need to balance their own budgets. That had a negative effect in the sense of solidarity within the institution. I think it makes it hard to pull together to achieve pedagogic ends if you are only looking at your own particular goals. For example, you cannot get a designer that can be flexible enough to hang around until 10 at night till we have got something done, because his time has to be accounted for in a certain way and they have already given you three days and that was all they were down for. Of course that is related to the introduction of the Founding Council assessment of each Unit. I was not suggesting that it was done in isolation [the institutional response to Thatcherist economics]. It might have been something that some people would say was necessary merely as a survival strategy in order to weather the storm of Conservative Government. I don't know if it was an option but I don't think it was a good idea.

(Professor from School of Education)

What might be a concern in this regard is the undermining of the sense of community:

We are competitors now, rather than a community of scholars. [When I asked when this kind of transformation took place he said:] About ten years ago...having

to do mainly with the change in the way of funding. We are competing against other Higher Education institutions in the United Kingdom.

(Staff Member from the Pro-Vice-Chancellor Office)

It needs to be said that the competition goes on as much internally, within the OU, as externally. Indeed, if the OU loses, or fails to recover, the sense of being a 'Community of Scholars', united by a sufficiently shared core of educational and ethical values and aspirations then, it may be legitimately asked, What is it? What has it become? What may it end up being? Not without a heavy heart a senior IET interviewee reflected:

The selling of the soul of academia to corporations took place through language- the surrendering to the business language represented a paradigm shift. I could point out precisely the time when this took place. It was with the setting up of a self-financing division, the expression came up: 'cheque-led courses' that came to substitute need-led courses.

(Senior IET Lecturer)

There seems to be a need to establish some clearer boundaries and delimitations between the various stake-holders in the contended field of education. Otherwise education risks to be subsumed by the prevailing corporatist mood. It remains an open question as to whether the UK government, operating basically out of utilitarian ethics, will allow education to develop according to its own internal dynamics, rather than treating it just as another money-driven agency. Gestalt 5 presents some related interview data that illuminates this issue.

Gestalt (5) academic-corporations-business

[...]The educational world is not primarily regarded as a commercial institution and therefore commercial indexes of success do not properly assess education.

There is a strong potential for new forms of domination through the new technologies and the economic and corporate interests pushing them. We need to understand the type of healthy collaboration that should exist between academia and the corporate sector. This involves developing mutual knowledge and respect for the proper areas of influence and decision-making of each, as well as for the particular form of the language they use.

Related to the question of access and financing of distance education is the question of the technology choice,

Well, the technology choice has implications. Because if you choose expensive technologies or expect students to equip themselves this would obviously effect access.

(OU Regional Director)

There is a certain risk that the OU may gradually cut back on face-to-face tutorials and substitute them for exclusively on-line tuition. This will certainly have consequences in the way students relate to the institution and may effectively distance a number of current and potential students. The following comments appeared in the OU's Sesame bulletin (October/November 1999, p. 2. This is a regular publication, that in its own words, reaches out to the 'OU community worldwide'):

I value tutorial support very highly. To me it is the most important thing in the OU after the quality of the written material...On-line support would not be a substitute and would be welcome only in addition to the existing provision...I write this in my 6th OU year and in proud possession of a computer (and therefore not a Luddite).

And yet another student,

The support received from face-to-face contact with tutors is invaluable...If the support was limited to telephone or on-line then the OU would have one less student.

Furthermore, the extent to which powerful commercial interests seem intent on pushing ever more sophisticated technologies, with an increasing pace of change and in-built obsolescence, does have ethical implications of its own. What interests are pushing what technologies in what contexts, and what is the rhetoric used in favour of the new technologies to raise the profile of distance education across the globe?

Particularly, in seeking to make viable distance education in developing countries, of primary importance must be considered the world-view of the international agencies that support distance education developments. Are they technologically driven, and therefore potentially geared towards domination and generating growing dependence of the 'assisted countries', or are they educationally guided, and motivated, and consequently seeking to implement an educational technology that would work for sustainability at a grass root level? As part of an OU consultancy team conducting a feasibility study for developing DE in Mozambique within the framework of the World Bank's Capacity Building Project, these issues were not insignificant.

One of our concerns in UA with regards to educational technology is that we perceive a sort of strong international lobby coming from software and hardware companies. We feel it is a threat. We need to keep control of our own institutional decisions and not be determined by others agendas. Another strategy is that, rather than creating new functions within the university, we seek to establish partnerships with companies of excellence outside. In terms of partnerships with companies we need to ascertain what each can offer. They can contribute a whole telematic set up but they lack understanding of pedagogy and of distance

education. And it is here where we can be useful. Plus we also have considerable mastery with regards to video and audio technologies. I think that if a symmetric relationship is established many good things could be accomplished.

(UA's Director of Planning and Teaching)

Looking further into ethical considerations, one of the early international distance education developments in which the IET had a prominent role was its involvement in setting up the Free University of Iran in the mid 70s, under the former Shah.

There was an ethical issue about the IET involvement with Distance Education in Iran, with the Free University there, whose primary motivation was to keep people at home.

(Senior IET Lecturer)

There were considerable institutional stirrings at this, the first major consultancy action undertaken by the OU via its IET. If the 'primary motivation' were to 'keep people at home' and thus preventing students revolts in the capital, how educationally justifiable would have been for the OU to accept such consultancy? However, the member of the IET who carried out the consultancy had no misgivings about what he sees as the actual potential of distance education to promote modernisation and to stimulate democratic aspirations. "What could be more 'revolutionary', he would insist, 'than to make possible for excluded segments of the population, in an Islamic culture -specially women- to gain access to ideas that open up possibilities for social transformations?'

But I feel that this argument had more to do with justifying the consultancy in terms of the process (in keeping with a certain strand of 'technical rationality' within educational technology) than with the content of the curriculum itself. The skills *per se* that a technologically focused educational technology facilitate do not necessarily contribute to instill democratic ideals. Crucially important would be access to ideas themselves. An educational technology concerned with democratisation must address conflicting

ideological positions from a genuine educational and philosophical perspective, less it merely propagates, if only by default, whatever happens to be the prevalent ideology at the time.

Tait (1994a, p. 33), a staff tutor with the OU, has been quite incisive in exposing the myth of ideological neutrality in Open Learning (OL), and how such 'open learning' has proven to be quite pliable to about any wind of the dominant ideology. Contextualising OL in its present setting, where it has become a mainstream delivery method, he reflects that 'Open and Distance Learning (ODL) was driven by activists who were often in opposition to the main currents of society through the support of and advocacy of marginalised sectors of the population. The analyses of individualism, Post-Fordism, commodification and consumerism now suggest that this is no longer an adequate account, and that ODL has now taken on a modernising role within current dominant ideology'.

An interviewee expressed the conviction that distance teaching universities have some major ethical responsibilities towards its students (a topic that will be further explored in chapter 7, when discussing research on intercultural issues in online distance education),

...I also think you have two responsibilities to your students: One, you want to be certain that your students will have a reasonable possibility of success, and therefore it is not moral to take students if you know they are going to fail, for that is a waste of their money and it also smashes their self-confidence. And secondly, any educational institution has, if it is at all worthwhile, a deep concern about standards which students will have when they exit. And so you then never compromise your standards; and if a student is not up to getting a degree, then you've failed them.

(OU Regional Director)

A central theme in the distance education literature is that of the 'drop-outs'. This is often viewed as an index of the relative success of a system. 'Are students presented with a reasonable possibility of success, or are they more or less victimised by a system that fails to give them due respect?' The consideration of these questions brings educational technology to the fore of any distance education system. Educational technology needs to be concerned with knowing who the students are, with being committed to research and to develop the best suitable materials, as well as with the support of the students. In summary, it needs to establish a meaningful rapport and follow up of the students' learning experience.

The ethos of any educational system is clearly perceived in the attitude towards its students. Are they given sufficient exposure to the system so they make informed decisions, or are they being propagandised by the unilateral interests of the institution? Is the institution open to accept some measure of responsibility, in principle, for the failure of its students? The easy way out, of course, is to put the blame on students as not being up to the 'rigorous academic standards' the institution so dignifiedly upholds. These are ethical issues that impinge on what counts as success for a distance teaching university.

If they are not careful distance teaching institutions may give in to a foreign ethos, to some form of spirit alien to its original roots and mission, i.e. to the prevailing utilitarian and markets moods in general culture. The expression 'cheque-led courses' was used by one of the interviewees, another said, 'we are competitor now and no longer a community of scholars', and yet another, 'are we mercenaries or missionaries?'

I would suggest that one of the functions of educational technology should be that of identifying and discerning these dynamics. For instance, technology may be seen as one of the spiritual powers of the age. Technology needs to standardise procedures and behaviours in order to produce efficiency, which would appear to be the sacred law of today's technology. In the next chapter I suggest that there is nothing wrong with

efficiency and productivity per se, and that these may be inherent to the very nature of distance education systems. Nevertheless they raise a serious concern when they pretend to assume the ultimate value. 'Technology tends more and more to become a new god', notes John Wilkinson (1970). When efficiency becomes the ruling principle, what is found enthroned is the supremacy of standardisation over spontaneity, of technology over personality. Then individuality and social interactions are so mediated by technology that people tend to feel inside that they have become more of a 'thing' and that a certain loss of personhood (a facelessness) has taken place in the exchange. Whenever the proposition 'If it is efficient it *must* be good' is embraced, be it explicitly or implicitly, one begins to realise that technology has been given ultimate significance and that the pragmatism of any particular institution has endorsed the technocratic ideology. In that situation any form of ethical checks and balances tend to become rhetorical if not clearly redundant.

The important question of efficiency, therefore, must always be counterbalanced by other modalities as indicated when discussing the multi-modal systems perspective (chapter 2), where technology is seen as subservient to the integral human and cultural wellness. Will human beings be crushed in the process of accelerated efficiency at any cost? What ethical issues are involved? A substantial number of such questions must be raised if we are to discern the spiritual dynamics of technology and seek to respond educationally to it.

'[Educational technologists] may decide to join...in opposing "the hubris of intellectuals and power relations that underlie the formation of knowledge" and aim instead for liberation' (Hawkridge, D. 1996, p.11).

All these various strands associated with ethical consideration affect the credibility of a distance teaching institution. A credibility which is not dependent merely on 'quality' but

rather in the spirit that animates the pursuit of excellence as the institution seeks to attract and support its students' academic success. Credibility, within the Multi-Modal Systems Thinking approach, relates to the pistic (Greek) or faith modality. This is qualified by vision and trustworthiness; the highest of the vocational modalities that can be discerned within a social system and which determines, to a large extent, its leadership potential.

Conclusion

Educational technology is conceptualised and experienced differently in each of the distance teaching universities of this study. In UA the central task attributed to educational technology and educational technologists is that of bridging the gap between the author of the course materials and the learners. With regards to UNED it could be stated that there is an undefined institutional role for educational technology, and that the concept itself is quite foreign to its *modus operandi*. If anything, educational technology would be regarded as the production of audio-visual materials to support what is fundamentally a text-based curriculum. The OU has a conception of educational technology that hinges on a systems approach to the educational process as a whole, even modelled in some respects after an industrialised form of educational 'production' (Sewart, 1990; Daniel, 1996). Furthermore, the Open Learning concept is strongly linked, within the UK academic culture that originally conceived it, with a Course Team approach, which is quite alien to the individualistic academic culture of Southern Europe. Finally, this chapter has also shown that the developments and uses of educational technology and distance education have significant ethical implications.

On this note, I can think of no better historical illustration than that of Samuel Plimsoll. He was a politician known as the 'Sailor's Friend' and instrumental in the approval of the Merchants Shipping Act (1876). This law concerns the regulations affecting unseaworthy vessels and put an end to the unethical practice of sending overloaded and heavily insured

old ships (known to sailors as ‘coffin ships’) to sea, from which the unscrupulous owners made a profit if they sank. The ‘Plimsoll’ mark is today painted in every ocean-faring ship, thus indicating the maximum load line for safety. This ‘Plimsoll mark’ exemplifies a concept of justice and ethics, which I believe is relevant to our present situation. As distance education goes global, supported by ever more sophisticated educational technology, a whole load of questions will need to be frequently raised regarding the ‘seaworthiness’ of the models, and their educational and philosophical values, as they travel by virtue of digitalisation, across the planet. It is my belief that institutions and individuals should strive to set up a ‘Plimsoll Mark’ in distance education that would ensure the best chances for educational technology to serve the ideals of true liberation, openness and sustainability throughout the distance education landscape. Having pointed out some of the issues affecting the current situation of educational technology, it becomes necessary to explore the theoretical nature of the field, which will be pursued in the next chapter.

Chapter 6

Educational Technology: A Field in Search of a Theory?

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Introduction

This chapter discusses the theoretical basis of educational technology. It points out the existence of a 'theory deficit' currently in academic considerations of educational technology. This is seen as a problematic situation with major implications for the future of the field. Of the three Distance Teaching Universities studied the only one where educational technology enjoys recognition as an academic unit is the Open University, through its Institute of Educational Technology (IET). The chapter will therefore focus on the contribution that the experience of IET has made to the theoretical development of the field. The chapter offers some suggestions for rebuilding the theoretical foundations of educational technology by recovering and re-thinking the original systems approach which generated IET itself. A new definition of educational technology in terms of curriculum and power is proposed, along with a Multi-Modal Systems approach applied to the relationship between OU and OUW Ltd. to illustrate some new understanding on the role of educational technology.

Educational Technology: A Problematic Term

In the second chapter of this work I have already discussed some of the issues affecting the historical development of the notion of educational technology and how Morgan (1990, 1997) is one of the few who actually raises the question as to 'What is educational technology?' In this chapter I will seek to further explore the nature of educational technology in the context of this research.

Educational technology does not exist in a philosophical and social vacuum. It is embedded in forms of interpretation. Consequently, and before we can proceed further, it will be necessary to clear the ground as to which interpretations are possible and are actually being adopted in the context of analysis. The usual response to the difficulty of competing definitions of educational technology is to favour one or the other, and to work within that frame. (One could also opt for giving up definitions of educational technology altogether, but wouldn't that represent -if only by default- some form of definition?). The danger of settling for such kind of solution, if each definition does have its own merits, is that important dimensions of specific and related meanings of this field will be missed. Thus my approach will not be to insist that definitions of educational technology are mutually exclusive. A temptation would be to absolutise a particular definition for the simple expedient reason of 'advancing' one's own elaboration, and having thus dispensed with theoretical preoccupations, to engage ourselves with the practical matters regarded as central in this field. After all, is not educational technology a particular field of **applied educational science** - as the Institute of Educational Technology was originally named?

Any theory should always be constrained by observable facts. But they are only *constrained* by those facts, not *determined* by them. I am saying this in order to affirm the empirical without succumbing to *empiricism*. Likewise, in considering the various historical definitions of educational technology one may adopt a cautious view towards the assumption that makes changes *per se* sound as if they are irreversible. On my part, what I seek to do to is to affirm the value of historical meaning of definitions without succumbing to *historicism*. Evolutionary ideas produce the effect of making social change too mechanical a process. Human beings actively contribute to the social systems which simultaneously shape their lives (Wuthnow, 1984, p.261). The simple story is suspect. Ambiguity abounds. Paradox proliferates. The concept of educational technology is rather 'messy'. But this fact does not exempt us from a sloppy theoretical effort. Care over detail only leads into greater complexity. The temptation must be resisted to relieve

complexity by appeal to convenient expediency. Rethinking our approach is part of the argument that may take us beyond the current constraints impinging on our field. The word 'problematic' has also a technical sense. In this research, I am challenging myself to go "beyond" unexamined presuppositions and taken-for-granted versions of educational technology. Parenthetically, one of the interviewees at the OU spoke of educational technology as an 'ill-defined term'. A 'problematic' is a 'rudimentary organisation of a field of study' (Abrams, 1982, p. xv). It suggests directions along which to look, and holds together in loose way different things which seem relevant. Judging from the literature and the interview data educational technology is still a 'young field of study'. Yet, given its significance and potential in the contemporary educational scene, revisiting its theoretical foundations seems appropriate.

Leadership vs. Managerialism

Pragmatism is a feature of British temperament displayed in the creation of the OU:

“It was in this spirit of pragmatism that I took up my appointment and began work” (Perry, 1976, p. xiv)

A senior colleague in the IET confirmed this to me when he described Sir Walter as ‘a master of the ad-hoc’. One of the early realisations of this research, arising from the literature review, was that there is a marked ‘theory deficit’ within the field of educational technology. It is a field which has received scant theoretical attention, yet it has significant philosophical interest, namely the interaction of the technological and the personal dimensions in education. Certainly, there exists ample literature on a vast array of distance education topics. There is also some substantial work on educational technology with regards to curriculum development, the special contribution of Derek Rowntree (1974, 1982, 1992), but there is little which seeks to articulate educational

technology as an integrated body of knowledge (of the kind, for instance, that I have found in the field of Adult Education, i.e. Jarvis, 1993, 1997 and education in general). This particular point about educational technology is reflected in the following quotes:

There aren't very many theoretical people, not at the moment. This is one of the great weaknesses of the institution. We don't have people who are thinking deeply about assessment, educational policy, and so on. We lack that kind of person on a whole. We have lots of people who are interested in Technology.

(Regional OU Director)

There has never been a central doctrine in the IET, neither a body of knowledge for that matter. People were contracted because they were interested in effective learning and things needed to be done in a hurry.

(Senior IET Lecturer)

The theoretical soul of IET, as a number of IET colleagues have described it, seems to have been embodied in Professor Brian Lewis:

He was a thinker and an inspirer of others. A theoretician and a peace-maker.

(Senior IET Lecturer)

We lack someone like Brian Lewis, a true theoretician, willing to support long range development of ideas. The IET has high quality technicians, but a lack of educators...few people with experience in education. In fact there are no relationships between IET and the School of Education.

(Founding Member of IET)

Certainly the untimely death of Lewis (in 1986) may have prevented IET from being able to ground its increasingly rich and diversified practice on more solid theoretical foundations. Lewis was concerned with theoretical issues. According to Hawkrige (the founding Director of IET), he was insistent on the question: 'What is the world-view of the learner, and of the course writers?' Yet, by and large, constructing a body of educational technology expertise on philosophical foundations has not been the goal of IET. I have heard various justifications for this, for example: 'As Applied Educational Sciences we are really borrowing from across all the disciplines.... So we depend on whatever available theory is out there (from other fields)'. Or, 'as we enter the post-modern mood the aspiration for some overarching theory becomes all the more elusive'. Or finally, 'theoretical concerns have not been too prominent on the agenda, for most of our existence we have been a Unit at risk [at various points the continuation of the IET was being questioned]. It was enough just to survive'.

But since the success of the various UK universities' Research Assessment Exercises (RAEs) in 1992 and 1996, in which IET gained the highest grade (5) as an academic unit of world-class status in educational technology research, it has seen its identity transformed 'from Cinderella to Royalty' within the OU academic community. However this does not imply that this highly regarded research has an integrated theoretical basis.

My approach to this debatable 'theoretical deficit' has been to highlight the relevance of world-view issues as they relate to the field, following Lewis' lead mentioned above. World-views are inextricably linked to belief systems and the realisation that there is no such thing as neutrality, not even at the point of the presupposed autonomy of theoretical thought. We all start from presuppositions which are, in the final analysis, of a pre-theoretical nature. A world-view outlook is useful for raising and confronting issues as wide ranging as the origin, nature, and destiny of the cosmos (conventionally referred to as the cosmological question), or its counterpart, the origin, nature, role, and destiny of the human being (anthropological question). And, indeed, these deep questions touch

dangerously on the so-called religious or at least on the ethereal realm of speculative philosophy. Yet world-view thinking is inescapable if we care to interact meaningfully, even ethically, with educationalists from the Third World: Are we sure that our scientific-technological “solutions”, and beliefs, are what will help them the most? A world-view reflection could help us discern not just the ‘whats’ but also the ‘whys’ as to how education and the future are becoming increasingly technocratic and managerialistic:

Following the post-Second World War consumer boom great hopes were vested in the possibilities of postindustrial society which would both place behind us the inequities of earlier capitalism and foster a new social condition based on knowledge. Computers and telecommunications were central to this vision. But as the postindustrial was transposed into postmodern key, progress evaporated, leaving only the as yet little understood iconocentric and cybernetic world of data-processing, mass electronic surveillance and virtual realities. Increasingly, technique takes over. In health, welfare, education, politics, as well as industry, managerialism reigns. Questions of purposes in education, life and death in medicine, and social goals in politics are reduced to performance criteria: 'can we manage?' is the main question. (Lyon, 1994, p. 71, the emphasis is mine).

Bringing world-view issues to the fore of educational technological reflection seems paramount to the future of the field. Yet, the hard won honours of IET as recognised by the RAE, have not resulted in using this breathing space for tackling this type of issues. The mood is rather one that seeks to ensure (sometimes with an excessive level of preoccupation) that ‘we stay in the top 5 grade’ (IET Research Newsletter, ‘The Meaning of Five’, March 1997, p. 1), with the attached funding implications. That seems to be an insufficient mission for the future of IET. Perhaps a more suitable mission statement could be drawn from the following quote:

The real test of genuine effectiveness in educational technology is to what extent the world is changed as a result. And this is an essentially educational question, not how many reports does it generate. We are not a commercial institution, therefore commercial indices of success do not properly assess education. You look at economics after you have got your values straight.

(Founding Member of IET)

The field of educational technology offers the theoretical opportunity for combining the personal and the non-personal, and for building the interface of the educational and the technical. I would suggest that an improved understanding of the nature of educational technology may be derived from trying to characterise Technology; then trying to characterise Education - or more precisely the teacher-learner relationship - and finally, seeking to understand the proper interaction that should take place between the two.

Educational Technology as Curriculum Development and the Exercise of Power

Definitions such as those issued by the Association for Educational Communication and Technology (1974 and 1994), quoted in chapter 2, emphasise the systemic nature of educational technology. In a similar way, interview data also seemed to confirm the same view:

I was introduced to educational technology in the OU context through the works of Rowntree. For him educational technology has to do with the application of scientific principles as opposed to anything having to do with machines as such. It has to do with trying to apply some form of systemic approach and analysis to the educational process. If that involves the use of machines, well that may or may not be the case, it is not a necessary part of the process.

(Senior IET Lecturer)

Likewise, in his valedictory lecture (29/9/1998), the Founding Director of the IET, Professor Hawkrige defined educational technology as 'based in a problem-solving systems approach'.

It could be said, in passing, that this conception of educational technology is very distinctly OU, and at variance not only with UNED and UA but also across the Anglo-Saxon world and in particular with USA, the more technologically advanced nation at present.

(Senior IET Lecturer)

In USA the common academic conception of educational technology is rather different (Gagné and Briggs, 1974; Gagné 1987; Briggs, Gustafson and Tillman, 1991). It has more to do with machines and technological devices and they make much more use of the term 'Instructional Design' and 'Instructional Technology'. However, the point I wish to advance through the analysis of the various definitions of educational technology is that **a systems approach appears to be inherent in educational technology**. This seems to be a valid conclusion congruous with the definitions proposed by the Association for Educational Communication and Technology and already quoted in chapter 2 under the section on 'Educational Technology'. Consequently, the awareness of, and the type of systems thinking adopted is going to affect the conception and implementation of educational technology in any distance teaching institution. At this point I would like to suggest my own tentative definition of educational technology:

Educational technology is a system whereby technological, sociological, political and educational processes are integrated at three levels: operational, theoretical and environmental (see chapter 3). Accordingly, educational technology takes place within a continuous modal unfolding of social systems. From a Multi-Modal Systems approach (as will be discussed later in this chapter), educational technology is qualified by the epistemic and operational modalities - getting things done in an educationally effective

manner. The Socio-Cultural perspective provides it with the educational dynamics for developing international communities of discourse in distance education (see chapter 7). Finally, within the 'New Learning Environment' (global and electronically interactive) educational technology can be defined in terms of curriculum and power (in reference to the ethical dimension discussed in the previous chapter), with a crucial role in promoting access and educational developments world-wide and, consequently, needing to operate at an inter-cultural level if educational processes of 'liberation' rather than 'domination' are to be effected.

I would like to expand some of the aspects of this definition by using the guidelines for developing a 'root definition' arising from the Viable Systems Model (Beer, 1981; Espejo and Bowling, 1999).

Educational Technology in Higher Distance Education is

'... a system in which
... actors
... transform'

Educational technologists transform and/or help to generate new curricular materials for use in a distance teaching-and-learning situation. They help design a total learner support system, and they influence the institution as a whole helping it to become a learning organisation that pursues with excellence its institutional vocation.

'... in order to produce output
... for the benefit of students'

Educational technologists facilitate an adequate learning experience in learners, thus empowering them to advance towards their educational goals.

'... from providers
... by means of methods
... using resources'

They participate in the design and production of new educational resources and support systems in a diversity of formats (printed, audio-visual, electronic, etc.) integrating them and making them suitable for distance teaching-and-learning situations by sustained interactions within a course team setting. This course team is comprised of a diversity of specialists (authors, external assessors, audio-visual producers, editors, developmental testers, etc.), each making their own distinctive contribution to the team's effort.

'... under the control of definers'

The process is under the control of the course chair and successive layers of faculty and institutional authorities that eventually approve or otherwise the release and presentation of the course materials.

'... for a purpose relevant to a world-view'

The purpose, within an Open and Distance Teaching University, is seen as that of widening access to educational opportunities for as large a number of the population as possible, and to equip students with the knowledge and intellectual skills that would enhance their meaningful contribution to the community of which they are part of and/or other communities in which they may want to participate.

'... subject to environmental constraints'

Applications of educational technology will be subject to environmental constraints such as the current state of technological development that can be employed for educational purposes; priorities and guidelines set by the government and educational authorities, with their all important financial (resourcing) implications; trends in general cultural as well as the internal and personal world-view of the people involved in the institution.

This definition of educational technology as curriculum development and the exercise of power, which I have proposed, carry with it the following implications:

- 1) It acknowledges that educational technology occupies a key and central area with regards to the interface of the educational and technical dimensions of human existence.
- 2) Educational technology has the potential to harness our technological society without succumbing to its technological seductions. This point is further elaborated in the next chapter.
- 3) Educational technology can develop along non-reductivist lines through the application of a Multi-Modal Systems approach (as I will explain in more detail later in this chapter).
- 4) Educational technology can become culturally relevant in the international scene through the implementation of a socio-cultural perspective.
- 5) Educational technology has a pioneering and key role in distance education through its intervention in shaping the curriculum and methodology (Morgan, 1990, see quote in chapter 2, 'The Old, the New, and the Next Educational Technology' section).
- 6) This key role of educational technology calls for integrity in the use of power and exposure of its abuse.
- 7) Educational technology should be guided by a commitment to defend and develop the fundamental values of open and distance education as hinted by the OU's 'openness as to people, places, methods, and ideas' - not merely broadening them but deepening their epistemological and spiritual roots. (See Lord Crowther's inaugural speech of the OU in Appendix 1).

Building on Lukes (1974) dimensions of power, Jarvis (1997, pp. 79-80) refers to an *overt* form of power which aims to ensure that people subject to it make the decisions that the power holders desire. Then there is *covert* power which becomes exposed when addressing the question as to who controls the agenda for discussions. Thirdly, he refers to what I would call an *atmospheric* power in the sense of a pervasive and persuasive solicitation that seeks to make people conform to a particular social order and which can be recognised by explicit or implicit appeals to 'the way we do things here', or the ominous consequences awaiting those who may question the 'statu quo' or even attempt to 'rock the boat'. Education, according to Jarvis, is "clearly part of this power process" which effectively results in forms of domination rather than liberation. However, this research explores the possibility of an ethically informed and guided educational technology and the conditions in which it can promote genuine, dialogical and situated manifestations of educational liberation.

While signifying a desire for the IET to have maintained closer links with the Systems Group within the Open University (a highly reputed Academic Unit throughout the UK and internationally), one of the interviewees expressed a strong caution in the sense that 'Systems Thinking', in the OU, has some heavy mechanistic connotations:

IET should have linked more with the Systems Group. IET is systemic by its very nature, but the question is what type of systems. There is a need to represent idiosyncratic development, and not merely the mechanical aspects.

(Senior Lecturer from IET)

The Systems Group is integrated within the OU Technology Faculty, and a number of influential members of it have an engineering background which carries with it its own distinct perspective. This became clearer to me through a subsequent conversation with Dr. Sytse Strijbos, an engineer and philosopher from the Free University of Amsterdam who is the current President of the International Society for System Sciences (ISSS). He

explained the engineer world-view as follows: ‘Just tell me what is the problem and I’ll solve it’; but, he added, ‘we tend to be in a bit too much of a hurry to pay sufficient attention to the questions’. The conception of systems thinking which I consider best applicable to educational technology is definitely not an engineering conception. Rather it is one that takes into consideration the unique and irreducible aspects of reality in their own right, i.e. educational, cultural, historical, ethical, etc., and acknowledges their need to develop in accordance to their own guiding principles. This Multi-Modal Systems approach stands firm against the kind of interference that seeks to subsume the various aspects of human reality under any particular form of totalitarian domination.

Educational Technology: A Multi-Modal Systems Thinking Approach

Multi-Modal Systems Thinking (MST) has been introduced in chapters 2 and 3 as part of the literature and the methodological review. The following sections build directly upon that earlier discussion. The MST approach affirms that every social system is subject to the guiding principles of every modality. To review briefly, these modalities are regarded as ontological categories that refer to a distinct mode of being and functioning within total reality. The MST approach considers that our everyday experience of reality is concrete and seamless: we meet people, relate to institutions, experience events as a whole rather than encountering the diverse aspects of that reality in their differentiated mode of being. Yet in abstracting from that wholeness, we are seeking to discern the different basic ways in which things function. Each of these modalities, therefore, is unique, yet while unique, each is interpenetrated with the others forming a rich multi-modal thread that links both human and natural systems into a humane cultural ecology. It presupposes too that there is one modality that endows the particular system under consideration with its ultimate mission. The essence of that particular modality provides the mission for the system, and distinguishes it from any other systems. A hospital is a

system qualified by the biotic modality; a university by the epistemic; a family by the ethical modality, and so on.

The structural normativity (inherent givens) of each modality constitutes the source both for the authority and responsibility of the system, and requires that the system should be free to comply with the unique (irreducible) principles that make it what it is. Consequently, MST acknowledges a 'sphere of sovereignty' to each system, imbued with its particular duties and rights to pursue its mission.

If people operate on the basis of any particular modality and show signs of imperialistic aspirations (i.e. statism, ecclesiastical absolutism, etc.), this would inevitably threaten the relative autonomy of the other modalities and hence it would be disruptive to the system as a whole. For instance, we find that in an industrial (and post-industrial) society, technological utilitarianism has become the dominant ideology, replacing all other ideologies of the conventional left and right (de Raadt, 1997, p. 50). In this situation universities (which are qualified by the epistemic modality) become subservient to the industrial society's mind-set and interests through its funding mechanisms; areas of inquiry being subtly framed by the funding bodies. The assumption being that technological development is good (even the highest, or ultimate good, for humanity), and the primary task becomes that of increasing industrial competitiveness. No professorial chair in this context must now be without 'entrepreneurial competence'.

According to Stafford Beer (1979) every social system, in our case every distance teaching university (DTU), has an operational [sub-] system that does the work of the system and is guided by the operational modality. Applying this conceptual analysis to this area of research and situating the analysis within the OU culture - the most technologically developed of the universities of this inquiry - it could be considered that the IET represents, in principle, the operational educational subsystem *par excellence* of this DTU as an academic unit, that is, functioning in the epistemic modality. It must be

recognised too that there exists within the institution a complex Operations Division concerned with the administrative and production aspects of the system.

The essence of a distance education system must be that of the epistemic modality: the pursuit of knowledge, understanding and wisdom; that is, making the best possible decisions based on justified true beliefs, and the responsible selection and presentation of information. On the other hand, the operational modality focuses on production: the process of getting things done and functioning with relative harmony and increasing effectiveness and productivity. Educational technology, from this perspective, comprises both functions. On the basis of this construct, and responding to the GABEK data obtained with reference to the nature of educational technology (see specially Gestalten 9, 10, 13, 19 and 30 in Appendix 4), I consider the specific task of educational technology being that of 'operationalising education', i.e. the 'art' or 'technique' of understanding the principles and interactions that make the system run smoothly (harmoniously) and of 'making it happen' educationally. In this way it can inspire the institution itself into becoming a growing learning organisation. Operational Sciences would therefore appear to constitute one specific scientific realm of educational technologists, and with it the specialised art-skill of teaching and learning as 'reflective practitioners' (Schon, 1984). Yet, under a mechanistic world-view, technology and operational sciences become reduced to 'engineering' tools and tasks, and the operation itself is conceived in terms of 'instrumentalist' processes. To express this with the words of Stafford Beer: "Once the machine is in, man is out' (1981). The operation becomes effectively de-humanised.

In summary, I would suggest that the mission of a distance teaching university, and of educational technology as its epistemic-operational function, is concerned with the efficient acquisition, elaboration, design and dissemination of knowledge-understanding-and-wisdom to reach, and make it accessible to as large a number of people as viably

possible. In the next section I will go on to discuss how this mission can be achieved in terms of the educational technology within this systems perspective.

The Operational Modality within a Distance Teaching University

Although the IET constitutes the most significant educational technological operational subsystem within the OU, it is certainly not the only one. Indeed much of the IET's original expertise has effectively become common practice throughout the institution. Productions departments, graphic designs, BBC, Course Teams, are various expressions of this epistemic-operational modality. However, the interactions of these various operations are managed at a meta-systemic level which is guided by the economic modality, the essence of which is viability. But this viability or sustainability, in its classical sense of cybernetics, is in stark contrast to the current meaning of economics as utilitarianism. Prior to utilitarianism, management was the operation through which the system was sustained or attained viability. This viability, according to Beer (1979), is attained through four subsystems in the meta-system and which affect the organisation as a whole:

- 1) Co-ordination: facilitating the interaction between various operational systems, i.e. IET and Faculties and BBC, etc.
- 2) Functional: personnel management, maintenance of physical facilities, delivery mechanisms, accounting, and in general, 'the here and now' activities.
- 3) Development: the planning and design tasks, as they are seen for instance in the expansion of OU in the international scene, or in curricular diversification.

4) Directive: which is concerned with balancing the interactions between the functional and development subsystems, particularly. It corresponds to the directive subsystem to decide how much effort and resources should be committed to the future by sacrificing from the realities of the present and vice-versa.

These various subsystems are, more or less, embodied in the various leadership levels of the university. It seems interesting, for instance, that in the course of interviewing Sir John Daniel, the OU's Vice-Chancellor, he saw as his primary task that of "constantly re-examining the mission and the methods" of the institution, clearly reflecting a directive function. While each of these subsystems has a unique contribution to make to the system as a whole, it is of critical importance to recognise that the proper authority of a distance teaching university, as a social system, lies in the sphere of sovereignty in which it operates, that is, the epistemic modality. Consequently the metasystem, with the four subsystems alluded to, and which functions in the economic modality, is set up to support the system as a whole and to ensure its viability. Herein seems to reside the crucial difference between managerialism and legitimate leadership in the particular field of distance education. In this context, managerialism must be considered a form of reductionism in that it attempts to subsume within itself the operational systems by imposing its economic utilitarian ideology. On the other hand, legitimate leadership implies that managers should not dictate to educators but support the primary educational, not utilitarian, mission of the university. It is then in the realm of educational-epistemic concerns where final decisions would need to be made.

Yet, according to Lyon (1994, p. 71) '... managerialism reigns supreme'. Managerialism is perhaps the ultimate ideology of the New Times, triumphant over the traditional right-left distinctions, as mentioned earlier, and pervasive in the 'new order' of Postmodernity or Late-Late Modernity. It demands that organisational decisions must be aimed at maximising economic utility as measured in money. Accordingly, human endeavour is "commodified" and supported by particular management styles. The application of this

managerialistic ideology comports severe dehumanising consequences for the underprivileged, that become marginalised and disempowered, as well as within the institution itself .

In my view, and that of some systems people, as the OU veers into increasingly formal management by command and control, the viability of the OU is maintained only by people performing meta-system functions (learningful and supportive) in the background!

(Senior IET Lecturer)

Dialectically, on the other side of the spectrum, Marxism came to reject management altogether as a class engine for exploitation and replaced the economic modality with the social as the means of understanding and governing all human activities. Marxism sees the essence of the social modality as conflict, with power becoming all important to the revolutionary process. Management then is rejected and the metasystem transformed into a bureaucracy. As referred to in the literature chapter, the social consciousness of Marxist theories, revitalised through the Frankfurt School, have impacted some members of the IET mainly through the Australian distance education practitioners. Whereas their socio-critical paradigm (see chapter 2) has made significant contributions to the reflection in the field (specially by calling attention to the importance of interpretative frameworks; highlighting the power dynamics in social relations and propounding the centrality of dialogue), nevertheless its conception of power as ultimately political - rather than cultural, educational, or even spiritual - constitutes from the multimodal systems perspective yet another form of reductionism, and which I have sought to redress by suggesting earlier a new definition of educational technology as curriculum and power. Both forms of reductionism (managerialism and bureaucratic determinism) would seem inadequate, and ultimately self-defeating for the purpose of developing true leadership in distance education.

The Systemic Relationship between the OU and OUWorld-wide Ltd.

As an illustration of the way in which educational technologists could discern these power dynamics by applying this new approach to educational technology that I have been describing, I will seek to apply it towards an understanding of the interrelation between OU as an academic institution and OUW Ltd. as a commercially defined entity.

The Open University World-wide (OUW) was set up in 1996 as a limited company with a special brief to disseminate OU's educational materials abroad. The inclusion of OUW in this section seems relevant not only because OUW is expressly international and therefore represents the OU as a worldwide institution, but also because it embodies some of the aspects of economical utilitarianism and managerialism referred to above. Furthermore, its commercial links with developing countries carry with them significant cultural and ethical dimensions that affect the institution as a whole, and which to my knowledge have not been systemically explored before. This relationship between OU and OUW seems to be an area of significant confusion and occasional tension within this institution.

Making money has been defined as the primary aim of OUW. We used to have a sense of being 'missionaries', now we get the feeling of being pushed towards becoming 'mercenaries'.

(Founding IET Member)

It is shocking the way in which the documents for the launching of the United States Open University (USOU) blatantly state that the primary reason for its creation is to raise finances for the UKOU. To the extent that I know the North American educational scene I would need to say that this is not educational enough.

(A North American Consultant)

From a Multi-Modal Systems perspective both OU and OUW Ltd. find their fundamental domain ('sphere of sovereignty') in the epistemic modality. That is where their vocations reside. Their ultimate aim is that of realising and promoting knowledge, understanding and wisdom, giving access to them to as many people as viably possible across the world. This is implicit in the mission statement of the university and in the original foundational values as laid by Lord Crowther from the beginning of this institution. To accomplish these goals, both OU and OUW need to integrate their objectives and harmonise their *modus operandi*. Of course, the affirmation that for both the epistemic modality is at the heart of their existence does not preclude their respective obligations to balance their budgets. But these obligations are distinct from their mission or vocation. It is here where a failure of understanding can derail the system. For although I find people generally reluctant to say that the mission of the OU is to make profit, I have not found such reluctance to state emphatically that 'making money' is (or should be) the mission of OUW.

In effect, OUW is considered to be a business and, when a social system is regarded as a business in our present managerialistic climate, its ultimate goal automatically becomes that of 'making money' irrespective of what sphere of sovereignty it is qualified by. It is this modern classification as 'business' that bounds a social system, stripping it of its distinctive and vocational characteristics and binding it to the law of utilitarian commodification. According to this law, every human endeavour - education included - should be regarded as a business, and hence commodified and valued according to utility. It would seem that political and managerial leaders across the social and institutional spectrum are buying into this utilitarian mind-set, and endorsing it with enthusiasm. However, it needs to be recognised that the international presentation and justification of open and distance learning methodology that characterises the OU system would be approached differently whether it is conceived from an academic concern or through a commercial enterprise. Educational technologists, in the way that has been discussed in this chapter, must be particularly sensitive to the values and processes by which OUW

operates. They should assist in identifying OUW's strengths and service to the institution, as well as those areas that, if left unchecked, will produce increasing imbalance within the systemic functioning of the university. This is particularly important with regards to the international projection and image of the institution in order to retain its fundamentally educational, non-mercantilistic, commitment. Consequently, the IET, as embodying a systemic view of institutional research could spearhead some proposals for widening the basis of reflection on the OU-OUW interactions. Such process would help in building the body of shared understanding and know-how in international developments across the institution as well as in identifying ways by which a richer representation of academic voices can collaborate with OUW.

The relevance of educational technology to a distance education system, and its central role in it, led me to think of the IET by the title of one of Stafford Beer's books: *The Brain of the Firm*. "Is IET the Brain of the Firm?", when I posed this question to one of the founding members of the IET, he replied, "I wouldn't think of it precisely in those terms, but perhaps more in the line of 'the consciousness of the system', in the sense that we should keep asking the questions". This comment does not imply in any way that colleagues across the Faculties are not asking 'the questions', whether or not in dialogue with IET members. But it simply means that IET was born, as I understand it, for the particular purpose of 'asking the questions' relevant to operationalising, making it viable, a distance learning model, and to do this is a systemic and sustained way.

Conclusion

In this chapter I have explored the academic status of educational technology, with special reference to the Open University, and have suggested a new definition of educational technology in terms of curriculum and power. I have suggested that IET may be best understood as functioning in the epistemic-operational modality and that an

educational technological system would need to be tested also with regards to how it integrates other modalities, specially the informatory, economic and ethical modalities. Operational sciences and systems thinking are seen as an essential component within an educational technology curriculum and that, furthermore, understanding systems thinking could contribute critical insights into the nature and dynamics of leadership in distance education. While managerialism's primary concern is with performance criteria, leadership is seen as a commitment to tackle the deep questions, even the questions of ultimate meaning (the World-View questions), out of which comes a recovery and reaffirmation of the integrity and mission of an educational system. In the following chapter I will elaborate some of these issues, situating them within an international context.

Chapter 7

The Internationalisation of Distance Education: A Case Study based on the Open University

Chapter 7 - The Internationalisation of Distance Education: A Case Study based on the Open University

Introduction

In this chapter I analyse and evaluate some trends affecting the internationalisation of distance education as they affect educational technology and in particular the need to take into account intercultural concerns. It also highlights some leadership issues in connection with those trends. This chapter focuses on the British Open University as the most outspoken candidate of the three universities to assume that sort of leadership in the international scene. It explores some aspects of the OU experience with regards to extending its educational provision in continental Europe. Furthermore, it discusses various intercultural issues arising from research into the MA Programme in Open and Distance Education in which I have been involved both as an Associate Lecturer and as a Research Fellow. In contrast to market dominated and technocratic processes of globalisation, it is proposed the creation of International Communities of Discourse in the form of a grass-root movement of culturally situated 'mustard seed groups', where concerned practitioners of educational technology and distance education could jointly contribute to theory building in the field.

Towards the Internationalisation of Distance Education

Distance education has become a global phenomenon. The research has shown that the educational technology constitutes a major factor to the implementation of distance education systems. It has also pointed out (see Gestalten 11, 14, 17, 21, 33 in Appendix 4) that within a utilitarian economic environment educational technology tends to lean towards technocratic concerns. In this way it promotes a techno-scientific world-view that has shown to be particularly insensitive, and in cases clearly offensive, towards the

real needs of the real people in the real world. The type of educational technology informed by this world-view is less than satisfactory, especially when encountering the educational needs of developing countries. The educational technology of the new millennium can be easily seduced by techno-and-digital utopian visions.

According to Ellul (1964) "No social, human, or spiritual fact is so important as the fact of *la technique* in the modern world". On his part, Postman (1992) speaks of a 'technopoly' as the society in which technology has attained absolute authority: "Technopoly is a state of culture. It is also a state of mind. It consists in the deification of technology..." Technology has become the face and icon of the 'spirit of the age' and the technological world-view is in the role of providing the integrating and meaning-making framework for cultural developments. In this capacity, technology acquires a quasi-religious function. "Tools are no longer integrated into culture...They bid to *become* the culture. As a consequence [all other realms of social, cultural and spiritual life] have to fight for their lives" (Postman, 1992). Bringing these considerations closer to the immediate environment of this research, I would mention the opinion by Tim O'Shea, Professor of Educational Technology in IET and a former Pro-Vice-Chancellor of the OU, who in a Computers and Learning Research Group's conference expressed his belief that educational technology is "Technology driven, really!" (Educational Technology Research - Newsletter of the OU's IET, June 1999, p. 5). When I asked a founding member of the IET whether he thought there were people in the OU who 'worship' technology, he gave me a shocking (for its intensity), impromptu reply, "Oh, yes!" This sort of veneration of technology has significant ethical and educational implications.

Of the three distance teaching universities of this research, the OU is the one more clearly positioned to spearhead leadership in global distance education. It was the OU that redefined and pioneered a new concept of distance education about thirty years ago, an important part of which was the innovation of creating an IET. As a result of this, the OU has the most developed and integrated conception of educational technology of any

distance teaching operation I have encountered in this research. Furthermore, English as medium of instruction operates very much as a '*lingua franca*' across the globe. And, of course, computers' first language is also English. At any rate, the OU's Vice-Chancellor (Daniel 1996) has signalled the intention for the OU to assume that sort of leadership in global distance education to which neither UNED or UA have shown any particular aspiration. Indeed the OU was a major inspiration in the creation of UNED and UA. The OU has formalised, structured and mobilised significant resources to become a world player in the global distance education highly competitive market. The setting up of the OUW (1996) attests to this purpose. What are some of the dynamics and implications of these developments?

Europe: The OU's Multicultural Challenge

One of my interviewees was Dr. Andrew Robinson (Deputy Director of the OU Regional Office in Newcastle, which assists students in North England, and in Continental Europe) who expressed the opinion that:

If the OU does not succeed in Europe, it will have no true success in the global scene.

This is clearly, and as one might expect, a resolute pro-European stance. Yet he may be right in perceiving that the OU is being tempted, quite understandably so, to give in to the easiest way to make its market targets as expediently successful as possible. This kind of short term drive may be seen as a natural concomitant of this initial phase of expansion, while it is not yet quite mature the understanding as to how to tackle this new global and international (intercultural!) mission. The easy way is for the OUW to concentrate on selling OU's well produced courses as they stand, in English of course (there are some valuable exceptions to this), with some measure of adaptation and

consultant support. Logically, Commonwealth countries, and countries with a strong emphasis on English as the medium of instruction are a primary target to introduce OU courses world-wide. Yet, the OU may not dwell too long on this approach. A senior IET staff member made the following point:

With regards to international collaborations we have not been good at being partners but rather playing a 'messianic' role.

(Senior IET Lecturer)

This attitude, however subconscious, generates a relationship of dependence, of gentle - civilised- cultural domination, even some form of a neo-colonialist ideology. The situation radically changes though when the OU is confronted with the multicultural challenge. The OU's multicultural challenge, which so far has been most reluctant to face, is none other than, *voilà*...Europe. The OU has, in 1999, over 5,000 students in Continental Europe. One needs only to review the comments expressed by a representative sample of these students (Spendiff, 1998; Regan, 1998) to realise that this 'New Academic Community' (as Regan entitles his research document) would hardly accept being 'colonised' (much less 'messianised') by the OU.

University [is] expensive for non-UK residents. Charges are not based on a desire to expand and gain market share for the OU overseas but on a nationalistic feeling that it is doing a favour to the foreigners that want a British degree. (Spendiff, 1998 p.8)

The fees for continental students are scandalous! I feel ripped off.
(Spendiff, 1998 p.8)

£800 too much to pay for a couple of books & videos. Feel I'm being exploited.
(Spendiff, 1998 p.9)

Nevertheless, these outspoken, even enraged, OU European students would also be quick to extol the qualities they have found in the OU system:

The OU writes some of the most readable materials I have had access to. Good tutors, materials and organisation. Remarkable. Thanks OU!

(Spendiff, 1998 p.12)

And yet another student,

Courses are extremely well designed. (Spendiff, 1998 p.12)

Students are also vocal in their concerns for the UK-only perspective in the courses, that questions the very philosophy of OU openness:

UK cultural bias in the social science is a problem, as are the culturally determined expectations of tutors & examiners. Hard to gauge what is the 'norm' in UK society when writing about social issues. (Spendiff, 1998 p.13)

The OU's insular UK-centric approach is irritating. It needs to realise overseas students are not a ball and chain around its leg. (Spendiff, 1998 p.13)

Obviously, the worst thing the OU could do with that sort of statements would be to gloss over them as yet another curious set of funny European feelings. It could be extremely costly in deeper ways than merely economics. They represent honest concerns that call for honest answers, not 'messianic' satisfactions. What is at the stake is the soul of the OU itself in the new learning environment. They question and challenge the OU to demonstrate the reality of its foundational values: "Open as to people, open as to places, open as to methods and open as to ideas".

If the OU is Open as to People, why is the OU increasingly perceived as a commercial concern, accessible only to those who can pay? According to Spendiff (1998, p. 10) some students see themselves as ‘purchasers of a commodity, which is offered for sale within a market’.

If the OU is Open as to Places, why do some students feel neglected in terms of the tutorial support they need? And why is the conception of the OU curriculum so apparently ‘UK-centric’ and ‘dominantly UK based’?

If the OU is Open as to Methods and to Ideas, why is there such fixity and rigidity in the OU so that students feel they have just to survive (and smile?) at some of the oddities they have to put up with. ‘Hard studying finance when European conventions differ so much to UK conventions’ (Spendiff, 1998 p. 13). They seem to say ‘could not, legitimately, some aspects of the curriculum be negotiated to make more sense in our own cultural context?’ With characteristic Latin humour, one of the students commented on cultural differences:

It has been an interesting ‘cultural experience’. I appreciated the different Italian/British approaches to education (creative + flexible + disorganised) / (rigid + organised). (Spendiff, 1998 p. 14)

Humour included, (and much more could be made of this unique human quality in building intercultural understanding) the ‘Four Opens’ are essentially ethical in nature and OU students from Central and Western Europe are a particularly rich, and potentially productive, testing ground for these values.

In a personal communication Dr. Robinson commented, “the breakthrough [for the OU to advance in Europe] needs to come through partnerships, which must involve

negotiations”. Yet partnerships, at least as commonly understood to a European are what the OU ‘has not been good at’ as previously quoted.

‘Getting the ground rules right’ is what Dr. Robinson sees as a fundamental priority. The theoretical elaboration, and application, of these ‘ground rules’ are at the core of the socio-cultural perspective on distance education. They are also central to the process of building International Communities of Discourse in distance education that has been proposed in this research and to which further reference is made in this chapter. It is to this end that the comparative approach can be particularly useful:

The comparative perspective is more than a scientific technique -- it provides a basic intellectual outlook that helps one overcome natural inclinations to view the world through egocentric or ethnocentric lenses. When this liberating perspective is pushed too far, it opens the door to bottomless relativism, but, as we shall see, the comparative perspective has a tendency to curb this danger itself. (Etzioni and Dubow, 1970: viii)

And then from one of the interviewees at Universidade Aberta:

The great strength of the comparative method resides first of all in the possibility of giving us information we do not possess in our habitual space. Second, of seeing ourselves as through the mirror of organisations and cultures different to ours. I think that this could contribute considerably to the maturity process of our own institution. It can help us to gain an awareness of our blind spots.

(UA's Director of Planning and Teaching)

The OU as a British institution reflects the general ambivalence of British society towards the construction of the European Union, also educationally, and there may be

some 'blind spots' in this regard. The reasons for this ambivalence would make a fascinating psycho-national study of its own (Catherwood, 1991; Connolly, 1995; Taylor, 1996) as well as of its implications for British Higher Education and the OU in particular with regards to its European context. The dynamism of the OU global projection has gained a new frontier with the recent launching (early part of 1999) of the United States Open University (USOU). But this new frontier may prove to be more of a challenge than expected. The OUW preferred mode of 'doing business' is to promote a straightforward technology -and- courses transfer, in British English, with minimal disruption to HQ and maximum profitability. The OU may be forced to make concessions unheard of till present. It could be expected that there would be heavy demands to become more flexible in making curricular adaptations good and fast, even if only at language level and this would call for new forms of educational technology intercultural expertise.

Intercultural and Linguistic Issues in Global Online Education

This section is a case study based on my experience as an Associate Lecturer in the MA Programme in Open and Distance Education and as a Research Fellow in IET. The discussion that follows is part of a report jointly produced with Robin Goodfellow, Mary Lea and Robin Mason, the Programme Director - all of us directly involved in teaching this Programme. My contribution was related mainly with the comparative aspect of the research, i.e., contrasting academic results of native vs. non-native English speaking students, carrying out in-depth telephone interviews with a number of non-native English speaking students about their experiences in this globally delivered online Programme as well as contributing to articulate the implications of the study and its general design. This case study research lasted for five months and the invitation to participate in it came through the experience gained in doing this PhD work. Its inclusion is justified in terms of elucidating some of the concerns related with the internationalisation of distance education and the cultural and ethical implications attending this process. The

undertaking of this type of research is the first one of this kind in the context of the OU and positions the IET at the forefront of intercultural research in global online education. Our intention, as educational technologists, has been to investigate some of the ways that cultural and linguistic differences manifest themselves in global online learning environments and to consider ways that can help to promote cross-cultural understanding. Intercultural aspects of distance education are emerging as an important focus of research, arising from the globalisation of learning via communications and information technologies (CIT), (Edwards & Usher 2000, Mason 1998, Collis & Remmers 1997, Gayol & Schied 1997). Gayol and Schied had the following to say about modern forms of educational technology:

Content selection, visual design, central planning, language, teaching-learning routines, accreditation, academic prestige of the originating site, are all centralized textualities which might work together as an assimilationist or exclusionary pedagogy. (Gayol & Schied 1997)

This quote highlights some of the issues discussed in previous chapters with regards to 'liberation' vs. 'domination' concerns in distance education and the emerging new definition of educational technology as curriculum and the exercise of power. Collis & Remmers (1997), discussing principles for determining content, design, and language for web sites, distinguish between 'sites made for one context and its culture, but visited by those from other contexts and cultures', and 'sites made specifically for cross-cultural participation' (p.86). If we take the term 'sites' in its broader sense, to include whole cultural artefacts like online courses, then by this definition, courses which do not question the norms and approach of the sponsoring organisation, but simply see the internet as a way to bring these to a broader market, are sites of the first kind - guilty of a 'well-meaning parochialism (which is) ...dangerous to real cross-cultural understanding, (Collis & Remmers op cit. p.90).

The UK Open University's rationalisation of the extension of the sale of its courses to areas outside the UK is in line with its stated mission to expand educational opportunity.

The Open University now has the potential to extend educational opportunities to a much wider body of learners...more widely in the world. (OU 1995 mission statement).

It is true that there is a global demand for OU courses and that this is premised on a combination of reputation for quality, qualification status, flexibility of study methods, and English-medium teaching (Manning and Mayor 1999). This demand extends to UK and Western degrees and certification in general (Mason 1998, p.46). However, with the deployment of communication and information technology (CIT) to create virtual learning communities, the scope of Western institutions of learning to impact culturally, as well as educationally on the lives of their international students is greatly increased.

Users move daily from the real, concrete, immediate, heterogeneous "community" to the abstract, international, highly specialized virtual reality. This ambivalent plugging in and out of 'contextual' and virtual worlds becomes part of a lifestyle. The worlds influence each other and are integrated by the users into a whole. The technical qualities of virtual reality, to some extent, circumscribe the characteristics of the narratives. Consequently, virtual reality becomes a new source that contributes to the shape of identities. (Gayol & Scheid 1997).

If our attempts to take advantage of the demand for our educational services are to take account of the responsibility we have for 'contributing to the shape of identities', then we should be prepared to consider, firstly how intercultural issues manifest themselves within these global learning communities, and secondly how we can develop sites and practices that are specifically created for cross-cultural communication. Because we believe there is currently little published research on cross-cultural aspects of online

learning (Chambers 2000), and that at the moment this MA programme might be characterised as a site of Collis' and Remmers' first kind, we are taking a first step in the sense of taking a critical examination of our own practice. Our courses obviously reflect our own UK and Higher-Education-based assumptions and understandings of knowledge and assessment, which may conflict with those held by students. Although we will never be able to get away from the complexity of cultural issues involved in learning we still believe that we have a responsibility to make our own, often hidden assumptions, as explicit as possible.

From a comparativist approach our aim has been to identify aspects of the learning experience that students perceive as culturally-marked, and to identify the steps we need to take in order to fit the courses, and their virtual realisations, specifically for cross-cultural participation, rather than simply to transmit our own cultural and academic norms. In tackling this issue we have been confronted with some problems inherent to the study of cultural practices, eg: the dangers of setting up an artificial category of those labelled as 'marginalised' and in doing so, perpetuating the very distinction we are trying to eradicate. Whilst we would not claim to have resolved this paradox we have nevertheless tried to apply a critical perspective to our research methodology as much as to our educational practice.

Experience of Cultural Difference

The empirical side of the study, including the selection process of the target group and the comparative results of average academic performance between native speakers (NS) and non-native speakers (NNS) of English are presented in Goodfellow, Lea, Gonzalez and Mason (2001). It would suffice to say here that results showed a marked difference in the academic performance of both groups and that some NNS may be disadvantaged by

the assessment process and, generally, by cultural biases in the design of the programme. This justified pursuing the research along more qualitative lines.

Having determined that the group we had identified as NNS might reasonably be regarded as experiencing in common the effects of some aspects of cultural difference, we set out to establish what, in their view, these aspects might be. To investigate this we carried out a qualitative study based on telephone interviews with 12 of the 33 students who had responded to an email inviting their participation. 4 of these 12 were from the Netherlands, 2 from Greece, 1 each from Portugal, Norway, and Austria, 1 from Columbia, 1 from Pakistan (resident in UK) and 1 from USA (resident in Denmark). Once a student had confirmed their willingness to participate in the interview, s/he was sent an email with a set of questions that would help guide the conversation. The questions, reproduced below, were derived in discussion between researchers, informed by email discussion amongst members of the current course cohort. The interviewer, himself a non-native English speaker, contacted each of the informants by telephone during a two week period. Each interview was recorded on tape, and lasted approximately 40 minutes. The tapes of the interviews were transcribed and then reviewed by the interviewer and checked for accuracy.

Introductory questions:

Confirm name and current course

Confirm understanding of rights as informant

Interview:

- 1) Which course did you take in 1999? Have you taken any other?
- 2) How did your previous educational experience relate to this course?

- 3) How far did this course take a global view? [Did you feel it is appropriate for a multicultural audience?]
- 4) As a non-native English speaker, from a non-UK background, did you have any particular difficulties with the written materials?
- 5) Do you think your tutor had a good understanding of your particular cultural context?
- 6) How did you feel about participating in online interaction? [Did you feel in any way different from others in your tutor group?]
- 7) Did you feel disadvantaged in any way by the assessment system? [Did you get the grades you believe you deserve?]
- 8) Who or what did you learn the most from on this course?
- 9) How could the course be improved from a multicultural point of view?
- 10) Has your participation in this programme contributed in any way to developing a sense of 'global citizenship'?
- 11) If there are any other comments you wish to add please do so.

Our intention here is not to try and conclude whether the things the speakers refer to are, or aren't, true, but instead to try and unearth some of the common assumptions underlying all the discussions. We have identified 4 key areas in which these assumptions are relevant to the experience of cultural difference in these courses, and which we will discuss below, they are: the notion of 'cultural otherness'; the perception of 'globality'; the experience of language difference; and the awareness of academic conventions.

1. Cultural Otherness

We argued above that there are grounds in the assessment data to justify treating the participants in these interviews as members of a group whose participation in the courses is marked by factors relating to cultural difference. In doing so, of course, we also construct 'the rest' as a group in opposition - the students identified as being English native speakers, resident in UK or having some familiarity with the UK academic system.

Whilst there will certainly be other factors which shape individuals' identities (gender, race, class etc.) and which impact on their experience of the courses, we did not introduce them as topics in the discourse of these interviews, and they were rarely brought in by the informants themselves. What arises from these discussions, then, is that the notion of cultural 'otherness' as being primarily about national and linguistic characteristics is relevant and willingly taken up. It is a common discursive resource in the description of interaction between people of different nationalities and linguistic backgrounds on these courses. For example:

PG (interviewer): I think there is the proverbial sense of reserve, isn't it¹, of the English temperament?

S1: Yes exactly. On the other hand, I am still not aware of many people who are not of Anglo origin in the courses. I know of a couple of persons from Brazil, Spain and [name] who was from Greece, but actually she was Australian and she was Anglo again.

In this exchange, interviewer and interviewee collaborate to construct 'Anglo' (which includes English and Australian) in opposition to other nationalities found on the course. Elsewhere in the interview, S1 speaks of 'barriers' that he found in communicating with 'Saxon' people. He also talks about the need to communicate 'fairly and properly' with people from other cultures, and proposes that there should be more tutors who are 'not necessarily Anglo'. Other informants also construct oppositions between 'English/British' and their own cultural groups:

PG (interviewer): In that case is it back to kind of reviewing your writing and processing it in a different way...on the EBBS [electronic bulletin board system] you also do that?

¹ Note that the Interviewer in these exchanges was also a non-native English speaker.

S2: I do that, but in a way, although I'm conscious that most people do not like to read long messages, one should attempt to be precise and objective, you know, the way the British are, it is a way which is difficult for the Latin...

Whilst in other exchanges, speakers use an opposition between 'Northern' and 'Southern' European, or 'Western' and 'Asian' to make points about cultural difference:

PG (interviewer): ...So, my question 3 is in which sense do you think that the MA takes a global view, a global perspective? How appropriate was it for people from different cultural backgrounds?...

S4: That's difficult for me to consider because actually I think Norwegian and British cultures are very similar. I would think that people from other countries, Southern Europe...there was one from Greece, Spain perhaps, might find it more difficult with culture than I found, and I have studied English as a foreign language at university level for one and a half years....

PG (interviewer): What sort of thing did you value in meeting students from non-Western world?

S5: I think some of their ideas are thought-provoking, also the way they kind of behave in a tutor group. In my tutor group there was a lady who was from, I mean her background was Asian, and I really appreciated her, because she was so kind of responsible, she really showed lots of responsibility towards our tutor group, I don't know if this was a cultural aspect, but what I have experienced from lots of, I mean also chatting with people, it seems to be part of their culture to...to...if you start something you really give your best, it was my idea from face-to-face courses in Britain, meeting people from Japan or from different countries, other parts of the world.

Of the 12 interviewees, 6 engaged in this kind of contrast-talk at some point in the discussion, referring to styles of interaction as being cultural. (This is distinct from their discussion of cultural bias in the content of the courses, which is dealt with in the section on 'globality' below). The interaction they refer to is the text-based messaging that constitutes the virtual discussion environment which characterises these courses, and distinguishes them from conventional distance learning experiences. Interaction via text-based asynchronous messaging has many elements that impact differentially on individuals - the fact that it is written, that it is public, that it is recorded, the pace at which discussion proceeds, the opportunity it gives for the display of intellectual and technical skills etc. That these elements are also capable of carrying broad cultural markers is of great significance to us, suggesting as it does that in our own functioning as facilitators and conference moderators, we still unwittingly embed cultural messages, however distanced from traditional tutoring roles we may feel ourselves to be.

2. Perceptions of Globality

Whereas people from different national and geographical backgrounds are contrasted in cultural terms by some of these informants in order to make points about their behaviour in interaction, the notion of 'globality' tends to be constructed around the coverage of the course material, ie: the extent to which it gives equal prominence to issues of Distance Education arising in different national contexts.

PG (interviewer): ...If we could go on to another question, it's how far the course takes a global view. You have already answered something on your email about not being perhaps taking account of Europe too much...

S6: Yes, in fact the European Union is multicultural, and as I am living in Continental Europe I was disappointed to see that the example given important distance education institutions were nearly always in the far East, and were nearly never in Continental Europe which is very near, and where there are interesting,

important distance education institutions and also interesting experience in this field, you see.

PG (interviewer): ...Now, let me ask you did you feel that this MA is taking a global view, to what extent is it appropriate for a multi-cultural group of students, do you think?

S7: Well, I really think when I saw that question I answer no, because when I was reading I always had to transfer by myself all the knowledge to my situation, I think all the examples...most of the examples are from developed countries, and most of them are from the UK or Australia, and I think I never saw one from undeveloped countries, and I always had to try to read and transfer to my own situation, so I think it is not really global.

Although informants disagreed about the nature of the global coverage of the programme content (some felt there was insufficient focus on Europe, others that it was the developing countries that were under-represented) almost all interpreted the issue as being to do with the visibility of some part of the world when viewed through the perspective of the course content. To be 'global' is to be inclusive of diversity, especially of contexts which are outside what is perceived as the dominant culture of the course, in this case 'Western', or UK, Australian etc. Several interviewees spoke in approving terms of the experience of globality as being one of diversity - of 'friends all over the world', 'fellow students from completely different cultural backgrounds', 'extending consciousness of cultural diversity', 'understanding problems from different perspectives', 'feeling part of a global network' etc. In contrast to this we often found a parallel assertion of local visibility - an attempt to resolve the paradox of positioning one's own national or cultural importance within the global perspective. The informant below, for example, was a Colombian studying the course from an American university. At the same time he was feeding back what he was learning to his own institution in Columbia:

PG (interviewer): ...Had any of your tutors demonstrated an understanding, a prior knowledge a little bit, about the Colombian culture, or an awareness of its particular...?

S7: No, not really. Maybe it's not because of them but because of me, I always, I just told them I was from Columbia from the first introduction, but then I was always talking about [name of US university] and my...and from here, because I know that I was not going to be able to send my work in Spanish, so I just tried to work from an American perspective...

The speaker below identifies the global trend with the internationalisation of English, and the consequent neglect of local languages.

PG (interviewer): How relevant do you feel the content of the course is for people from different cultural backgrounds?

S8: Obviously the literature is English, and it is being produced by English speakers, and increasingly, also, by non-English speakers, so in that sense, the literature is more or less international isn't it?...The tendency, as you well know, is of course, even for people from Holland universities, to publish in English, so this is a bit of a paradox, in fact, which you can't solve easily. We would like more literature in the native languages, but the international trend goes against it, doesn't it?

The juxtaposition of global and local narratives, which is exemplified in these informants' talk, has been discussed in a number of general accounts of the relation between technology, globalisation and culture (eg: Castells 1996, Hawisher & Selfe 2000). It is a complex issue which has given rise to the notion of 'third cultures' or 'third spaces' (eg: Pennycook 1999) which provide an alternative perspective to that of the 'centre-and-margin' view of intercultural interaction, and may help to describe what is constructed when materials from one culture are studied by people from another culture (Mason 1998

p.156). A full discussion of this concept is outside the scope of this section, but it appears to offer a way to approach the issue of design for cross-cultural learning, and will form the basis of a further analysis of the data from the current study at a later date.

3. Linguistic Difference

All the informants construe the issue of language competence as problematic, either for themselves or for others, though it is often qualified by other factors, such as personal communication styles, or topic difficulty. The key issue for them is not the reading of course materials in English, or even mainly the production of assignments for marking, as might be the case with a conventional distance education programme, but the need to interact with other students in written English in the online discussions, through which much of the knowledge base of the courses is constructed. Although we have observed (above) that the effect of cultural difference is not solely reducible to the issue of language competence, the evidence of these interviews is that much of the student reflection focuses on the difficulties of producing timely and intelligent comment in a foreign language. In several cases this problem is cited as an explanation for low levels of participation in the online discussion.

PG (interviewer): Now, how do you feel about the online participation, the interaction on the EBBS?

S9: To be honest, I didn't participate as much as I could...I think the main reason for me was the languages, the language. I was reading all the posted messages in the online system, in the CMC system, and was prepared to answer to several of them, but I needed time not so much to think but to write my own message, and most of the time someone else have given an answer or post another message, and the discussion was at another point.

We should note that native speaking students often report similar degrees of difficulty and time involved in producing text for online discussion (Lea 2001, Chambers 2000). Nevertheless, it is in the context of discussion of language issues relating to online interaction that we find in these accounts a lot of explicit construction of difference from the 'UK group'.

PG (interviewer): ...How do you see that this MA course...(takes) a global view, whether it was sufficiently appropriate to a multi-cultural audience of students?

S8: That's a tricky one. Because I think that this would be mainly going on in the conference area, where there is a lot of interaction and contact among the students, and I think, on the whole, that the student body, including all those people from different countries and languages, did quite well, but possibly almost hidden from the outside view of the English-speaking students...there is something going on, in fact, that people from different cultures and different languages obviously are at a disadvantage in a number of ways, or at any rate, that is their perception...I sometimes wonder how messages from native speakers are not completely 100% understood by the non-native speakers, because that is happening in fact, but I can't see how that could be remedied in any way...

The difference is seen in terms of: time taken to respond appropriately (native speakers are assumed to do so instinctively), effectiveness in argument, and the presentation of self through accurate use of language. Some students describe how noticing that native speakers occasionally make mistakes in messages comes as a surprise and a relief to them.

The language issue prompts some of the interviewees to suggest steps that future courses could take: separate conferences for non-native speakers, private email exchanges with tutors, use of native speakers to 'take the burden' of written interaction etc. It is the issue which can be most directly addressed by course teams too, and will be, in the supplementary material which has been developed in parallel with this research.

However, it is our view that the apparent straightforwardness of the language challenge hides a complexity of problems, not all of which are linguistic. Some of these problems are related to the students' perceptions of what they are required to produce for assessment - this is discussed in the next section.

4. Academic Convention

Since these courses award credit they involve assessment. This creates the requirement for a certain kind of summative writing, which the interviewees discuss in terms of what is expected from them, and what barriers there are to achieving it. In some cases they contrast 'the system' with what they are used to from their home universities.

PG (interviewer): As an assessment system would you say that it is similar or different from the habitual system in Portugal?

S2: It's completely different. It's different, because, you know, that was really transmissive, whereas here in the TMAs you have to combine, you know, your own views with academic resources and views of your fellow learners, and you know, what was the exchange in the EBBS, so in a way it is completely different.

Alternatively, academic conventions may be constructed in terms of interaction with the tutor, especially over the question of feedback and marks for written assignments. Although few of these students actually complain about their grades, there are a number of examples where informants interpret experiences of dissatisfaction with some aspect of the tuition they received, in terms of different cultural expectations.

PG (interviewer): How has been your experience of the assessment system? Do you feel at all disappointed by the way the assessment is put together...these sort of activities that are required?

S7: Yes, well I would have two things about that, one would be that I think, I don't know if it's cultural or not, but I think that it's very constraining because sometimes I got points out because I did more things, but were not the things that were being graded, so I always remember my tutor saying 'yes, this is great, but I cannot give you points for this because it is not what we were expecting'...I think I was always doing two TMAs, one for sending to the Open University that was in English, and that was not my best work, and one that I was doing for my institution and I think that was my best work.

One issue that was used by some of the informants to explain difficulties they had with the academic writing conventions of the courses, was the word limits which all the assignments prescribe, as part of the OU-specific procedures for assessment. These limits, which are only partly justified in pedagogical terms (the other part of the justification being related to the terms and conditions of the part-time Associate Lecturers who are traditionally employed to teach and mark OU courses), are seen as problematic, in contrast to 'our academic context' where 'we are free about words'. This is a special case of a more general cultural/academic issue which has been noted in work that has looked at differences between 'US/Anglo' and 'German/Continental' academic writing traditions (eg: Clyne 1987). This work has proposed a fundamental difference between the 'structure-focus' of the contemporary US/Anglo approach to writing, and the 'content-focus' of the traditional European approach. The former is manifested in concise, single-issue, empirically-based argument, and the latter in elaborate, digressive, abstraction-based discourse. Whilst some of the informants in this study construct the issue of having to write to word limits as a problem of control over the English language, others confirm that the problem for them is how to meet pre-specified assessment criteria and word limits, in a way that, for them, does justice to the complexities of the subject matter.

In summary, 'cultural otherness' narratives clearly have an important place in these participants' perceptions of their experience of the MA, either in terms of the way they position themselves in contrast to the English-speaking 'Course' with its academic values,

or to fellow-students perceived as having different ways of interacting. This suggests to us that any future design for cross-cultural communication in programmes such as this should begin by making explicit the forms that these narratives take, including the ways they are embedded in institutional practice (eg: the view of the global market that the university-as-provider takes). Linguistic differences are implicated in these narratives, but so also are conceptions of social behaviour as manifested in online textual interaction. An important step towards cross-cultural understanding could therefore be the development of policies and practices which allow for an element of multi-lingual communication, making space for the expression of social behaviour free of the constraints of operating in a second language. It is difficult to see at the moment exactly how this might be done, as it implies parallel versions of some materials and activities in different languages. However, we do have models of what is possible, in projects that have taken place within the European Community (eg: see Chambers 2000).

The broadly positive discourse of 'globality' that emerges from these interviews also gives us grounds for optimism, that conflict between global/dominant and local/resistant conceptions of culture is not the only way to view the future of international online education. We need to explore further the concept of the 'third culture' and to study the practices being enacted in these virtual spaces and the implications that these might have for both students and tutors in terms of learning and teaching. Work on communities of practice and learning (eg: Wenger 1999, Lave & Wenger 1991) can help us to understand more about non-participation and marginalisation in online communities and globally-delivered courses.

None of the perceptions of our student informants about culture, language or the academic norms of this programme adequately accounts for the generally lower-than-average scores for assignments that this group achieved, especially considering the fact that several of them had had some experience of studying in UK or US educational contexts. For this reason we are hesitant to derive particular courses of action intended to

address disadvantage in the assessment system, from this study. We intend, however, to use some of the views expressed to illustrate points in the supplementary material that is being designed to assist all future students on this programme (not just those who are non-native English speakers) to get to grips with the academic/linguistic cultural basis of the courses. The material is being designed with the aim of supporting learners in planning and writing assignments, familiarising them with the unique aspects of online study, and supporting them in taking a full role in group interaction, through awareness-raising and confidence-building exercises.

We conclude with the following quote from 'Students Writing in the University', which makes explicit the responsibility we have to engage with students in the pursuit of cross-cultural understanding and which highlights once again the crucial significance of ethical considerations in our field.

There is now more negotiation to be held between the particular institution's processes and discourses on the one hand and, on the other, the uniqueness of the student's individual cultural and linguistic related histories.

(Jones, Turner and Street, 1999. pp.xvi)

This investigation represents a first step in the negotiation process. It has also shown a potentially fruitful direction where educational technology as curriculum and power can find a significant role to play for intercultural understanding in the new, globalised learning environment. It has also brought to the fore an awareness that unevolved, intolerant, and mono-cultural settings see the 'other' as threatening, alien and different. Whereas to see the 'other' as a reflection of one's own self, to take responsibility for the 'other' as an equal member of an open learning community is indeed an ethical responsibility for educational technologists. This sense of ethics is, however, profoundly different from what Jarvis (1997, p. 74) refers to as the ethics of professionalism for "the professionals professed their expertise and offered it as a service to the client", but in

education a human being enters "a relationship with another for no other reason that the Other is and has impinged upon the individual's freedom".

Building International Communities of Discourse in Distance Education

The research process has generated a number of rich interactions among distance education systems, predominantly the British, Spanish and Portuguese distance teaching universities. I have also benefited from participation in several international Congresses (ICDE '95, Birmingham, and ICDE '97, PennState) and Conferences (Madrid, '96, '97, '98; Córdoba, Argentina, '98; Mexico, 2000). My consultancy involvement in Mozambique, which also entailed visits and interviews at various Distance Learning Centres in South Africa (UNISA, SAIDE) has positively contributed to the research reflection. Finally, I was able to gain a first hand experience of the German distance teaching university through visits to two of their Euro-Study Centres (Koethen, in the former DDR, and in Oldenburg).

Both the exposure and discussion with colleagues from such diverse backgrounds and the exchange of perceptions with regards to the future of distance education in the globalising learning environment has crystallised in a proposal for the building of International Communities of Discourse in Distance Education. 'Building Shared Understanding' is a distinct concept within the socio-cultural approach. It is my conviction that the IET could, as part of its role within the OU, deepen, extend and operationalise the four core values of the institution ('open as to people... places... methods.... and ideas'). It could also, on the basis of its well established international recognition, provide a platform for the furtherance of these multi-lingual and multi-cultural communities as part of its mandate in the field of educational technology.

A major outcome of this research is the conviction that the successful development of distance education in the future is contingent on the effective capacity to establish an increasing body of shared knowledge among distance education practitioners around the world. The opportunities made available through the third generation distance education should promote the creation of dynamic communities of discourse in the field of distance education. Using the socio-cultural perspective as a guidance (Edwards and Mercer, 1988; Mercer and González Estepa, 1966; Mercer, 1997, 1998), I suggest that the construction of such community would need to be based in mutual agreement regarding a set of 'ground rules' towards that end. The purpose of which is not only to stimulate professional interaction, but also to effectively build shared understanding in a climate of mutual respect, always open to constructive dialogue.

The fact that the basic conceptualisations of educational technology at each DTU of this research have been identified could serve as a starting point for generating a growing understanding, and joint construction of the field, taking into consideration the socio-cultural parameters by which educational technology may reach new levels of maturity in the intercultural arena. It is in this context that I would like to make some suggestions for the development of International Communities of Discourse in Distance Education.

What would be some distinctive features of a socio-cultural approach to the development of these International Communities of Discourse in Distance Education? Reflecting and adapting Mercer's views of intellectual development of younger generations (1998b), I suggest that:

1. The development of the discourse of educational technology takes place through a dialogic, interacting and culturally sensitive dynamics. The understanding of educational technology is shaped by the network of relationships and by the local culture in which those relationships are situated.

2. Language is a vital component of this developmental process, both as a cognitive tool enabling participants in communities of discourse to gain, process, organise and evaluate knowledge, and also as a cultural tool by which this knowledge is shared and made available to other learning communities. Discourse building operates at two levels, one within their own linguistic community, its intra-dimensionality, and another, a meta level of inter-dimensionality in the way that members of different language groups are invited, given access and offered guided participation, to share in the intellectual life of other language communities within the same field of academic interest, in our case educational technology.

Some 'Ground Rules' to assist the creation of International Communities of Discourse in Educational Technology in Distance Education

1. Cultural diversity is to be valued and promoted. Tendencies towards domination by any particular culture should be avoided, and collaborations should be based on the recognition of equality and mutual respect.
2. The assumptions with regards to what may constitute a good practice in distance education, in a particular context, need to be made explicit and justified. Participants'/partners' conceptions as to what constitutes 'effectiveness' in a particular system of distance education need also to be made explicit. In those cases where there may be significant differences among various conceptions they would need to be accounted for and discussed.
3. Suitable opportunities should be created where, taking advantage of the possibilities offered by communication technologies, mutual support and constructive dialogue may take place among the participants.

Distance education seems ideally positioned as a pioneer field where the new technologies of information and communication could be tested in a pedagogically situated environment. Globalising Education (Mason, 1998) has to do with facing the challenge of bridging cultural, national and linguistic frontiers, as well as with developing inter-institutional and inter-personal collaborations. Globalisation needs to be rooted in the personal and local setting. True globalisation contributes a heightened and enriched awareness of the unique cultural and historical roots of each of the participants in such global community of discourse. These issues became clearer to me through the consultancy I was involved in during the course of this research. There emerged in discussion with colleagues from the South African Region, a series of variables regarded as crucial when examining the viability of setting up a system of distance education in a country like Mozambique (identified as one of the poorest countries in the world). As an example to illustrate these cultural differences I will refer here to the conception of a business transaction. "Buying and selling" is regarded by Westerners as an impersonal economic operation and they will regard prices as something fixed. One is not interested in the person (seller/buyer) and therefore wants to conclude the transaction with the greatest expediency. Traditional Africans, however, view buying as a social person-to-person transaction and therefore they will take their time to negotiate over the price in order to establish a personal relationship between buyer and seller. This difference in approach must have significant implications when conducting 'educational business' and deserves some careful consideration by Western institutional partners. Further elaboration of these cultural differences can be found in Van der Walt (1997) and Stoy (1995).

Certainly, the purpose in raising these types of issues is not to erect a rigid, dichotomistic contrast among these, and other, existential outlooks. It rather highlights the awareness that such dimensions do exist and that, however implicitly, are necessarily at work in the way education is conceived and practised in different loci of our 'global village'. Furthermore, these questions need to be creatively and sensitively addressed whenever there is any serious and committed effort to engage in true intercultural dialogue,

demanding as this task is. Protests would arise, 'Is it really important to get to know each other cultures at that deeper level? Why should we tire ourselves trying to understand other patterns of behaviour and methods of communication? Is this task not too difficult, too time-consuming, too complex, too vague, and - of course - too expensive?' But perhaps this is not a choice if an institution aspires to leadership in global distance education. Neglect of such priorities will result in tensions and conflicts becoming bigger and less manageable. Can distance teaching universities afford themselves the luxury of ignoring the realities of different cultures in our networked educational environment?

Elsewhere in this thesis (chapters 2 and 3) I have explained the relevance of world-view analysis (Marshall, Griffioen and Mouw, 1989; Wright, 1992) with regard to the crucial task of developing competence in intercultural dialogue. These world-view analyses have shown a significant complementarity to the socio-cultural approach. Understanding the nature and configurations of the various world-views is seen as central to this process of building international communities of discourse in distance education.

How could these International Communities of Discourse in Educational Technology in Distance Education be implemented?

We could assume for instance that at any of the distance teaching universities of our study, a leader in educational technology (this being understood in principle as the process by which distance education in that particular context is operationalised) would take the role of 'discourse guide' (Mercer, 1995, p. 83). This person needs to be capable of organising, energising and sustaining the particular conference-discourse building community, 'cell', in that particular context with a view - and this is an important consideration - of enabling members of similar 'cells' from other distance learning cultures to ask questions, make sense of their situation, and engage as 'legitimate

peripheral participants' (Lave and Wenger, 1991) in the joint construction of the knowledge of the field.

As a 'discourse guide' this person would need to be able to:

- a) Model the values and attitudes the task requires and provide 'scaffolding' for equipping less experienced members to contribute to the discourse process in their own local context.
- b) Bring the learning conversation, of which the discourse is made of, onwards (within their own 'cell') and upwards into the international dialogical space.
- c) Balance cycles of resolution (deepening the understanding within their own cell members and condensing this shared understanding in some objective manner) with further projections of international nature.
- d) Help 'frame' the discussion. Not so much in terms of 'explaining' things but rather bringing the language and frames of reference of the 'expert' discourse into the 'collective consciousness' of the group (Northedge, *Making Sense of Studying*, in press).
- e) Facilitate the exchange of questions, insights and the disclosure of new understanding with other international communities.
- f) Provide, in general, the contextual foundations for the future learning and development of the field.
- g) Encourage the sort of educational conditions that would sustain a 'long - and meaningful - conversation' (Maybin, 1994) and making room for all its inherent diversity and conflict.

As pointed out earlier, in the process of this research I have had the privilege of working with practitioners of distance education and educational technologists from various distance learning cultures, which have shown an interest in initiating this discourse community building process. In this way it would be possible to envision a network of international cells, each with their own unique histories, stages of development, and styles of discourse contributing, from the rootedness of their distinct local cultures, to a shared understanding and joint construction of the field of educational technology in distance education.

Conclusion

This chapter has centred on the OU as a case study for exploring issues related to the internationalisation of distance education. It has highlighted the delicate process involved in trying to bridge intercultural boundaries. The potential the new technologies afford for attracting students across the globe has not been met with an understanding of the educational issues that need to inform a truly inter-cultural curriculum. That is, a curriculum that meaningfully takes into account the particular needs of students with different worldviews and cultural and academic backgrounds.

This new curriculum approach would require a firm commitment to engage in intercultural dialogue, a favourable disposition to establish international academic partnerships or as it was indicated earlier to engage in a 'negotiation process'. Failing this, and if only by default, distance education, in the international arena, may reduce itself to exporting ready-made data products to customers worldwide succumbing to a neo-colonialist and mercantilist mindset.

The OU, with a far larger number of students abroad than the other two universities and with ambitious strategic plans to expand internationally, is confronted with these issues

and increasingly realising the need to come to grips with the dynamics involved in them. In this sense OUW Ltd, recently under a new leadership, is beginning to reconsider its 'business first and foremost' approach as well as the international image it projects for the university as a whole. Particular academic sectors are also taking initiatives to address the issues and to identify the challenges and opportunities this situation presents to the university. Such is the case, among others, of the OU Regional Centre at Newcastle responsible for student support in Continental Europe and the Open University Business School, adapting and translating some of their courses into Central and Eastern European languages. But of especial significance from the point of view of educational technology is the research on intercultural and linguistic issues in online education undertaken by IET personnel regarding its MA Programme in Open and Distance Education. Apart from eliciting a number of relevant topics, this research has also raised awareness as to ways in which, inadvertently, its courses may be disadvantaging their non-native English speaking and/or 'culturally other' students - as shown by the consistently lower grades they gain in contrast with students that are home-grown to British academic conventions. It has brought to the fore the ethical implications regarding the assessment system and the need to 'negotiate' aspects of the curriculum in response to access and equal opportunity principles. It has challenged educational technologists to develop competence in intercultural curriculum design and student support thus pioneering a new frontier for the university as a whole.

To assist this process of dialogue it has been proposed the building up international communities of discourse in distance education applying socio-cultural premises and creating a framework where critical issues can be discussed among practitioners in their own context, and languages, and then clarified, shared and challenged in the process of discussion with other such communities.

Chapter 8

Conclusions

Chapter 8 - Conclusions

Introduction

This chapter summarises the various models of educational technology found at the three distance teaching universities studied and suggests an answer to the basic research question regarding the role of educational technology in distance education. It provides a summary of the relevant findings related to the concept of educational technology, methodological innovations, and elucidation of the broader issues that the thesis has uncovered. It analyses some of the strength and weaknesses identified in the research as well as possible alternative paths along which the thesis could have been developed. It points out a number of questions the research raises and new directions for future research.

An Answer to the Research Question

'What is the concept and role of educational technology in distance education?' is the research question that I have sought to address in this thesis. To elucidate this question I have approached it from a socio- and multi-cultural perspective with reference to three European distance teaching universities: the British OU, the Spanish UNED, and the Portuguese UA. Through the research I have identified three very different conceptualisations of educational technology and how it is operationalised at each of the institutions.

In UA the central task attributed to educational technology and educational technologists is that of bridging the gap between the author of the course materials and the learners. With regards to UNED it could be stated that there is an undefined institutional role for

educational technology, and that the concept itself, as understood in OU, is quite foreign to its *modus operandi*. If anything, educational technology would be regarded as the production of audio-visual materials to support what is fundamentally a text based curriculum. The OU has a conception of educational technology that hinges on a systems approach to the educational process as a whole, even modelled, in some respects, after an industrialised form of educational 'production'.

UNED appears to be the less innovative from an educational technological point of view. This does not mean that this institution is not investing significantly in technological resources, TV and Video studios, audio productions, and the most extensive net of video-conferences for educational purposes in Europe. But it means that it is by and large more like an amplified extension of the conventional model of Spanish Universities.

UNED's innovations are more of a social order. This is specially the case with regards to its extensive net of 'Centros Asociados' that operate, and are being sustained, from a local and regional initiative. This gives UNED a unique rootedness throughout Spain. It has also alleviated considerably the financial burden that otherwise would rest on the central HQ. The determination of the Spanish population to embrace the opportunity that the University offers accounts for the considerable success of the institution. UNED's graduates - who have completed the five academic years of which their degree consists - are sympathetically referred to as 'survivors' within UNED's literature. The extent to which the quality of dedicated distance learning materials account for the success of students is less of a factor in UNED. As a student at UNED I found its 'Unidades Didácticas' (the basic distance learning texts) very dissimilar as to their quality and adequacy to the distance learning situation.

On the other side from UNED, the OU represents a consciously 'revolutionary' (cf. John Daniel, Preface to 'Open and Distance Learning Today', 1995) break, at the time of its inception, with regards to the conventional UK Higher Education (HE) system. The

discontinuity was sealed in the declaration of the foundational values that Lord Crowther formulated in his inaugural speech: Open as to people, Open as to places, Open as to methods, and Open as to ideas". It is in particular the 'openness as to methods and ideas' that generated the setting up of the IET, distinctly as an academic unit rather than an audio-visual technical support, and with a potential to implement and operationalise the four values of this open and distance learning system. It proved, through the quality of OU's materials and tutorial support that the ideal of access (obviating previous academic qualifications of the student) could be accomplished without compromising on standards (cf. Harold Wilson on the Foreword to 'Open University' by Walter Perry, 1976). And it rang out its message across the international academic world: "It can be done".

These four "opens" represent a discontinuity with the conventional wisdom of elitist HE. It was actually the dream of the founding fathers of UNED to implement such policy of Access OU style. But the powers that were would not permit it. Instead, though still significant in its own context, UNED could only offer an Access Course (that usually takes two years to complete) to students over 25 years of age.

The challenge of Open Access affects directly and prominently, even determinatively, the type of educational technology that needs to be put into place. UNED, by relegating 'Open Access' to a certain age group could get by with a less demanding educational technology. The university assumed that its students would be able to make do with a type of distance learning texts - that are more in keeping with the conventional university text-book than with specifically designed distance learning courses -, and there has not been the investments necessary to develop a course team approach, and the concomitant checks and balances that would ensure the suitability of distance learning materials.

UA comes in between UNED and the OU with regards to its educational technology. For although there is not an equivalent to the IET, their educational technologists have an institutional profile defined in reference to the Master of Comunicação Educational

Multimedia. I have already mentioned in this chapter that their primary task is that of bridging the gap between the author of the course materials and the learners. But as noted elsewhere (chapter 5) the process is not without its difficulties and complications.

It is only in the OU that educational technology in distance education has been defined as a major institutional function - even constituted as an academic Unit concerned with research and development of the system as a whole. It is in this respect that the IET is seen as a critical innovation of the Open University. It has effectively imprinted the OU with much of its own identity and style.

The research has encountered a curious paradox: on the one hand, educational technology is shown to be a *sine qua non* condition to the functioning of any distance education system; in other words, that the quintessence of a distance teaching university is indeed its educational technology, at the same time a distance education system can operate, and does operate, from very different conceptions of educational technology. Such different conceptions, in fact, that an observer contrasting educational technology in UNED and the OU and UA may conclude that there is no conception of educational technology in UNED, and even that educational technology efforts at UA look rather primitive. The counter argument would run along the lines that such an expensive OU system was far beyond the economic possibilities of either Spain or Portugal; that still these systems are proving to be operational and, in the case of UNED, it has long established an enviable academic reputation within the Spanish HE culture.

Thus, to summarise an answer to the research question it may be said that:

Educational technology is at the core of a distance education system and determines, to a significant extent, the type and quality of a distance teaching operation and the type and quality of the learning experience a student receives.

Having established the centrality of the role of educational technology in distance education, it became urgent to re-examine the nature of educational technology, and for the purpose of this research there could have been no better place than the IET itself. The opportunity for me to be part of the IET culture for the duration of this research has proved invaluable as a participant observer and action researcher.

This research found that educational technology in the context of distance education is a problematic and theoretically underdeveloped concept. Even though technology itself, and the way it is conceived, plays a vital role in distance education, making it possible for a distance education system to operate, the notion of educational technology is not, generally, made explicit by the people using it. In the absence of this theory or explicit conceptualisation, educational technology tends to function in a rather pragmatic, 'problem solving' way, in relation to particular projects and situations. It tends to be 'ad hoc' and reactive rather than principled and reflective of its nature and practice.

This is perhaps surprising given that particular units within the distance education institutions that have been studied are dedicated to making sense of the role of educational technology and/or distance education. Nevertheless, there was nothing that suggested that it was easy for people in these different institutions to articulate their views on educational technology since they were working from different discourses and communities of distance education (Lave and Wenger, 1991). From the interview analysis there could not be identified a unified field of discourse regarding the nature of educational technology in the universities of this study. However this interview analysis revealed that educational technology is largely seen as a technological issue and very rarely as a strictly educational issue. Consequently this whole field has tended to be driven by technology. In fact, John Daniel, the current Vice-Chancellor of the OU, has commented that, "Technological developments have determined the progress of distance education " (Daniel, 1996, p. 50). This view is historically confirmed by the fact that TV and radio were crucially connected with distance education in the 70's, just as computers

have now become a major focus in the new learning environment. What is not clear however is how the introduction and use of new technology is related to particular conceptions of educational practice or pedagogy. It seems that when technology is regarded as (or perceived to be) the driving force in cultural development a shift takes place towards a technocratic and instrumentalist view of education. The effective technologising of education reduces it to just another tool for professional advancement or mere 'survival' in a sophisticated techno-social machinery. This reductionism of education, in which education becomes just another function of technology, raises fundamental ethical concerns, which have been explored in chapters 5 and 6.

Furthermore, the research identified that there has been a general assumption, particularly in the early stages of IET and due to its behaviourist roots, that educational technology could be seen as a 'value free' set of tools, applicable to any particular educational purpose; that there is no problematic relationship between the use of technology and the kind of education that takes place. The research shows that this idea is untenable; that the way technology is considered is intimately bound up with local and regionalised concepts of distance education and their histories within particular institutions. This, it would seem, has practical implications for 'Open' systems of distance education, i.e. how decisions concerning the choice of technological media effects which segments of the population would gain access, or otherwise, to a particular educational system.

The conclusions are drawn mainly from interview data obtained at the distance teaching universities of this study. What this data essentially represented was the view of people who are involved with the use of technology in education, or with a technological approach to education, verbalising their conceptions of their own activities and how these relate to the practice of distance education. At the OU, in particular, this data had the distinct advantage of including a significant sample of its 'first generation' educational technologists. Many of them, who in the course of this research were completing their service to the university, actually embody the history and 'know-how' of this institution

in relationship to educational technology. Talking with practitioners of educational technology in these institutions revealed that educational technology is conceptualised quite differently within each institutional culture.

Having substantiated these variations, I have suggested that the nature of educational technology and the way it is conceptualised can be better understood by drawing on the socio-cultural perspective. With regards to educational technology, it should be noted that because the various conceptions of educational technology are intimately bound with the way people use language to talk about it in their distance education local communities, such variations represent the ways in which these communities act out their collectively thought activities in language, thus making distance education happen in their particular contexts. These communities of practice (Lave and Wenger, *op.cit.*) are effectively, and in essence, communities of discourse (Swales, 1990).

Furthermore, drawing on the different theoretical strands that have contributed to this research, I have developed a definition of educational technology in the context of curriculum development and the exercise of power (chapter 6). I have then applied this new conceptual tool towards understanding the systemic relationships within an institution (the OU-OUW Ltd. interaction) and in intercultural research in online education with reference to IET's MA Programme in Open and Distance Education.

An Account of Some Strengths and Weaknesses of this Research

The possible strengths and weaknesses of this thesis seem to be paradoxically interdependent. The research represents the first time, within the three distance teaching universities of this study, that someone academically formed in one of them has carried out a thesis on this topic by actually becoming part of another distance teaching university as well as involving three institutions in this research. This offered a major

linguistic and cultural challenge as well as a sustained commitment to learn to navigate through various climates and institutional waters. This possible strength is likely to be counterbalanced by the inherent vulnerability of any intercultural study when it is judged from any rigid cultural stance. The ability to cross cultural boundaries and seek to make sense of culturally conditioned choices in diverse contexts will be differently valued depending on the intercultural and interlinguistic experience of the critic as well as the degree of familiarity with all the systems of the study involved. Only then can meaningful intercultural, rather than monocultural, dialogue be pursued. From this point of view, the relative strength of the argument of the thesis (as this notion of 'argument' may be interpreted from any particular academic culture) needs to be complemented by the unique intercultural possibilities that the research has generated in terms of promoting understanding and dialogue among the institutions involved.

Another strength of the comparative approach is seen with regards to its interdisciplinary function. This has been sufficiently attested when introducing the comparative methodology in chapters 2 and 3. Yet it is precisely because the richness and demands of this approach that it is not always easy to strike a balance between analysis and synthesis, between particularisation and generalisation and thus the final composition reflects the phenomenological experience of the researcher, and it is also vulnerable to any non-interdisciplinary appraisal.

The research developed from an intuition that educational technology plays a significant role in relation to distance education, however, the pursuit of this intuition, supported by qualitative analysis, encountered the severe restriction of a lack of theoretical framework for educational technology as an academic field of its own right, and therefore my efforts became more descriptive while I would have wished to advance the theoretical model for which I was only able to lay some preliminary foundations.

The interview process and GABEK analysis managed to elicit and represent what I consider it to be a rich picture of the first generation of educational technologists in the

OU. This generation carries with them not only their closeness in time, but very often in spirit too, with the ethical and educational ideals that inspired the creation of this university. This, I believe, is a crucial contribution of the research. On the other hand, it would be presumptuous to suggest that this GABEK analysis is either exhaustive or comprehensive and that every one interviewed or knowledgeable of the history and experience of the IET would agree in every point. At the same time, this particular aspect of the research holds significant interest to educational technologists from other academic cultures as the current Spanish translation being done in Mexico suggests. For reasons explained in chapters 1, 5 and also in appendix 5, it was not possible to produce a comparable description of the other two DTUs and consequently this part of the research focussed predominantly on the experience of educational technology within the IET. What has been done, and this for the first time, has been to bring together an innovative method for the analysis of qualitative data (GABEK) with a socio-cultural perspective and analytic approach, in such a way that the results do not simply cluster different remarks of a set of individuals, but uniquely treat these individuals as members of a particular community of practice. I hope I have been able to show the potential usefulness of using GABEK as a tool for investigating the discourse of different institutions as well as representing the knowledge commonly constructed in these communities, and in particular the way that educational technology is discursively represented. I would emphasise that GABEK is not 'the thing itself' (Das Ding an Sich) when used to represent a community of discourse such as the IET but mainly a tool, a point of contact, that can give access to others into that particular community. In this sense GABEK has been found to complement, or perhaps merely expand or transcend the often self-referential nature of the phenomenological approach in relation to the researcher's perception. In other words, what this has enabled me to do is not merely to make sense of comments expressed in the various interviews but characterise the main traits of an institutional culture and what is more, to extract some shared communal meanings associated with certain concepts. Finally, this methodological application has given

GABEK added theoretical dimensions which were unexplored prior to the present research.

It is readily admitted that the GABEK analysis, in spite of its usefulness and the strengths that it has contributed to this thesis (see Appendices 5 through 7) did not discriminate sufficiently between the different sources of the data and on a first approach appears to be treated as one body of data – I tried to obviate this difficulty by clarifying in the title of the Gestalts when these did not refer to the Open University on which the GABEK analysis was mainly based. The thesis could also be said to be ‘biased’ in terms of enjoying full involvement in one of the institutions and therefore perceiving research issues more intensively from the OU perspective. Although this weakness may be somewhat compensated by the interest that the thesis is generating among Spanish and Portuguese distance educators and educational technologists. But it may also prove useful to the OU, and IET in particular, with regards to insights that may be gained through having a Spanish researcher, from a very different distance learning culture, examine and participate critically though sympathetically within its life and operation. In this way the thesis may help to enlarge the mutual understanding and to provide a firmer basic for intercultural dialogue in our field.

The research has also highlighted the ethical dimension as constitutive of any educational enterprise, hence in educational technology and distance education too. This ethical dimension appears to be a central factor in facilitating a cultural dialogue not only among Western distance teaching universities, that share a similar cultural paradigm, but very specially with regards to the interactions that these institutions carry out with developing countries or in their international programmes. The realisation of the significance of the ethical dimension in this context came through my involvement in the OU. I had to face the tension as to how to do justice to the positive ethical contributions the OU has made and is making, and yet the concerns and warning signals that I have perceived as being a major shift within the ethos of the institution. This difficulty could be summarised as

follows, How does one speak of Ethics without claiming any higher moral ground, or without being presumptuous in raising this type of questions? How to be critical and yet non-judgemental? This tension led to an understanding of the notion of 'critical' in terms of 'discernment' rather than in the sense of passing any judgement. It could be said that in any open and sincere dialogue we expect to go beyond the forms of the words (the discursive text) to discern the spirit and intention that promotes such discussions. The researcher recognises a limitation regarding his own mastery of the terminology used to discuss these matters in English as well as the appropriateness in contextualising these issues within a cultural setting, the OU, to which he is new.

Reflection on other routes the research could have taken

In many respects the research question has clearly determined the dynamics and main thrust of the research, including the sequence of methods employed throughout the various phases of the research. In this way, it could be discerned an internal logic as to the way the research has developed. The research began as a comparative study, fundamentally in order to identify and characterise the notion and the status of educational technology in each of the universities. To do this it was necessary to contextualise educational technology within their respective academic institutions and, consequently, an extensive exploration of the history, cultural and educational values of each university was carried out but only reported with reference to Universidade Aberta (Appendix 4). At that point, the research could have resolved, or settled itself, within well-defined boundaries. It would have remained, and developed exclusively, as a comparative study by focussing on:

- a) Contrasting in depth the three universities at their institutional level.
- b) Analysing in detail the structure of departments related with educational technology areas.

- c) Producing a content analysis of the MA programmes on distance education and/or educational technology that each university was offering.

To some extent this was done and has been incorporated into the thesis, mainly by presenting two case studies (one on UA, just mentioned, and another on the OU's MA Programme in Open and Distance Education, chapter 7) together with a series of contrastive analyses of the three institutions (chapter 4). However, a further direction opened up through the analysis of the interview data. It was then realised the potential significance of concentrating the remainder of the thesis on the educational technology experience at the IET, the only setting of the three universities where educational technology enjoys an academic status. Consequently, an effort was made to theorise educational technology on the basis of GABEK analysis and other interview data. The interaction of human and technological elements in distance education is in my view of such significance and academic potential to justify my having addressed these issues within the framework of this research.

The MA-ODE, represents a potential platform from which to assess and develop the theoretical fabric of IET. In any case, the authors of the MA themselves do not conceive of it, at least not at the time of this writing, as an attempt to build the theory of educational technology. So my efforts at theorising educational technology or seeking to justify its potential as an academic field in its own right sounded more like a solitary voice in an unclaimed territory.

On the other hand, I had the unusual opportunity, as a research student, to be part of a major consultancy project with the Open University and the World Bank to conduct a feasibility study for developing distance education in Mozambique. This was another main turning point of the research in that it helped to delineate the challenges involved in implementing distance education from a Westernised techno-scientific model into one of the poorest countries in the world. Was it a matter of technology transfer, applying good

'engineering' principles to education? Or, was it rather having more to do with listening to the other culture and working together a definition of values and processes by which distance education and educational technology may serve to expand the educational offer according to the priorities and values of the 'receiving' culture? This experience foregrounded the complexity of inter-cultural issues and helped, partly, to test the comparative study done of the three distance teaching universities. It also highlighted the problematic of Western vs. non-Western worlds divergent value systems and the spirit of domination and commercialisation that often taints these developments. This is how the ethical question came into focus with an added sense of urgency and why part of the thesis is devoted to situating ethical issues at the core of the agenda for discussing distance education and educational technology in an increasingly globalising world. It could have been ideal to have approached the other two universities with these ethical concerns in a more direct manner - although a number of valuable insights were gathered during the general interview process which took place before the Mozambique consultancy – this would have allowed the thesis to advance along comparative lines but there were not the time neither the resources to accomplish this within the time-frame of the research.

Further Questions this Work Raises and New Avenues of Research

Identifying the research possibilities of this thesis involves a consideration of new research questions and how these may be pursued. For instance:

a) How could UNED rethink its educational technology model and particularly its course development policy in order that its teaching materials would be more coherently designed for effective use by distance learners?

- b) By what means could UA succeed in persuading authors, usually working within a traditional academic setting, to accept the contribution from educational technologists so as to 'open up' academic discourses to a wider distance learning community?
- c) How can the IET develop and reaffirm a primary commitment to educational concerns rather than complying with technocratic pressures? Could the IET create a space, or even perceive the need, to define the field of educational technology as an academic discipline in its own right?
- d) How could the "basic rules" for the development of International Communities of Discourse in Distance Education, inspired in the socio-cultural approach, best be tested?
- e) What new models for inter-cultural research in distance education and educational technology are needed to carry out a constructive cultural critique of globalising and uniformitarian trends driven by technocratic approaches?

When we think of 'globalisation', what sort of model, image or metaphors, come to mind? An option is that of 'ex pluribus unum' – out of diversity a unity is produced. This may be called the melting-pot or the mash-potato model in globalising distance education. Out of this sort of unity that effectively does away with diversity there can be constructed a mechanical, marketable and highly reproducible process (a sort of MacDonaldisation of distance education). And obviously someone has to do the 'melting' or the 'mashing' so we end up with little cultural islands of 'little Americas' (the Northern ones), or little UKs educational systems transplanted here and there, with more or less fortune, across the globe (globalisation being regarded mainly as an Anglo-American construct which tends to monopolise and marginalise international perspectives arising from other cultural and linguistic groups). I would much rather prefer to think in terms of 'in pluribus unum' that is, in discovering and building unity in and through diversity. What we find in this model of transcultural distance education is a reinforcing

interaction between the local and the global dimensions and between the individual and different community configurations. The challenge in becoming multicultural has to do with striving towards a balance between unity and diversity. And this balance is obviously a delicate one.

f) What would be required for OU foundational values to gain new vigour and meaning at this stage of the OU history? How could the younger generation of educational technologists at IET and, to some extent, in KMI be made aware, and perhaps even inspired too, by the vision and aspiration of universal openness which has been the driving motif of this institution since its creation?

g) How to promote better understanding of the cultural and technological interface, and what is regarded as educationally appropriate within a particular cultural setting? What role can ICT play in the service of educational and cultural ideals? How can comparative research in distance education and educational technology promote dialogue between the increasingly technologically dominated Western world and the non-western, less technologically developed, world?

The saying, 'values are caught rather than taught' suggests that it is not merely a matter of crystallising values into a neat set of 'professional codes' (Jarvis, 1997, p 42), in keeping with the managerialistic spirit of the age, but that something deeper and more radical than that would be needed, even a sustained ethical reflection on these fields of educational technology and distance education, if such values are to gain presence and substance.

h) How could the design of new, or the remodelling of old, distance education systems take into account values and experiences accounted for in the process of this research? How could they inform the re-thinking of distance education, particularly in order to

preserve and enhance the crucial aspect of 'openness' as a historical landmark to which distance education has significantly contributed?

i) How could findings of the research be translated into co-operative projects between the universities involved? And furthermore, how this co-operation may be extended in developing countries, especially in Latin America, where each of the universities is actively, though independently of each other, involved at the time of this research?

A fundamental methodological issue concerns not so much what sort of analytical apparatus can best serve this type of studies (important as this question is), but how can distance education institutions encourage the formation of this type of researchers? What attitudes need to be cultivated in order to tackle successfully the intercultural challenge? What multi-disciplinary knowledge and experience need to be called upon in order to identify areas of research and contribute meaningfully to the field? How can distance education institutions create opportunities for people to be involved in this critical area of inter-cultural research?

The thesis has acknowledged the need to reaffirm the role and responsibility of the individual academic in contradistinction to the supposedly autonomous expert system of which he may be a part, and this for fundamental ethical reasons raised in chapter 5. The individual's action, however symbolic it may seem, need not be insignificant when arising from a genuine commitment. Perhaps the creation of a 'Fund for Ethical Concerns in Educational Technology and Distance Education in Developing Countries', which the research has initiated may inspire others to ask themselves what could be appropriate and congruent with the international educational mission of the university in which they serve.

Another concrete action which has emerged from my experience in this research as well as a tutor and research fellow within the IET has been the creation of the 'Society for

Comparative and International Research in Online-Education' (SCIRO). What I envision, and has begun to take shape, is the carrying out of comparative studies of Post-graduate Programmes in Online Education from around the world. Underway is the setting up of similar societies in Spain, Portugal and Latin America (my main personal areas of involvement and to which other regions and languages would be invited) eventually configuring an OU-SCIRO, UNED-SCIRO, UA-SCIRO, Universidad Autónoma de Tamaulipas UAT-SCIRO (México), etc. All of these institutions are currently offering MA Programmes in related areas of distance education and educational technology with significant online components in them. This is regarded as a major strategy towards the building of international communities of discourse in distance education referred to in various parts of the thesis.

A larger issue is whether, in an increasingly technological society, rather than technologising education, educational technologists are able to increasingly educationalise technology. That is, whether educational technology can be reconceptualised as a means of improving the quality of distance education according to ethical and pedagogical principles rather than being driven by the apparent "affordances" of technology - what technology can do as a result of its own internal dynamics, without consideration to other concerns for a balanced cultural development. These are issues frequently raised; for example, there has been a recent report (Hennesy, Flude and Tait, 1999) discussing whether the introduction of computerised online tuition may in fact have had the effect of discouraging the participation of certain groups, such as older students and women.

The thesis advocates a recovery of the personal dimension as central to the educational relationship in contraposition to the blurring of ontological categories implicit in titles like, 'Being Digital' by Nicholas Negroponte (1995) which seems to suggest a reconceptualisation of existence as a whole, and therefore education too, in a digital mode, that in the final analysis all we have and indeed all we are is a matter of digits.

Another important topic is whether this kind of research can form the basis for enabling cross-cultural dialogue among the global communities of distance education regarding educational technology, as well as other issues having to do with the pedagogy of distance education and its ethical considerations. There is much to be said for the need of deepening such dialogue since there is not a truly international discourse. This kind of analysis, by making these issues explicit, could at least allow people to become aware of the various ways in which different distance education cultures are thinking and functioning and their rationale for doing so. It could become a catalyst for promoting focused conversations on relevant topics thus helping to create a meta-level of awareness as to how educational technology is talked about both among, but also within, these institutions. A result of this interaction would be the realisation that the way an institution does educational technology, as in the case of this research, is not a self-evident and obvious thing, but that they are making implicit assumptions about how it operates and what it is for. Furthermore, they can benefit by making explicit these assumptions in the process of dialogue and participation in international and multicultural communities of discourse in distance education.

In this process the issue of “power” is regarded as of paramount importance in educational technology and distance education. However, this power is not primarily conceived in its political dimension, as is the case with the socio-critical exponents, but rather in a socio-cultural understanding of power as effective personal and social transformation. Pask (1969, pp.18-19), already quoted in chapter 2, reflects the positive attitude that is needed when meeting 'the other' in dialogue, and when 'agreement includes agreement to disagree' and also to work together towards 'conflict resolution in mutual respect'. Similarly does Popper (1994, pp. 34-35) endorse the need for disagreement, here applied to intercultural frameworks and the celebration of diversity:

I hold that orthodoxy is the death of knowledge, since the growth of knowledge depends entirely on the existence of disagreement...discussion between people

who share many views is unlikely to be fruitful, even though it may be pleasant; while a discussion between vastly different frameworks can be extremely fruitful, even though it may sometimes be extremely difficult, and perhaps not quite so pleasant (though we may learn to enjoy it).

Pask's and Popper's ideas invite an ethical reflection that can support the view of the learner as a person, rather than being instrumentalised as a functional unit within any particular educational system. Then, perhaps, 'in this non-violent transitivity the very epiphany of the face [will be] produced' (Levinas, 1991, p.51).

The socio-cultural analysis of educational technology and distance education may offer a means for constructing / helping to build International Communities of Discourse in Distance Education, which may fruitfully discuss not only the pragmatics of using educational technology but these more subtle and broader issues. Again the challenge for the future of distance education is seen not so much in technologising education but rather in educationalising technology in the service of people in their own communal environments and in promoting a more humane, and ethically guided ('Responsible Technology', Monsma, 1986) use of technology in enhancing cultural values.

The thesis has shown that depending on the quality of its educational technology, a distance education system can offer a relative openness and accessibility to potential student populations. This has direct ethical implications. Distance education can promote a sense of liberation (increasing openness as to people, as places, as to methods, and as to ideas) or, on the contrary, favour ways of domination by subtle indoctrination into particular forms of monolithic world-views (Hawkrige, 1996). Of special concern to this thesis, dealing with distance education systems in an international context, is the distinct Western techno-scientific world-view with its powerful commercial drive to monopolise distance education in global terms. This drive, if unchecked, would effectively neutralise the possibilities of openness and genuine dialogue among various cultures of distance

education. The World Bank and other major multi-national corporations (e.g. AT&T) are becoming major players in distance education developments. When this is coupled with a trend towards corporate-like universities, it can vitiate the educational *raison d'être* of these institutions in the sense of diverting reflection and dialogue as to what educational technology can do and should be doing in terms of harnessing technological opportunities for educational purposes. The technocratic-managerialistic mind-set may prove a suffocating cul-de-sac to academia. It produces a narrowing perspective, which hinder institutions from being able to interact meaningfully and constructively with other cultures of distance education not so dominated by a techno-scientific world-view.

The challenge to rescue distance education and educational technology from these monopolistic commercial interests constitutes a major concern for educational technological development and for the character educational technology assumes in the near future. We find ourselves at a crucial historical junction for distance education in that the information revolution (Internet) is still a young phenomenon not so set in concrete that sustained educational reflection and action could not bring about significant directional change and inject the sort of values needed to imprint these new technologies with a distinct educational mission.

To make this possible I have suggested the possibility of generating a grass-root movement of International Communities of Discourse in Distance Education (ICD-DE). They will diverge from the conventional way of thinking of 'funding first', diluting prime energy in proposals to international funding bodies, whose decision then becomes determinative as to whether such aspirations materialise. I believe that the power to set up these ICD-DE needs to be assumed by the institutions themselves, and by individuals within those institutions that feel inspired by the original pioneering spirit that characterised the birth of these distance teaching universities. These 'mustard seed' groups acting in different cultural settings would be motivated, even charged with a responsibility as part of their institutional mission, to explore and share inter-culturally

the values and meanings of their conceptions of educational technology as it was discussed in chapter 7. In this way, these various communities of discourse may help circumvent the superficiality of learning for mere pragmatic reasons. However, meeting this challenge of recovering the value of education for its own sake in the new learning environment will not be possible without making explicit the presuppositions and belief systems that are at work in the various communities and which ultimately guide their practices.

On the one hand the research has shown that these different distance education institutions have their own discourses, their own cultures and their distinct world-views, partly because they operate in different societies and linguistic communities, partly because they have their own institutional histories which account for the variations I have encountered in their conceptions of educational technology. On the other hand I am also suggesting that even though there are important variations among them, nevertheless they are all influenced as well by the pervasive Western view that almost venerates technology as a panacea, as a kind of 'messianic' good with practically no limits as to what it can accomplish and almost no accountability to anything beyond its own internal dynamics. If there is no cultural standard by which to test technological development then technology itself, it may be argued, has become the standard and ultimate reference point for cultural progress.

This implies that the research has identified two different levels of analysis: a) the particular communities of practice represented by each of the distance teaching universities of this study, and b) the general Western conception of the nature and role of technology. In summary, while there are positive variations among the various institutions and their concept of educational technology, one important reason why these variations are not made explicit among its practitioners is that across them and permeating them there is a deep-seated assumption regarding the Western view of technology, that technology is the answer, that virtually to any problem there is a

technical solution, including education. The result is a quasi-monolithic consensus which prevents distance education practitioners from gaining insights from other perspectives and value systems arising from alternative world-views.

In conclusion the research has shown why educational technology has been given a rather muddled and fuzzy treatment by practitioners of distance education in terms of its pedagogics, ethics and general applicability, and why successful future development of educational technology in distance education would benefit from its clarification and elaboration. My hope is that the work represented here would contribute in some measure toward this goal. The future of this field, as I see it, would be best served by developing genuine inter-cultural dialogue among practitioners that would discuss these matters in full awareness of their differences of educational technological conceptions and world-views. I hope I have also shown that these matters have not only an academic importance, but that they touch upon the very core of our technological society and the ultimate question as to how should we then live and learn in it.

Appendices

**LORD CROWTHER'S INAUGURAL SPEECH
OF THE OPEN UNIVERSITY
(23 July 1969)**

To be chosen as the Chancellor of any university is a great honour. To be named as the Foundation Chancellor of this unique institution is a distinction of which I have difficulty in thinking myself worthy. But since the command comes from the Queen in Council, I have accepted it with alacrity and with a deep sense of gratitude for being given so elevated a platform from which to observe the course of this great experiment.

This is the **Open University**. We are open, first, as to **people**.

Not for us the carefully regulated escalation from one educational level to the next by which the traditional universities establish their criteria for admission. "We took as axiomatic," said the Planning Committee, "that no formal academic qualifications would be required for registration as a student." Anyone could try his or her hand, and only failure to progress adequately would be a bar to continuation of studies.

The first, and most urgent task before us is to cater for the many thousands of people, fully capable of a higher education, who, for one reason or another, do not get it, or do not get as much of it as they can turn to advantage, or as they discover, sometimes too late, that they need. Only in recent years have we come to realise how many such people there are, and how large are the gaps in educational provision through which they fall. The existing system, for all its expansion, misses and leaves aside a great unused reservoir of human talent and potential.

Men and women drop out through failures in the system, through disadvantages of their environment, through mistakes of their own judgement, through sheer bad luck. These are our primary material. To them we offer a further opportunity. Almost we can say, like the

Statue of Liberty in New York harbour, "Give me your tired, your poor, your huddled masses yearning to breathe free. Send these, the homeless, tempest-tossed to me. I lift my lamp beside the open door."

But if this were all, we could hardly call ourselves a university. This is not simply an educational rescue mission - though that is our first task and we do not decry it. But we also aim wider and higher. Wherever there is an unprovided need for higher education, supplementing the existing provision, there is our constituency. There are no limits on persons.

We are open as to **places**. This University has no cloisters - a word meaning closed. Hardly even we have a campus. By a very happy chance, our only local habitation will be in the new city that is to bear two of the widest-ranging names in the history of English thought, Milton Keynes. But this is only where the tip of our toe touches ground; the rest of the University will be disembodied and airborne. From the start it will flow all over the United Kingdom.

But it is already clear that the University will rapidly become one of the most potent and persuasive, and profitable, of our invisible exports. Wherever the English language is spoken or understood, or used as a medium of study, and wherever there are men and women seeking to develop their individual potentialities beyond the limits of the local provision (and I have defined a large part of the world), there we can offer our help. This may well prove to be the most potent form of external aid that this country can offer in the years to come. The interest of those all over the world who are wrestling with the problem of making educational bricks without straw has already been aroused, and before long the Open University and its courses, electronically recorded and reproduced, will be for many millions of people their introduction to the riches of the English language and of Britain's heritage of culture. There are no boundaries of space.

We are open as to **methods**. The original name was the University of the Air. I am glad that it was abandoned, for even the air would be too confining. We start, it is true, in dependence on, and in grateful partnership with, the British Broadcasting Corporation. But already the development of technology is marching on, and I predict that, before long, actual broadcasting will form only a small part of the University's output. The world is caught in a communication revolution, the effects of which will go beyond those of the industrial revolution of two centuries ago. Then the great advance was the invention of machines to multiply the potency of men's muscles. Now the great new advance is the invention of machines to multiply the potency of men's minds. As the steam engine was to the first revolution, so the computer is to the second. It has been said that the addition of the traditional university to the lecture room is a sign of its inability to adjust to the development of the printing press. That, of course, is unjust. But at least no such reproach will be levelled at the Open University in the communications revolution. Every new form of human communication will be examined to see how it can be used to raise and broaden the level of human understanding. There is no restriction on techniques.

We are open, finally, as to **ideas**. It has been said that there are two aspects of education, both necessary. One regards the individual human mind as a vessel, of varying capacity, into which is to be poured as much it will hold of the knowledge and experience by which human society lives and moves. This is the Martha of education - and we shall have plenty of these tasks to perform. But the Mary regards the human mind rather as a fire which has to (be?) set alight and blown with the divine afflatus. This also we take as our ambition.

What a happy chance it is that we start on this task, in this very week* when the Universe has opened. The limits not only of explorable space, but of human understanding, are infinitely wider than we have believed. I am reminded of Milton's description of an even greater return from Outer Space with mission accomplished. "The Planets in their stations

listening stood, while the bright Pomp ascended jubilant. 'Open ye everlasting gates,' they sung, 'Open ye heavens your living doors. Let in the great Creator, from his work returned; Magnificent, His six days work, a World.'"

**The inauguration ceremony took place in the week that the Apollo astronauts returned from the first moon landing.*

A Theology of "Openness"?

In seeking to contextualise ethical issues in educational technology and distance education, I am aware of the religious dimension of human existence, which in my view impinge on educational and scientific pursuits - it is the whole person who does education, and who does science (see chapters 2 and 3). Lord Crowther's Speech reveal that these values, 'Open as to People, Open as to Places, Open as to Methods, and Open as to Ideas', proudly displayed by the OU in its literature and publicity, are imbedded in a distinct set of axiological ideals which, it could be argued, have clear references to a particular world-view, even a religious frame of reference, that of a Christian world-view. I will point out some of the topics in that speech that seem to bear a direct connotation to biblical values and which, to some extent, might characterise a 'Theology of the Openness'. For instance, Lord Crowther states:

"We hear the Statue of Liberty in New York saying: 'Give me those among you who are tired, the poor, the desperate for a mouthful of liberty, send them to me those who have been tossed by tempests'".

Does not this statement resonate with another invitation found in the Gospel: 'Come to me all who are laboured and heavy laden and I will give you rest' (Gospel of Mathew 11:28).

"[The OU could become] the most potent form of external aid this country may offer in the coming years...' and then '[to provide] assistance to help those who are struggling, having to produce educational bricks without straw'".

This seems a reference to the dismal condition of Israel's slavery in Egypt as God is about to intervene in bringing deliverance (Exodus 5: 7, 17). Then there is the proverbial, and often alluded to in university related literature, of Mary vs. Martha attitudes. 'The Martha of education' seems to refer to the systemic running of an institution and the processing of learning in the form of educational products. By contrast, 'the Mary', represents a different learning approach even 'a fire set aflame by the Divine Afflatus'. So we find here co-existing, and being mutually accepted, two commitments: the delivery of information and the processing of it in teaching and learning but also the flame of the Spirit in the hearts of teachers and learners and, indeed, all those involved in the educational process. Along with this is the vocation to deep learning, to being reflective practitioners and seeking to impart (and spread) such values throughout the whole academic community. If we were to have to decide between the two approaches, we could probably do no better than to follow the guidance of the one about whom Mary and Martha are set in relationship with: 'Mary has chosen the best part which shall not be taken away from her' (Gospel of Luke, 10:42).

"In this very week when the universe has opened".

'An open universe: man's landing on the moon. A small step for a man, a big step for mankind' (The inauguration of the OU took place on the week that the Apollo's astronauts returned from the first moon landing). But there is also the association with the astronauts reading from outer space: "In the beginning God created the heavens and the earth and the earth was without form and void and the Spirit of God moved upon the face of the deep. And God said 'Let there be light and there was light'" (Genesis 1:1, 2). It is

against this background that Lord Crowther concludes his Inaugural Speech for the launching of the OU, and he does so by borrowing from Milton's *Paradise Lost*:

“The Planets in their stations listening stood, while the bright Pomp ascended jubilant. ‘Open ye everlasting gates,’ they sung, ‘Open ye heavens your living doors. Let in the great Creator, from his work returned; Magnificent, His six days work, a World.’”

He refers here to the magnificent return in glory of the Creator Himself and the ushering of a new heaven and a new earth wherein righteousness dwells. Lord Crowther wishes that the OU may assist as many people as possible to regain some Paradise of learning and in so doing prepare the way for a better, more equitable, society. This is the immediate context in which the OU values are enshrined. It is also these values that, through the successful implementation of the OU, have inspired a number of other distance teaching universities.

Undoubtedly, the tone of the Speech is somewhat 'sermonising', perhaps even prophetic at times - Lord Crowther proclaiming the values of the OU at the sound of a trumpet as it were - but what is undeniable too is the significance these values carry to date. It should be noted in this regard, that in a recent Senate meeting of this University (June 2001), the minutes record that ethical issues regarding the mission of the University were addressed and Lord Cowther's Speech appeared reproduced in full as an appendix to them.

There is another revealing comment by the 'father' of the OU himself, Harold Wilson, which throws further light on this 'theological framework of the OU', so he writes on his preface to Walter Perry's book, *Open University* (1976, xi): “The text and outline proposals [for the setting up of the then known as 'University of the Air'] had been written out by hand in less than an hour after church on the previous Easter Sunday morning”. Indeed, this “openness as to people, places, methods and ideas” is the historic

battle-hymn of the OU Republic. They are the foundational values in which this institution finds its *raison d'être*. On these values the OU stands or falls. But these values are ethical at their very core, why should an institution be committed to such 'openness'? Why would these values become embodied in this particular context and not in another? Which world-view gives meaning to these values and can sustain their ongoing institutional expression? Or are these values universal, in principle? Where do these values fit in the general landscape of the history of education?

In positioning these values within a Christian frame of reference, as the analysis of Lord Crowther's speech has shown, it is not implied that other belief systems, such as Secular Humanism, Marxism, Hinduism, Buddhism or Islam, among others, do not share some, or the same, or even wider and deeper core educational values, or that they have not made significant contributions to shaping the character of the institution. However, what the research points out is the historical significance that these values have been articulated, and have gained institutional expression, in this cultural context and not in another. Likewise, it may not be mere coincidence that the conception and implementation of this university came through the Labour Party, one of whose main architects in Britain was Keir Hardie who "once told an international conference of socialists (much to their shock and horror) that the work of labour parties was to apply the principles of Jesus to politics" (Allan, 1989, pp. 131-132).

The assumption of trying to make these things as available as possible to the wider number of people as possible, that we are not to be an elite activity that just goes on for a small select sector of the population. My values, on that basis, are shared with a number of colleagues, but not all, and it colours the discussion I have had with people in other institutions. Some times disagreements come on that basis: what we see as the purpose of education in higher education and not about other particular aspects we are talking about.

(Senior IET Lecturer)

This comment was made in the context of conversing about international collaborations, and the experience of the interviewee at international conferences. How academics understand 'the purpose of education' does indeed colour, and at times overshadow, other particular concerns. In one of his OU's 25th Anniversary Speech (1995b, pp. 400-403) the Vice-Chancellor at the time, Sir John Daniel, made a similar comment with regards to the academic challenge experienced as the OU becomes increasingly active in the international scene:

[It] obliges us to question our assumptions about what is normal, it makes us realise what we take for granted, and it brings home to us the realisation that there is no such thing as a common academic culture.

And later on,

The OU's teaching and learner support methods embody certain western, liberal and academic values...They are an important part of the package. (The emphasis is mine).

It would constitute a worthy comparative research effort to discern and identify what these 'western, liberal and academic values' are, and what may be their historical origin in terms of the various world-views that have contributed to shape them.

OLD vs NEW EDUCATIONAL TECHNOLOGY

(Farnes, quoted by Hawkrige, 1993)

Characteristic	New Educational Technology	Old Educational Technology
<i>Approach to theory</i>	Theory based	Atheoretical
<i>Theoretical base</i>	Social and political theory	(was?) psychology of learning
<i>Treatment of context</i>	Context analysed	Context taken as given
<i>Education viewed as</i>	Social policy	Courses and students
<i>Orientation</i>	Discipline based	Technique based
<i>Scope</i>	Macro, holistic	Micro, atomistic
<i>Level of analysis</i>	Societal, institutional and personal	Course and student
<i>Perspective</i>	Historical and longitudinal	Cross sectional, systemic
<i>View of decision making</i>	Vested interests and conflict	Consensus, rational
<i>Explanations</i>	Dialectical and interactive	Cause and effect, correlation
<i>Focus</i>	Institutional and adult life	Media and learning
<i>Origin of problems</i>	Proactive, to inform theory	Responsive to requests for help
<i>Stance</i>	Critical	Conservative
<i>Evaluation</i>	Pluralistic, goal free, contextual	Based on objectives, ratings
<i>Concerns</i>	Power, process, change, policy	Knowledge and skill
<i>Starting point</i>	Ideology, assumptions and values	Aims and objectives
<i>Mode of consultancy</i>	Question raising, value clarification challenging, ideological analysis	Prescriptive, technique oriented, data collection

MISSING

PAGES

NOT

AVAILABLE

LIST OF INTERVIEWEES

UA:

Reitor Prof. Armando Rocha Trindade.

Prof. Maria Emilia Ricardo Marques, Director Study Centre for Distance Education.

Dra. Lúcia Amante, Lecturer in Sciences of Education.

Eng. José Lagarto, Director Institute of Multimedia Communication.

Dra. Lina Morgado, Lecturer in Sciences of Educacion.

Dra. Lurdes Camacho, Educational Technologist.

Prof. Hermano Carmo, Director of Planning and Development.

Dra. Judite Nozes, International Relations.

UNED:

Rector Professor Jenaro Costas.

Emeritus Professor Ricardo Marín Ibáñez.

Dr. Agustín Velloso Santistebán, Lecturer in Comparative Education.

Dr. José Carpio Ibáñez, Director of Telematics.

Dra. Catalina Alonso, Director of the Master in Informática Educativa.

Prof. Eduardo Ramos, Pro-Vice-Chancellor for Methodology, Media and Technology.

Prof. Ramón Pérez Juste, Pro-Vice-Chancellor for Academic Development.

Dr. Eduardo de Bustos, Director of International Relations.

Prof. Antonio Medina Rivilla, Head of Department: Didactic and School Organisation.

Dr. Lorenzo García Aretio, Director of Instituto Universitario de Educación a Distancia (IUED)

Dr. Domingo Gallego, Deputy Director of IUED.

Dr. Miguel Santamaría, Lecturer in Economics.

Prof. Jose Luis García Garrido, Comparative Education, a former President of the European Association of Comparative Education.

Dra. Amelia Pérez, Director of the Centre for the Design and Production of Audiovisual Media (CEMAV).

Dr. Eduardo Gómez, Coordinator of the Master in Informática Educativa.

OU:

Vice- Chancellor, Sir John Daniel.

Ms Mary Thorpe, IET Director.

Prof. David Hawkrige, Founding Director IET.

Prof. Derek Rowntree, IET.

Prof. Clive Lawless, IET.

Prof. Ray Ison, Systems Group.

Prof. Neil Mercer, School of Education.

Dr. David Wield, Technology Faculty.

Dr. Keith Williams, OUW - Academic Director.

Mrs. Vicky Amos, OUW (Latin America).

Dr. Keith Harry, IET/ICDL.

Dr. Nick Farnes, IET/ICDL.

Dr. Judith Calder, IET.

Mr. Tony Kaye, IET.

Mr. David Christmas, Pro-V-C Office.

Dr. Fred Lockwood, IET.

Dr. Reginald Melton, IET.

Mr. Adrian Kirkwood, IET.

Dr. Andrew Robinson, OU-Europe, Region 9.

Dr. Greville Rumble, Regional Director.

Mrs. Carolina Trewinnard, OU Coordinator, Portugal.

Dr. Gordon Burt, IET.

Mr. Michael Macdonald-Ross, IET.

Dr. Paul Lefrere, IET.

Dr. Stuart Watt, KMI.

Dr. Simon Buckingham Shum, KMI.

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A CASE STUDY: UNIVERSIDADE ABERTA

Introduction

The choice of Universidade Aberta as a case study to be presented here is appropriate for a variety of reasons. Not only it is the more recently created distance teaching university of this study, but it is also the less internationally known of the three universities, with fewer references and publications in English. Its incorporation in this thesis may, somewhat, help to remedy this situation. But more importantly this university has an intrinsic relevance to this research as well as a unique dynamic regarding its creation and role in Portuguese society.

Although the section that follows is mainly descriptive, it is by no means intended as a comprehensive description of this particular university. Statistical data and general descriptive indicators (student numbers, courses, study centres, staff, etc.) are not included here. My aim is rather to identify and reflect on those aspects of the institution deemed as of central importance to the guiding theme of this research: the concept and role of educational technology within a distance teaching university. I will examine some of the most relevant curricular areas, seeking to characterise their significance within the institution, particularly with reference to the role of educational technology. Some of the various philosophical, educational and political factors involved in the shaping and reshaping of Universidade Aberta will likewise be considered. Following this I will seek to identify and elaborate on some of the present institutional issues as well as future trends and projections.

In a larger socio-cultural framework it is becoming apparent the era of setting up national systems of distance education has passed and can be regarded as part of modernity's legacy. Consequently, Universidade Aberta may be one of the last historical instances of this type of institution. The current trend, in a postmodern condition, is rather one of

convergence, in which conventional educational institutions increasingly adopt the tested methods of open and flexible learning pioneered by single-mode distance teaching universities.

Educational Technology in Portugal: Some major developments

In order to understand educational technology in Universidade Aberta it would be helpful to consider some of the historical landmarks in the introduction of mass media for educational purposes. Abrantes (1981) identifies eight major developments in this process:

1. In 1932 a Commission for Educational Cinema was established.
2. In 1963 a Centre for the Study of Audiovisual Pedagogy was set up.
3. In 1964, within the Ministry of Education, an Institute of Educational Audiovisual Media was created and endowed with administrative and financial autonomy.
4. A major development occurred In 1964 with the creation of the Telescola, which represented 'the first systematic use of the media in the context of formal education' (Trindade, 1990, pg. 236). It offered preparatory studies of a technical nature, plus a course in French language. Yet, according to Abrantes (1981) the Telescola was not a system of distance education, but rather a conventional, face to face teaching (set in a classroom, with fixed schedules, and the physical presence of teacher and students), although supported by audiovisual media.

Through the Telescola it was possible to extend compulsory education to six years, proving to be a successful system, both in terms of the number of students served by this

means (over one million, with an annual average of 60,000) and with academic results of students slightly better than the conventional counterpart. It also proved to be effective in terms of making the best possible use of existent social resources, both of facilities and involvement of primary teachers. The model of the telescola was of a strictly programmed learning nature, in regards both contents and procedures, though used in a classroom situation. In this way it sought to make up for detected lacks on the side of the teaching agents (Trindade, 1990). The results of the telescola may be regarded as extremely positive (Carmo, 1994, p.554) and an invaluable supplement to the school network. Nevertheless the unique contribution of the telescola never received adequate recognition. Eventually it became incorporated, with some modifications, into the conventional teaching system.

5. In January 1970, the Institute of Educational Audiovisual Media (see point 3) was substituted by the Instituto de Tecnologia Educativa (ITE) - *Institute of Educational Technology*, with the added commission of "(...) updating of the pedagogical methodologies, using the most modern media and techniques for teaching, and thus allowing for the organisation and support of school activities of a systemic character and other types of educational activities". (From the creation title of the ITE). It had an eventful existence, being buried and later resurrected at different periods, until its final closure in 1988 (the year in which the UA was born).

6. In 1976, two years after the Revolution, the UNIABE (as it was referred to at the time) - UNIVERSIDADE ABERTA was created (Law Decree 146/76), with the instrumental objective of "*contributing towards the progress of democracy and the construction of the socialism.*" The fundamental challenge the UNIABE was meant to face was to combat the inequalities of educational opportunities and to serve a population traditionally marginalised in the conventional system, for geographical, time restrictions and any other motives. Yet UNIABE did not take off, it was a *false start* as Carmo referred to it during the interview. Furthermore, and as a matter of certain historical curiosity, the charter for

the creation of UNIABE though never implemented was never officially abrogated (Trindade, 1993, p.8).

7. In 1977 the first effective initiative of formal distance education was created with the establishment of an Access Course to the university studies. It was based on text and video (broadcast television) and had a network of 70 'Centros de Apoio' (Study Centres) based on the premises of establishments of secondary education. The implantation of this Access Course came as a result of the confusion resultant from the effects of the Revolution of 1974 and the situation of confusion that was affecting tertiary education. In these circumstances it came about more as a tentative measure to respond to a crisis than as an in-depth solution, and the results were not particularly successful. The system operated for 3 years until an additional year of school education was introduced.

The significance of the experience of this Access Course is seen in that it proved the logistic and pedagogical possibility of developing distance education for large populations spread over vast geographical areas. Also it became apparent that this teaching method would only be appropriate for adult populations, reckoning with a level of personal maturity that would allow, after certain training, for students to overcome the barriers of isolation and to manage, with a high degree of autonomy, their own learning process.

8. In 1979 the Instituto Portugues de Ensino a Distancia (Portuguese Institute of Distance Teaching) was created (Law Decree 519-VI/79). The attributions of this Institute were:

- a) the conception and development of courses for Distance Education;
- b) reseach into the methodology of this form of teaching, and
- c) the preparation for the establishment of a future Open University.

The specified target populations of the Institute were: teachers of secondary education, administrative personnel of the government throughout the various regions, and adults in general. Special attention was to be given to support the national heritage and the promotion of the Portuguese language and culture, both within the country and abroad.

With regards to research, two complementary lines were followed: one related to the pedagogy of distance education, and the other to the technology suitable for this teaching method. Finally, and with the mission of making the necessary preparations for the creation of an Open University, the Institute had a clear international vocation "(...) given the obvious need to establish such contacts with foreign organisations of distance education that will make possible the acquisition of knowledge about various models of organisation and operation" (Trindade, 1996).

Some Vicissitudes in the labouring process towards the birth of the Universidade Aberta

Although the Minister of Education at the time (1980) wanted the new Open University to be launched at once, he was persuaded by the President of the Institute Portuguese de Ensino a Distancia of the need to create a transitional structure, that would prepare the way to the university and to prevent it from falling prey to a double pressure: one coming from the government itself to solve the pending question of the teachers training needs, and the other the pressure coming from the students to solve the dilemma of the *numerus clausus* (limited availability of student places). Consequently it was thought that four years would be a necessary period to generate the adequate conditions for the "prudent launching" of the Universidade Aberta.

After this period, in 1984, the report was presented to the new minister of education informing that the conditions were now ripe for the new university. The Minister sought the advise of the Council of University Rectors (*Reitores*). This Council expressed a

negative opinion towards the creation of the university. There was also a concern for an unfair competition that this institution could bring about for the reason of not being subject to the restrictions of the *numerus clausus*. This resistance originated a series of tensions that were only solved after the founding of the Universidade Aberta and with the acceptance by the Council of Rectors of Portuguese Universities of the Rector of the Universidade Aberta as a full member of the Council.

Given its international vocation, the Institute became increasingly active in the European scene, establishing a solid network of support and actually becoming one of the founding members of EADTU (along with the British OU and the Dutch Open Universiteit), even though the Portuguese Distance Teaching University was still in a virtual stage. According to Carmo (1994, p.561), such a network of support was fundamental in establishing the legitimacy for the *Project of the Universidad Aberta*. Finally, and in the context of a Workshop for the "Long Term Development of Distance Teaching in Europe", celebrated in Lisbon with representatives from all European Open Universities, and the presence of the Director of Education of the European Community, Mr. Hywell Jones, the Portuguese Minister of Education, Roberto Carneiro, made the public announcement of the definite creation of the Universidade Aberta on the 2nd July 1988 (Trindade, 1993, p.3). His announcement coincided with an important recommendation by the European Commission with regards to the decisive importance, and strategic role, attributed to the Open Universities in Europe (Trindade, 1990, pp.265-269). Nevertheless, as a counterpart to the successful influence of the international community of distance education in legitimising the creation of the university, the UA was perceived as if being possessed of a *foreign image*. This perception made its adoption as national project difficult and hardly shared by the other higher educational institutions, in contrast to what happened in Spain.

Yet another crisis brought new complexities to the creation of the university. This was the confluence of the personnel from the Instituto de Tecnologia Educativa (see above)

with the personnel of the Projecto Universidade Aberta. There were the problems of bringing together two very different organisational cultures: the ITE was dominated by a technological mind set, with an experience that was based on the Telescola, and a personnel more related to primary and secondary education. On the other hand the culture of the Instituto Portugues de Educação a Distancia was predominantly academic and was staffed by people that had invested considerable energy in research into the modality of distance education. The first exemplified a more burocratic structure, in the weberian sense, while the other was more ad-hocratic, using Toffler's terminology. The 'solution' came through a ministerial decision by which the president of the IPED was also made president of the ITE. We are referring to the Founding *Reitor* of the UA- Professor Armando Rocha Trindade. Nevertheless, the integration of both institutes was never organically complete (Carmo, 1994, p.563).

The Birth

Universidade Aberta became formally constituted in 1988, with the publication of its charter DL 444/88 of the 2nd of December. Before referring to the specific attributions that the charter conferred to the new university, it would be illuminating to view some of the contextual factors present in the dynamics of the Ministerial decision to create the university. First, the country was experiencing a situation of educational reform provoked by the Foundational Law of the Educational System of 1986. There was also a strong political will expressed by the Minister of Education, Roberto Carneiro, to establish the Universidade Aberta. He saw it as a powerful medium to enlarge the educational offer, for improving its quality and for meeting the needs of the Portuguese population, regardless of their geographical distribution. Another influential factor was the favourable opinion, this time, of the Council of Rectors of the Portuguese Universities, once they perceived that the UA would not be targeting the same groups as the other Universities. Finally, it became obvious that a top priority of the educational reform,

motivated by the Law, would be the accreditation of a considerable number of teachers in active service, within primary and secondary education, who were in need of obtaining their professional qualifications (Carmo, 1992). This urgent need might have proved to be the catalyst that precipitated the birth of the university, but at a high institutional cost as we will see.

The Universidade Aberta: Its Mission

The charter (444/88) states the reasons for the setting up of this university in the following terms: "Taking into consideration that the country is undergoing an accelerated pace of development which requires a significant increase in knowledge of large numbers of Portuguese people with speed and sustainability, it is recognised the need to establish an institution specially commissioned to attend to the above mentioned objectives".

This justification of purpose brought into realisation the statement of a previous Law of 1986 (the Foundational Law of the Educational System) which stated that:

- "1. Distance teaching, through the incorporation of multimedia and the new information technologies, constitutes not only a way of complementing the regular modality of teaching, but may establish itself as an alternative modality to the existing system.
2. Distance teaching will play a major role in continuing education and in the ongoing training of teachers.
3. Within this modality of distance teaching finds its place the Universidade Aberta".

The Charter continued stating: "(...) In synthesis, beyond the essential commissions that are common to any university, it is incumbent on the UA to actively intervene in those areas which require the expansion of knowledge of every level, attending large numbers of population, and the flexibility of modalities of access (the underlying is mine) to systematised knowledge." The term "beyond" reflects a very positive increase in the

evaluation of the Institution in contrast to more restrictive positions of previous Ministries of Education, that saw the role of the UA merely as a supplementary function. The law also attributed to the university four major areas of intervention: Distance Education, Research, Cultural Promotion and Diffusion, and Active Involvement in Community Development.

The range in which these four areas of responsibility would be expressed comprised:

- Academic instruction on all levels.
- Training and updating of teachers.
- Research and service to the community in the area of pedagogy and the technology of distance education.
- The promotion of the Portuguese language and culture, both within the country itself and towards the Portuguese community abroad.
- Development and production of technologised materials (*materiais e documentos mediatizados*) with some multimedia components as support to the educational system at large.
- Collaborations with other institutions in this area, ie, the European Community and PALOPS (the Portuguese speaking countries).
- Development and production of materials for the support of vocational training, continuing education and professional updating.
- Community development, particularly through the formation of teachers, the higher levels of Public Administration and any other actions regarded as of national or local interest.

It is worth noticing that the target population of the university is not circumscribed to the national Portuguese geography but reaches out to the Portuguese speaking community globally (Portugal, Macau, PALOPS, and the Portuguese communities in the 'diaspora'), an estimated population of about 180 million.

The problematic general situation of the Portuguese educational system at the end of the 80s had a major pending issue: the urgent need to accredit large numbers of 'de facto' teachers that lacked the necessary professional qualifications. This social and political pressure significantly conditioned the start of UA, under the sign of *the urgent*, and neglecting, in the opinion of our informant, some of *the important* issues that would have been needed to be thought through and set in place. Thus during the first year of its existence, UA's main programme was that of in service teachers training. Nevertheless, the experience was positively evaluated by Carmo in the following way:

"(...) it could be said that this programme was highly effective in that it not only achieved the initial objectives -to train a large group of teachers assigned by the Ministry- but it went beyond that since it opened new possibilities of ongoing training to many others. But on the other hand, it showed the need to improve the functioning of the system in order to cope with situations of 'overload", and to respond to emergencies at a short notice" (Carmo, 1992, p. 42).

Early Beginnings

Four phases can be clearly distinguished:

1. Preparation for launching: from February 1989 to February 1990. This is the time between the nomination of the University's Rector and the inauguration of the first academic year.
2. Setting in motion: covering the first academic year, from February until December 1990.

3. Consolidation: from October 1990 (beginning of the second academic year) till October 1992 (end of the third academic year).

4. Transition and Crisis: October 1992 till October 1993.

I will characterise briefly each of these phases.

1. The preparation was marked by two major thrusts: the need to produce the technologised (the term used in Portuguese is *mediatizados*) materials for the first courses, while at the same time to focus on building the organisational structures appropriate for the objectives to which the university had been commissioned. The initial challenge consisted then in trying to solve this major crisis of training 3500 teachers in order to obtain their necessary professional accreditation. Along with this task was the development of a Licenciatura in Sciences of Education (five years of university studies, roughly comparable with a British Honours degree or, in some cases, with a Master). The university was aware that in accepting this special commission from the Ministry of Education (and this was hardly an option) it was assuming a high risk for its institutional development. Subsequently the best possible measures regarding the quality of the Course were implemented : careful selection of course writers, attention to the communications channels, and the setting up of "feed-back" mechanisms.

Quite interesting were the type of difficulties encountered in trying to negotiate with the authors ways in which the materials might be regarded as suitable for use in a distance teaching situation. Not many authors were used to the concept of "team work":

"The training of these authors was done rather informally, through a series of long discussions with them based on their first manuscripts, in which the area coordinator would propose some changes to the original version. The whole process required certain

capacity for negotiation, seeking to preserve the essential objectives of the pedagogy of Distance Education without hurting the authors susceptibilities" (Carmo, 1996)

Also audio and video support were elaborated for radio and television broadcasting.

The parallel issue the institution was facing was the configuration of its own institutional structure and identity as a university. The aim was "to be as similar as possible to other Portuguese Universities", but diverging merely in creating those specific subsystems considered indispensable to the functioning of a Distance Teaching Institution, ie, O Centro de Estudos de Ensino a Distância (Centre for the Study of Distance Education).

2. The Setting in Motion was marked by "strong pressures on the part of future trainees who wanted to start their course at once and found unacceptable the delays in the beginning of academic activities - these delays having to do mainly with the preparations of the course materials". These pressures generated considerable instability. Then there were the typical difficulties associated with the quick production of the materials, which didn't have the advantage of being tested in advance on a surrogate group of students -to detect and correct important gaps- before its final presentation. For instance some of the materials were addressing situations of a particular school level (years 7th and 8th) while ignoring others (years 5th or 7th). Also knowledge taken for granted in the trainees was also a problem; many of them objected that they had forgotten their long ago acquired scientific preparation (the call was more for a foundational type of course, OU style, than a final academic stage). Even broadcast failures, in some cases due to natural accidents - a bad storm in the North of the country severely damaged several broadcasting stations - completed this first year of trials for the UA. During this period the university also underwent considerable pressure from the political front, demonstrations, anonymous letters and phone calls, antagonistic letters in newspapers, etc.

3. Consolidation: it was characterised by the setting in place of democratic mechanisms for student representation. The situation became considerably more calm and stable than

the previous phase. This improved situation allowed for the diversification of the academic offer. A programme in Sciences of Education was established and various alternatives were open for studies to be pursued alongside the full set of Courses of a particular academic year, that is, students could register for single courses counting towards accreditation, and also in a regime of "free registration" (in the sense of not requiring any previous academic qualification from the student, but neither counting towards academic credit). The production of courses (single subjects) now totalled forty.

Of particular interest to this research, given its significance within the university as a primary means by which to generate and expand an educational technological mind-set throughout the institution, was the creation of a Mestrado em Comunicação Educacional Multimedia (Master in Educational Multimedia Communication) and a Mestrado em Relações Interculturais, to which I will refer later. On the organisational side the university finalised its own statutes that were approved by a Representative Assembly in July 1992.

4. Transition and Crisis 1992/93. This transition refers to the implementation of the newly defined organisational structure according to the statutes. But the crisis came when at the end of this laborious institutional process the new Minister of Education, Couto dos Santos, declared his being opposed to the statutes on the basis that he did not favour a recognition of autonomy for the Universidad Aberta, not from any particular antagonism towards this university but because, in principle, he was never in agreement with the Law of University Autonomy. Such antagonism from the Minister of Education " *created an atmosphere of disorientation potentially dangerous for the institution in the deep sense that the whole project was questioned once again*" (Carmo, 1996). The response of the university was to make renewed efforts for clarifying its *raison d'être* and to put forth a Strategic Plan for the Development of the University with a projection till 1999. As a fruit of the negotiations between the Reitor and the Minister of Education the crisis was once again successfully navigated. Nevertheless, the statutes were definitely published on

the 9th of March 1994, under yet a new Minister of Education, Maria Manuela Dias Ferreira Leite.

Major Curricular Areas

I would like to call attention now to some areas of the curriculum perceived as fundamental values within the UA, reflected in the very statutes. The first one concerns the defense and promotion of the Portuguese Language and Culture. The second one is the crucial role attributed within the development of the university to the Mestrado em Comunicação Educational Multimedia, and thirdly, the Mestrado em Relações Interculturais. Finally, the training of teachers is another important constant (Cf. Statutes, Attributions, pgs. 13-15).

1. The defence and expansion of the Portuguese Language and Culture, within the country itself and abroad, with a special projection towards countries in which Portuguese is the official language and for those communities anywhere in the world of Portuguese descent.

The university has capitalised on this task as a major justification for its existence. It is indeed a fact that Portuguese is a major language of global significance that can be enhanced through the medium of distance education. In this sense the university was born with a global vision which is reflected also in its frontline participation in every language project of the European Community. But within the Curriculum itself this can be clearly observed in the offer of major careers such as: History of Portugal, English and Portuguese Studies, French and Portuguese Studies, Portuguese Language and Culture (Guia do Estudante).

2. The importance of the Mestrado em Relações Internacionais may be seen more clearly in this context of the role of the university for the promotion of the Portuguese way of

being and of living. This commitment is further reinforced through the dynamics of seeking to integrate the masses of population that returned to the metropolis in the process of de-colonisation, during the last few decades. This Mestrado focuses on the intercultural societies, a phenomenon increasingly relevant in our globalised world, but which presents in Portugal a sort of ideal microcosm for its study, with the existence of richly differentiated cultural groups sharing a reduced geographical space. *"The multiplicity of cultures may have its origin in an essentially pacific phenomenon of economic migrations, but with the significative increase of its dimensions, it could, by the mere recognition of differences, express itself in rejection and intolerance."* (Rocha-Trindade and Marques, 1993, p.27).

To avoid and prevent this type of undesirable consequences two political approaches have been developed: a) to legislate the rights of the minorities and b) to undertake a process of intercultural education for the whole population, and specially of those with a particularly influential role in society: teachers, politicians and civic servants. The thematics of the Master relate to Social Sciences, Sciences of Education and Politics and Strategic Planning. The richness of the intercultural context and experience of the academics of UA in this area gives the university a cutting edge expertise in this important social and political field. The statutes refer to the role of the university in serving the larger community in the "areas of pedagogy and the technology of teaching and training at a distance and of educational multimedia communication".

3. This Master in Comunicação Educacional Multimedia (Rocha-Trindade and Marques, 1993) was created as early as 1989, and it was indeed the first Master's Programme to be offered. What appears significant to this research is the influential function attached to this Master in order to train the UA personnel in a technological conception of the educational process, seen as foundational for the development of quality distance education. It is worth noticing the manner of diffusion adopted for sharing this expertise throughout the Institution, offering it as an MA Programme rather than creating a

separate department dedicated to Educational Technology. Most of the UA personnel, in strategic institutional positions, were and are invited to participate in this MA. Until now it has been offered only on a face-to-face basis in Lisbon, but the possibility of offering it via videoconference to UA's centres in Porto and Coimbra is currently being piloted.

4. Finally, although it appears earlier than the rest in the order of the statutes, point b) states: "the university will promote actions related to the training, updating and continuing education of teachers, where these require the use of distance teaching methodologies and of production of multimedia materials". I have already alluded to the specific, and enforced, commission by the Ministry of Education to the UA in order to train a large number of teachers, from the primary and secondary levels, that needed the appropriate accreditation. Thus the Ministry ascribed to the UA a large number of these teachers-trainees (3,500) and did so in a rather coercive, administrative, manner. This approach constituted in the words of Carmo (1994, p. 605) "*one of the capital sins of the programme* " since it is understood that Distance Education presupposes a model chosen voluntarily by the student, open, at least, in this respect. This Programme, Professional In-service Teacher Training, comprised three common subjects: Educational Communication, Methods and Techniques of Education, and Educational Psychology, plus a course on the Didactics of the specific area of the teacher's speciality. In successive years this same curriculum was offered as a course of Accreditation in Sciences of Education, and which was then pursued on a voluntary basis by those teachers that chose to do so.

Educational Technology: Its attributions within the University's statutes

The statutes of the Universidade Aberta (March, 9th., 1994) define its mission by making reference to its specific teaching methodology and its dedication towards "the ultimate goal of democratising Science and Culture". It is significant to this thesis the role ascribed to educational technology, in its broadest sense, in this context and towards this "ultimate goal". The pedagogical project was to be based on the "systematic use of the *mass media* ...with a diversification of supports or channels of communication" (pp. 12,13). They also stress the educational technological ability to reach the individual in his particular circumstance and to count on his ability for self-learning. Educational technology in this way makes also possible the general conception of the organisational structure seen as a balance of "centralised management with operational decentralisation" (p. 12). Educational technology appears as inherent to the methodology of distance teaching with regards to the production of multimedia materials (art. 3, 1b), as well as in connection with the "technology of teaching and training and of educational multimedia communication (art. 3, 1c).

A cautionary note may be in order at this point. For by laying such a strong emphasis on the import of educational technology there might be a danger of assuming that teaching and training might be not only inherently, but even primarily, or fundamentally, a technological process. And consequently that solutions to educational issues are ultimately of a technological nature rather than providing a meaningful support and a component within the larger pedagogical project. Educational technology is also implicitly referred to in the expression "documentos o materiais *mediatizados*" (mediated documents and materials) which implies a technological process guided by an educational objective. In this case the expression is specifically used in relation to the promotion of the Portuguese Language and Culture (art. 3, 1d).

One of the most comprehensive statement regarding the function and reach of educational technology reads: "To develop and produce technologised (*mediatizados*) educational materials apt to be used via technological means of communication, destined to non-formal and formal education, at every level, and to serve as support to the institutions of the national educational system at large" (art. 3, 1e). Once again "methodologies of distance teaching or *multimedia* technologies" are presented in connection with the updating or retraining of personnel from the Public Administration, Central, Regional or Local levels. (art. 3, 1g). A statement is also made regarding international collaboration towards the production of technologised (*mediatizados*) materials (art. 3, 1h), and in this same international context, to contribute towards the development of methodologies and of national and transnacional structures committed to distance teaching and training" (art. 3, 1j).

We may deduct from this range of attributions that the development and production of documents and materials *mediatizados* is considered paramount to the nature of the Institution. Educational Technology, in this sense, makes possible for the university to move towards its objectives of reaching the individual learner in his unique circumstances, but it also opens ways of developing structures for international collaborations and projects for extending the implementation of the specific methodology of Distance Education.

International Cooperation

International co-operation has been one of the strategic supports of the UA. It played a determinative role in its birth (Carmo, 1994, p. 674), and it is viewed as a major dimension for its ongoing development. The success of UA's international involvement may be credited, to a large extent, to the multicultural and linguistic competence of its founding *Reitor*, Professor Trindade. He has demonstrated over the years an unusual

dynamism in the international scene culminating in his being elected to the presidency of the International Council for Distance Education in the Birmingham Congress of 1995.

Also the excellent relationships that Professor Trindade cultivated with UNED were evidenced in the celebration of the Luso-Hispanic Congress (Semana Luso-Espanhola de Pedagogia, 1989) that preceded the launching of the university. This congress came as a result of an "inspiration" (of prodigious Latin spontaneity), that was brilliantly corresponded by the Spanish counterpart and the delegation led by Professor Ricardo Marín Ibáñez. It was a major milestone in the history of the two Iberian Distance Teaching Universities.

For the UA, the development of this international strategy will allow *"a better placement within the system of international relations in this field, an opening of markets for our educational services and products and a means of attracting educational resources"* (Trindade, 1996). Apart from its membership in EADTU and ICDE, UA participates in most educational agencies of the European Union, as well as its extensions towards governments of Portuguese speaking countries.

Summary: Key elements of Universidade Aberta

In 1974 Portugal found itself at a turning point of its History. The process of accelerated change triggered by the decolonisation and its recent democratisation has been reinforced by the global transition from an industrial to an information-based society. Also Portugal integration within the European Union provoked major structural transformations at every level of its social fabric. This major process of change was perceived as a potential risk of a loss of national identity, unless development policies would take a larger look and a deeper commitment than to mere economic growth. In this context the major resource of the nation must be seen in the people themselves and in their ability to

exercise their citizenship within a true democratic process and as the agents of their own individual and collective destiny.

All these major transformations presented the Portuguese educational system with challenges that were difficult to cope with. It also brought to light some of the weaknesses and limitations of its educational provision. It was in this context that the UA was configuring its strategic role as a major tool for providing professional training at a distance. It was also considered an instrument for the renewal of the educational system as a whole, particularly with respect to the introduction of new technologies in the teaching-and-learning process. Educational technology was very much conditioned by the experiences of the Telescola, TV and the use video, which in the opinion of Marín Ibáñez expressed in the *Semana Luso-Espanhola de Pedagogia* (1989) is superior to that of UNED, and Universidade Aberta seems to have a greater awareness with regards to the specific methodology for curriculum development in distance education.

Nevertheless, the need for the setting up of a national distance teaching university was not perceived unanimously. There has been ongoing conflicting opinions about this which has brought about considerable ambivalence among the political forces. This was manifested in the way the Universidade was instrumentalised to meet the crisis related to the need of training a large number of teachers, who were forced by the Government into this modality of learning. Its precariousness was also revealed in the uncertainty with which the university faced the recognition of its own statutes and autonomy by the Ministry of Education.

Its model of teaching is designed with the concept of self-learning at its very core. The university pays careful attention to the quality of their distance teaching materials and the resource of telephonic communication with the lecturers at Lisbon. It also makes extended use of radio broadcast and video and clearly places the concept of face-to-face tutorial support on a secondary plane.

A General Evaluation

UA produced effective opportunities for educational development, specifically with respect to the training of thousands of teachers to obtain their academic qualifications. The ambivalent positions of the political agents, on the contrary, provoked considerable confusion and delays in the expansion of its academic offer. These conditions made for a poor institutional image in the eyes of the national public in the beginning, which needs to be restored and reinforced with a strong campaign of public relations. Also the foreign imprint with which the university was born, due to its dependence on the validating support of the distance education international community, must give way to a more radical awareness of the university as a national project.

The existing support network would appear as inadequate from the point of view of becoming an effective instrument for the local development of human potential. It has been indicated the UA is based on a model of self-learning plus telephone tutorials. The university's delegations (Porto and Coimbra) have a role of pedagogical labs to experiment with new form of educational innovations that could later be extended to the rest of its network. Since the Primary Support Network is dependent on the collaboration of local educational institutions, and these institutions have often shown to have conflicting interests to those of the UA, the beneficial effect of this network seems to have been rather limited.

The Open University did find indeed a much more favourable milieu for the renting of facilities and the recruitment of tutors. But the British culture in general is marked by a stronger sense of associationism and of teamwork. In Spain we find that lecturers in the conventional Universities felt attracted to teach as tutors in order to promote their academic careers - UNED having considerable academic prestige in the nation. In other cases there are a good number of local medical doctors, solicitors and intellectuals who, by vocational solidarity, felt compelled to lend their collaboration to task regarded of

primary social importance and which gave the whole experience a distinct community flavour. UA hopes that with the increase in numbers of its programmes, in formal, non-formal and continuing education, that there will develop a social awareness in the country that would stimulate the setting up of a stronger supportive network with the involvement of local authorities and institutions (Carmo, 1994, p. 682).

**Interview Analysis with GABEK (Ganzheitliche
Bewältigung von Komplexität Holistic Processing of
Linguistically Represented Complexity)
Gestalten Tree and Conceptual Matrixes**

This appendix presents the basic approach followed in the interviews conducted at each of the Universities' HQ sites and contains the actual interview analysis using GABEK. It discusses and illustrates the fundamental concepts of the GABEK methodology as it deals with the qualitative data of this study and how was applied in this research, as well as the adaptations that became necessary in the process of the interviews themselves. This is followed by two sections. The first one presents the 33 Gestalten that were obtained. Each Gestalt is shown with the respective Gestalt grid of key terms that were identified within the original interview data and from which a summary statement was produced. In this way a structured analysis and interpretation of the original interview material is supported and becomes accessible for critical reflection. The second section, Hyper-Gestalten, brings the level of the analysis one step upwards within the GABEK Relevancy Pyramid thus providing a higher, more comprehensive, interpretation of the interview data. Finally, the appendix includes a series of diagrams (Gestalten Tree and Conceptual Matrixes) which serve as tools for mapping and navigating the knowledge structures elicited through the analysis and interpretation of the data. These diagrams are also meant to support an ongoing process of immersion in the original data and to stimulate reflection and dialogue based thereon. These diagrams are complemented by the Gestalten Key Terms List (Appendix 6) and the List of Original Statements (Appendix 7).

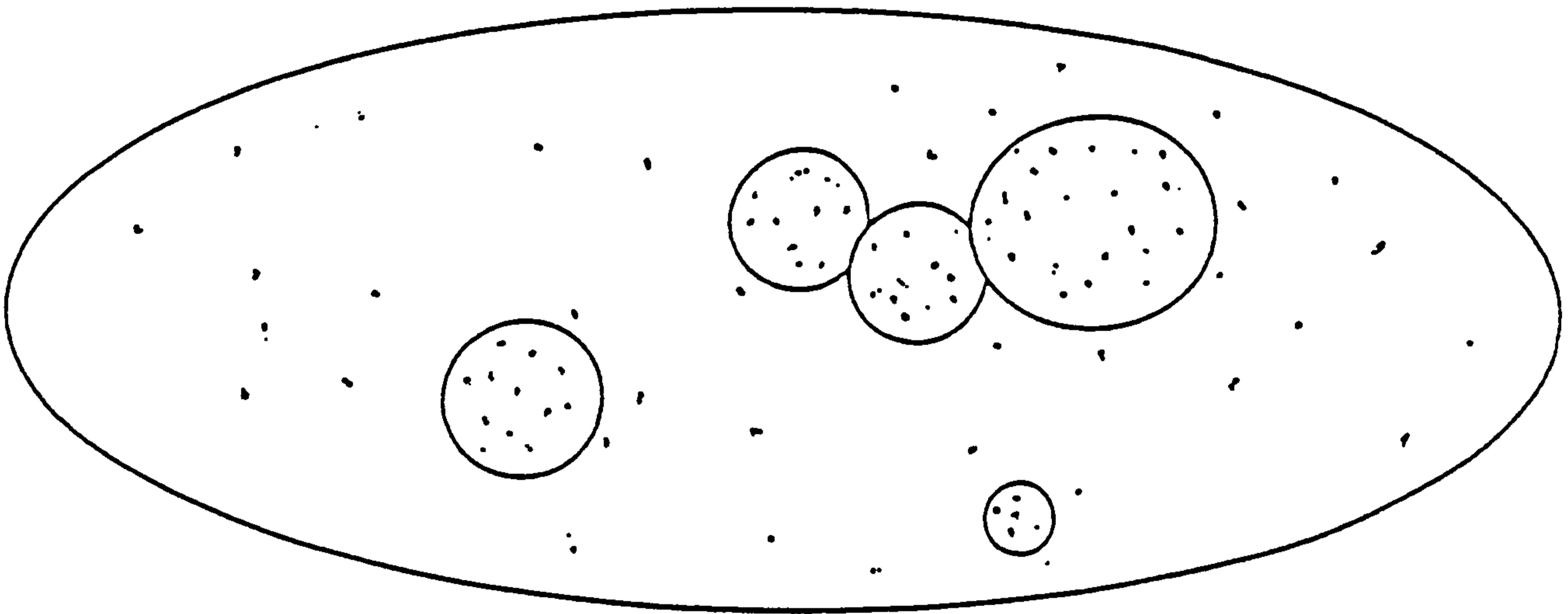
The use of GABEK and the understanding gained through the analysis of the data had a major effect in refocusing the remaining of this research. Basically the results of the analysis marked the transition from the original comparative approach to a more philosophical and theoretical reflection on the nature of educational technology.

Data Processing with GABEK

In chapter 3, in the section entitled 'Some Preliminary Clarifications Regarding the Interview Data', I already explained how the interviews were conducted, recorded and transcribed, as well as the amount of interview data to which GABEK has been applied. I wish to concentrate now in explaining the practical procedure.

An individual sentence or a group of sentences that would configure a certain unity of thought and meaning arising from the interview data, could be represented as a spread of dots with varying degree of relationships between them. In the following diagram dense fields represent groups of sentences with some shared information (i.e. two sentences are considered closely related if they share some key terms in common).

The following diagram illustrates the basic GABEK approach:



Sorting out the Clusters

Following a careful scrutiny of the transcribed data, and informed by a growing familiarity with the body of the data and the literature, I would determine a number of selections from each of the interviews which, in my view, contained relevant information to the purpose of the research as guided by the interview questions (chapter 3). I then proceeded to code the sentences - units of meaning - by selecting key terms in order to provide a basis for finding connections between them. This is illustrated in the example below using a text unit from one of the interviewees, the view of one senior IET member:

Educational technology is not about any particular technique or piece of equipment. It has more to do with the approach of how you look at the educational process in its different facets and how the different bits fit together and how teaching and learning goes on. Using the term 'technology' seems to misdirect people - people think first about technology when you mention educational technology.

On this text I have coded a number of key terms or lexical concepts (usually between three and nine) such *educational technology, technique, equipment, educational process, teaching, learning, technology*. Implicit in the text I had also discerned the notion of *system*, and have included it as a key term in substitution for the expression: 'how the different bits fit together and how teaching and learning goes on'. In most cases I could find the key terms as they stand in the text itself, while in a few cases, as I have just indicated, I have deduced them from the context.

Subsequently, the GABEK programme enabled me to generate a table of the key terms I had selected for each original statement. Appendix 6 shows the list of key terms that were identified in the course of the analysis and the codified statements in which they appear. Also, Appendix 7 Illustrates the way in which these key terms were diagrammed, along with the original statements.

Having thus codified and identified the key terms I was in a position to view the sentences in relation to the key terms that are shared with other statements within the whole universe of the data. Groups of sentences, related in this way, would provide the raw material out of which the Gestalten (the plural form of the word Gestalt in German) would emerge.

A Gestalt consists of three basic elements - building upwards: 1) the original statements generally consisting of one paragraph expressing a certain unity of thought; 2) a matrix representing all the key terms shared in common by all statements, and the number of times they occur in the various statements in the matrix, and 3) a representative statement of the original data that should incorporate, in a balanced way, the key terms and relationships mapped out in a matrix. It could be said that a Gestalt results from the integration and presentation of selected original data that link meaningfully between themselves by sharing two or more key terms, while at the same time each contributing a novelty value to the rest. An example of a Gestalt is shown later in this section.

Basically the primary rule of Gestalt formation is that the statements should have two or more key expressions in common. Nevertheless, this basic rule is supported by sophisticated statistical formulation that provides different methods of cluster analysis and that is operationalised by a PC program ('Winrelan', developed by J. Schonegger and J. Zelger) which allows the following operations:

- textual input.
- structuring units of meaning.
- coding in object language.
- coding in meta-language.
- elimination of synonyms and homonyms.
- creating lists of key expressions.
- selection of trends and weak signals.
- coherence analysis, cluster analysis, network analysis, etc.

The statistical formulation of Winrelan, the PC program that supports GABEK, is described by Zelger (1996, p. 7) in the following manner:

1) First a square matrix is created, in which all the texts (file cards) are related to each other. As values 'Aij' the number of the key terms occurring in both texts 'i' and 'j' are entered. The diagonal value of Aii for every text 'i' equals the number equals the number of marked key terms in text 'i'.

2) This matrix is normed: $N_{ij} = A_{ij} / \sqrt{A_{ii} \cdot A_{jj}}$. For every Nij we obtain a value between 0 and 1.

3) Next step is to calculate the distance matrix:

$$D_{ik} = j(N_{ij} - N_{kj}) / n$$

where, n = the number of existing pairs (i,k) and $j = 1, \dots, n$. Using this method, the text 'i' and 'k' are considered similar if they contain common key expressions. The texts 'i' and 'k' are compared with all the other texts of the matrix, their results are added and their difference is then interpreted as the distance between 'i' and 'k'.

4) Next, the distance grouping is established: the smallest value Dik is identified and the corresponding texts 'i' and 'k' are joined.

5) These steps are applied recursively until all the texts have been joined to form a single one, whereby for any pair (i,k) the mean value is $(D_{ik}' + D_{ik}'') / 2$. If a further text is to be added to a text group then the distance value of the text group is weighted according to the number of text contained.

Once all the Gestalten have been formed they can be structured hierarchically into a sort of relevancy pyramid (Fig. 2 Relevancy Pyramid), which will be explained in the next section. To the extent that some of the original statements do not share common information with the rest they are dropped since they do not enter in the Gestalt-building process, 'the continuation of this hermeneutic procedure will lead to a data base increasingly consistent and coherent' (Zelger, 1995, p. 102). However, those 'dropped'

statements are always available to provide meaningful insights into the overall semantic field and to illuminate particular issues that may prove specially relevant (Fig. 3 Linguistic Gestalt-Building: a Hermeneutic Learning Procedure).

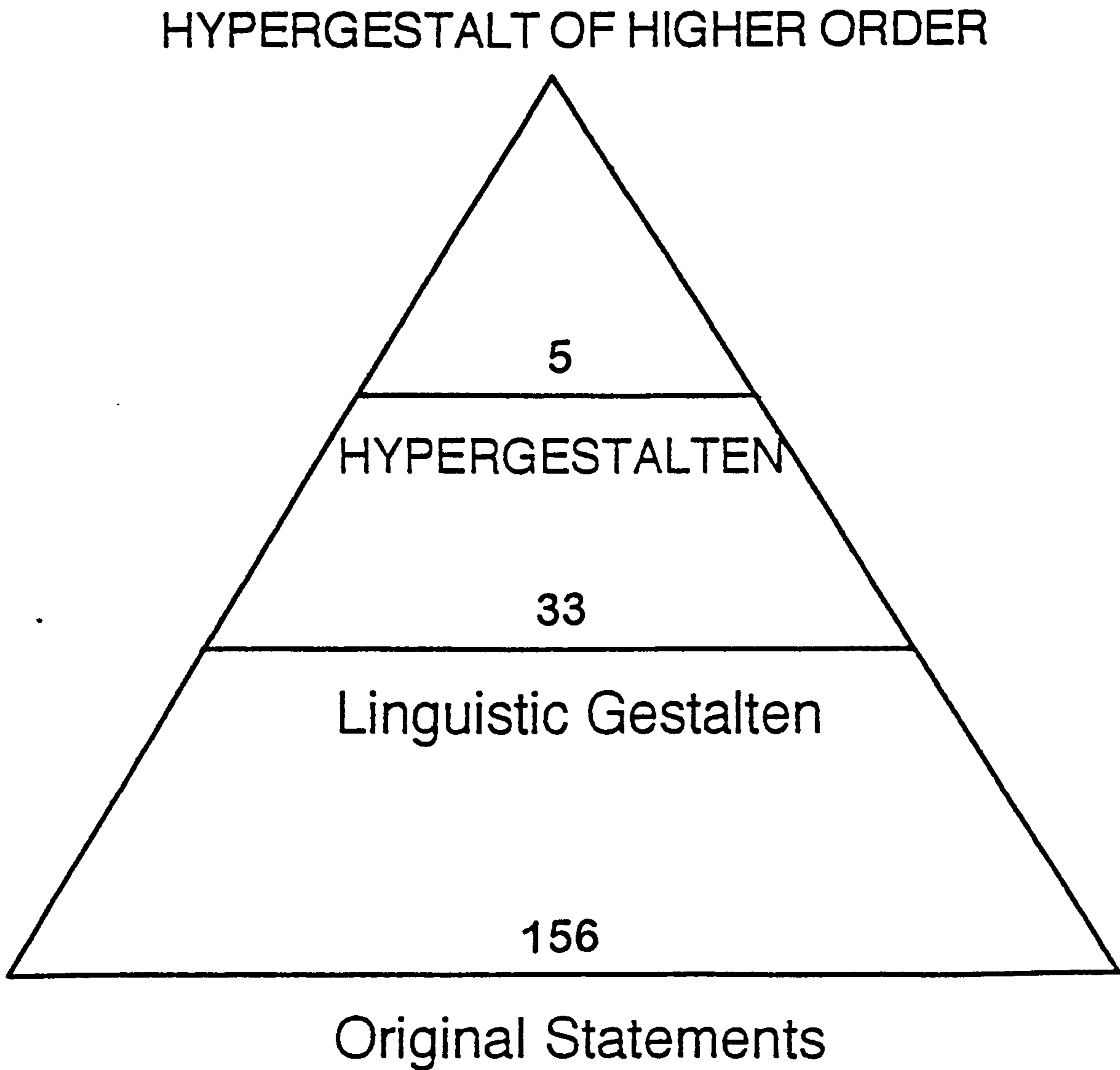
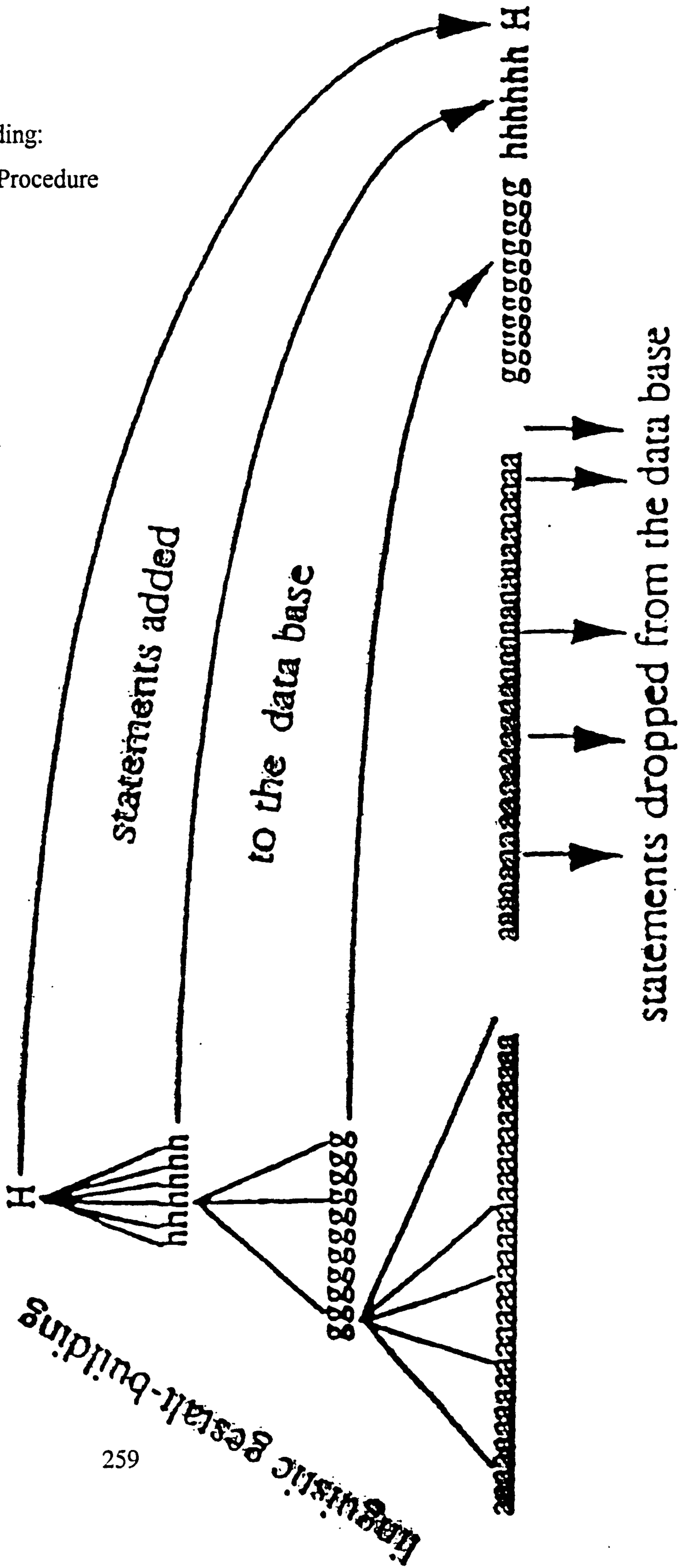


Figure 2: Relevancy Pyramid

Figure 3: Linguistic Gestalt-Building:
A Hermeneutic Learning Procedure



Linguistic Gestalt-building

Let us consider as an example the Gestalt 7, which comprises 6 original statements. (There is no particular significance to the order of the Gestalten, neither to its title which acts merely as an identifier and does not seek to exhaust the content of the Gestalt).

Gestalt 7 ET-Pedagogy-DE

Technology may be part of an answer to an educational problem. But in so many cases people are just 'prodding' things by adding yet another gimmick rather than having an educational rationale for doing it. To be useful educational technology will need to be pedagogically located within an actual teaching situation. Technology per se may be a necessary, yet not a sufficient condition to have educational technology in the service of distance education. There is a need for appropriate educational technology rather than the high tech hype and digital utopia (digutopia) one encounters in the corporate sector. The fundamental educational questions need to be addressed and the real test must be seen in the quality of the learning as experienced by the learner.

	6	3	3	2	2
Ai5	Educational_Technology		pedagogy		
Da9	Educational_Technology		pedagogy	distance_education	corporate_sector
Fa1	Educational_Technology	technology		distance_education	
Fe1	Educational_Technology	technology	pedagogy		
Ac7	Educational_Technology				corporate_sector
Af9	Educational_Technology	technology			

Ai5

My own feeling about educational technology is that it has to be pedagogically located within a teaching situation.

Da9

In terms of partnerships with companies we need to ascertain what each can offer. They can contribute a whole telematic set up but they lack understanding of pedagogy and of distance education. And it is here where we can be useful. Plus we also have considerable

mastery with regards to video and audio technologies. I think that if a symmetric relationship is established many good things could be accomplished.

Fa1

Technology is a necessary, yet not a sufficient condition to have educational technology in the service of distance education.

Fe1

Some use of technology may be part of an answer to an educational problem but it may not be. Probably far more likely not to be. Educational technology has more to do with the basis of the curriculum design of a course, rather than with the method of delivery. In so many cases people are just 'prodding' things by adding yet another gimmick rather than having an educational rationale for doing it. Or they say, people are now playing with computers, therefore I must include computers as an addition, without fundamental educational questions about what it is that they are trying to do.

Ac7

We need appropriate technology and appropriate educational technology in those particular contexts rather than the high tech hype and digutopia. There is a strong potential for new forms of domination (slavery) through the new technology and the economical and corporate interests pushing them.

Af9

It is easy to be carried away by the flashy latest technologies, but the test must be the quality of the learning experience as experienced by the learner. So my advice is not to hurry to adopt the latest available technologies...let others make the mistakes. We haven't learnt to use the print and audio technologies sufficiently, we are very much at the beginning stages.

From Gestalten to Hyper-Gestalten

Once all the Gestalten have been constructed, we can then proceed to form the Hyper-Gestalten using the Gestalten, as it were, as the new set of original statements. It should be noted that with every higher level of Gestalt formation the construction of meaning is subjected to the interviewees initial statements, so that at any point it would be possible to call up those statements and test the relative validity of any representative statement that may have been proposed. An illustration of a Hyper-Gestalt follows:

Hyper Gestalt 1: Finance-Thatcherism-Language

Political issues play a major role in the implementation or otherwise of innovations. Decisions concerning the allocation of resources are crucial in that respect. A market-led approach has resulted in a consumer oriented education. Seeking to 'maximise audience' has become a matter of institutional survival in order to attract government funding. To prove to be financially successful has become the first and foremost criterion within the Units. This has generated significant confusion and disruption with regards to the educational mission of academia. The sense of solidarity has been eroded and substituted by a spirit of competition. There is no longer the sense of being a community of scholars. Expressions such as 'cheque-led courses', 'customers', etc. mark a surrender to the business language and represent a paradigm shift.

	5	3	2	2	2	2	2
G-3	finance					innovation	politics
G-11	finance	Thatcherist_economics			market		politics
G-16	finance	Thatcherist_economics		Units		innovation	
G-17	finance	Thatcherist_economics	language	Units	market		
G-5	finance		language				

GESTALT (3) Threat-polit-inno-financ

Political issues play a major role with regards to the implementation or otherwise of innovation. These innovations are usually perceived as a threat by existing institutional structures. Decisions concerning the allocation of finances constitute one of the ways of responding to a threat.

GESTALT (11) Market-Government-OL

Governments (in the context on the European Union) have endorsed a market-led approach as to the courses being offered and which results in a consumer oriented education. In the UK, in 1985, with the creation of the Open Tech, the government was indicating that Open Learning was to be a major trend in the future. Seeking to maximise audience becomes then a matter of survival for educational institutions in order to attract government funding. Consequently market research becomes imperative. This has led to mass education although this does not necessarily entail a superficial learning experience.

GESTALT (16) OL-Innovate-Generations

The first generation of OU people were willing to take a risk, but they are now leaving. The second generation are half/half between innovators and those being of a more conventional, less committed type. The contextual pressures are quite different now. To prove to be financially successful has become the first and foremost criterion. The Thatcherist type of economics has produced an increased rigidity in the relationships between the different Units. In its initial phase, the OU was regarded as innovative because of its open access policy and also because of its well prepared teaching materials, which have also impacted many conventional systems.

GESTALT (17) Thatcherism-Competition

A typical legacy of Thatcherism has been a 'customers' trend towards a market-led education. Internally, the OU Units have been redefined as more autonomous and needing to balance their own budgets. This has negatively affected the solidarity within

the institution and has set up a kind of competitive spirit, sacrificing the sense of being a community of scholars. It has also rendered the institution less flexible. All this process is reflected in subtle changes in the use of language.

GESTALT (5) Academia-corporations-business

The selling of the soul of academia to corporations took place through language - the surrendering to the business language represented a paradigm shift. The need to prove to be financially successful has become the first and foremost criterion, hence the expression came up of 'cheque-led courses' and the setting up of a self-financing approach. Nevertheless the educational world is not primarily regarded as a commercial institution, therefore commercial indexes of success do not properly assess education. There is a strong potential for new forms of domination through the new technologies and the economical and corporate interests pushing them. We need to understand the type of healthy collaboration that should exist between academia and the corporate sector. This involves developing mutual knowledge and mutual respect for the proper areas of influence and decision making of each, as well as for the particular form of the language they use.

The Gestalten Tree

The GABEK analysis was applied to 156 original statements, out of which 33 Gestalten and 5 Hyper-Gestalten were obtained. The whole map of the data becomes a Gestalten Tree, a sort of landscape version of the 'relevancy pyramid' (Fig.4 Gestalten Tree).

Gestalten Tree

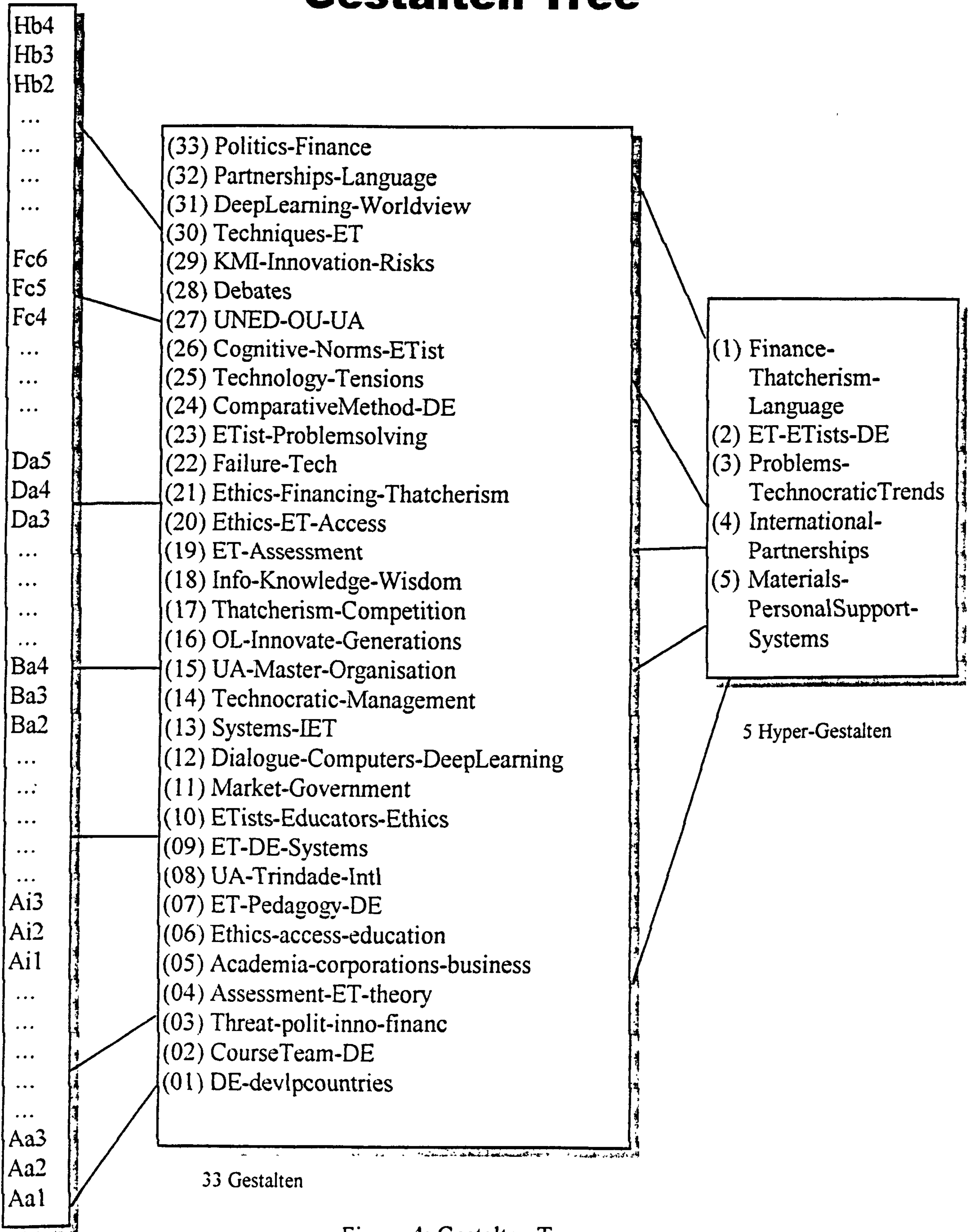


Figure 4: Gestalten Tree

Causal Network; Conceptual Matrix

GABEK permits a representation of causal relationships among those statements in which the researcher has introduced a parameter of causality (see Appendix 7, for example Aa3, where funding is deemed causal to competition). However, I encountered some technical difficulties in applying the programme to reproduce the mapping of the Causal Network. A viable alternative was for me to create a 'conceptual matrix' visualising the major topics as they emerged in the Gestalten and Hyper-Gestalten representations. The connecting lines between the topics would then be identified by means of the original statements expressing the various relationships. In this way core values and primary aims contained in the research data were established. These would provide a sense of the value system pulsating within the universe of the data.

(Fig .5 Conceptual Matrix. Note: The length in the connecting lines does not have any statistical significance among the connected variables, only that there exists some meaningful relationship between them. Occasionally an indication of directionality has been shown).

Through building the shared understanding within a group of people co-operation of many individuals is encouraged. Like a road map, GABEK serves as a system of orientation for the whole landscape of opinions. We may explore the thematic connections in the way that one would explore various routes. Furthermore the route that one selects, and accounts for, is always open to alternative routes thus promoting a firm data-grounded dialogue among all those interested in examining this particular road map and expanding the hermeneutic possibilities of the universe of the data. The whole process seeks to holistically integrate orientational, explanatorial and implementational functions into a unity of thought and action.

Conceptual Matrix #1

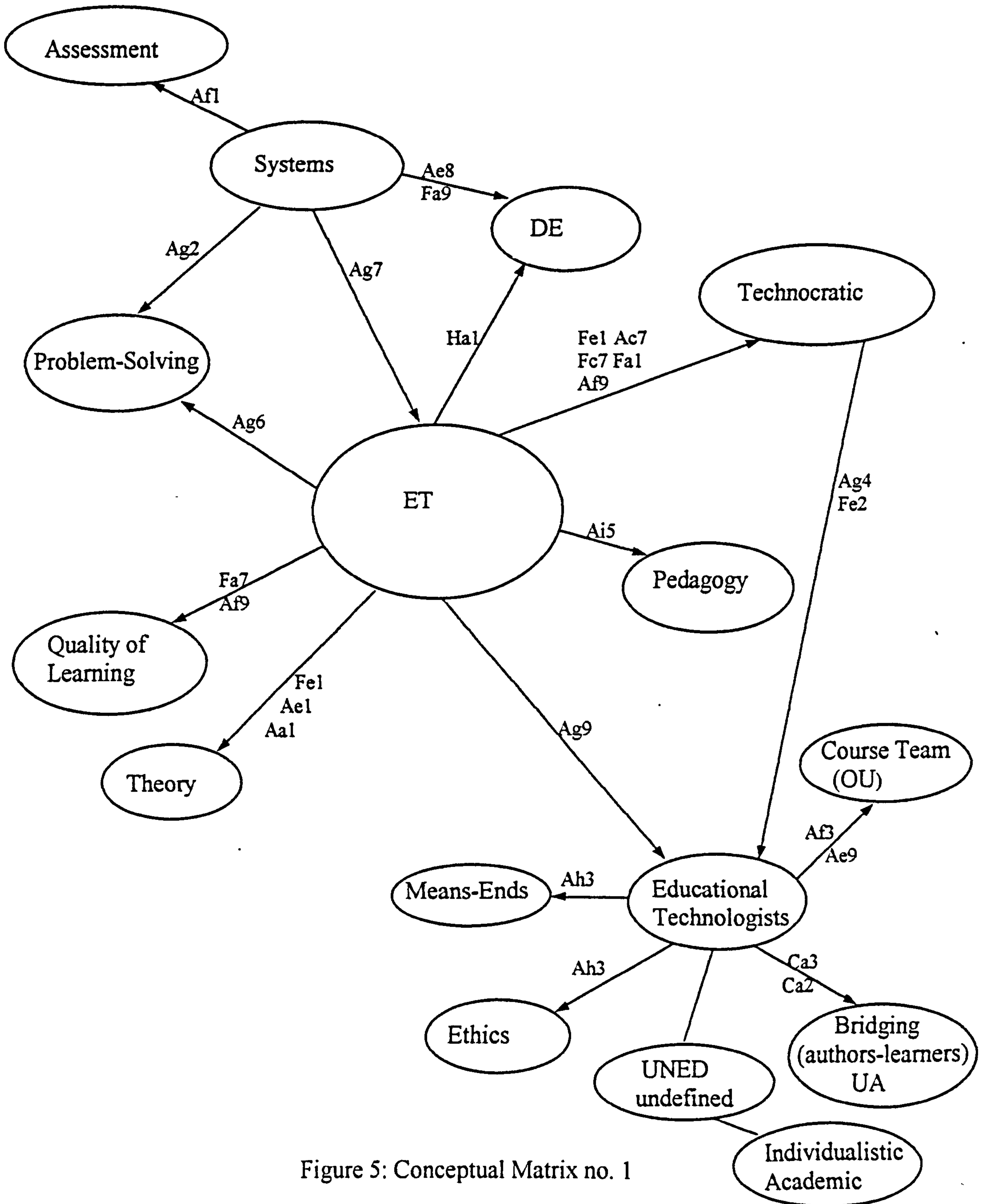


Figure 5: Conceptual Matrix no. 1

Conceptual Matrix #2

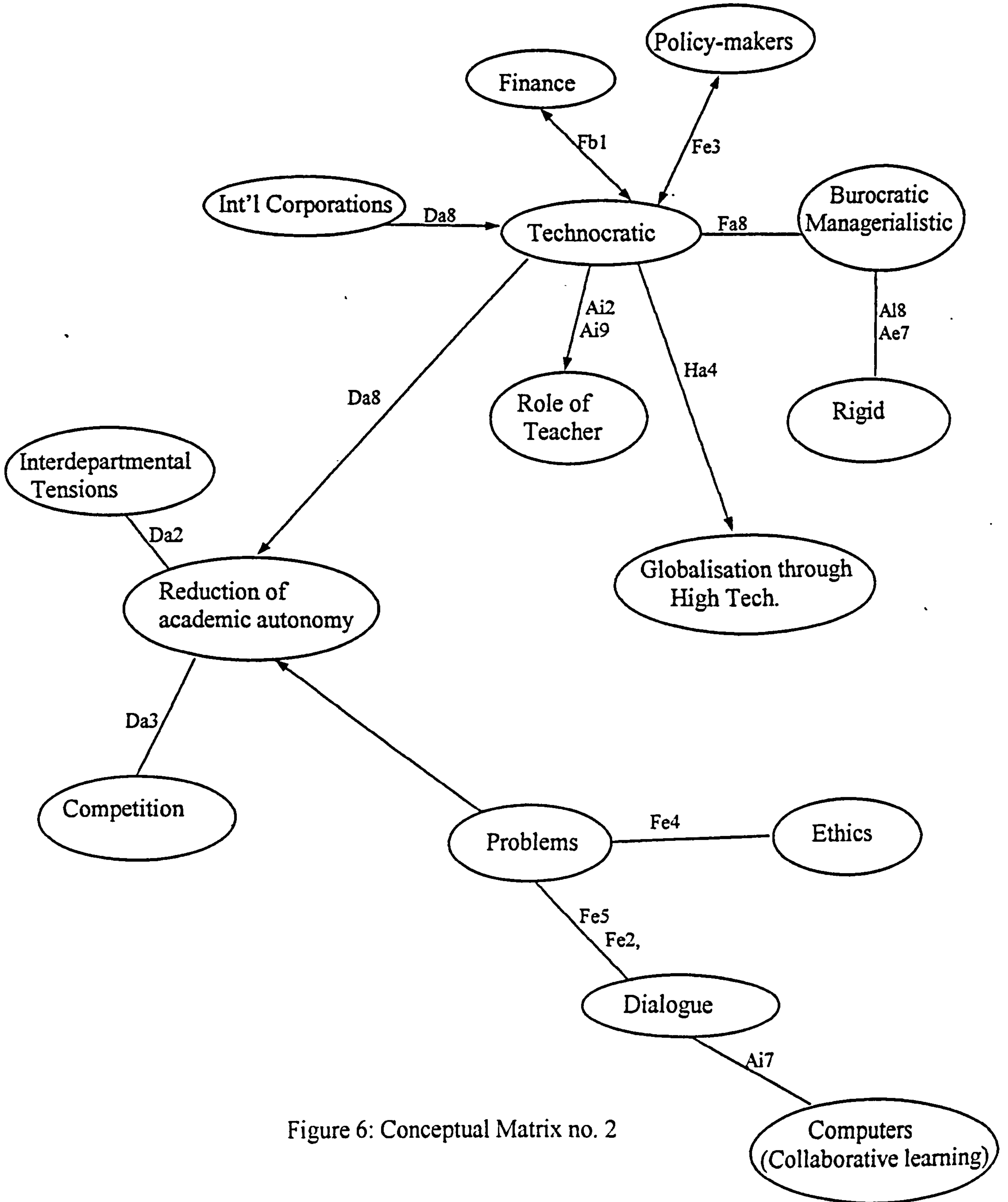


Figure 6: Conceptual Matrix no. 2

Conceptual Matrix #3

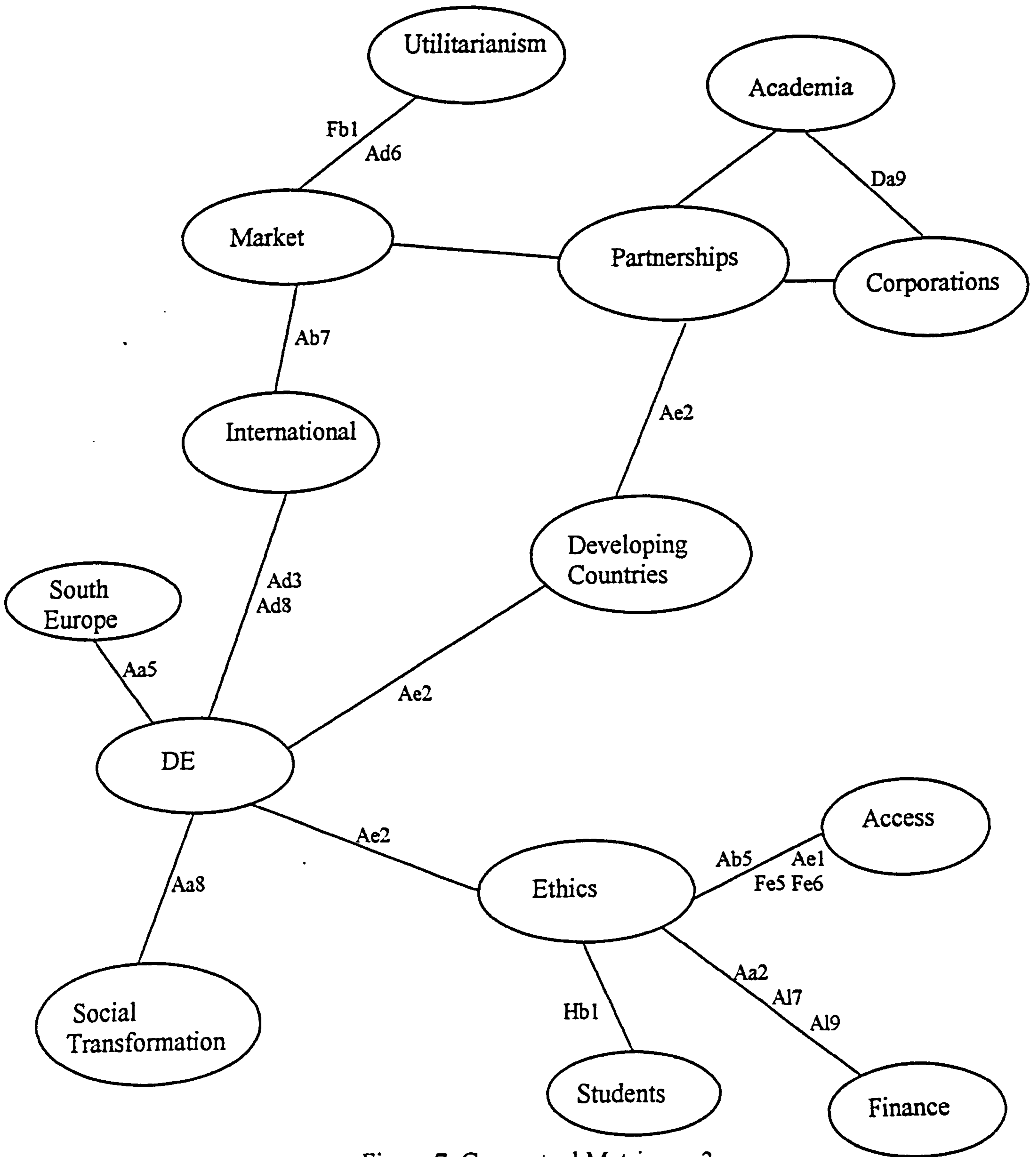


Figure 7: Conceptual Matrix no. 3

Conceptual Matrix #4

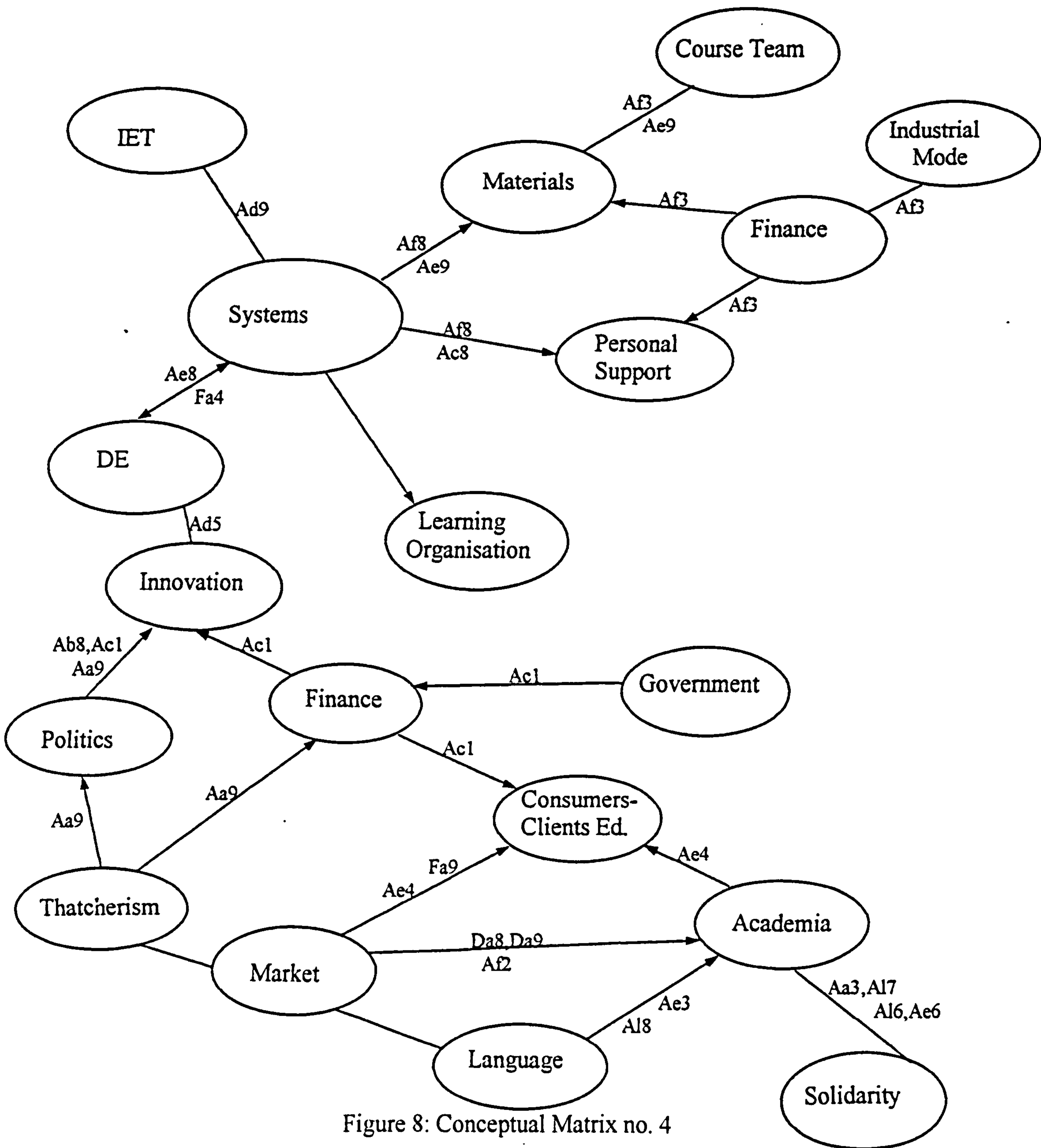


Figure 8: Conceptual Matrix no. 4

The Gestalten (1-33)

Gestalt 1 DE-devlp-countries

Internationalism is a big issue in distance education, specially concerning developing countries, yet it has not been a matter of much discussion and debate in the OU. There are problems with respect to partnerships. This is sometimes shown in an institution seeking to play a 'messianic' role - said with respect to the OU by a member of this institution. In the third world, International Agencies prefer to support primary education developments over university. There is also the problem that staff from conventional institutions have not much understanding of distance education.

	3	2	2	2
Ab3	international			Distance_Education
Ae2	international		partner	
Ad3	international	developing_countries	partner	Distance_Education
Ad8		developing_countries		

Ab3

Yes, it is, but where...I mean OK. Everybody was told about it [KMI], nobody was asked to discuss it. I mean, it is a significant development as it is the whole question of internationalism...Now of course the way you raise a debate says something about what you want the outcome to be.

Ae2

With regards to international collaborations we have not been good at being partners but rather playing a 'messianic' role.

Ad3

In the third world International Agencies prefer to support primary education developments over university. For instance Canadian agency involvement in the Caribbean, and also to ODA (Overseas Development Agency) in Shri Lanka. But a problem is that the staff in these projects came from conventional institutions with not much understanding about Distance Education.

Ad8

The future lies in the global development, and developing countries and with exciting organisational systems.

Gestalt 2 Course-team-DE

Distance Education is an innovative, materials-based learning system. The institution should invest significantly in the production of the best possible materials, otherwise it will end up being an extension of the conventional system. It needs support, e.g. well-trained personnel and the necessary investments. The course team has proven to be essential to the quality of the system.

	5	3	2	2	2	2	2
Af8	Distance_Education	support				personal	material
Ac8	Distance_Education	support				personal	
Af3	Distance_Education		invest	course_team	innovation		
Ae9	Distance_Education	support		course_team			material
Ad5	Distance_Education		invest		innovation		

Af8

Distance Education is a materials-based learning system as opposed to classroom or people based. Yet, the best materials will fail unless the support, personal and organisational, is adequate.

Ac8

There is an important distinction to make between Distance Education, just a delivery mechanism of information and instruction vs. Open Learning which requires a committed and well trained personal support.

Af3

Distance Education is patterned after the industrial model: you invest much more at the beginning [economies of scale]. The best idea we had was the Course Team, along with Open (social dimension) and distance (both practical and economical).

Ae9

Basics of a distance Education system: Dedicated materials. The institution should invest significantly in the production of the best possible materials, otherwise what you have is an extension of the conventional system. Then, the course team model has proven to be essential. Also the concept of an institution of national scope [strong political aspect], and finally, the use of mass communication technology. Apart from that you could take a bulldozer and get rid of the rest.

Ad5

The first generation of OU people were willing to take a risk, willing to step in the dark, even in the face of mockery from the educational establishment. Setting up a totally new form of institution, teaching in a totally new way. It took a particular type of people.

Gestalt 3 Threats-polit-inno-financ

Political issues play a major role with regards to the implementation or otherwise of innovation. Innovations are usually perceived as a threat by existing institutional structures. Decisions concerning the allocation of finances constitute one of the ways of responding to a threat.

	3	3	2	2
Ac1	threat	politics		finance
Aa9	threat	politics		finance
Ab4	threat		innovation	
Ab8		politics	innovation	

Ac1

Yes, I did inquire on this particular. I was told that it was the government who specifically designated the funding for the academic, undergraduate, program. Nevertheless, on one occasion on which I specifically posed the question to the government officials I received the disquieting news that after releasing the funding it was up to the University to decide how distribute it.

Aa9

Some of us believed that in the founding documents of the University there was a commitment to Community Education. The Community Education Program took off with very little finance, yet we found a number of sympathetic groups in general society, such as the Playgroup Association. Once the thing took off it began to be perceived as a threat by other sections within the institution. Thanks to the personal support and involvement of Walter Perry things were facilitated considerably.

Ab4

He asked the question of whether the function of the KMI was merely to design prototypes or "is it also involved in educational training...as a good way for a new organism to take roots in the institution is offer concrete training services to colleagues, who otherwise would feel threatened or marginalised".

Ab8

In Portugal, the worst enemy was the Council of Rectors of the other 14 or 13 conventional universities which did not recognise the need for a new university.

Gestalt 4 Assessment-ET-theory

Assessment is a key function in Educational Technology. It drives education. Objectives (though not a currently fashionable term due to its behaviourist connotations) are at the heart of an educational system. There is an absence of theoretical people who are thinking deeply about assessment. This absence is seen as an institutional weakness.

	5		2	2	2	2	2
Af5	assessment	key					Objectives
Af1	assessment	key		weakness	education	educational_tech nology	
Aa1	assessment		theoretical_peop le	weakness			
Ab1	assessment		theoretical_peop le				
Af2	assessment				education	educational_tech nology	
Af4		key					Objectives

Af5

Objectives are at the heart, while assessment is the key. Open learning workbooks and assessment are really the essentials. You should think your objectives and activities all the way through. Mass education doesn't need to make necessarily for superficial learning.

Af1

Course production is the core of Educational Technology, along with exams and assessment, because assessment drives education. OU does certain things better than Oxford, i.e. Course Team production - most conventional universities use OU materials as a resource-, yet it has the weakness that it cannot provide tutorials Oxford style. Each university is better for a certain type of learning.

Aa1

There aren't very many theoretical people, not at the moment. This is one of the great weaknesses of the institution. We don't have people who are thinking deeply about assessment, educational policy, and so on. We lack that kind of person on a whole. We have lots of people who are interested in Technology.

Ab1

One of the debates that doesn't really seem to take place very much is the one that Harris 'Openness and Closure in Distance Education' raised.

Af2

The real test of genuine effectiveness in educational technology is to what extent the world is changed as a result. And this is an essentially educational question, not how many reports does it generate. We are not a commercial institution, therefore commercial indexes of success do not assess properly education. You look at economics after you have got your values straight.

Af4

Objectives are at the heart. Once in place they will determine all else in the system. In later years the term became no longer fashionable in the IET, so we prefer to use the expression: what do you want your learners to be able to do as a result of the teaching-learning process?

Gestalt 5 Academia-corporations-business

The selling of the soul of academia to corporations took place through language - the surrendering to business language represented a paradigm shift. The need to be financially successful has become the first and foremost criterion; hence the expression 'cheque-led courses' and the setting up of a self-financing approach. Nevertheless the educational world is not primarily regarded as a commercial institution, therefore commercial indexes of success do not properly assess education. There is a strong potential for new forms of domination through the new technologies and the economical and corporate interests pushing them. We need to understand the type of healthy collaboration that should exist between academia and the corporate sector. This involves developing mutual knowledge and respect for the proper areas of influence and decision-making of each, as well as for the particular form of the language they use.

	5	4	3	3	3	2	2	2	2	2
Ae3	corporate_sector		academia	business	change					language
Ad1	corporate_sector		academia							language
Ad6				business	change			context	success	
Af2		educational_technology	academia	business	change		assessment		success	
Ac7	corporate_sector	educational_technology					assessment	context		
Da8	corporate_sector	educational_technology				partnerships				
Da9	corporate_sector	educational_technology				partnerships				

Ae3

The selling of the soul of academia to corporations took place through language - the surrendering to the business language represented a paradigm shift. I could point out precisely the time when this took place. It was with the setting up of a self-financing division, the expression came up: 'cheque-led courses' that came to substitute need-led courses.

Ad1

We need to understand the type of healthy collaboration that should exist between academia and the corporate sector

Ad6

The 1st. generation is now leaving. The 2nd. are half/half. Half of them were innovators, others were more conventional, less committed. There was a change in the type of people. But also the context pressures are very different now, with less room for experimenting. You have to prove to be financially successful. This has become the first and foremost criteria.

Af2

The real test of genuine effectiveness in educational technology is to what extent the world is changed as a result. And this is an essentially educational question, not how many reports does it generate. We are not a commercial institution, therefore commercial indexes of success do not assess properly education. You look at economics after you have got your values straight.

Ac7

We need appropriate technology and appropriate educational technology in those particular contexts rather than the high tech hype and digutopia. There is a strong potential for new forms of domination (slavery) through the new technology and the economical and corporate interests pushing them.

Da8

One of our concerns in UA with regards to ET is that we perceive a sort of strong international lobby coming from software and hardware companies. We feel it is a threat. We need to keep control of our own institutional decisions and not be determined by others agendas. Another strategy is that, rather than creating new functions within the university, we seek to establish partnerships with companies of excellence outside.

Da9

In terms of partnerships with companies we need to ascertain what each can offer. They can contribute a whole telematic set up but they lack understanding of pedagogy and of distance education. And it is here where we can be useful. Plus we also have considerable

Appendix 5

mastery with regards to video and audio technologies. I think that if a symmetric relationship is established many good things could be accomplished.

Gestalt 6 Ethics-access-education

Access is the biggest ethical issue in Open and Distance Education. Along with it is the issue of financing, as to whether people can afford it or not. Yet the assumption of trying to make education available to as wide a number of people as possible is not universal. In international circles there are perceptible disagreements as to what the purpose of higher education should be. For instance, when the Free University of Iran was first created its primary motivation was to keep people at home. There is also a moral responsibility towards students in offering them a reasonable opportunity to succeed, while at the same time never compromising on academic standards.

	5	2	2	2	2
Ab5	ethics		ignorance	access	economics
Fe4	ethics	higher_education	ignorance		
Fe5	ethics	higher_education		access	
Ae1	ethics				
Hb1	ethics				economics

Ab5

Oh, the biggest one surely must be around access. Access and the financing of education. Are we genuinely open to people who cannot afford it because they are low paid or are we not? That is my perception of ethical issues and there would be people who wouldn't see that as a problem.

Fe4 [What about ethical issues in ET?]

I don't know, I really don't know about that one, I have to admit. I think a lot of people involved in higher education aren't actually particularly well versed in educational issues at all.

Fe5 [With regards to international collaborations...]

The assumption of trying to make these things as available as possible to the wider number of people as possible, that we are not to be an elite activity that just goes on for a small select sector of the population. My values, on that basis, are shared with a number of colleagues, but not all, and it colours the discussion I have had with people in other institutions. Sometimes disagreements come on that basis: what we see as the purpose of education in higher education and not about other particular aspect we are talking about.

Ae1

There was an ethical issue about the IET involvement with Distance Education in Iran, with the Free University there, whose primary motivation was to keep people at home.

Hb1

I think that you have two responsibilities towards the students. One, you want to be certain that the students will have a reasonable possibility of success, and therefore it is not moral to take students if you know that they are going to fail, for that is a waste of their money and it also smashes their self-confidence. Second, as a University, or any educational institution, actually has, if it is at all worthwhile, a deep concern about standards which students will have when they exit. And so you don't ever compromise on your academic standards. If the student is not up to getting a degree, then you have failed them.

Gestalt 7 ET-Pedagogy-DE

Technology may be part of an answer to an educational problem. But in so many cases people are just 'prodding' things by adding yet another gimmick rather than having an educational rationale for doing it. To be useful ET will need to be pedagogically located within an actual teaching situation. Technology per se may be a necessary, yet not a sufficient condition to have ET in the service of DE. There is a need for appropriate ET rather than the high tech hype and digital utopia (digitopia) one encounters in the corporate sector. The fundamental educational questions need to be addressed and the real test must be seen in the quality of the learning as experienced by the learner.

	6	3	3	2	2
Ai5	Educational_Technology		pedagogy		
Da9	Educational_Technology		pedagogy	distance_education	corporate_sector
Fa1	Educational_Technology	technology		distance_education	
Fe1	Educational_Technology	technology	pedagogy		
Ac7	Educational_Technology				corporate_sector
Af9	Educational_Technology	technology			

Ai5

My own feeling about Educational Technology is that it has to be pedagogically located within a teaching situation.

Da9

In terms of partnerships with companies we need to ascertain what each can offer. They can contribute a whole telematic set up but they lack understanding of pedagogy and of distance education. And it is here where we can be useful. Plus we also have considerable mastery with regards to video and audio technologies. I think that if a symmetric relationship is established many good things could be accomplished.

Fa1

Technology is a necessary, yet not a sufficient condition to have ET in the service of distance education.

Fe1

Some use of technology may be part of an answer to an educational problem but it may not be. Probably far more likely not to be. ET has more to do with the basis of the curriculum design of a course, rather than with the method of delivery. In so many cases people are just 'prodding' things by adding yet another gimmick rather than having an

educational rationale for doing it. Or they say, people are now playing with computers, therefore I must include computers as an addition, without fundamental educational questions about what it is that they are trying to do.

Ac7

We need appropriate technology and appropriate ET in those particular contexts rather than the high tech hype and digutopia. There is a strong potential for new forms of domination (slavery) through the new technology and the economical and corporate interests pushing them.

Af9

It is easy to be carried away by the flashy latest technologies, but the test must be the quality of the learning experience as experienced by the learner. So my advice is not to hurry to adopt the latest available technologies...let others make the mistakes. We haven't learnt to use the print and audio technologies sufficiently, we are very much at the beginning stages.

Gestalt 8 UA-Trindade-Intl

The first years of UA were very much the personal achievement of Rocha Trindade(1). He has always been very active in international circles. He has succeeded at creating an awareness of the linguistic compatibility among southern European nations(2). A major international achievement, under his initiative, has been the creation of the International Open University of Asia, based in Macao and functioning as a partnership of three different educational models (English, Portuguese, and Chinese). He believes that DE is the answer for massive retraining of the population in places that are experiencing rapid social changes. Nevertheless there has been criticism that under his leadership UA became a very hierarchical institution.

	6	1	1	1	1	1	1
Ba3	UA	successors	first_years				
Ba4	UA	Master					
Da5	UA	Chinese	Hong_Kong	Macao			
Aa8	UA	need	contents	industrial_fabric	society	distance_education	training
Aa5	UA	potential	partnerships	success	relationships	Southern_Europe	language
Ba1	UA	trust	culture	frustrating	hierarchy		

Ba3

The first years of the UA were the personal achievement of Trindade, with enormous sacrifices. Now there is no one with the international stature of Trindade to take his place and the possible successors are people who haven't been in the University from the beginning.

Ba4

Everyone took the Master in Multimedia Educational Communication which had the effect of rendering the team more cohesive.

Da5

UAIA (Universidade Aberta Internacional da Ásia), based in Macao, offers three type of courses following either the Portuguese model, English (via Hong Kong) or Chinese. It has been functioning for about four years. Students in Portuguese are the smaller number.

Aa8

Everything changed; the way of thinking, the society, the industrial fabric and the liberal relationship. There was a need for massive retraining of all segments of the population and we were unable to do so at the time; it took too long to make this conversion. Society

has to change in as short a period as possible and it is my personal belief that distance education systems are just the answer because they allow for flexibility of time and pace, and flexibility of contents; you can provide the education and training that people are interested in.

Aa5

This simple formula worked wonderfully, and had a most liberating effect in the relationships. Now in the network of universities that we are part of with Spain, and also Italy, we are successfully employing the same approach. This has created a new awareness of linguistic compatibility and potential for our countries in Southern Europe.

Ba1

Ours [UA] is a very hierarchical University and there is no 'empowerment'. There aren't many organisms for horizontal co-ordination. It is always from top downward, and it is quite frustrating. It is an issue of cultural organisation. It gives little trust to people.

(1) President of ICDE (1995-1999).

(2) Organised the first Luso-Hispanic Conference in Pedagogy at the official launching of UA in 1989. The Conference was significantly multicultural in that presenters used their native languages without mediating translation. It was a reputed success.

Gestalt 9 ET-DE-Systems

ET is an essential part of any DE system; a necessary condition to develop a meaningful educational relationship at a distance. ET is about the process of teaching and learning and how to apply it in a given context. It is not about any particular technique but rather a systems approach to education concerned with how the different bits fit together as a problem-solving activity. The term 'technology' in ET seems to misdirect people, as they tend to think first about technology.

	6	5	4	3	2	2	2
Ag6	Educational_Technology	learning		teaching			
Ag7	Educational_Technology	learning		teaching			education
Fa2	Educational_Technology	learning	technology	teaching		approach	
Fa7	Educational_Technology	learning	technology			approach	
Fd4	Educational_Technology	learning	technology		essential		education
Ha1	Educational_Technology		technology		essential		

Ag6

If teachers were to take this kind of educational technological approach to their work, they would be constantly learning about teaching - and probably never teaching in quite the same way a second time. Learning as drawing out rather than propping in to people...as a problem-solving activity.

Ag7

Educational Technology is in the business of understanding the processes of teaching and learning but not for their own sake (as pure science), but in order to apply that understanding to the practical activities of education.

Fa2

ET is not about any particular technique or piece of equipment. It has more to do with the approach of how you look at the educational process in its different facets and how the different bits fit together and how teaching and learning goes on. Using the term 'technology' seems to misdirect people - people think first about technology when you mention ET.

Fa7

I think we find two approaches in ET:

- a) How can I use technology to simulate or enhance what I normally do. It is the prevalent USA view - dissemination of conventional education.

b) Let's think about learning experiences we may want to give our students and there are certain things you can do better through the use of certain technologies.

Fd4

I don't think the important issues have changed over the years, but the context in which they manifest themselves has: What is learning and how is it best effected in relation to technological developments? What is education and who is it for? Is education just about giving information? What is technically possible, is it equally educationally desirable? It was thought in the '50s that Educational TV would solve the problem. Then later on, in the early computers days: 'All we need is to get computers into all the homes'. And to a certain extent all the stuff these days about multimedia, Internet, the WWW is still in that direction. The perception of it is that all we need are waves of information and that is it!

Ha1

Yes, I do see ET as an essential part of any distance educational system. You have to do that, don't you? You cannot communicate at a distance, or develop any sort of educational relationship at a distance, without using technology somehow.

Gestalt 10 ETists-Educators-Ethics

An educational technologist is one who is thinking technologically about the educational process, about the rational adjusting of means to ends. At the same time there needs to be a moral awareness about justifying ends as well as means, although not all educational technologists would seem to agree with this. A distinction is made between educators and educational technologists - as those having a supportive role towards educators- and the suggestion that educational technologists may function more effectively if they would work in an actual context, seeing their contribution as a part and not as the whole. Educational technologists would need to put the emphasis more on the educational rather than on the technological.

	6	6	3	2	2		
Ag4	technology	educational_technologist	education				
Ag9	technology	educational_technologist	education				
Ah3	technology	educational_technologist			Educational_Technology		
Ai1	technology	educational_technologist		teaching_and_learning			
Aj1	technology	educational_technologist		teaching_and_learning			
Fe2	technology	educational_technologist	education		Educational_Technology		

Ag4

An educational technologist is not fascinated with technology. I haven't thought of myself for years as an educational technologist, but rather as someone involved in educational development.

Ag9

Technology is more a state of mind (rational and scientific) than a set of tools. It might consist of a set of techniques rather than a set of tools. The art or *tekne* (Greek) of performing a certain activity. An educational technologist is one who is thinking technologically about the educational process.

Ah3

Educational Technology involves being rational about both ends and means. Both have to be justified, although I am not sure that all educational technologists would agree that

justifying ends is part of the technology. It would be a pretty dangerous kind of technology that had no moral awareness about the purposes it is applied to.

Ai1

I do not see myself as an educational technologist. An educational technologist is primarily someone who helps educators and people who are being educated to use technology to achieve their goals. He is looking at ways of developing technological support for the process of teaching and learning. I don't do that. What I do as an educator, I am a teacher, what I do is look for appropriate tools to help me achieve good teaching and some of those tools will be technological.

Aj1

If educational technologists do think of themselves as serving the process of teaching and learning then one thinks they ought to accept, which I think they are very reluctant to do: that their particular technology can only be an element in that process and not an embodiment of the whole. They'll probably function much more effectively if they realise that they are going to be working in the actual context in which their technology is only one element in it and it will never be all of it.

Fe2

[ET?] Yes, I would put the emphasis on the first word as opposed to the second. Sometimes I refer to myself as a sceptical enthusiast: I can see great advantages and possibilities and potentials [with regards to the new technologies], but one has to be rather sceptical as to what the origin of these things are, why are people doing it in the first place and so forth, and if you can see useful educational rationale for doing it then fine, no problem. But when it is not advancing any educational causes, then I see the problem or rather potential dangers.

Gestalt 11 Market-Government

Governments (in the context of the European Union) have endorsed a market-led approach to determine the courses which will be offered to the students and this has resulted in a consumer-oriented education. In the UK, in 1985, with the creation of the Open Tech, the government was indicating that Open Learning was to be a major trend in the future. Seeking to maximise audience becomes then a matter of survival for educational institutions in order to attract government funding. Consequently, market research becomes imperative. This has led to mass education although this does not necessarily entail a superficial learning experience.

	5	3	2	2	2	2	2
Af7	Market					consumer_orientated_education	Mass_education
Fa9	Market	course			government	consumer_orientated_education	
Ae4	Market			Thatcherist_economics			
Ae3	Market	course		Thatcherist_economics			
Ag1			Open_learning		government		
Af5		course	Open_learning				Mass_education

Af7

If you don't make decisions on the marketing level others will do it for you who might not be the right people or who understand the nature of the products. Market research becomes imperative where there are multiple options for a consumer-orientated avalanche of students

Fa9

There is some pressure coming from the Government supposedly intending to give greater choice to students; people having a greater say in their educational options. This has produced a market-led approach as to what courses are offered, which translates into playing to the audience - audience maximise. A consumer-orientated education vs. what might be a true educational need. And the former has become determinative to attract government funding.

Ae4

This was also a typical Thatcherist legacy - 'Customers' trends towards a market-led education. It became a matter of institutional survival which according to Maslow's hierarchy of needs is the primary need.

Ae3

The selling of the soul of academia to corporations took place through language - the surrendering to the business language represented a paradigm shift. I could point out precisely the time when this took place. It was with the setting up of a self-financing division, the expression came up: 'cheque-led courses' that came to substitute need-led courses.

Ag1

In 1985, with the establishment of the Open Tech, the government was basically saying that Open Learning was the thing. Information Technology has transformed my vision. It takes distance out of distance education. By the end of the decade, all courses will have a strong CMC component.

Af5

Objectives are at the heart, while assessment is the key. Open learning workbooks and assessment are really the essentials. You should think your objectives and activities all the way through. Mass education doesn't need to make necessarily for superficial learning.

Gestalt 12 Dialogue-Computers-DeepLearning

Dialogue is a part of the perennial problem of distance education which has often been regarded as almost a one-way delivery process. On the other hand, people dispersed geographically, even dispersed in time, may have more significant dialogue than people co-existing in one place at the same time. Dialogue is only a part of the educational process. There is also a certain amount of imparting of information and knowledge, so that people do not need to reinvent the wheel. It is at the point of putting things together in some form of meaningful whole, when dialogue with other people becomes the essential part. Computers can enable students to have a critical and mutually supportive educational relationship thus enlarging the universe of discourse where various kinds of verbal interactions can take place.

	6	2	2	2	2	2	2	2
Ai6	dialogue						student s	educator
Ai7	dialogue					computers	student s	educator
Fc2	dialogue				distance_ed ucation			
Fc5	dialogue	essential	worldview	deep_learning				
Fc3	dialogue		worldview	deep_learning				
Fc4	dialogue				distance_ed ucation			
Ea1		essential				computers		

Ai6

I am not sure that the new technology offers something which is completely distinct from what you might call the old technology. What I think the technology allows is the presentation of information and ideas and opinions and even values in a way that both teachers and learners can look at and can be presented in a dialogical space rather just being in the teacher's head.

Ai7

Computers enable students to jointly have a critically and mutually supportive educative relationship in dealing with something which doesn't get the ultimate authority of the teacher residing in it. By permitting this the universe of discourse is enlarged as well as the kinds of dialogues and roles and the quality of those dialogues.

Fc2

I think that it is part of the perennial problem in distance education, the dialogue aspect, where education is seen not specifically as dialogue but as almost a one-way giving process, which to a certain extent is sort of the behaviourist-cognitive science approach - not all, I am grossly generalising.

Fc5

It is at the point of putting things together into some form of meaningful whole that the interaction and dialogue with other people is the important, the essential part.

Fc3

Dialogue is only a part of the educational process. There is an amount of imparting of information and knowledge, of pointing people in certain direction - 'this has been done in the past' - so you don't need reinventing the wheel. There is a body of knowledge and experience that is a starting point people can use. But then, I think, it goes beyond that. Building on that you then go to an area where dialogue becomes important and necessary. At a basic level it is making sense of that information, ideas, principles, and this needs a certain amount of negotiation: it got to be incorporated within the person's own understanding of the world.

Fc4

I have been in many face-to-face situations where very little dialogue goes on, and in certain distance education situations where people are dispersed geographically or even dispersed in time but there has been more in the way of dialogue than people coexisting in a room together at the same time and same place.

Ea1

I am an IT sceptic. The big question to me when seeing all these wonderful technologies is 'so what?' 'how can we use it?' 'what is its purpose?' 'what can it do for people?' Think for instance of the marvel of the Virtual Microscope in the crystallography programme. We died for something like this thirty years ago. This is magic.

Gestalt 13 Systems-IET

DE is only possible from a systems approach. Cybernetics and management are very important in setting up a learning organisation. The IET is systemic by its very nature. Yet the question is, “what type of system is needed?” It cannot be merely mechanical. The best distance learning material will fail unless the personal and organisational support is adequate. The IET in the OU has sought to apply a systems approach to the educational process. Nevertheless, it has tended to become more technologically orientated at the expense of making space for people of more theoretical orientation.

	6	2	2	2	2
Ae8	system				Distance_Education
Af8	system			organisation	Distance_Education
Ad9	system		IET		
Ae5			IET		
Ag2	system	Educational_Technology			
Ag5	system			organisation	
Fa4	system	Educational_Technology			

Ae8

You can only have Distance Education from a systems approach, through cybernetics. The OU had excellent management scientists like Michael Neil, but the University didn't follow on this line. Cybernetics and management are very important for a Distance Education system. A learning organisation is what is needed [Donald Schoen].

Af8

Distance Education is a materials-based learning system as opposed to classroom or people based. Yet, the best materials will fail unless the support, personal and organisational, is adequate.

Ad9

IET should have linked more with the Systems group. IET is systemic by its very nature, but the question is what type of systems. There is a need to represent the idiosyncratic development, and not merely the mechanical aspects.

Ae5

We lack someone like a Brian Lewis, a true theoretician, willing to support long range development of ideas. The IET has high quality technicians, but a lack of educators...few people with experience in education. In fact there are no relationships between IET and School of Education.

Ag2

Educational Technology is essentially a rational, problem-solving approach: a way of thinking sceptically and systematically about teaching and learning. Technology is more an approach, something systemic, rather than a set of tools.

Ag5

Sometimes people would ask us to write a training programme. When we examine the situation we may suggest that the initial requirement might not be what is needed but rather something to do with the organisational structure.

Fa4

I was introduced to ET in the OU context through the works of Rowntree. For him ET has to do with the application of scientific principles as opposed to anything having to do with machines as such. Trying to apply some form of systemic approach and analysis to the educational process. If that involves the use of machines, well that may or may not be the case, it is not a necessary part of the process.

Gestalt 14 Technocratic-Management

The danger of technocratic tendencies is that sometimes people think that a form of technology can or should replace the role of the teacher; that you have learners and all you have to do is to provide them with resources. But technology can never be neutral. There seems to be a trend for administrators to take over a more significant role than educators. In practice, when people are wearing the administrative hat they think: 'How can we use technology to get materials to the widest number of people in the cheapest way?' As an example of this trend, the OU began calling its students 'customers' which reflects a change of ideology in management circles. The OU became a rather rigid organisation (this was not so in its pioneering days). Although management is very important for a Distance Education system it is very hard to find good managers.

	3	3	3	2	2	2
Ae6					administrative	educator
Ai2	technology			failure		educator
Ai9	technology		students			
Fa8	technology		students		administrative	
Al8		management	students	failure		
Ae8		management				
Ae7		management				

Ae6

The OU lacks some common ground for interfaculty meetings. It wasn't like this in the early days. But the trend from educators to administrators took over. There isn't any academic common room which I see as central to the building of the academic community.

Ai2

The danger, I suppose, of technocratic tendencies, i.e., sometimes people think that a form of technology can or should in fact replace the role of the teacher, and I think that this is totally misguided in more than one way. I think it is sort of philosophically misguided because it never really replaces the teacher in the sense that there is always a hidden teacher in the technology.

Ai9

There has been a tendency in some technological developments to think you can have learners and all you do is to provide them with the resources. I think that that is a

misconception of how humanity operates. Technology should never be offering this kind of isolated, idealised learner's resources. What it has to offer is some way of mediating a relationship between a teacher and a learner. You can never offer resources in a neutral form. Technology can never be neutral, because if it is guiding the construction of knowledge in some way, then it is making choices.

Fa8

In practice, when people are wearing the administrative hat they think: 'how can we economically use technology to get materials and things to students. What is going to be the cheapest way of getting things to a wider number of people'. Whereas on other occasions, the theme is: 'What we would like our students to be able to do? What type of experiences would we like them to learn from?' You cannot totally separate the two things.

A18

As an example [of effects of Thatcherist economics] the OU began calling its students 'customers', which is a linguistic reflection of a change of ideology among the management circles. It makes the organisation less flexible and less able to respond to needs. It makes it even slower at responding which is one of the OU bigger problems. Compared with competitors and other institutions the OU is very slow to respond. The OU could have retained its cohesiveness as an institution and become more competitive. It is merely an ideological game and now there is a greater sense of competition within the institution and divisiveness and less trust.

Ae8

You can only have Distance Education from a systems approach, through cybernetics. The OU had excellent management scientists like Michael Neil, but the University didn't follow on this line. Cybernetics and management are very important for a Distance Education system. A learning organisation is what is needed.

Ae7

The OU became [as administrators took the reins of the institution from educators] a most rigid organisation. The reality is that few people want to take managerial positions...and is very hard to find good managers. Poor management at the OU is a major problem.

Gestalt 15 UA-Master-Organisation

One of the main aims of the UA's Master in Multimedia Educational Communication is to permeate the entire organisational structure of the university with regards to Educational Technology. This is done by encouraging as many of staff as possible to take this MA. This has had the effect of making the team more cohesive. An important role of educational technologists in UA is to create a bridge between authors and the distance learners by adapting the academic content to various media. One of the organisational concerns at UA is to withstand the strong international pressure coming from information technology corporations in order to not lose control of their own institutional decisions.

	3	3	2	2	1	1
Da4		Master			organisation	
Ba4	UA	Master				
Ba2	UA			strategy	vision	access
Ca3		Master	Educational_Technology		contents	media
Da8	UA		Educational_Technology	strategy	corporate_sector	decisions

Da4

The function of the Master in Multimedia Educational Communication is permeate the different layers of the University with the end of shaping the whole organisational culture.

Ba4

Everyone took the Master in Multimedia Educational Communication which had the effect of rendering the team more cohesive.

Ba2

The Statutes [UA, 1994] were discussed point by point involving everyone, from down upwards. It was a deeply democratic exercise. But it was never done again, neither was it verified. Now the Strategy Plan [1995] is considered a confidential document, and it is profoundly absurd that the very personnel of the UA don't have access to it. It is a lack of vision of the hierarchy.

Ca3

Our educational technologists are colleagues who have completed the Master in Multimedia Educational Communication. One of their major functions is to

accommodate (transform) the text from the author to our style, to create a bridge between the author and the distance learner by adapting the content to the various media.

Da8

One of our concerns in UA with regards to ET is that we perceive a sort of strong international lobby coming from software and hardware companies. We feel it is a threat. We need to keep control of our own institutional decisions and not be determined by others agendas. Another strategy is that, rather than creating new functions within the university, we seek to establish partnerships with companies of excellence outside.

Gestalt 16 OL-Innovate-Generations

The first generation of OU people were willing to take risks, but they are now retiring. The second generation are half/half between innovators and others being of a more conventional, less committed type. The contextual pressures are quite different now. To prove to be financially successful has become the first and foremost criteria. The Thatcherist type of economics has produced an increased rigidity in the relationships between the different Units. In its initial phase, the OU was regarded as innovative because of its open access policy and also because of its well prepared teaching materials, which have also impacted many conventional systems.

	6	3	2	2	2	2	1
A12	OU					conventional_education	media
Ad5	OU	innovation			type_of_people		Distance_Education
Ad6	OU	innovation		success	type_of_people	conventional_education	essential
A15	OU		Units				rigidity
Da3	OU		Units				competition
Fd6	OU	innovation		success			different_place

A12

Something that I like about the OU is the breadth of technological facilities it offers. I think many conventional systems have gained from the OU example and even more directly from the use of OU materials.

Ad5

The first generation of OU people were willing to take risks, willing to step in the dark, even in the face of mockery from the educational establishment. Setting up a totally new form of institution, teaching in a totally new way. It took a particular type of people.

Ad6

The 1st. generation is now leaving. The 2nd. are half/half. Half of them were innovators, others were more conventional, less committed. There was a change in the type of people. But also the context pressures are very different now, with less room for experimenting. You have to prove to be financially successful. This has become the first and foremost criteria.

A15

The most unsuccessful innovation, I think, if it can be called an innovation, was the introduction of a sort of Thatcherist type of economics for organising elements of course production and presentation in the OU. We ended up with a far more rigid kind of relationships between the different Units than used to be the case.

Da3

When I visited the OU in 1991 I felt a certain tension between the IET and the Faculties. I didn't feel that for instance in Holland, where the lecturers work in a much more integrated manner, even though there is a department of ET there. It was more a question of style, there was a great integration among the course teams and no rivalry among them.

Fd6

The OU, in its first phase, was regarded as an innovative institution and its innovations were of two main types: First, the open access policy, innovative in the context of Higher Education in the UK, and making it available on a part time basis to anyone that would like to come along. This innovation didn't have to do necessarily with ET, but with the sort of philosophy of the institution. Second, the production of these well prepared teaching materials which could reach students in their own homes. But the success of the innovation was the fact that it took what had been solely taking place with a group of people sitting in front of a teacher, making it available to a large number of people in different places and spread over time and doing this in a way that was accessible so that people could engage with it in a relatively easy way (student friendly) rather than being done as an elitist sort of activity.

Gestalt 17 Thatcherism-Competition

A typical Thatcherist legacy has been a 'customers' trend towards a market-led education. Internally, the OU Units have been redefined as becoming more autonomous and needing to balance their own budgets. This has negatively affected the solidarity within the institution and has set up a kind of competitive spirit, sacrificing the sense of being a community of scholars. It has also rendered the institution less flexible. All this process is reflected in subtle changes in the use of language.

	5	4	3	2	2	2	2	2	2	2
Ae4	Thatcherist_economics		Market						need	customers
Aa3		competition					finance	change		
Al6	Thatcherist_economics	competition				Units				
Al7	Thatcherist_economics	competition			flexible	Units	finance			
Al8	Thatcherist_economics	competition		failure	flexible				need	customers
Ae3	Thatcherist_economics		Market	failure				change		

Ae4

This was also a typical Thatcherist legacy - 'customers' trends towards a market led education. It became a matter of institutional survival which according to Maslow's hierarchy of needs is the primary need.

Aa3

We are competitors now, rather than a community of scholars. When I asked him when this kind of transformation took place, he said: About ten years ago...having to do mainly with the change in the way of funding. We are competing against other Higher Education institutions in the United Kingdom.

A16

The various Units [under Thatcherist economics] they've all been redefined as having their own economics, rather than all contributing to a common goal. That really has had a bad effect.

A17

The different Units [under Thatcherist economics] are becoming more autonomous and need to balance their own budgets. That had a negative effect in the sense of solidarity within the institution. I think it makes it hard to pull together to achieve pedagogic ends if you are only looking at your own particular goals. For example, you cannot get a designer that can be flexible enough to hang around until 10 at night till we have got something done, because his time has to be accounted for in a certain way and they have already given you three days and that was all they were down for.

A18

As an example [of effects of Thatcherist economics] the OU began calling its students 'customers', which is a linguistic reflection of a change of ideology among the management circles. It makes the organisation less flexible and less able to respond to needs. It makes it even slower at responding which is one of the OU bigger problems. Compared with competitors and other institutions the OU is very slow to respond. The OU could have retained its cohesiveness as an institution and become more competitive. It is merely an ideological game and now there is a greater sense of competition within the institution and divisiveness and less trust.

Ae3

The selling of the soul of academia to corporations took place through language - the surrendering to the business language represented a paradigm shift. I could point out precisely the time when this took place. It was with the setting up of a self-financing division, the expression came up: 'cheque-led courses' that came to substitute need-led courses.

Gestalt 18 Info-Knowledge-Wisdom

Although immense amounts of information are made available through new technologies, it is what one does with them that is important. Information isn't knowledge, it isn't learning, and it isn't education. Education is rather about using that information purposefully in a wise way. In this respect the concept of appropriate technology can be useful in that it emphasises the ends rather than the means, the philosophical, educational and existential goals rather than the available instruments. In practice however, it doesn't seem that education can offer much wisdom. What it can give at best is knowledge and the means of constructing it jointly by giving access to particular communities of discourse. Distance Education could be seen as a means to transform society - not simply to provide information but actually getting people to discuss issues and take action.

	6	5	4	3	3	2	2	2	2	2
Fd5	informa tion	educa tion	know ledge		wisdom					new_tech ologies
Fc1	informa tion		know ledge		wisdom					
Fc7	informa tion								Educatio nal_Tech nology	
Fd4	informa tion	educa tion						techn ology	Educatio nal_Tech nology	
Ai6	informa tion					stude nts	values	techn ology		new_tech ologies
Hb3	informa tion	educa tion		means			values			
Ad2		educa tion	know ledge	means						
All		educa tion	know ledge	means	wisdom	stude nts				

Fd5

Yes, you can get immense amounts of information through all these new technologies, but its what you do with it is that is important. Information isn't knowledge, isn't learning, isn't education, much rather it is using it purposefully in a wise way, and you don't get that just by downloading information.

Fc1

[What is an educated person?]

That is a really difficult one. Not the amount of knowledge or facts stored up. Rather knowing where to find out information and data, principles. What will you do when you recognise you have a need for information or more importantly, how do you apply the knowledge and information you got to new or everyday situations; relating things and anticipating results. Yes, I do think the word 'wisdom' could be used in this context.

Fc7

It is not intrinsic to any particular medium that it has to be used in a particular way or not. It is people who tend to champion certain uses of it that one can think: well, why do they try to do it this way and not the other way? Think for instance of the mystic of the CD-ROM. It has been presented as an educational entity in itself and of course it is not. It is a way of storing information; it depends what information you put on it, and what use you make of it.

Fd4

I don't think the important issues have changed over the years, but the context in which they manifest themselves has: What is learning and how is it best effected in relation to technological developments? What is education and who is it for? Is education just about giving information? What is technically possible, is it equally educationally desirable? It was thought in the '50s that Educational TV would solve the problem. Then later on, in the early computers days: 'All we need is to get computers into all homes'. And to a certain extent all the stuff these days about multimedia, Internet, the WWW is still in that direction. The perception of it is that all we need are waves of information and that is it!

Ai6

I am not sure that the new technology offers something which is completely distinct from what you might call the old technology. What I think the technology allows is the presentation of information and ideas and opinions and even values in a way that both teachers and learners can look at and can be presented in a dialogical space rather just being in the teacher's head.

Hb3

If you think that distance education can be used to transform society, not just to educate some people. To provide information, yes, but actually as a means to getting people to discuss and to take action, to transform society. I would have said that some of the radio-escuelas [in Latin America] have been exceedingly interesting projects. But that is a value judgement that says as much about my political stance as about anything else.

Ad2

The concept of appropriate technology emphasises the ends rather than the means, the philosophical, educational and existential goals rather than the available instruments. This is also in relation to “tacit knowledge(Schoen) and the “learning organisation”

All

I don't think that education can give you wisdom. I think that may be expecting too much from it. It might give you the means to become wise. I think what education can give you at best is knowledge and means of constructing it jointly. So the test of education is that it enables the student to enter and participate in certain communities of discourse.

Gestalt 19 ET-Assessment

ET has to do with three major areas: Curriculum design, evaluation and monitoring, and with knowing who the learners are - specially where there is an open access policy. Course production is the core of ET along with exams and assessment, because assessment drives the system. The need is for appropriate technology that places the emphasis on ends - the philosophical, educational and existential goals - rather than on the available instruments. There do not seem to be many theoretical people who are thinking deeply about assessment, educational policy, etc. Yet it is suggested that the real test of genuine effectiveness in ET is the extent to which the world is changed as a result of it.

	7	5	4	2	2	2	2	2
Ac7	assessment	educational_ technology						appropriate_ technology
Ah4	assessment	educational_ technology					theory	
Fa6	assessment	educational_ technology						
Ad2			education					appropriate_ technology
Af1	assessment	educational_ technology	education	weakness	course	essential		
Af5	assessment				course	essential		
Af2	assessment	educational_ technology	education					
Aa1	assessment		education	weakness			theory	

Ac7

We need appropriate technology and appropriate educational technology in those particular contexts rather than the high tech hype and digutopia. There is a strong potential for new forms of domination (slavery) through the new technology and the economical and corporate interests pushing them.

Ah4

Then [he] divided educational theory in empirical and evaluative, and both need to be referred to in educational technology.

Fa6

Well, I think that ET has to do with three major areas: Curriculum design (which originally was strongly behaviouristic). Then, Evaluation and monitoring. Feeding in the

other areas rather than being separated from them. Finally, ET is concerned with knowing who the learners are. This is specially important when you have an open access policy.

Ad2

The concept of appropriate technology emphasises the ends rather than the means, the philosophical, educational and existential goals rather than the available instruments. This is also in relation to “tacit knowledge (Schoen) and the “learning organisation”

Af1

Course production is the core of Educational Technology, along with exams and assessment, because assessment drives education. OU does certain things better than Oxford, i.e. Course Team production - most conventional universities use OU materials as a resource - yet it has the weakness that it cannot provide tutorials Oxford style. Each university is better for a certain type of learning.

Af5

Objectives are at the heart, while assessment is the key. Open learning workbooks and assessment are really the essentials. You should think your objectives and activities all the way through. Mass education doesn't need to make necessarily for superficial learning.

Af2

The real test of genuine effectiveness in educational technology is to what extent the world is changed as a result. And this is an essentially educational question, not how many reports does it generate. We are not a commercial institution, therefore commercial indexes of success do not assess properly education. You look at economics after you have got your values straight.

Aa1

There aren't very many theoretical people, not at the moment. This is one of the great weaknesses of the institution. We don't have people who are thinking deeply about assessment, educational policy, and so on. We lack that kind of person on a whole. We have lots of people who are interested in Technology.

Gestalt 20 Ethics-ET-Access

Ethics in DE and ET seem to be centred around access and the financing of education. Yet there is a general acknowledgement of uncertainty regarding ethical issues in this field. There are ethical implications in the choice of technologies, in whether students are given a fair chance to succeed, and whether the institution is committed to upholding academic standards. Ends as well as means need to be justified - means do not justify the ends. It would be a pretty dangerous kind of technology that had no moral awareness about the purposes to which it is applied. In the context of international collaborations the ethics of access - making education as accessible to as many people as possible - do not seem to be universally shared.

	6	2	2	2	2	2	2	2
Ab5	ethics				ignorance	finance	economics	access
Fe4	ethics			higher_e ducation	ignorance			
Fe5	ethics			higher_e ducation				access
Ab6	ethics					finance	economics	
Ah2	ethics	educational _technologi st	pragmatism					
Ah3	ethics	educational _technologi st	pragmatism					

Ab5

Oh, the biggest one surely must be around access. Access and the financing of education. Are we genuinely open to people who cannot afford it because they are low paid or are we not? That is my perception of ethical issues and there would be people who wouldn't see that as a problem.

Fe4

[What about ethical issues in ET?]

I don't know, I really don't know about that one, I have to admit. I think a lot of people involved in higher education aren't actually particularly well versed in educational issues at all.

Fe5

[With regards to international collaborations...]

The assumption of trying to make these things as available as possible to the wider number of people as possible, that we are not to be an elite activity that just goes on for a small select sector of the population. My values, on that basis, are shared with a number of colleagues, but not all, and it colours the discussion I have had with people in other institutions. Some times disagreements come on that basis: what we see as the purpose of education in higher education and not about other particular aspect we are talking about.

Ab6

Well, the technology choice has implications. Because if you choose expensive technologies or expect students to equip themselves...I also think you have two responsibilities to your students. One, you want to be certain that your students will have a reasonable possibility of success, and therefore it is not moral to take students if you know they are going to fail, for that is a waste of their money and it also smashes their self-confidence. And secondly, any educational institution has, if it is at all worthwhile, a deep concern about standards, which students will have when they exit. and so you then never compromise your standards; and if a student is not up to getting a degree, then you've failed them.

Ah2

Then we need some sort of theory justifying the technique we are using. The educational technologist uses techniques that can be justified in terms of scientific evidence and underlying theories. Not only the means (the techniques) need to be justified, but also the purpose. I certainly don't think the means justify the ends (in a sort of machiavelian reversal).

Ah3

Educational Technology involves being rational about both ends and means. Both have to be justified, although I am not sure that all educational technologists would agree that justifying ends is part of the technology. It would be a pretty dangerous kind of technology that had no moral awareness about the purposes it is applied to.

Gestalt 21 Ethics-Financing-Thatcherism

The financing of education carries with it an important ethical dimension. The most unsuccessful innovation was perhaps the introduction of a sort of Thatcherist type of economics whereby each Unit needed to justify its existence in terms of its financial success. This had a bad effect on the organisational culture because of the loss of the sense of solidarity. It was related to the introduction of the Founding Council assessment of each Unit. Now you can attract customers and funding if you use the ultimate technological gadget, even if the learning could be done better through traditional technologies. To be financially successful has become the first and foremost criterion for academic Units, just as it is the top priority for the International Division (OUWorldwide).

	6	5	4	2	2	2	2	2
A15		Thatcherist_economics	Units					OU
A16		Thatcherist_economics	Units				competition	
A17	finance	Thatcherist_economics	Units				competition	
A19	finance	Thatcherist_economics	Units					
Ae4		Thatcherist_economics			international	customers		
Ad6	finance			essential				OU
Aa2	finance							
Ab7	finance			essential	international			
Fb1	finance					customers		

A15

The most unsuccessful innovation, I think, if it can be called an innovation, was the introduction of a sort of Thatcherist type of economics for organising elements of course production and presentation in the OU. We ended up with a far more rigid kind of relationships between the different Units than used to be the case.

A16

The various Units [under Thatcherist economics] they've all been redefined as having their own economics, rather than being all contributing to a common goal. That really has had a bad effect.

A17

The different Units [under Thatcherist economics] are becoming more autonomous and need to balance their own budgets. That had a negative effect in the sense of solidarity within the institution. I think it makes it hard to pull together to achieve pedagogic ends if you are only looking at your own particular goals. For example, you cannot get a designer that can be flexible enough to hang around until 10 at night till we have got something done, because his time has to be accounted for in a certain way and they have already given you three days and that was all they were down for.

A19

Of course that is related to the introduction of the Founding Council assessment of each Unit. I was not suggesting it was done in isolation [institutional effects of Thatcherist economics]. It might have been something that some people would say was necessary merely as a survival strategy in order to weather the storm of Conservative Government. I don't know if it was an option but I don't think it was a good idea.

Ae4

This was also a typical Thatcherist legacy - 'customers' trends towards a market led education. It became a matter of institutional survival which according to Maslow's hierarchy of needs is the primary need.

Ad6

The 1st. generation is now retiring. The 2nd. are half/half. Half of them were innovators, others were more conventional, less committed. There was a change in the type of people. But also the context pressures are very different now, with less room for experimenting. You have to prove to be financially successful . This has become the first and foremost criteria.

Aa2

Oh, the biggest one surely must be around access. Access and the financing of education. Are we genuinely open to people who cannot afford it because they are low paid or are we not? That is my perception of ethical issues and there would be people who wouldn't see that as a problem.

Ab7

Making money has become the top priority of the International Division [just renamed "OU Worldwide"].

Fb1

Also you attract customers and funding if you use the ultimate gadget, even if the knowledge to be acquired can be obtained better through the old way.

Gestalt 22 Failure-Tech

The world seems to be going down the 'high-tech' path, with people such as Gates (the Microsoft University) making extravagant claims that sound good to people who actually do not know much about educational matters, i.e. policy makers. It is easy to be carried away by the flashy latest technologies. One suggested approach is to think critically about them, to not hurry, and to learn from others' mistakes. For instance, one sometimes hears the comment: 'I had problems with my traditional course. People seemed to be a bit bored, so I decided to connect everybody to the WWW and students love it!' Technology is useless if it doesn't help students to learn. Neither can it replace the role of the teacher for there is always a hidden teacher in the technology. Technology can not be neutral.

	5	4	3	3	2
Af9	failure	technology	students	technocratic	learning
Ha9	failure	technology	students		learning
Ai2	failure	technology		technocratic	
Fd9	failure		students		
Fe3	failure			technocratic	
Ai4		technology			

Af9

It is easy to be carried away by the flashy latest technologies, but the test must be the quality of the learning experience as experienced by the learner. So my advice is not to hurry to adopt the latest available technologies...let others make the mistakes. We haven't learnt to use the print and audio technologies sufficiently, we are very much at the beginning stages.

Ha9

Well, technology is only useful if it helps students to learn. If it doesn't help students learn, it is useless.

Ai2

The danger, I suppose, of technocratic tendencies, i.e., sometimes people think that a form of technology can or should in fact replace the role of the teacher, and I think that this is totally misguided in more than one way. I think it is sort of philosophically misguided because it never really replaces the teacher in the sense that there is always a hidden teacher in the technology.

Fd9

I get quite depressed at times when I go to some conferences. Lots of presentations boil down to people giving case studies - 'I had problems with my traditional course. People seemed to be a bit bored, so I decided to connect everybody to the WWW and students love it!'. I thought: you haven't solved anything, you haven't addressed what the problem is about, what is going wrong with the way the person is teaching.

Fe3

Unfortunately, I think the world is going down the technological path, led by technological and economical research, rather than anything else. Everything now is pointing in that direction. Think about Microsoft University. Extravagant claims get made by people like Gates, which sound good to people who actually do not know much about it, i.e. policy makers and it seems to them as the answer that they desire, and people like myself are left with a sort of rearguard action.

Ai4

For me the use of technology must always be framed within a pedagogical model and it must be examined critically and functionally in terms of what it is helping to achieve in terms of that pedagogy.

Gestalt 23 ETist-Problemsolving

ET is seen as a rational problem-solving activity that centres in a systems approach to the analysis of the educational process. Likewise the type of learning that it tends to favour is regarded primarily as a problem-solving activity, both by teachers and students, rather than pumping information into people. The origins of ET in the OU were marked by a certain missionary zeal, the feeling of being part of a movement, of being at the cutting edge of educational developments.

	4	3	2	2
Ag2	educational_technology	problem-solving		system
Ag3	educational_technology	problem-solving	machines	
Fa4	educational_technology		machines	system
Ag6	educational_technology	problem-solving		

Ag2

Educational Technology is essentially a rational, problem-solving approach: a way of thinking sceptically and systematically about teaching and learning. Technology is more an approach, something systemic, rather than a set of tools.

Ag3

Programmed learning was the historical antecedent and provided the basis for Educational Technology. Later programmed learning was dropped. You don't need machines to do programmed learning, it can be done in book form. Programme learning was exciting, problem-solving, missionary. It felt like being part of a movement, like being on the cutting-edge of things.

Fa4

I was introduced to ET in the OU context through the works of Rowntree. For him ET has to do with the application of scientific principles as opposed to anything having to do with machines as such. Trying to apply some form of systemic approach and analysis to the educational process. If that involves the use of machines, well that may or may not be the case, it is not a necessary part of the process.

Ag6

If teachers were to take this kind of educational technological approach to their work, they would be constantly learning about teaching -and probably never teaching in quite

the same way a second time. Learning as drawing out rather than propping in into people...as a problem-solving activity.

Gestalt 24 Comparative Method-DE

The Comparative Method can be very helpful as a part of a programme of institutional self-discovery. It can provide us with information that we do not possess in our habitual space. It can help us to understand a particular institution through the 'mirrors' of other organisations and cultures. It provides an effective tool to counter ethnocentrism and eurocentrism. Distance Education is a global phenomenon and we can learn much from others. One of the interesting problems in comparative research is that one encounters different measures of effectiveness, nevertheless the essential comparison seems to be quite simple: Are there conditions where Distance Education would be a viable approach?

	6	2	2	2	2
Aa4	comparative_method			institutions	epistemology
Db3	comparative_method			institutions	
Ac4	comparative_method	research	distance_education		
Db2	comparative_method		distance_education		
Db4	comparative_method	research			epistemology
Ha2	comparative_method				

Aa4

I believe that the Comparative Method can be extremely helpful in this programme of [institutional] self-discovery, provided there is a rigorous epistemological approach.

Db3

The great strength of the comparative method resides first of all in the possibility of giving us information we do not possess in our habitual space. Second, of seeing ourselves as through the mirror of organisations and cultures different to ours. I think that this could contribute considerably to the maturity process of our own institution. It can help us to gain an awareness of our blind spots.

Ac4

But the essential comparison is pretty mundane really: Are there conditions where Distance Education is a viable approach? You know: the economics, the politics, what is happening in the particular level of education you are talking about will determine the answer. But the questions which you pose and seek answers to are almost universal. This [Comparative Research in Distance Education] is a field yet to be defined.

Db2

I have a background in anthropology where extensive use is made of the comparative method. It provides a tool to counter ethnocentrism and eurocentrism. I realised that distance education is a global phenomenon and that I could learn, and in actual fact I learnt much, from the Indians, Pakistanis, Thais, from everyone.

Db4

The comparative method requires a great epistemological discipline in the researcher in the sense that, for example, there was a large number of European anthropologists that applied the comparative method to 'prove' that other cultures, i.e. African, were inferior.

Ha2

One of the interesting problems in comparative research is that you get different measures of effectiveness, don't you? How do you actually make comparisons? Do you judge the distance educational system in the UK against the one in the Dominican Republic? Or do you judge the Dominican Distance educational system against the Dominican conventional one? I came down increasingly to believing that the only measures that you can use is that you need to compare the system within its own country, and then if you want to you can make an international comparison by using some kind of very simple ratio: success in the distance system divided by success in the conventional system gives you a figure. Then you can begin to draw some international comparisons around that.

Gestalt 25 Technology-Tensions

The introduction of new technologies lends itself to generating tensions among different departments. In the UA there has been a preference for a strategy of diffusion rather than setting up a separate Unit for ET as such. The incorporation of new technologies in DE carries with it a whole set of different meanings to different people (it is conflictive). If the emphasis is too strong on technology there is an inclination to operate on a 'delivery mode' approach. There are large regions in the world that cannot afford the high technologies, but this doesn't mean that DE is not a viable answer to their educational problems, rather that high tech solutions cannot be imposed across the world.

	4	3	2	2	2	2
Ca1	new_technologies	Units			diffusion	Educational_Technology
Da2	new_technologies	Units		tensions	diffusion	
Fc6	new_technologies		distance_education			
Ha4	new_technologies		distance_education			
Da3		Units		tensions		Educational_Technology

Ca1

There is not a Unit of Educational Technology as such. Of Distance Learning, yes. And it is normal in this context to study new technologies and ways to use it. The general strategy for Educational Technology is diffusion, rather than creating a separated Unit.

Da2

The introduction of new technologies lends itself to generating tensions among different departments. Our approach is one of diffusion rather than setting up new centres specialised in new technologies.

Fc6

With regards to the incorporation of new technologies in distance education, there is whole set of different meanings being made by different people. If the emphasis is put on technology first and foremost, as opposed to what it actually is supposed to achieve, there is a danger of pushing things in the direction of what I refer to as the 'delivery mode': just sending things to people, as opposed to necessarily helping people learn by communicating with one another. Because you can use a lot of these things (WWW, multimedia) for achieving that. It all depends how you use it.

Ha4

You have to find cheaper solutions. How do you think that the Sub Sahara Africa is going to be able to afford the high technologies? It doesn't mean that distance education isn't a viable answer to their educational problems, but you cannot just impose high technological solutions across the whole world.

Da3

When I visited the OU in 1991 I felt a certain tension between the IET and the Faculties. I didn't feel that for instance in Holland, where the lecturers work in a much more integrated manner, even though there is a department of ET there. It was more a question of style, there was a great integration among the course teams and no rivalry among them.

Gestalt 26 Cognitive-Norms-ETist

It is not intrinsic to any particular medium to have to be used in one ce way and not another. People champion certain uses in preference to others. In the USA, the concept of instructional design is largely based on the cognitive science view of getting things correct in the first instance. A problem encountered by UA is that course authors neglect to follow the prescribed norms for producing suitable distance learning materials and the cognitive processes they focus on are very limited. A major function of the educational technologist in that situation is that of adapting the text to the various media and to create a bridge between the author and the distance learner.

	3	3	3	3	2	2
Ca4			distance_learning	norms		
Fa5	cognitive	Educational_Technology				
Fc2	cognitive					
Fc7		Educational_Technology		norms		media
Ca3		Educational_Technology	distance_learning		author	media
Ca2	cognitive		distance_learning	norms	author	

Ca4

One of my goals (Director of CENTED) is to produce a computerised Expert System to ensure that the authors follow the prescribed norms for the production of distance learning texts

Fa5

In USA the concept, the way of thinking, about ET is rather different. It has more to do with machines and technological devices and they make much more use of the term 'Instructional Design', largely based on cognitive science view of getting things correctly in first instance - 'get the message right'.

Fc2

I think that is part of the perennial problem in distance education, the dialogue aspect, where education is seen not specifically as dialogue but as almost a one-way giving process, which to a certain extent is sort of the behaviourist-cognitive science approach - not all, I am grossly generalising.

Fc7

It is not intrinsic to any particular medium that it has to be used in a particular way or not. It is people who tend to champion certain uses of it that one can think: well, why do they try to do it this way and not the other way? Think for instance of the mystic of the CD-

ROM. It has been presented as an educational entity in itself and of course it is not. It is a way of storing information; it depends what information you put on it, and what use you make of it.

Ca3

Our educational technologists are colleagues who have completed the Master in Multimedia Educational Communication. One of their major functions is to accommodate (transform) the text from the author to our style, to create a bridge between the author and the distance learner by adapting the content to the various media.

Ca2

Authors are not following the recommendations we give them for the production of distance learning texts. No one respects the norms! I was so astonished! The only cognitive processes the authors expect from the students is to observe something and to analyse it. Nothing more.

Gestalt 27 UNED-OU-UA

UNED is generally perceived as a very traditional Spanish University. In its conception of curriculum it is very different from the OU. The OU has been regarded as a major innovation specially because of its open admissions policy. While colleagues at UNED express great admiration ('at a distance') towards the OU, the OU looks at UNED in wonder - an intriguing model - for its success as a mega-university. UNED differs from both OU and UA in that it is mainly text-based for its delivery of instruction. UA is very active in the whole area of multi-culturalism and partners with various Spanish and Italian Universities in developing a European MA in Intercultural Relationships. UNED and UA have come to realise that Spanish and Portuguese languages are actually quite compatible; at various joint events they have successfully used their respective languages without mediating translation. There are important similarities among DTUs in that they have to operate on the basis of certain givens: production facilities, distribution facilities, academic experts, etc.

	6	4	2	2	2	2	2	2	2	2	2	2	2	
Da6	Spanish _UNED											distance _educati on	curric ulum	Italian
Ha6	Spanish _UNED	OU						institu tions	open ness	innova tion	distance _educati on	curric ulum		
Aa5				partne rships	UA	succ ess	lang uage							
Aa6	Spanish _UNED													
A12		OU												
Ca5	Spanish _UNED				UA									
Fd6		OU	stude nts			succ ess		institu tions	open ness	innova tion				
Ha5	Spanish _UNED	OU	stude nts											
Da7	Spanish _UNED			partne rships			lang uage						Italian	

Da6

The UA is very active in the whole area of multiculturalism. With various Spanish and Italian universities there has been a decision to create a European Master in Intercultural Relationships with curricular contributions from the different universities. I tried to show

my colleagues in presencial universities that distance education can be very useful in intercultural studies.

Ha6

UNED always struck me as a very traditional Spanish University and the major difference with the OU was its conception of what a curriculum was, which certainly is a larger issue than distance education. For example the OU was innovative in this country, above all, in having an open admission policy, that hasn't anything to do at all with distance education, you could do that in a traditional institution.

Aa5

This simple formula worked wonderfully, and had a most liberating effect in the relationships. Now in the network of universities that we are part of with Spain, and also Italy, we are successfully employing the same approach. This has created a new awareness of linguistic compatibility and potential for our countries in Southern Europe.

Aa6

The Open University is most worthy of admiration, but in no way can be imitated, Everything concerning the Open University has an interest to us. It is a paradigmatic model.

A12

Something that I like about the OU is the breadth of technological facilities it offers. I think many conventional systems have gained from the OU example and even more directly from the use of OU materials.

Ca5

Our courses always have video and audio components, at least, sometimes also informatic support. In UNED it is mainly text.

Fd6

The OU, in its first phase, was regarded as an innovative institution and its innovations were of two main types: First, the open access policy, innovative in the context of Higher Education in the UK, and making it available on a part-time basis to anyone that would like to come along. This innovation didn't have to do necessarily with ET, but with the sort of philosophy of the institution. Second, the production of these well prepared teaching materials which could reach students in their own homes. But the success of the innovation was the fact that it took what had been solely taking place with a group of people sitting in front of a teacher, making it available to a large number of people in different places and spread over time and doing this in a way that was accessible so that people could engage with it in a relatively easy way (student friendly) rather than being done as an elitist sort of activity.

Ha5

So there is nothing new in the questions, there may be an awful lot of differences in the answers. But there are givens. Then I would go on to say that when a decision, for example to set up an autonomous distance teaching university is taken, certain things begin to follow: You have to make technological choices. You choose certain technologies and from that springs certain facts about your organisational structure, you will need to have production facilities, distribution facilities, student enrolment facilities, etc. Academic experts...even then you have to make choices if you are going to have staff on contract or setting up a department and so on. But the fact that you will need certain facilities is a given and it is not surprising to me that the structure of the British OU, the Dutch OU, and the Spanish UNED are actually quite similar in many ways.

Da7

We have had experience of holding working conferences with Spanish and Italian colleagues where each participant used its own language. Taking certain care -articulating clearly and slowly- the level of comprehension achieved was quite satisfactory. So there is a growing awareness of the potential of Southern European countries to strengthen their academic partnerships.

Gestalt 28 Debates

David Harris made some useful initial critiques of the OU but this is not the case with his more recent judgements. Still the debate he raised about 'openness and closure in distance education' is one that the University has never tackled upfront. There has also been little debate in the OU about the creation of the KMI as well as with the question of internationalism. The absence of debate is attributed to the lack of theoretical people in the institution and perhaps to a problem of leadership.

	5	3	3	2	2
Fd2	debates	Distance_Education	problems		OU
Hb2	debates	Distance_Education			OU
Ab1	debates	Distance_Education			
Ab3	debates			KMI	
Ha8	debates		problems		
Fc9			problems	KMI	

Fd2

David Harris made what I thought were very useful early critical points about the potential problems of distance education in terms of being seen as just involved with transmission and delivery of goods to people. If the concentration was just on passing things out to students, rather than students making much use of it. But in recent years he's made a lot of comments about problems with the OU and distance education which have not much ground and I think it is based more upon rather strange views he's got about how things used to be as opposed to how things subsequently developed.

Hb2

Well, the one of the debates that doesn't really seem to take place within this institution [OU] very much is the one which Harris 'Openness and Closure in Distance Education' raised. Are we a standardised packages institution or are we providing room for individuals to develop themselves. It is not a debate the institution ever had upfront.

Ab1

One of the debates that doesn't really seem to take place very much is the one that Harris 'Openness and Closure in Distance Education' raised. There aren't very many theoretical people, not at the moment. This is one of the great weaknesses of the institution.

Ab3

Yes, it is, but where...I mean OK. Everybody was told about it [KMI], nobody was asked to discuss it. I mean, it is a significant development as it is the whole question of internationalism...Now of course the way you raise a debate says something about what you want the outcome to be.

Ha8

There is no educational debate going on in the institution [OU], and very few issues that are really significant are raised for general discussion. It is a problem of leadership.

Fc9

So down from blue-sky research to specific instances in course development, then you bring a whole range of other issues which I don't think people in KMI are particularly well suited or interested in doing. So that overlap becomes difficult and could present potential problems.

Gestalt 29 KMI-Innovation-Risks

The creation of KMI stirred up no small controversy in the institution. A colleague from UA raised the question as to whether KMI is involved in providing in educational training for other Units, within the University, as a concrete way of being useful to others rather than these feeling threatened or marginalised. KMI may go down avenues that are not particularly fruitful. The much celebrated KMI Stadium appears to be little more than a televised lecture. It seems that people in KMI may not be particularly suited to bringing blue-sky research to specific instances in course development.

	4	2	1	1	1	1
Ab4	KMI	innovation	dangers	training		
Fc8	KMI	innovation	effectiveness	useful	Educational_Technology	
Ab3	KMI		development	outcomes	debates	international
Fc9	KMI		problems	difficult	course_production	

Ab4

He asked the question of whether the function of the KMI was merely to design prototypes or "is it also involved in educational training...as a good way for a new organism to take roots in the institution is to offer concrete training services to colleagues, who otherwise would feel threatened or marginalised".

Fc8

The KMI may go down not particularly fruitful avenues. The KMI stadium, which as far as I can make out is what in the old days we would call a televised lecture, with a few extra bits. Not a very useful instructional or educational experience and does use a vast amount of expensive technology to disperse it to a wider audience. It may have its place but I don't think it is particularly innovative, and I don't think it is particularly effective for doing a great deal.

Ab3

Yes, it is, but where...I mean OK. Everybody was told about it [KMI], nobody was asked to discuss it. I mean, it is a significant development as it is the whole question of internationalism...Now of course the way you raise a debate says something about what you want the outcome to be.

Fc9

So down from blue-sky research to specific instances in course development, then you bring a whole range of other issues which I don't think people in KMI are particularly well suited or interested in doing. So that overlap becomes difficult and could present potential problems.

8

Gestalt 30 Techniques-ET

ET is not about any particular technique or piece of equipment. Technology might consist of a set of techniques rather than a set of tools, something like the skill of performing a certain activity. The educational technologist uses techniques that can be justified in terms of scientific evidence and underlying theories. The justification for the choice of a particular technique is that it must work, it must be effective in achieving some purpose or desired result. According to this it is suggested that ET might be defined as the application of justified true techniques in education.

	5	3	2	2	2	2
Ah1	techniques	Educational_ Technology			education	pragmatism
Fa5	techniques	Educational_ Technology				
Ah2	techniques			educational_ technologist		pragmatism
Ag9	techniques		technology	educational_ technologist	education	
Fa2	techniques	Educational_ Technology	technology			

Ah1

Talking about what sort of justification might be needed for the choice of a particular technique in educational technology: Simply that the techniques must actually work: they must be effective in achieving some purpose or desired result. If they are not effective you won't even bother trying to justify them. Let us say that Educational Technology is the application of justified true techniques in education -or in teaching and learning, if you want to be a bit more down to earth.

Fa5

In USA the concept, the way of thinking, about ET is rather different. It has more to do with machines and technological devices and they make much more use of the term 'Instructional Design", largely based on cognitive science view of getting things correctly in the first instance - 'get the message right'.

Ah2

Then we need some sort of theory justifying the technique we are using. The educational technologist uses techniques that can be justified in terms of scientific evidence and underlying theories. Not only the means (the techniques) need to be justified, but also the

purpose. I certainly don't think the means justify the ends (in a sort of machiavelian reversal).

Ag9

Technology is more a state of mind (rational and scientific) than a set of tools. It might consist of a set of techniques rather than a set of tools. The art or *tekne* (Greek) of performing a certain activity. An educational technologist is one who is thinking technologically about the educational process.

Fa2

ET is not about any particular technique or piece of equipment. It has more to do with the approach of how you look at the educational process in its different facets and how the different bits fit together and how teaching and learning goes on. Using the term 'technology' seems to misdirect people - people think first about technology when you mention ET.

Gestalt 31 DeepLearning-WorldView

The essence of education is of a relationship between a teacher and a learner in which the learner is assisted in understanding pre-existing forms of knowledge. It is about making sense of information, ideas, principles which get to be incorporated within the person's own understanding of the world. It is at the point of putting things together into some meaningful whole where the interpersonal dialogue becomes essential. A person may not become wise just because of being more educated, although education might provide the means to become wise. Essentially education enables people, through knowledge and skills, to enter and become active participants in certain communities of discourse.

	5	3	3	3	3	3	2	2	2	2	2	2	2
Fc3	know ledge				shared_ understa nding	inform ation				deep_le arning	world view	prin ciple s	dial ogue
Fc5				esse ntial						deep_le arning	world view		dial ogue
Ai3			educat ion	esse ntial	shared_ understa nding				stud ents				
Ak1	know ledge			esse ntial	shared_ understa nding		educ ated _per son	communit ies_of_dis course					
Fc1	know ledge	wisd om				inform ation	educ ated _per son					prin ciple s	
All	know ledge	wisd om	educat ion					communit ies_of_dis course	stud ents				
Fd5	know ledge	wisd om	educat ion			inform ation							

Fc3

Dialogue is only a part of the educational process. There is an amount of imparting of information and knowledge, of pointing people in certain direction - 'this has been done in the past' - so you don't need reinventing the wheel. There is a body of knowledge and experience that is a starting point people can use. But then, I think, it goes beyond that. Building on that you then go to an area where dialogue becomes important and necessary. At a basic level it is making sense of that information, ideas, principles, and this needs a

certain amount of negotiation: it has got to be incorporated within the person's own understanding of the world.

Fc5

It is at the point of putting things together into some form of meaningful whole that the interaction and dialogue with other people is the important, the essential part.

Ai3

The essence of education is of a relationship between a teacher and a learner, and of the development of a shared understanding. And education has to be predicated on the idea that there are some forms of knowledge which pre-exists the learner and that the learner may acquire or transform them as a form of human development, but that nonetheless they have to be helped to understand them.

Ak1

I feel the essence of education is enabling people to join and become active participants in certain communities of discourse. I think educated people in any culture are those who have taken on some of that culture more sophisticated means for creating, sharing and evaluating knowledge and understanding, solving problems and so on. But they have also developed effective ways of sharing that understanding at least with a community of discourse.

Fc1

[What is an educated person?]

That is a really difficult one. Not the amount of knowledge or facts stored up. Rather knowing where to find out information and data, principles. What will you do when you recognise you have a need for information or more importantly, how do you apply the knowledge and information you got to new or everyday situations; relating things and anticipating results. Yes, I do think the word 'wisdom' could be used in this context.

Al1

I don't think that education can give you wisdom. I think that may be expecting too much from it. It might give you the means to become wise. I think what education can give you at best is knowledge and means of constructing it jointly. So the test of education is that it enables the student to enter and participate in certain communities of discourse.

Fd5

Yes, you can get immense amounts of information through all these new technologies, but what you do with it is what is important. Information isn't knowledge, isn't learning, isn't education, much rather it is using it purposefully in a wise way, and you don't get that just by downloading information.

Gestalt 32 Partnerships-Language

In terms of academic partnerships with the corporate sector it is essential to ascertain what each can offer. The aim should be for a symmetric relationships: partnership is not surrender of specific identities and missions. Already a surrender has taken place by academia increasingly adopting a business approach and form of language. The Community Education Programme of the OU was a case of successful partnerships with sympathetic groups in general society, nevertheless it began to be perceived as a threat by other sectors in the institution. The personal involvement of the VC at the time was crucial. With regards to international collaborations the OU has tended to play a 'messianic' role. Spanish, Italian and Portuguese have experienced holding working conferences where the participants used their own language. This has created an awareness of linguistic compatibility that should strengthen their academic partnerships.

	5	3	2
Aa5	partnerships	language	
Da7	partnerships	language	
Ae3		language	corporate_sector
Ae2	partnerships		
Aa9	partnerships		
Da9	partnerships		corporate_sector

Aa5

This simple formula worked wonderfully, and had a most liberating effect in the relationships. Now in the network of universities that we are part of with Spain, and also Italy, we are successfully employing the same approach. This has created a new awareness of linguistic compatibility and potential for our countries in Southern Europe.

Da7

We have had experience of holding working conferences with Spanish and Italian colleagues where each participant used its own language. Taking certain care -articulating clearly and slowly- the level of comprehension achieved was quite satisfactory. So there is a growing awareness of the potential of Southern European countries to strengthen their academic partnerships.

Ae3

The selling of the soul of academia to corporations took place through Language -the surrendering to the business language represented a paradigm shift. I could point out precisely the time when this took place. It was with the setting up of an elf-financing division, the expression came up: 'cheque-led courses' that came to substitute need-led courses.

Ae2

With regards to international collaborations we have not been good at being partners but rather playing a 'messianic' role.

Aa9

Some of us believed that in the founding documents of the University there was a commitment to Community Education. The Community Education Programme took off with very little finance, yet we found a number of sympathetic groups in general society, such as the Playgroup Association. Once the thing took off it began to be perceived as a threat by other sections within the institution. Thanks to the personal support and involvement of Walter Perry things were facilitated considerably.

Da9

In terms of partnerships with companies we need to ascertain what each can offer. They can contribute a whole telematic set up but they lack understanding of pedagogy and of distance education. And it is here where we can be useful. Plus we also have considerable mastery with regards to video and audio technologies. I think that if a symmetric relationship is established many good things could be accomplished.

Gestalt 33 Politics-Finance

The birth of UA (and by extension of each of the DTUs of this research) constitutes a good case study for political science. There is a strong political aspect to setting up an educational institution of national scope. There is a view that distance education can be used to transform society, but this reflects more on the individual's political stance. Policy makers seem to be particularly responsive to extravagant claims of people such as Gates with regards to the technological direction the world is taking. The institutional effects of Thatcherism, and the adoption thereof, in the OU is related to the introduction of the Funding Council assessment of each Unit. It seems to have been a survival strategy. In the context of the Community Education Programme of the OU, whoever decides the direction of the funding has a major determinative role. Yet this particular programme succeeded at first, in spite of little institutional funding, due to the strong political support of the head figure of the university.

	6	3	2
Aa9	politics	finance	
Ac1	politics	finance	
Hb3	politics		Distance_Education
Fe3	politics		
Da1	politics		
Ae9	politics		Distance_Education
Al9		finance	

Aa9

Some of us believed that in the founding documents of the University there was a commitment to Community Education. The Community Education Programme took off with very little finance, yet we found a number of sympathetic groups in general society, such as the Playgroup Association. Once the thing took off it began to be perceived as a threat by other sections within the institution. Thanks to the personal support and involvement of Walter Perry things were facilitated considerably.

Ac1

Yes, I did inquire on this particular. I was told that it was the government who specifically designated the funding for the academic, undergraduate, programme. Nevertheless, on one occasion on which I specifically posed the question to the government officials I received the disquieting news that after releasing the funding it was up to the University to decide how distribute it..

Appendix 5

Hb3

If you think that distance education can be used to transform society, not just to educate some people. To provide information, yes, but actually as a means to getting people to discuss and to take action, to transform society. I would have said that some of the radio-escuelas [in Latin America] have been exceedingly interesting projects. But that is a value judgement that says as much about my political stance as about anything else.

Fe3

Unfortunately, I think the world is going to down the technological path, led by technological and economical research, rather than anything else. Everything now is pointing in that direction. Think about Microsoft University. Extravagant claims get made by people like Gates, which sound good to people who actually do not know much about it, i.e. policy makers and it seems to them as the answer that they desire, and people like myself are left with a sort of rearguard action.

Da1

The birth of the UA constitutes a good case study for political science. It was really hard.

Ae9

Basics of a Distance Education system: dedicated materials. The institution should invest significantly in the production of the best possible materials, otherwise what you have is an extension of the conventional system. Then, the course team model has proven to be essential. Also the concept of an institution of national scope [strong political aspect], and finally, the use of mass communication technology. Apart from that you could take a bulldozer and get rid of the rest.

A19

Of course that is related to the introduction of the Founding Council assessment of each Unit. I was not suggesting it was done in isolation [institutional effects of Thatcherist economics]. It might have been something that some people would say it was necessary merely as a survival strategy in order to weather the storm of Conservative Government. I don't know if it was an option but I don't think it was a good idea.

The Hyper-Gestalten (1-5)

Hyper-Gestalt 1 Finance-Thatcherism-language

Political issues play a major role in the implementation or otherwise of innovations. Decisions concerning the allocation of resources are crucial in that respect. A market-led approach has resulted in a consumer oriented education. Seeking to 'maximise audience' has become a matter of institutional survival in order to attract government funding. To prove to be financially successful has become the first and foremost criterion within the Units. This has generated significant confusion and disruption with regards to the educational mission of academia. The sense of solidarity has eroded and been substituted by a spirit of competition. There is no longer the sense of being a community of scholars. Expressions such as 'cheque-led courses', 'customers', etc. mark a surrender to the business language and represent a paradigm shift.

	5	3	2	2	2	2	2
G-3	finance					innovation	politics
G-11	finance	Thatcherist_economics			market		politics
G-16	finance	Thatcherist_economics		Units		innovation	
G-17	finance	Thatcherist_economics	language	Units	market		
G-5	finance		language				

Gestalt (3) Threats-polit-inno-financ

Political issues play a major role with regards to the implementation or otherwise of innovation. Innovations are usually perceived as a threat by existing institutional structures. Decisions concerning the allocation of finances constitute one of the ways of responding to a threat.

Gestalt (11) Market-Government-OL

Governments (in the context of the European Union) have endorsed a market-led approach to determine which courses will be offered to the students, and this has resulted in a consumer-oriented education. In the UK, in 1985, with the creation of the Open Tech, the government was indicating that Open Learning was to be a major trend in the future. Seeking to maximise audience becomes then a matter of survival for educational

institutions in order to attract government funding. Consequently, market research becomes imperative. This has led to mass education although this does not necessarily entail a superficial learning experience.

Gestalt (16) OL-Innovate-Generations

The first generation of OU people were willing to take risks, but they are now retiring. The second generation are half/half between innovators and those being of a more conventional, less committed type. The contextual pressures are quite different now. To prove to be financially successful has become the first and foremost criterion. The Thatcherist type of economics has produced an increased rigidity in the relationships between the different Units. In its initial phase, the OU was regarded as innovative because of its open access policy and also because of its well prepared teaching materials, which has also impacted many conventional systems.

Gestalt (17) Thatcherism-Competition

A typical legacy of Thatcherism has been a 'customers' trend towards a market-led education. Internally, the OU Units have been redefined as becoming more autonomous and needing to balance their own budgets. This has negatively affected the solidarity within the institution and has set up a kind of competitive spirit, sacrificing the sense of being a community of scholars. It has also rendered the institution less flexible. All this process is reflected in subtle changes in the use of language.

Gestalt (5) Academia-corporations-business

The selling of the soul of academia to corporations took place through language - the surrendering to business language represented a paradigm shift. The need to be financially successful has become the first and foremost criterion, hence the expression 'cheque-led courses', and the setting up of a self-financing approach. Nevertheless the educational world is not primarily regarded as a commercial institution, therefore commercial indexes of success do not properly assess education. There is a strong potential for new forms of domination through the new technologies and the economical and corporate interests pushing them. We need to understand the type of healthy collaboration that should exist between academia and the corporate sector. This involves developing mutual knowledge and mutual respect for the proper areas of influence and decision making of each, as well as for the particular form of the language they use.

Hyper-Gestalt 2 ET-Educational Technologists-DE

To be useful, educational technology needs to be pedagogically situated within an actual teaching situation. There is a need for the concept of an appropriate educational technology, endowed of a strong educational rationale and actively engaged with fundamental educational questions. This is at variance with the current fascination with high tech and digutopia. There do not seem to be a lot of theoretical people thinking deeply about these issues. Educational technology is seen as an essential component of distance education and conceived as a systems approach. It is concerned with how the different facets of the teaching-and-learning process fit together as a problem-solving activity. A part and parcel of its function is to assess the quality of the learning experience as perceived by the learner. Educational technologists are those who are thinking technologically about the educational process, about the rational adjusting of means to ends. The justification of both involve ethical considerations.

	3	3	3	2	2	2
G-4		education	educational_technology			system
G-7	technology		educational_technology		distance_education	
G-9	technology	education	educational_technology	teaching_and_learning	distance_education	system
G-10	technology	education		teaching_and_learning		

Gestalt (4) Assess-ET-theory

Assessment is a key function in Educational Technology. It drives education. Objectives (though not a currently fashionable term due to its behaviourist connotations) are at the heart of an educational system. There is an absence of theoretical people who are thinking deeply about assessment. This absence is seen as an institutional weakness.

Gestalt (7) ET-Pedagogy-DE

Technology may be part of an answer to an educational problem. But in so many cases people are just 'prodding' things by adding yet another gimmick rather than having an educational rationale for doing it. To be useful Educational Technology will need to be pedagogically located within an actual teaching situation. Technology per se may be a

necessary, yet not a sufficient condition to have ET in the service of DE. There is a need for appropriate ET rather than the high tech hype and digital utopia (digutopia) one encounters in the corporate sector. The fundamental educational questions need to be addressed and the real test must be seen in the quality of the learning experience as experienced by the learner.

Gestalt (9) ET-DE-Systems

ET is an essential part of any DE system; a necessary condition to develop a meaningful educational relationship at a distance. ET is about the process of teaching and learning and how to apply it in a given context. It is not about any particular technique but rather a systems approach to education concerned with how the different bits fit together as a problem-solving activity. The term 'technology' in ET seems to misdirect people, as they tend to think first about technology.

Gestalt (10) ETists-Educators-Ethics

An educational technologist is one who is thinking technologically about the educational process, about the rational adjusting of means to ends. At the same time there needs to be a moral awareness about justifying ends as well as means, although not all educational technologists would seem to agree with this. A distinction is made between educators and educational technologists -as those having a supportive role towards educators- and the suggestion that educational technologists may function more effectively if they would work in an actual context, seeing their contribution as a part and not as the whole. Educational technologists would need to put the emphasis more on the educational rather than on the technological.

Hyper-Gestalt 3 Problems-Technocratic Trends

The need for dialogue is one of the perennial problems of distance education. Computers can be very useful to support forms of collaborative learning. Yet a danger of technocratic tendencies is the view that technology can replace the teacher, or that technology itself can be neutral. In a technocratic environment there appears to be a trend where administrators take a more significant role than educators. Extravagant claims by people like Gates sound good in the ears of policy makers, but are not necessarily sound from an educational point of view. A serious concern at UA is to withstand the strong international pressure coming from information technology corporations. This kind of pressure can result in the loss of academic autonomy. The introduction of new technologies lends itself to generating tensions among different departments. There is also a tendency to impose high tech solutions globally.

	5	4	3	2	2	2	2	2	2	2	2	2	2
G-12	probl em	stude nts	deliv ery									educ ator	Distance _Educat ion
G-14	probl em	stude nts	deliv ery				organisa tion	ideol ogy	fail ure	techno logy	techno cratic	educ ator	Distance _Educat ion
G-15	probl em	stude nts		inter natio nal	stra teg y	educat ional_ techno logy	organisa tion						
G-22	probl em	stude nts						ideol ogy	fail ure	techno logy	techno cratic		
G-25	probl em		deliv ery	inter natio nal	stra teg y	educat ional_ techno logy							

Gestalt (12) Dialogue-Compututers-DeepLearning

Dialogue is a part of the perennial problem of distance education which has often been regarded as almost a one-way delivery process. On the other hand, people dispersed geographically, even dispersed in time, may have more significant dialogue than people coexisting in one place at the same time. Dialogue is only a part of the educational process. There is also a certain amount of impartation of information and knowledge, so that people do not need to reinvent the wheel. It is at the point of putting things together

in some form of meaningful whole, when dialogue with other people becomes the essential part. Computers can enable students to have a critical and mutually supportive educational relationship thus enlarging the universe of discourse where various kinds of verbal interactions can take place.

Gestalt (14) Technocratic-Management

The danger of technocratic tendencies is that sometimes people think that a form of technology can or should replace the role of the teacher; that you have learners and all you have to do is to provide them with resources. But technology can never be neutral. There seems to be a trend for administrators to take over a more significant role than educators. In practice, when people are wearing the administrative hat on they think: 'How can we use technology to get materials to the widest number of people in the cheapest way?' As an example of this trend, the OU began calling its students 'customers' which reflects a change of ideology in management circles. The OU became a rather rigid organisation (this was not so in its pioneering days). Although management is very important for a Distance Education system it is very hard to find good managers.

Gestalt (15) UA-Master-Organisation

One of the main aims of the UA's Master in Multimedia Educational Communication is to permeate the whole organisational structure of the university with regards to Educational Technology. This is done by encouraging as many staff as possible to take the MA. This has had the effect of making the team more cohesive. An important role of educational technologists in UA is to create a bridge between authors and the distance learners by adapting the academic content to various media. One of the organisational concerns at UA is to withstand the strong international pressure coming from information technology corporations in order to not lose control of their own institutional decisions.

Gestalt (22) Failure-Tech

The world seems to be going down the 'high-tech' path, with people like Gates (the Microsoft University) making extravagant claims that sound good to people who actually do not know much about educational matters, i.e. policy makers. It is easy to be carried away by the flashy latest technologies. A suggested approach is to think critically about them, to not hurry, and to learn from others mistakes. For instance, one sometimes hears the comment: 'I had problems with my traditional course. People seemed to be a bit bored, so I decided to connect everybody to the WWW and students love it!' Technology is useless if it doesn't help students to learn. Neither can it replace the role of the teacher - there is always a hidden teacher in the technology.

Gestalt (25) Technology-Tensions

The introduction of new technologies lends itself to generating tensions among different departments. In the UA there has been a preference for a strategy of diffusion rather than setting up a separate Unit for ET as such. The incorporation of new technologies in DE carries with it a whole set of different meanings to different people (it is conflictive). If the emphasis is too strong on technology there is an inclination to operate on a 'delivery mode' approach. There are large regions in the world that cannot afford the high technologies, but this doesn't mean that DE is not a viable answer to their educational problems, rather that high tech solutions cannot be imposed across the world.

Hyper-Gestalt 4 International-Partnerships

Internationalism is a big issue in distance education which has become a global phenomenon. Implementing distance education in developing countries, where International Agencies are actively involved, entails a substantial number of ethical and cultural issues. There is no international agreement with regards to making access (extending educational opportunities) a guiding principle of distance education. In some cases the international division of a Distance Teaching University, as in the OU, has as its stated primary concern to be as financially successful as possible. UA has experienced remarkable international successes in spite of being a younger institution and of relatively small size as compared to UNED and OU.

	4	3	2	2	2
G-1	international	distance_education			
G-8	international	distance_education			
G-6	international	distance_education	success	finance	ethics
G-21	international		success	finance	ethics

Gestalt (1) DE-devlp-countries.

Internationalism is a big issue in distance education, specially concerning developing countries, yet it has not been a matter of much discussion and debate in the OU. There are problems with respect to partnerships. This is sometimes shown in an institution seeking to play a 'messianic' role - said with respect to the OU by a member of this institution. In the third world, International Agencies prefer to support primary education developments over university. There is also the problem that staff from conventional institutions have not much understanding about distance education.

Gestalt (8) UA-Trindade-Intl

The first years of UA were very much the personal achievement of Rocha Trindade(1). He has always been very active in international circles. He has succeeded in creating an awareness of the linguistic compatibility among southern European nations(2). A major international achievement, under his initiative, has been the creation of the International Open University of Asia, based in Macao and functioning as a partnership of three different educational models (English, Portuguese, and Chinese). He believes that DE is the answer for massive retraining of the population in places that are experiencing rapid

social changes. Nevertheless there has been criticism that under his leadership UA has become a very hierarchical institution.

Gestalt (6) Ethics-access-ed

Access is the biggest ethical issue in Open and Distance Education. Along with it is the issue of financing, as to whether people can afford it or not. Yet the assumption of trying to make education available to as wider number of people as possible is not universal. In international circles there are perceptible disagreements as to what the purpose of higher education should be. For instance, when the Free University of Iran was first created its primary motivation was to keep people at home. There is also a moral responsibility towards the students in offering them a reasonable opportunity to succeed, while at the same time never compromising on academic standards.

Gestalt (21) Ethics-Financing-Thatcherism

The financing of education carries with it an important ethical dimension. The most unsuccessful innovation was perhaps the introduction of a sort of Thatcherist type of economics whereby each Unit needed to justify its existence in terms of its financial success. This had a bad effect on the organisational culture because of the loss of the sense of solidarity. It was related to the introduction of the Founding Council assessment of each Unit. Now you attract customers and funding if you use the ultimate technological gadget even if the learning could be done better through the traditional technologies. To be financially successful has become the first and foremost criteria for academic Units, just as it is the top priority for the International Division (OUWorldwide).

Hyper-Gestalt 5 Materials-PersonalSupport-Systems

Distance Education is an innovative materials-based system. At the same time it needs to offer good quality personal support. Both of these requirements call for significant institutional investments. A systems approach appears to be indispensable to a distance educational operation and to promote a learning organisational culture. The OU was regarded as an innovative institution because of its open access policy, but also because of its well prepared teaching materials. In the absence of a course team approach, a major function of the educational technologist at UA is that of bridging the gap between the text author and the distance learner.

	4	3	2	2	2	2	2
G-2	material	system		personal	innovation	support	distance_education
G-13	material	system		personal		support	distance_education
G-16	material	system	problem		innovation		
G-26	material		problem				

Gestalt (2) CourseTeam-DE

Distance Education is an innovative materials-based learning system. The institution should invest significantly in the production of the best possible materials, otherwise it will end up being an extension of the conventional system. It needs support, for example, in the means of well trained personnel and required investments. The course team has proven to be essential to the quality of the system.

Gestalt (13) Systems-IET

DE is only possible from a systems approach. Cybernetics and management are very important in setting up a learning organisation. The IET is systemic by its very nature. Yet the question is what type of system is needed for it cannot be merely mechanical. The best distance learning material will fail unless the personal and organisational support is adequate. The IET has sought to apply a systems approach to the educational process. Nevertheless it has tended to become more technified at the expense of making space for people of more theoretical orientation.

Gestalt (16) OL-Innovate-Generations

The first generation of OU people were willing to take risks, but they are now retiring. The second generation are half/half between innovators and those being of a more conventional, less committed type. The contextual pressures are quite different now. To

prove to be financially successful has become the first and foremost criterion. The Thatcherist type of economics has produced an increased rigidity in the relationships between the different Units. In its initial phase, the OU was regarded as innovative because of its open access policy and also because of its well prepared teaching materials, which has also impacted many conventional systems.

Gestalt (26) Cognitive-Norms-ETist

It is not intrinsic to any particular medium to have to be used in a certain way or another. People champion certain uses in preference to others. In the USA, the concept of instructional design is largely based on the cognitive science view of getting things correctly in the first instance. A problem encountered by UA is that course authors neglect to follow the prescribed norms for producing suitable distance learning materials and the cognitive processes they focus on are very limited. A major function of the educational technologist in that situation is that of adapting the text to the various media and to create a bridge between the author and the distance learner.

GESTALTEN KEY TERMS LIST

34 Educational_Technology	Ac7 Af1 Af2 Af9 Ag1 Ag2 Ag3 Ag6 Ag7 Ah1 Ah3 Ah4 Ai5 Da8 Da9 Ea3 Fa1 Fa2 Fa4 Fa5 Fa6 Fa7 Ba5 Ca1 Ca3 Da3 Fc7 Fc8 Fd4 Fd8 Fe1 Fe2 Ha1 Ha7
28 distance_education	Aa8 Ab1 Ac4 Ac8 Ad3 Ad5 Ae1 Ae8 Ae9 Af3 Af8 Ag1 Da6 Da9 Db2 Fa1 Fc2 Fc4 Fc6 Fd1 Fd2 Fd7 Ha3 Ha4 Ha6 Hb2 Hb3
26 technology	Ae9 Af9 Ag2 Ag4 Ag9 Ah3 Ai1 Ai2 Ai4 Ai6 Ai9 Db1 Aj1 Al3 Fa1 Fa2 Fa7 Fa8 Fc6 Fd4 Fe1 Fe2 Ha1 Ha5 Ha9
19 students	Ab6 Af6 Af9 Ai3 Ai6 Ai7 Ai9 Al1 Al3 Al8 Fa6 Fa8 Fa9 Ca6 Fd6 Fd9 Ha5 Ha9 Hb1
18 education	Aa1 Ab6 Ad2 Ad5 Ae5 Af1 Af2 Ag4 Ag7 Ag9 Ah1 Ai3 Al1 Fd4 Fd5 Fe2 Ga1 Hb3
16 OU	Ad5 Ad6 Ad7 Af6 Al2 Al5 Al8 Da3 Fd2 Fd3 Fd6 Fd7 Ga1 Ha5 Ha6 Hb2
15 essential	Ab7 Ac4 Ad6 Ae9 Af1 Af4 Af5 Ai3 Ak1 Ea1 Fc5 Fd6 Fd7 Ha1 Ha5
13 course	Ac9 Ae3 Ae9 Af1 Af5 Af8 Al3 Al4 Ea3 Fa8 Fa9 Fd6 Fe1
12 UA	Aa5 Aa8 Da5 Da8 Db1 Ba1 Ba2 Ba3 Ba4 Ba5 Ca4 Ca5
12 finance	Aa2 Aa3 Aa9 Ab5 Ab6 Ab7 Ac1 Ad6 Db5 Al7 Al9 Fb1
11 educational_technologist	Ag4 Ag5 Ag8 Ag9 Ah2 Ah3 Ai1 Aj1 Ca3 Fe2 Ha7
11 economics	Ab5 Ab6 Ac4 Af2 Af3 Al6 Fa8 Fd3 Fe3 Ha3 Hb1
10 problems	Ad3 Ae7 Af6 Fc2 Fc9 Fd2 Fd8 Fd9 Ha2 Ha8

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10 failure	Ab6 Ae3 Af9 Ai2 Al8 Fd9 Fe3 Ha9 Hb1 Hb4
10 ethics	Aa2 Ab5 Ab6 Ae1 Ah2 Ah3 Fc7 Fe4 Fe5 Hb1
10 learning	Af8 Af9 Ag6 Ag7 Fa2 Fa7 Ca6 Fc6 Fd4 Ha9
9 conventional_education	Ad3 Ad6 Ae9 Af1 Al2 Fa7 Fc4 Ha2 Ha3
9 information	Ac8 Ai6 Fb2 Fc1 Fc3 Fc7 Fd4 Fd5 Hb3
9 assessment	Aa1 Ab1 Ac7 Af1 Af2 Af5 Ah4 Al9 Fa6
9 new_technologies	Ac7 Ad4 Ai6 Ca1 Da2 Fc6 Fd5 Fe2 Ha4
8 Units	Ai7 Al5 Al6 Al7 Al9 Ca1 Da2 Da3
8 innovation	Ab4 Ab8 Ad5 Ad6 Af3 Fc8 Fd6 Ha6
8 knowledge	Ad2 Ak1 Al1 Fb1 Fb2 Fc1 Fc3 Fd5
8 system	Ad9 Ae8 Af4 Af8 Ag2 Ag5 Aj1 Fa4
8 politics	Aa9 Ab8 Ac1 Ac4 Ae9 Da1 Fe3 Hb3
8 success	Aa5 Ad6 Af2 Db1 Fd6 Fd7 Ha2 Hb1
7 organisation	Ad8 Ae7 Af8 Ag5 Db3 Da4 Ha5
7 partnerships	Aa5 Aa9 Ae2 Da7 Da8 Da9 Fe5
7 educator	Ae5 Ae6 Ai1 Ai2 Ai3 Ai6 Ai7
7 Spanish_UNED	Aa6 Da6 Da7 Ba6 Ca5 Ha5 Ha6
7 access	Aa2 Ab5 Af3 Al3 Ba2 Fd7 Fe5
7 international	Ab3 Ab7 Ad3 Ad5 Ae2 Ae4 Db2
7 academia	Ad1 Ae3 Ae6 Ga1 Ha5 Ha7 Hb1
7 technocratic	Ab1 Ab6 Ae5 Af9 Ai2 Fc6 Fe3
7 Thatcherist_economics	Ae3 Ae4 Al5 Al6 Al7 Al8 Al9

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6 debates	Ab1 Ab3 Ba5 Fd2 Ha8 Hb2
6 dialogue	Ai6 Ai7 Fc2 Fc3 Fc4 Fc5
6 Market	Ad4 Ae3 Ae4 Af7 Fa9
6 IET	Ad9 Ae1 Ae5 Af4 Ba5 Ha7
6 culture	Ad9 Ak1 Db3 Ba1 Ba5 Da3
6 dangers	Aa9 Ab4 Ad5 Ai2 Da8 Fe2
6 comparative_method	Aa4 Ac4 Db2 Db3 Db4 Ha2
6 competition	Aa3 Ad4 Al6 Al7 Al8 Da3
6 pedagogy	Ai4 Ai5 Da9 Al7 Fe1 Fe2
5 techniques	Ag9 Ah1 Ah2 Fa2 Fa5
5 teaching	Af4 Ag6 Ag7 Fa2 Fd9
5 vision	Ad8 Ag1 Ag3 Ba2 Ga1
5 change	Aa3 Aa8 Ad6 Ae3 Af2
5 society	Aa8 Aa9 Af3 Al4 Fd3
5 institutions	Aa4 Db3 Fd6 Fe5 Ha6
5 ignorance	Ab5 Ab8 Af9 Fe4 Ha7
5 solutions	Ak1 Fe1 Fe3 Ha4 Ha5
5 corporate_sector	Ac7 Ad1 Ae3 Da8 Da9
5 effectiveness	Af2 Db5 Al7 Fc8 Ha2
5 openness	Ea3 Fa6 Fd6 Ha6 Hb2
4 context	Ac7 Ad6 Aj1 Fd4
4 course_teams	Ae9 Af1 Af3 Da3

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4 teaching_and_learning	Ag2 Ah1 Ai1 Aj1
4 computers	Ai7 Ea1 Fd4 Fe1
4 tutor	Ac8 Af1 Af8 Fd7
4 ideas	Ae5 Ai6 Fc3 Fc6
4 Government	Ac1 Ad2 Ag1 Fa9
4 higher_education	Ac1 Fd6 Fe4 Fe5
4 media	Al2 Ca3 Ca6 Fc7
4 commitment	Aa9 Ac8 Ad6 Ea3
4 theory	Aa1 Ae5 Ah2 Ah4
4 delivery_mode	Ac8 Fc6 Fd2 Fe1
4 global	Ad8 Db2 Al3 Ha4
4 distance_learning	Ca1 Ca2 Ca3 Ca4
4 distance_education_system	Ae9 Ha1 Ha2 Ha5
4 outcomes	Ab3 Af4 Af7 Db5
4 values	Af2 Ai6 Fe5 Hb3
4 wisdom	Al1 Fb2 Fc1 Fd5
4 KMI	Ab3 Ab4 Fc8 Fc9
4 philosophy	Ad2 Db2 Al8 Fd6
3 deep_learning	Af5 Fc3 Fc5
3 resources	Ad2 Ai9 Al3
3 diffusion	Ca1 Da2 Fd1
3 principles	Fb2 Fc1 Fc3

3 quality	Af9 Ai7 Al4
3 strategy	Da8 Ba2 Ca1
3 cognitive	Fa5 Ca2 Fc2
3 transform_society	Ac9 Ag8 Hb3
3 potential	Aa5 Ac7 Fe2
3 problem-solving	Ag2 Ag3 Ag6
3 training	Aa8 Ab4 Ag5
3 pragmatism	Ah1 Ah2 Ah3
3 shared_understanding	Ai3 Ak1 Fc3
3 development	Ab3 Ad3 Ad8
3 useful	Ac9 Fc8 Ha9
3 trend	Ae4 Ae6 Ai9
3 educated_person	Ak1 Fb2 Fc1
3 norms	Ca2 Ca4 Fc7
3 objectives	Af4 Af5 Db5
3 educational_process	Fa2 Fa4 Fc3
3 leadership	Fc3 Fc7 Ha8
3 curriculum_designers	Fa6 Fe1 Ha7
3 language	Aa5 Ae3 Da7
3 understanding	Ad1 Ad3 Ak1
3 comparison	Db1 Db5 Ha3
3 goals	Ad2 Ai1 Ca4

3 machines	Ag3 Fa4 Fa5
3 Master	Ba4 Ca3 Da4
3 costumers	Ae4 Al8 Fb1
3 appropriate_technology	Ac7 Ad2 Ai1
3 course_production	Af1 Al5 Fc9
3 human_resources	Ac8 Ad3 Db5
3 means	Ad2 Al1 Hb3
3 Open_Learning	Ac8 Af5 Ag1
3 WWW	Fc6 Fd4 Fd9
3 mass_education	Af5 Af7 Ga1
3 need	Aa8 Ae4 Al8
3 flexible	Aa8 Al7 Al8
3 management	Ae7 Ae8 Al8
2 assumption	Fc3 Fe5
2 audio	Af9 Ca5
2 author	Ca2 Ca3
2 curriculum	Da6 Ha6
2 anticipating_results	Fb2 Fc1
2 activities	Af5 Ag7
2 determinative	Af4 Fa9
2 hierarchy	Ba1 Ba2
2 collaboration	Ad1 Ae2

2 beginning	Ae6 Af9
2 communities_of_discourse	Ak1 Al1
2 consumer_orientated_education	Af7 Fa9
2 everyday_situations	Fb2 Fc1
2 Community_Education	Aa9 Ac9
2 difficult	Fb2 Fc9
2 behaviouristic	Fa6 Fc2
2 changing_the_world_of_teaching	Ae6 Ag8
2 educational_problem	Fe1 Ha4
2 approach	Fa2 Fa7
2 educational_relationship	Ai7 Ha1
2 industrial_fabric	Aa8 Af3
2 epistemology	Aa4 Db4
2 choice	Ab6 Fa9
2 administrative	Ae6 Fa8
2 elitist	Fd6 Fe5
2 contents	Aa8 Ca3
2 decisions	Af7 Da8
2 interfaculty	Ae5 Ae6
2 case_studies	Da1 Fd9
2 absolutising	Aj1 Fd8

2 democratic	Ba2 Fd6
2 business	Ae3 Af2
2 developing_countries	Ad3 Ad8
2 Instructional_Design	Fa5 Ha7
2 production_facilities	Al4 Ha5
2 world-view	Fc3 Fc5
2 issues	Al3 Ha8
2 Italian	Da6 Da7
2 process	Aj1 Fd8
2 weakness	Aa1 Af1
2 video	Da9 Ca5
2 lack	Ae5 Ae6
2 type_of_people	Ad5 Ad6
2 trust	Al8 Ba1
2 pressure	Ad6 Fa9
2 theoretical_people	Aa1 Ab1
2 test	Af2 Af9
2 learning_organisation	Ad2 Ae8
2 tensions	Da2 Da3
2 standardisation	Ab6 Hb2
2 skeptic	Ea1 Fe2
2 roles	Ae2 Ai7

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2 rigidity	Ae7 Al5
2 responsibilities	Ab6 Hb1
2 relationship	Aa5 Ai3
2 relating_things	Fb2 Fc1
2 questions	Ac4 Ha5
2 USA	Fa5 Fa7
2 old_technology	Ai6 Fb1
2 self-confidence	Ab6 Hb1
2 multiculturalism	Da6 Hb4
2 set_of_tools	Ag2 Ag9
2 research	Ac4 Db4

MISSING

PAGES

NOT

AVAILABLE

LIST OF ORIGINAL STATEMENTS

Note: For the sake of illustrating the process through which GABEK has assisted me in identifying, and codifying, the key expressions (Ausdrücke) and criteria (Kriterien) I have shown here the matrices used for the initial statements. The most frequently used designations for the Kriterien has been: 'eval' (where a value statement has been made); 'causal' (to note where I recognise a causal relation); the University origin of the statement (UK, Port., or Sp.); and an identification number for each interviewee.

Aa1

There aren't very many theoretical people, not at the moment. This is one of the great weaknesses of the institution. We don't have people who are thinking deeply about assessment, educational policy, and so on. We lack that kind of person on a whole. We have lots of people who are interested in Technology.

Aa1	Ausdrücke	Kriterien
	theoretical_people	eval
	theory	UK
	weakness	1
	assessment	
	education	

Aa3

We are competitors now, rather than a community of scholars. When I asked him when this kind of transformation took place, he said: About ten years ago...having to do mainly with the change in the way of funding. We are competing against other Higher Education institutions in the United Kingdom.

Aa3	Ausdrücke	Kriterien
	competition	causal
	community	UK
	change	6
	finance	

Aa4

I believe that the Comparative Method can be extremely helpful in this programme of [institutional] self-discovery, provided there is a rigorous epistemological approach.
(2,UA)

Aa4	Ausdrücke	Kriterien
	comparative_ method	causal
	epistemology	eval
	institutions	Port
		2

Aa5

This simple formula worked wonderfully, and had a most liberating effect in the relationships. Now in the network of universities that we are part of with Spain, and also Italy, we are successfully employing the same approach. This has created a new awareness of linguistic compatibility and potential for our countries in Southern Europe. (2,UA)

Aa5	Ausdrücke	Kriterien
	language	causal
	Southern_Europe	eval
	relationship	Port
	success	2
	UA	
	partnerships	
	potential	

Aa6

The Open University is most worthy of admiration, but in no way can be imitated. (3, UNED) . Everything concerning the Open University has an interest to us. It is a paradigmatic model. (8, UNED)

Aa6	Ausdrücke	Kriterien
	Spanish_UNED	eval
	imitation	Sp
		3
		8

Aa8

Everything changed; the way of thinking, the society, the industrial fabric and the liberal relationship. There was a need for massive retraining of all segments of the population and we were unable to do so at the time; it took too long to make this conversion. Society has to change in as short a period as possible and it is my personal belief that distance education systems are just the answer because they allow for flexibility of time and pace,

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and flexibility of contents; you can provide the education and training that people are interested in. (4, UA)

Aa8	Ausdrücke	Kriterien
	change	causal
	training	eval
	distance_education	Port
	flexible	4
	society	
	UA	
	industrial_fabric	
	contents	
	need	

Aa9

Some of us believed that in the founding documents of the University there was a commitment to Community Education. The Community Education Programme took off with very little finance, yet we found a number of sympathetic groups in general society, such as the Playgroup Association. Once the thing took off it began to be perceived as a threat by other sections within the institution. Thanks to the personal support and involvement of Walter Perry things were facilitated considerably.

Aa9	Ausdrücke	Kriterien
	foundation	causal
	Community_Education	eval
	finance	UK
	society	7
	dangers	
	politics	
	commitment	
	partnerships	

Ab1

One of the debates that doesn't really seem to take place very much is the one that Harris 'Openness and Closure in Distance Education ' raised. There aren't very many theoretical people, not at the moment. This is one of the great weaknesses of the institution.

Ab1	Ausdrücke	Kriterien
	debates	causal
	Distance_Education	eval
	technocratic	UK
	assessment	1
	theoretical_people	

Ab3

Yes, it is, but where...I mean OK. Everybody was told about it [KMI], nobody was asked to discuss it. I mean, it is a significant development as it is the whole question of internationalism...Now of course the way you raise a debate says something about what you want the outcome to be.

Ab3	Ausdrücke	Kriterien
	international	UK
	debates	1
	KMI	
	outcomes	
	development	

Ab4

He asked the question of whether the function of the KMI was merely to design prototypes or "is it also involved in educational training...as a good way for a new organism to take roots in the institution is to offer concrete training services to colleagues, who otherwise would feel threatened or marginalised". (2, UA)

Ab4	Ausdrücke	Kriterien
	KMI	causal
	training	eval
	Innovation	Port
	dangers	2

Ab5

Oh, the biggest one surely must be around access. Access and the financing of education. Are we genuinely open to people who cannot afford it because they are low paid or are we not? That is my perception of ethical issues and there would be people who wouldn't see that as a problem.

Ab5	Ausdrücke	Kriterien
	access	causal
	ethics	eval
	economics	UK
	finance	1
	ignorance	

Ab6

Well, the technology choice has implications. Because if you choose expensive technologies. or expect students to equip themselves...I also think you have two responsibilities to your students. One, you want to be certain that your students will have a reasonable possibility of success, and therefore it is not moral to take students if you know they are going to fail, for that is a waste of their money and it also smashes their self-confidence. And secondly, any educational institution has, if it is at all worthwhile, a deep concern about standards, which students will have when they exit. And so you then never compromise your standards; and if a student is not up to getting a degree, then you've failed them.

Ab7

Making money has become the top priority of the International Division [just renamed "OU Worldwide"].

Ab8

In Portugal, the worst enemy was the Council of Rectors of the other 14 or 13 conventional universities which did not recognise the need for a new university.

Ac1

Yes, I did inquire on this particular. I was told that it was the government who specifically designated the funding for the academic, undergraduate program. Nevertheless, on one occasion on which I specifically posed the question to the government officials I received the disquieting news that after releasing the funding it was up to the University to decide how distribute it.

Ac4

But the essential comparison is pretty mundane really: Are there conditions where Distance Education is a viable approach? You know: the economics, the politics, what is happening in the particular level of education you are talking about will determine the answer. But the questions which you pose and seek answers to are almost universal. This [Comparative Research in Distance Education] is a field yet to be defined.

Ac7

We need appropriate technology and appropriate educational technology in those particular contexts rather than the high tech hype and digutopia. There is a strong potential for new forms of domination [slavery] through the new technology and the economical and corporate interests pushing them.

Ac8

There is an important distinction to make between Distance Education, just a delivery mechanism of information and instruction, vs. Open Learning which requires a committed and well trained personal support.

Ac9

The Community Education program was really important Specially in setting up Self-help groups, it really worked, it was rooted. It was grass root movement rather than 'sociology'. Materials produced for that program are still in use.

Ad1

We need to understand the type of healthy collaboration that should exist between academia and the corporate sector.

Ad2

The concept of appropriate technology emphasises the ends rather than the means, the philosophical, educational and existential goals rather than the available instruments. This is also in relation to "tacit knowledge (Schon) and the "learning organisation".

Ad3

In the third world International Agencies prefer to support primary education developments over university. For instance Canadian agency involvement in the Caribbean, and also to ODA in Sri Lanka. But a problem is that the staff in these projects came from conventional institutions with not much understanding about Distance Education.

Ad4

Indira Gandhi's University has an ability to compete in the global market, yet I have a concern that in going the high tech route in that direction they may loose touch with its primary target population.

Ad5

The first generation of OU people were willing to take risks, willing to step in the dark, even in the face of mockery from the educational establishment. Setting up a totally new form of institution, teaching in a totally new way. It took a particular type of people.

Ad6

The 1st generation is now leaving. The 2nd. are half/half. Half of them were innovators, others were more conventional, less committed. There was a change in the type of people. But also the context pressures are very different now, with less room for experimenting. You have to prove to be financially successful. This has become the first and foremost criteria.

Ad7

Now there is the 3rd (coming up) generation of OU people. Well, I am naturally optimistic, but I am also a realist.

Ad8

The future lies in the global development, and developing countries and with exciting organisational systems.

Ad9

IET should have linked more with the Systems group. IET is systemic by its very nature, but the question is what type of systems. There is a need to represent the idiosyncratic development, and not merely the mechanical aspects.

Ae1

There was an ethical issue about the IET involvement with Distance Education in Iran, with the Free University there, whose primary motivation was to keep people at home.

Ae2

With regards to international collaborations we have not been good at being partners but rather playing a 'messianic' role.

Ae3

The selling of the soul of academia to corporations took place through language - the surrendering to the business language represented a paradigm shift. I could point out precisely the time when this took place. It was with the setting up of a self-financing division, the expression came up: 'cheque-led courses' that came to substitute need-led courses.

Ae4

This was also a typical Thatcherist legacy - 'customers' trends towards a market-led education. It became a matter of institutional survival which according to Maslow's hierarchy of needs is the primary need.

Ae5

We lack someone like a Brian Lewis, a true theoretician, willing to support long range development of ideas. The IET has high quality technicians, but a lack of educators...few people with experience in education. In fact there are no relationships between IET and School of Education.

Ae6

The OU lacks some common ground for interfaculty meetings. It wasn't like this in the early days. But the trend from educators to administrators took over. There isn't any academic common room which I see as central to the building of the academic community.

Ae7

The OU became [as administrators took the reins of the institution from educators] a most rigid organisation. The reality is that few people want to take managerial positions...and is very hard to find good managers. Poor management at the OU is a major problem.

Ae8

You can only have Distance Education from a systems approach, through cybernetics. The OU had excellent management scientists like Michael Neil, but the University didn't follow on this line. Cybernetics and management are very important for a Distance Education system. A learning organisation is what is needed [Donald Schon].

Ae9

Basics of a Distance Education system: dedicated materials. The institution should invest significantly in the production of the best possible materials, otherwise what you have is an extension of the conventional system. Then, the course team model has proven to be essential. Also the concept of an institution of national scope [strong political aspect], and finally, the use of mass communication technology. Apart from that you could take a bulldozer and get rid of the rest.

Af1

Course production is the core of Educational Technology, along with exams and assessment, because assessment drives education. OU does certain things better than Oxford, i.e. Course Team production - most conventional universities use OU materials as a resource - yet it has the weakness that it cannot provide tutorials Oxford style. Each university is better for a certain type of learning.

Af2

The real test of genuine effectiveness in educational technology is to what extent the world is changed as a result. And this is an essentially educational question, not how many reports does it generate. We are not a commercial institution, therefore commercial indexes of success do not assess properly education. You look at economics after you have got your values straight.

Af3

Distance Education is patterned after the industrial model: you invest much more at the beginning [economies of scale]. The best idea we had was the Course Team, along with Open (social dimension) and distance (both practical and economical).

Af4

Objectives are at the heart. Once in place they will determine all else in the system. In later years the term became no longer fashionable in the IET, so we prefer to use the expression: what do you want your learners to be able to do as a result of the teaching-learning process?

Af5

Objectives are at the heart, while assessment is the key. Open learning workbooks and assessment are really the essentials. You should think your objectives and activities all the way through. Mass education doesn't need to make necessarily for superficial learning.

Af6

The new OU students have reading difficulties. May be they represent a new generation of disadvantaged learners...whereas the first generation were people highly motivated who lacked the opportunity to get their qualifications.

Af7

If you don't make decisions on the marketing level others will do it for you who might not be the right people or who understand the nature of the products. Market research becomes imperative where there are multiple options for consumer-orientated avalanche of students.

Af8

Distance Education is a materials-based learning system as opposed to classroom or people based. Yet, the best materials will fail unless the support, personal and organisational, is adequate.

Af9

It is easy to be carried away by the flashy latest technologies, but the test must be the quality of the learning experience as experienced by the learner. So my advice is not to hurry to adopt the latest available technologies...let others make the mistakes. We haven't learnt to use the print and audio technologies sufficiently, we are very much at the beginning stages.

Ag1

In 1985, with the establishment of the Open Tech, the government was basically saying that Open Learning was the thing. Information Technology has transformed my vision. It takes distance out of distance education. By the end of the decade, all courses will have a strong CMC component.

Ag2

Educational Technology is essentially a rational, problem-solving approach: a way of thinking skeptically and systematically about teaching and learning. Technology is more an approach, something systemic, rather than a set of tools.

Ag3

Programmed learning was the historical antecedent and provided the basis for Educational Technology. Later programmed learning was dropped. You don't need machines to do programmed learning, it can be done in book form. Programmed learning was exciting, problem-solving, missionary. It felt like being part of a movement, like being on the cutting-edge of things.

Ag4

An educational technologist is not fascinated with technology. I haven't thought of myself for years as an educational technologist, but rather as someone involved in educational development.

Ag5

Sometimes people would ask us to write a training program. When we examine the situation we may suggest that the initial requirement might not be what is needed but rather something to do with the organisational structure.

Ag6

If teachers were to take this kind of educational technological approach to their work, they would be constantly learning about teaching - and probably never teaching in quite the same way a second time. Learning as drawing out rather than propping in into people...as a problem-solving activity.

Ag7

Educational Technology is in the business of understanding the processes of teaching and learning but not for their own sake (as pure science), but in order to apply that understanding to the practical activities of education.

Ag8

Educational technologists would glean understanding of all disciplines related to education, but its emphasis would be different. For rather than focusing on description and interpretation (on understanding the educational world) his goal is on changing the world of teaching and learning.

Ag9

Technology is more a state of mind (rational and scientific) than a set of tools. It might consist of a set of techniques rather than a set of tools. The art or *tekne* of performing a certain activity. An educational technologist is one who is thinking technologically about the educational process.

Ah1

Talking about what sort of justification might be needed for the choice of a particular technique in educational technology: Simply that the techniques must actually work. They must be effective in achieving some purpose or desired result. If they are not effective you won't even bother trying to justify them. Let us say that Educational Technology is the application of justified true techniques in education -or in teaching and learning if you want to be a bit more down to earth.

Ah2

Then we need some sort of theory justifying the technique we are using. The educational technologist uses techniques that can be justified in terms of scientific evidence and underlying theories. Not only the means (the techniques) need to be justified, but also the purpose. I certainly don't think the means justify the ends (in a sort of machiavelian reversal).

Ah3

Educational Technology involves being rational about both ends and means. Both have to be justified, although I am not sure that all educational technologists would agree that justifying ends is part of the technology. It would be a pretty dangerous kind of technology that had no moral awareness about the purposes it is applied to.

Ah4

Then [he] divided educational theory in empirical and evaluative, and both need to be referred to in educational technology.

Ai1

I do not see myself as an educational technologist. An educational technologist is primarily someone who helps educators and people who are being educated to use technology to achieve their goals. He is looking at ways of developing technological support for the process of teaching and learning. I don't do that. What I do as an educator, I am a teacher, what I do is look for appropriate tools to help me achieve good teaching and some of those tools will be technological.

Ai2

The danger, I suppose, of technocratic tendencies, i.e., sometimes people think that a form of technology can or should in fact replace the role of the teacher, and I think that this is totally misguided in more than one way. I think it is sort of philosophically misguided because it never really replaces the teacher in the sense that there is always a hidden teacher in the technology.

Ai3

The essence of education is of a relationship between a teacher and a learner, and of the development of a shared understanding. And education has to be predicated on the idea that there are some forms of knowledge which preexists the learner and that the learner may acquire or transform them as a form of human development, but that nonetheless they have to be helped to understand them.

Ai4

For me the use of technology must always be framed within a pedagogical model and it must be examined critically and functionally in terms of what it is helping to achieve in terms of that pedagogy.

Ai5

My own feeling about Educational Technology is that it has to be pedagogically located within a teaching situation.

Ai6

I am not sure that the new technology offers something which is completely distinct from what you might call the old technology. What I think the technology allows is the presentation of information and ideas and opinions and even values in a way that both teachers and learners can look at and can be presented in a dialogical space rather just being in the teacher's head.

Ai7

Computers enable students to jointly have a critically and mutually supportive educational relationship in dealing with something which doesn't get the ultimate authority of the teacher residing in it. By permitting this the universe of discourse is enlarged as well as the kinds of dialogues and roles and the quality of those dialogues.

Ai8

Richard Hoggart, I think is very useful. A problem he has found although he is not an anti-technocrat at all, he finds that what the technological-information revolution has done is to confuse information with knowledge; that the increase of information in the world, people think, will create more understanding and more knowledge. He feels it is a basic misconception.

Ai9

There has been a tendency in some technological developments to think you can have learners and all you do is to provide them with the resources. I think that that is a misconception of how humanity operates. Technology should never be offering this kind of isolated, idealised learner's resources. What it has to offer is some way of mediating a relationship between a teacher and a learner. You can never offer resources in a neutral form. Technology can never be neutral, because if it is guiding the construction of knowledge in some way, then it is making choices.

Aj1

If educational technologists do think of themselves as serving the process of teaching and learning then one thinks they ought to accept, which I think they are very reluctant to do: that their particular technology can only be an element in that process and not an embodiment of the whole. They'll probably function much more effectively if they realise that they are going to be working in the actual context in which their technology is only one element in it and it will never be all of it.

Ak1

I feel the essence of education is enabling people to join and become active participants in certain communities of discourse. I think educated people in any culture are those who have taken on some of that culture more sophisticated means for creating, sharing and evaluating knowledge and understanding, solving problems and so on. But they have also developed effective ways of sharing that understanding at least with a community of discourse.

Al1

I don't think that education can give you wisdom. I think that may be expecting too much from it. It might give you the means to become wise. I think what education can give you at best is knowledge and means of constructing it jointly. So the test of education is that it enables the student to enter and participate in certain communities of discourse.

Al2

Something that I like about the OU is the breadth of technological facilities it offers. I think many conventional systems have gained from the OU example and even more directly from the use of OU materials.

Al3

Some of the issues having to do with technology are really access issues. The existence of technology does not mean the existence of access. As they become more global they become in some cases impractical, although technologically feasible, to include them as components of a course for we cannot ensure the student has the right kind of equipment.

Al4

One of the most successful innovations of the OU has been the co-publication of course texts with external publishers which allows the production of materials at high quality in a broader social context.

Al5

The most unsuccessful innovation, I think, if it can be called an innovation, was the introduction of a sort of Thatcherist type of economics for organising elements of course production and presentation in the OU. We ended up with a far more rigid kind of relationships between the different Units than used to be the case.

Al6

The various Units [under Thatcherist economics] they've all been redefined as having their own economics, rather than all contributing to a common goal. That really has had a bad effect.

A17

The different Units [under Thatcherist economics] are becoming more autonomous and need to balance their own budgets. That had a negative effect in the sense of solidarity within the institution. I think it makes it hard to pull together to achieve pedagogic ends if you are only looking at your own particular goals. For example, you cannot get a designer that can be flexible enough to hang around until 10 at night till we have got something done, because his time has to be accounted for in a certain way and they have already given you three days and that was all they were down for.

A18

As an example [of effects of Thatcherist economics] the OU began calling its students 'customers', which is a linguistic reflection of a change of ideology among the management circles. It makes the organisation less flexible and less able to respond to needs. It makes it even slower at responding which is one of the OU bigger problems. Compared with competitors and other institutions the OU is very slow to respond. The OU could have retained its cohesiveness as an institution and become more competitive. It is merely an ideological game and now there is a greater sense of competition within the institution and divisiveness and less trust.

A19

Of course that is related to the introduction of the Founding Council assessment of each Unit. I was not suggesting it was done in isolation [institutional effects of Thatcherist economics]. It might have been something that some people would say was necessary merely as a survival strategy in order to weather the storm of Conservative Government. I don't know if it was an option but I don't think it was a good idea.

Ba1

Ours [UA] is a very hierarchical University and there is no 'empowerment'. There aren't many organisms for horizontal coordination. It is always from top downward, and it is quite frustrating. It is an issue of cultural organisation. It gives little trust to people.

Ba2

The Statutes [UA, 1994] were discussed point by point involving everyone, from down upwards. It was a deeply democratic exercise. But it was never done again, neither was it verified. Now the Strategy Plan [1995] is considered a confidential document, and it is profoundly absurd that the very personnel of the UA don't have access to it. It is a lack of vision of the hierarchy.

Ba3

The first years of the UA were the personal achievement of Trindade, with enormous sacrifices. Now there is no one with the international stature of Trindade to take his place and the possible successors are people who haven't been in the University from the beginning.

Ba4

Everyone took the Master in Multimedia Educational Communication which had the effect of rendering the team more cohesive.

Ba5

The Instituto de Tecnologia Educativa (ITE) was an organism of the Ministry of Education to provide secondary education to remote places via TV. The great conflict happened when, by Ministerial orders, the ITE became fused with the Instituto Portuguese de Ensino a Distancia (IPED). They were two very different cultures. That was the immediate precedent to the creation of the UA.

Ba6

When I happened to mention, on passing, that Spanish people suffer a certain inferiority complex (I made reference to the book 'The Spaniard and his Inferiority Complex', by a prominent Spanish psychiatrist), she exploded with the loudest laughter as though having heard one of the best jokes ever.

Ca1

There is not a Unit of Educational Technology as such. Of Distance Learning, yes. And it is normal in this context to study new technologies and ways to use it. The general strategy for Educational Technology is diffusion, rather than creating a separated Unit.

Ca2

Authors are not following the recommendations we give them for the production of distance learning texts. No one respects the norms! I was so astonished! The only cognitive processes the authors expect from the students is to observe something and to analyse it. Nothing more.

Ca3

Our Educational technologists are colleagues who have completed the Master in Multimedia Educational Communication. One of their major functions is to accommodate (transform) the text from the author to our style, to create a bridge between the author and the distance learner by adapting the content to the various media.

Ca4

One of my goals (Director of CENTED) is to produce a computerised Expert System to ensure that the authors follow the prescribed norms for the production of distance learning texts.

Ca5

Our courses always have video and audio components, at least, some times also support. In UNED it is mainly text.

Ca6

What I am trying to do is to put more and more the learning in the hands of the students. I don't believe we can arrive at independent learning, but semi-autonomous, yes. To give the students many choices as to the media by which they want to learn, accommodating to their learning styles, etc.

Da1

The birth of the UA constitutes a good case study for political science. It was really hard.

Da2

The introduction of new technologies lends itself to generating tensions among different departments. Our approach is one of diffusion rather than setting up new centres specialised in new technologies.

Da3

When I visited the OU in 1991 I felt a certain tension between the IET and the Faculties. I didn't feel that for instance in Holland, where the lecturers work in a much more integrated manner, even though there is a department of ET there. It was more a question of style, there was a great integration among the course teams and no rivalry among them.

Da4

The function of the Master in Multimedia Educational Communication is permeate the different layers of the University with the end of shaping the whole organisational culture.

Da5

UAIA, based in Macao, offers three type of courses following either the Portuguese model, English (via Hong Kong) or Chinese. It has been functioning for about four years. Students in Portuguese are the smaller number.

Da6

The UA is very active in the whole area of multiculturalism. With various Spanish and Italian universities there has been a decision to create a European Master in Intercultural Relationships with curricular contributions from the different universities. I tried to show my colleagues in presencial universities that distance education can be very useful in intercultural studies.

Da7

We have had experience of holding working conferences with Spanish and Italian colleagues where each participant used its own language. Taking certain care -articulating clearly and slowly- the level of comprehension achieved was quite satisfactory. So there is a growing awareness of the potential of Southern European countries to strengthen their academic partnerships.

Da8

One of our concerns in UA with regards to ET is that we perceive a sort of strong international lobby coming from software and hardware companies. We feel it is a threat. We need to keep control of our own institutional decisions and not be determined by others agendas. Another strategy is that, rather than creating new functions within the university, we seek to establish partnerships with companies of excellence outside.

Da9

In terms of partnerships with companies we need to ascertain what each can offer. They can contribute a whole telematic set up but they lack understanding of pedagogy and of distance education. And it is here where we can be useful. Plus we also have considerable mastery with regards to video and audio technologies. I think that if a symmetric relationship is established many good things could be accomplished.

Db1

We made tests using video conference for some classes and we found very positive results, in the sense that, comparing the face to face group in Lisbon with the group in Oporto these results were extremely similar.

Db2

I have a background in anthropology where extensive use is made of the comparative method. It provides a tool to counter ethnocentrism and eurocentrism. I realised that distance education is a global phenomenon and that I could learn, and in actual fact I learnt much, from the Indians, Pakistanis, Thais, from everyone.

Db3

The great strength of the comparative method resides first of all in the possibility of giving us information we do not possess in our habitual space. Second, of seeing ourselves as through the mirror of organisations and cultures different to ours. I think that this could contribute considerably to the maturity process of our own institution. It can help us to gain an awareness of our blind spots.

Db4

The comparative method requires a great epistemological discipline in the researcher in the sense that, for example, there was a large number of European anthropologists that applied the comparative method to 'prove' that other cultures, i.e. African, were inferior.

Db5

In terms of comparison I have thought much in two important aspects: effectiveness and efficiency. Effectiveness as the relationship between desired outcomes, the defined objectives and the actual results. This gives us an indication of the effectiveness of the system. With regards to efficiency, I analyse the results in relation to the means - financial and human resources - had to employ. For example, you can have a program that is extremely effective, yet it is so expensive that it is poorly effective.

Ea1

I am an IT skeptic. The big question to me when seeing all these wonderful technologies is 'so what?' 'how can we use it?' 'what is its purpose?' 'what can it do for people?' Think for instance of the marvel of the Virtual Microscope in the crystallography programme. We did for something like this thirty years ago. This is magic.

Ea2

I distinguish between instructional and experiential learning. I consider that an overemphasis on conceptual learning distorts, suffocates, natural experimental knowledge. Let me recommend a book that illustrates this difference. It is called 'The Inner Game of Golf'.

Ea3

We are re-engineering OU courses into multimedia for people with physical deficiencies. And this is very significant for the OU in its commitment to openness and access.

Fa1

Technology is a necessary, yet not a sufficient condition to have ET in the service of distance education.

Fa2

ET is not about any particular technique or piece of equipment. It has more to do with the approach of how you look at the educational process in its different facets and how the different bits fit together and how teaching and learning goes on. Using the term 'technology' seems to misdirect people - people think first about technology when you mention ET.

Fa4

I was introduced to ET in the OU context through the works of Rowntree. For him ET has to do with the application of scientific principles as opposed to anything having to do with machines as such. Trying to apply some form of systemic approach and analysis to the educational process. If that involves the use of machines, well that may or may not be the case, it is not a necessary part of the process.

Fa5

In USA the concept, the way of thinking, about ET is rather different. It has more to do with machines and technological devices and they make much more use of the term 'Instructional Design', largely based on cognitive science view of getting things correctly in the first instance - 'get the message right'.

Fa6

Well, I think that ET has to do with three major areas: Curriculum design (which originally was strongly behaviouristic). Then, Evaluation and monitoring. Feeding in the other areas rather than being separated from them. Finally, ET is concerned with knowing who the learners are. This is specially important when you have an open access policy.

Fa7

I think we find two approaches in ET:

- a) How can I use technology to simulate or enhance what I normally do. It is the prevalent USA view - dissemination of conventional education.
- b) Let's think about learning experiences we may want to give our students and there are certain things you can do better through the use of certain technologies.

Fa8

In practice, when people are wearing the administrative hat they think: 'how can we economically use technology to get materials and things to students. What is going to be the cheapest way of getting things to a wider number of people'. Whereas on other occasions, the theme is: 'What we would like our students to be able to do? What type of experiences would we like them to learn from?' You cannot totally separate the two things.

Fa9

There is some pressure coming from the Government supposedly intending to give greater choice to students; people having a greater say in their educational options. This has produced a market-led approach as to what courses are offered, which translates into playing to the audience -

audience maximise. A consumer orientated education vs. what might be a true educational need. And the former has become determinative to attract government funding.

Fb1

Also you attract customers and funding if you use the ultimate gadget, even if the knowledge to be acquired can be obtained better through the old way.

Fb2

[What is an educated person?]

That is a really difficult one...not amount of knowledge or facts stored up. Rather knowing where to find out information and data, principles, and how do you apply the knowledge and information obtained to new, everyday situations, and relating things and anticipating results.[Would you use a word such as 'wisdom'?] Yes.

Fc2

I think that is part of the perennial problem in distance education, the dialogue aspect, where education is seen not specifically as dialogue but as almost a one-way giving process, which to a certain extent is sort of the behaviourist-cognitive science approach - not all, I am grossly generalising.

Fc3

Dialogue is only a part of the educational process. There is an amount of imparting of information and knowledge, of pointing people in certain direction -'this has been done in the past'- so you don't need reinventing the wheel. There is a body of knowledge and experience that is a starting point people can use. But then, I think, it goes beyond that. Building on that you then go to an area where dialogue becomes important and necessary. At a basic level it is making sense of that information, ideas, principles, and this needs a certain amount of negotiation: it got to be incorporated within the person's own understanding of the world.

Fc4

I have been in many face-to-face situations where very little dialogue goes on, and in certain distance education situations where people are dispersed geographically or even dispersed on time but there has been more in the way of dialogue than people coexisting in a room together at the same time and same place.

Fc5

It is at the point of putting things together into some form of meaningful whole that the interaction and dialogue with other people is the important, the essential part.

Fc6

With regards to the incorporation of new technologies in distance education, there is whole set of different meanings being made by different people. If the emphasis is put on technology first and foremost, as opposed to what it actually is supposed to achieve, there is a danger of pushing things in the direction of what I refer to as the 'delivery mode': just sending things to people, as opposed to necessarily helping people learn by communicating with one another. Because you can use a lot of these things (WWW, multimedia) for achieving that. It all depends how you use it.

Fc7

It is not intrinsic to any particular medium that it has to be used in a particular way or not. It is people who tend to champion certain uses of it that one can think: well, why do they try to do it this way and not the other way? Think for instance of the mystic of the CD-ROM. It has been presented as an educational entity in itself and of course it is not. It is a way of storing information; it depends what information you put on it, and what use you make of it.

Fc8

The KMI may go down not particularly fruitful avenues. The KMI stadium, which as far as I can make out is what in the old days we would call a televised lecture, with a few extra bits. Not a very useful instructional or educational experience and does use a vast amount of expensive technology to disperse it to wider audience. It may have its place but I don't think it is particularly innovative, and I don't think it is particularly effective for doing a great deal.

Fc9

So down from blue-sky research to specific instances in course development, then you bring a whole range of other issues which I don't think people in KMI are particularly well suited or interested in doing. So that overlap becomes difficult and could present potential problems.

Fd1

Derek Rowntree has done a remarkable job at popularising distance education and distance learning.

Fd2

David Harris made what I thought were very useful early critical points about the potential problems of distance education in terms of being seen as just involved with transmission and delivery of goods to people. If the concentration was just on passing things out to students, rather than students making much use of it. But in recent years he's made a lot of comments about problems with the OU and distance education which have no much ground and I think it is based more upon rather strange views he's got about how things used to be as opposed to how things subsequently developed.

Fd3

A great detractor, [of the OU] of course, was Margaret Thatcher. She was very much against the idea of an open university. When the University was very new and she was Secretary of State for Education she saw the OU as a nice and cheap way of expanding higher education, but subsequently made various comments like: 'you cannot get a degree just from sitting at home watching TV', and some other disparaging comments about the whole notion of distance education when she was in a very influential position. It was seen as being more cost effective than other institutions and therefore tolerated for economic reasons rather than by any social or educational reasons.

Fd4

I don't think the important issues have changed over the years, but the context in which they manifest themselves has: What is learning and how is it best effected in relation to technological developments? What is education and who is it for? Is education just about giving information? What is technically possible, is it equally educationally desirable? It was thought in the 50s that

Educational TV would solve the problem. Then later on, in the early computers days: 'All we need is to get computers into all homes'. And to a certain extent all the stuff these days about multimedia, Internet, the WWW is still in that direction. The perception of it is that all we need are waves of information and that is it!

Fd5

Yes, you can get immense amounts of information through all these new technologies, but its what you do with it is that is important. Information isn't knowledge, isn't learning, isn't education, much rather it is using it purposefully in a wise way, and you don't get that just by downloading information.

Fd6

The OU, in its first phase, was regarded as an innovative institution and its innovations were of two main types: First, the open access policy, innovative in the context of Higher Education in the UK, and making it available on a part time basis to anyone that would like to come along. This innovation didn't have to do necessarily with ET, but with the sort of philosophy of the institution. Second, the production of these well prepared teaching materials which could reach students in their own homes. But the success of the innovation was the fact that it took what had been solely taking place with a group of people sitting in front of a teacher, making it available to a large number of people in different places and spread over time and doing this in a way that was accessible so that people could engage with it in a relatively easy way (student friendly) rather than being done as an elitist sort of activity.

Fd7

Other places tried to get into distance education soon after the OU started but they didn't have the sort of structure in terms of those things being accessible to people: transmission, or postal service, or existing networks of educated people to act as tutors, and this is vital. The OU would not have succeeded were it not for the tutors that are engaged with the students at the ground level. It doesn't have just to do with having a self-contained distance education system.

Fd8

I see ET as an enhancer, bringing about some important processes that couldn't normally be done. It is more when people tend to grab hold of one or more of these things and see them as a sort of universal way of doing things that the problem comes.

Fd9

I get quite depressed at times when I go to some conferences. Lots of presentations boil down to people giving case studies -'I had problems with my traditional course. People seemed to be a bit bored, so I decided to connect everybody to the WWW and students love it!'. I thought: you haven't solved anything, you haven't addressed what the problem is about, what is going wrong with the way the person is teaching.

Fe1

Some use of technology may be part of an answer to an educational problem but it may not be. Probably far more likely not to be. ET has more to do with the basis of the curriculum design of a course, rather than with the method of delivery. In so many cases people are just 'prodding' things by adding yet another gimmick rather than having an educational rationale for doing it. Or they

say, people are now playing with computers, therefore I must include computers as an addition, without fundamental educational questions about what it is that they are trying to do.

Fe2

[ET?] Yes, I would put the emphasis on the first word as opposed to the second. Some times I refer to myself as a skeptical enthusiast: I can see great advantages and possibilities and potentials [with regards to the new technologies], but one has to be rather skeptical as to what as to what the origin of these things are, why are people doing it in the first place and so forth, and if you can see useful educational rationale for doing it then fine, no problem. But when it is not advancing any educational causes, then I see the problem or rather potential dangers.

Fe3

Unfortunately, I think the world is going down the technological path, led by technological and economical research rather than anything else. Everything now is pointing in that direction. Think about Microsoft University. Extravagant claims get made by people like Gates, which sounds good to people who actually do not know much about it, i.e. policy makers and it seems to them as the answer that they desire, and people like myself are left with a sort of rearguard action.

Fe4

[What about ethical issues in ET?]

I don't know, I really don't know about that one, I have to admit. I think a lot of people involved in higher education aren't actually particularly well versed in educational issues at all.

Fe5

[With regards to international collaborations...]

The assumption of trying to make these things as available as possible to the wider number of people as possible, that we are not to be an elite activity that just goes on for a small select sector of the population. My values, on that basis, are shared with a number of colleagues, but not all, and it colours the discussion I have had with people in other institutions. Sometimes disagreements come on that basis: what we see as the purpose of education in higher education and not about other particular aspect we are talking about.

Ga1

The original vision of the OU in the past was to provide education, not just academic degrees. Now the emphasis is on mass higher education: aiming at getting 40% of the population to obtain it.

Ha1

Yes, I do see ET as an essential part of any distance educational system. You have to do that, don't you? You cannot communicate at a distance, or develop any sort of educational relationship at a distance, without using technology somehow.

Ha2

One of the interesting problems in comparative research is that you get different measures of effectiveness, don't you? How do you actually make comparisons? Do you judge the distance educational system in the UK against the one in the Dominican Republic? Or do you judge the Dominican Distance educational system against the Dominican conventional one? I came down

increasingly to believing that the only measures that you can use is that you need to compare the system within its own country, and then if you want to you can make an international comparison by using some kind of very simple ratio: success in the distance system divided by success in the conventional system gives you a figure. Then you can begin to draw some international comparisons around that.

Ha3

From an economical point of view, like in cost-effectiveness studies, your comparison is more or less valid within a country, but it is totally invalid moving from country to country. I was having this argument two weeks ago: people were saying, well, I wish you turn all these cost figures that were in Pesos or in Zambian currency - God knows what - into US dollars, and my response to that was, 'But how stupid!'. OK, I can do it, but that is only valid today, tomorrow the currency may shift enormously in one country and therefore your international comparison is no longer valid. The only comparison is: is distance education cheaper within a country or more expensive than conventional education, and why? Perhaps that is a very limited result, which seems to upset people.

Ha4

You have to find cheaper solutions. How do you think that the Sub Sahara Africa is going to be able to afford the high technologies? It doesn't mean that distance education isn't a viable answer to their educational problems, but you cannot just impose high technological solutions across the whole world.

Ha5

So there is nothing new in the questions, there may be an awful lot of differences in the answers. But there are givens. Then I would go on to say that when a decision, for example to set up an autonomous distance teaching university is taken, certain things begin to follow: You have to make technological choices. You choose certain technologies and from that springs certain facts about your organisational structure, you will need to have production facilities, distribution facilities, student enrollment facilities,, etc. Academic experts...even then you have to make choices if you are going to have staff on contract or setting up a department and so on. But the fact that you will need certain facilities is a given and it is not surprising to me that the structure of the British OU, the Dutch OU, and the Spanish UNED are actually quite similar in many ways.

Ha6

UNED always struck me as a very traditional Spanish University and the major difference with the OU was its conception of what a curriculum was, which certainly is a larger issue than distance education. For example the OU was innovative in this country, above all, in having an open admission policy, that hasn't anything to do at all with distance education, you could do that in a traditional institution.

Ha7

Educational Technology seems to me an ill defined term, which might mean curriculum designers, might mean instructional designers, it might mean people who might be interested in ET, who were advising academics, you know. Ah yes, the original name of the IET was Applied Educational Sciences.

Ha8

There is no educational debate going on in the institution [OU], and very few issues that are really significant are raised for general discussion. It is a problem of leadership.

Ha9

Well, technology is only useful if it helps students to learn. If it doesn't help students learn, it is useless.

Hb1

I think that you have two responsibilities towards the students. One, you want to be certain that the students will have a reasonable possibility of success, and therefore it is not moral to take students if you know that they are going to fail, for that is a waste of their money and it also smashes their self-confidence. Second, as a University, or any educational institution, actually has, if it is at all worthwhile, a deep concern about standards which students will have when they exit. And so you don't ever compromise on your academic standards. If the student is not up to getting a degree, then you have failed them.

Hb2

Well, the one of the debates that doesn't really seem to take place within this institution [OU] very much is the one which Harris 'Openness and Closure in Distance Education' raised. Are we a standardised packages institution or are we providing room for individuals to develop themselves? It is not a debate the institution ever had outfront.

Hb3

If you think that distance education can be used to transform society, not just to educate some people. To provide information, yes, but actually as a means to getting people to discuss and to take action, to transform society. I would have said that some of the radio-escuelas [in Latin America] have been exceedingly interesting projects. But that is a value judgment that says as much about my political stance as about anything else.

Hb4

It is difficult to get the keys to help people understand each others cultures in a way that will improve communications between them. The problem is that tourism doesn't necessarily help, it breeds stereotypes. You actually need to get into peoples homes and live with them.

MISSING

PAGES

NOT

AVAILABLE

CONFERENCE PAPERS AND PUBLICATIONS

- Expanding Horizons in Educational Technological Design (International Council for Distance Education - ICDE '97, PennState, USA).
- Study-Timing and the New Educational Paradigm (ICDE '97, with Emilio Nogales Arroyo from UNED).
- Exploring the Nature of Educational Technology (Centre for Technology and Social Systems, Maarsen, Holland, April 1997).
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- La Educación a Distancia y la Creación del Conocimiento Compartido [Distance Education and the Creation of Shared Knowledge] (Córdoba, Argentina, June 1998, with Prof. Neil Mercer, also available as *CLAC Occasional Papers in Language and Communications, No. 54*).
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