

## TODAY'S OVERALL PICTURE OF DISTANCE EDUCATION

Distance education is practised in all parts of the world to provide study opportunities for those who cannot – or do not want to – take part in classroom teaching. This does not mean that there is universal agreement about its characteristics. To some, distance education is identical to private study of prescribed texts with or without special study guides, to others, it is a teaching-learning system including specially prepared study materials and regular, mediated contacts between students and tutors, individually or in groups. There are distance-teaching universities that offer their students printed and recorded courses but no mediated communication, although they sometimes provide supplementary face-to-face teaching. This applies, for example, to the Dutch Open Universiteit and the Colombian Unisur. Others like the British Open University, make provision not only for course materials but also for correspondence, telephone and computer communication between students and tutors and others in the distance-teaching school or university, which – following Delling (1987b) and earlier – I call the supporting organization. This use of pre-produced course materials and non-contiguous communication, sometimes supplemented by face-to-face contacts, no doubt represents the praxis of most distance-teaching institutions in the world. In some cases arrangements are also made for peer-group interaction, i.e. for individual students communicating with other students.

Usually students learn entirely individually and at their own pace. They then neither belong to a group or class, nor feel that they do so. A great number of exceptions to this rule occur, however. Universities sometimes teach some groups of students by distance-education methods and other groups face-to-face –

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they are so-called dual-mode organizations. Even single-mode organizations - like distance-teaching universities - in many cases endeavour to some extent to keep students together in groups and do so by imposing regulations of various kinds. Nevertheless, individual study basically characterizes distance education.

### THE DISTANCE-EDUCATION CONCEPT

The concept of distance education that this book is based on implies consistent non-contiguous communication between the supporting organization and its students. This communication is of two kinds:

- 1 One-way traffic in the form of pre-produced course materials sent from the supporting organization and involving students in interaction with texts; this can be described as simulated communication
- 2 Two-way traffic, i.e. real communication between students and the supporting organization.

As far as it is non-contiguous, this communication must be mediated. The media used for the one-way traffic are in most cases the printed and recorded word and for the two-way traffic correspondence and telephone interaction. More sophisticated media are now widely used (telex and electronic mail, for example). They are discussed in Chapter 6.

Distance education thus has two constituent elements, the teaching exposition referred to as one-way traffic and the real communication by means of which students have access to personal tutoring and counselling. With this understanding of its two constituent elements I would define distance education as covering the various forms of study at all levels which are not under the continuous, immediate supervision of tutors present with their students in lecture rooms or on the same premises but which, nevertheless, benefit from the planning, guidance and teaching of a supporting organization.

The term distance study is sometimes used in the sense of distance education (no doubt a translation of German Fernstudium, which means university-stage distance education), but should be limited to denoting the activity of the distance students while distance teaching denotes that of the supporting organization, particularly its writers, editors and tutors. Others have gone

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further in their descriptive definitions of distance education, thus including the role of possible supplementary face-to-face sessions and organizational-administrative aspects. See Keegan (1980a, b and 1990) as well as Bååth (1981).

The addressees of distance education are usually individual students although it sometimes also serves group learning, by tele-conferencing, for example.

### THE EVOLUTION OF DISTANCE EDUCATION

Teaching and learning by correspondence is the origin of what is today called distance education. Correspondence education has been known for several generations, mainly as part of adult education. References to what was probably correspondence education occur as early as the 1720s and to what was indisputably correspondence education in the 1830s (Battenberg 1971: 44; Brat 1977: 161; Holmberg 1986: 6-7). Correspondence education is taken to denote teaching in writing, by means of so-called self-instructional texts, combined with communication in writing, i.e. correspondence between students and tutors.

As, for both of these elements, media other than the written word became common and grew in importance, the term correspondence education was felt by many to be too narrow. In North America, independent study (cf. Wedemeyer 1981) and home study (Lambert 1983) have been used as competing terms. The same applies to external study in Australia and New Zealand; hence the name, the Australian and South Pacific External Studies Association. Since the early 1970s, distance education is the designation that has gradually been adopted in the United Kingdom and Ireland (though resisted by the Association of British Correspondence Colleges), in North America, Australia, New Zealand, and other parts of the English-speaking world, as well as internationally. Usage in this context can be studied in the periodicals concerned with this type of education. 'Distance' occurs in the very first issue of the British Open University journal, *Teaching at a Distance* (1974: 1, 35 and 55), and in the names of the Australian journal, *Distance Education*, the Canadian *Journal of Distance Education*, and the US *American Journal of Distance Education*. A degree of formal recognition of the term distance education occurred in 1982 when the International Council for

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Correspondence Education (ICCE) changed its name to the International Council for Distance Education (ICDE).

Whereas from the end of the nineteenth century up to the 1960s the distance-teaching organizations had – with few exceptions, among them the University of Chicago under William Harper and the University of Wisconsin inspired by William Lighty – been private correspondence schools (one of which, Hermods in Sweden, had in 1958 become an official examining body for its own students), a new era saw publicly supported and established universities and schools becoming more and more numerous and important while the private organizations continued their development with gradually more sophisticated use of methods and media (see Holmberg 1986 Chapter 3). An outstanding pioneer heralding the influence of public distance-teaching organizations was the University of South Africa, which emerged as a development of the University of Good Hope, founded in 1873 as an examining body based on the model of the University of London. It started teaching at a distance in 1946. The University of South Africa was definitely established as a distance-teaching university through a governmental decree of 1962 (Boucher 1973). However, it was the founding of the Open University in the United Kingdom in 1970 that above all marks the beginning of the new era. It gradually created general public recognition of distance education. With few exceptions, as in Scandinavia, educational authorities had until then been sceptical in their appraisal of this kind of education. The image of distance education in many countries changed from one of possibly estimable but little respected endeavour to one of a publicly acknowledged type of education, far from seldom acclaimed as an innovative promise for the future.

#### DISTANCE EDUCATION AND OPEN LEARNING

The adjective 'open' occurs frequently in connection with distance education, no doubt because of the strong influence of the British Open University and other distance-teaching organizations that have adopted practices corresponding to and names containing this adjective (see pp. 9–10). In these names, 'open' originally referred to access and to the avoidance of certain restrictions; in itself it has nothing to do with distance education, as Dewal makes clear:

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As distance education refers mainly to mode of delivery, open education refers to structural changes. A distance education institution can also be an open institution but not necessarily so. Open education refers to structural changes so as to make an institution open: open with respect to place; time; content of learning; mode of learning; etc. . . . A distance teaching institution could also be a 'closed' one. (Dewal 1986: 8)

This contradicts a statement by Lewis and Spencer (1986: 17) to the effect that 'distance learning is a sub-category of open learning', which was derived from the frequent use of 'some features of distance learning' in open learning (*ibid.*). To judge from the use made of the term open learning in the UK, this seems to be a fairly common interpretation. However, see Foks (1987):

Open learning is not synonymous with distance education; nor is distance education a subset of open learning. Distance education is a mode of learning with certain characteristics which distinguish it from the campus-based mode of learning. (p. 74)

Open learning is a state of mind. It is an approach taken to the planning, design, preparation and presentation of courses by educators, and an approach taken to the selection and use of learning strategies and associated resources by students. This approach seeks to provide students with as much choice and control as possible over content and learning strategies. (p. 76)

See also Crigiano 1983; Keegan 1986: 23–24; Lewis 1986; Northcott 1986; Boot and Hodgson 1987; Cunningham 1987; Holmberg 1989a. Cunningham equates open learning with self-managed learning (p. 41).

In today's usage the distinction between open and distance learning is blurred. Mary Thorpe testifies to this development: 'Undoubtedly "correspondence education" as a term has been overtaken by "distance education", which, in the United Kingdom at least, has in turn been overtaken by "open learning"' (Thorpe 1987: 56).

Frequent references to what are called open-learning methods seem to indicate that a change of meaning in this direction is a distinct possibility, however undesirable it may be from the point

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of view of conceptual clarity. Thorpe and Grurgeon (1987: 2) describe open learning as 'an umbrella term which refers to a whole series of varied educational initiatives and provision'.

Against this background it seems doubtful if open learning is really a helpful term. It would be if the distinctions made by Dewal and Foks were observed. But perhaps its very vagueness makes it acceptable to common usage. Educators who find distance education a forbidding term may feel like replacing it by open learning.

## MODES OF TEACHING AND LEARNING IN DISTANCE EDUCATION

Teaching and learning in distance education are based on the two constituent elements described: a pre-produced course and non-contiguous communication between students and the supporting organization with its tutors and counsellors. Modern technology has made a number of useful developments of both elements possible.

The pre-produced courses used are, or are meant to be, of a self-instructional type. They are usually in print and often supplemented by recorded audio presentations. Sometimes broadcast programmes (radio and/or television), video recordings, video data/videotex and other supplementary media are used (see p. 79ff.). Pre-produced courses may be self-contained or may function as guides to the study of set or suggested texts, recordings, etc. (see pp. 71-2). They are usually divided into units, at the end of which students are invited to answer questions, compute, translate, solve problems, write essays, etc. and to submit this work for correction and comment. Tasks for submission to the supporting organization are usually referred to as assignments.

The role of the second constituent element, non-contiguous communication (by which, of course, is meant two-way traffic, primarily student-tutor interaction), whether in writing, on the telephone, on audio tape, by computer, or in any other way varies in distance-education systems. In some it is the basic element, in others it is partly or even largely replaced by self-checking exercises and/or face-to-face sessions. Between these extremes there are various intermediary positions, acknowledging face-to-face interaction as a subsidiary procedure. For instance, on the one hand, the British Open University, though catering for complete

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non-contiguous two-way communication, systematically organizes face-to-face contacts in study centres and during summer courses; on the other hand, many private distance-teaching organizations in Europe, the USA and elsewhere, offer two-way communication mainly by non-contiguous means but make occasional use of face-to-face sessions.

The role of distance education within the organizations that offer it and the ways in which it is provided and supported also vary. Two opposite, general approaches should be mentioned as typical of well-known distance-teaching organizations. There are what I have elsewhere (Holmberg 1985a: 9-10) called large-scale and small-scale systems of distance education. Whereas the former develop courses for hundreds and thousands of students, often as a result of team work, and then engage groups of tutors to comment on students' work and teach in other ways, the small-scale approach implies causing teachers to develop courses exclusively for their own students, so that the course author is identical with the tutor. The large-scale organizations, as typically represented by the British Open University, the German FernUniversität and the large correspondence schools, can be regarded as innovations outside the traditional educational systems in that they apply what Otto Peters (1973 and 1983) calls industrial working methods (division of labour, rationalization, economies of scale, etc.; see p. 16). The small-scale organizations, on the other hand, find it important to keep within the main stream of education. The University of New England in Australia can be seen as the prototype of small-scale distance-education organizations, which commonly occur among Australian 'dual-mode' universities, i.e. universities with both traditional, on-campus activities for resident students and external study for distance students. Far-reaching parallels between these two forms of study are considered desirable and are effected. Periods of residential teaching are usually required also of the external, 'distant' students.

The two approaches outlined, large-scale and small-scale, represent different views of distance education: the latter often functions merely as a form of distribution, replacing, when necessary, traditional types of teaching and learning. This aspect will be discussed later on pp. 137 and 161. Important financial implications are further concerned in the differences between the two approaches, as investigated on p. 201.

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Distance education is often regarded as an innovation which gives students a high degree of independence. This has been expressed by, among others, Charles A. Wedemeyer (1981: 36), a leading representative of American independent study, in a list of  *desiderata* :

- 1 Instruction should be available any place where there are students – or even only one student – whether or not there are teachers at the same place at the same time.
- 2 Instruction should place greater responsibility for learning on the student.
- 3 The instructional plan or system should free faculty members from custodial duties so that more of the teacher's and learner's time can be given to truly educational tasks.
- 4 The instructional system should offer learners wider choices (more opportunities) in subjects, formats, methodologies.
- 5 The instructional system should use, as appropriate, all the teaching media and methods that have been proven to be effective.
- 6 The instructional system should mix and combine media and methods so that each subject or unit within a subject is taught in the most effective way.
- 7 The media and technology employed should be 'articulated' in design and use; that is, the different media or technologies should reinforce each other and the structure of the subject matter and teaching plan.
- 8 The instructional system should preserve and enhance opportunities for adaptation to differences among individual learners as well as among teachers.
- 9 The instructional system should evaluate student achievement not by raising barriers concerning the place where the student studies, the rate at which he studies, the method by which he studies, or even the sequence in which he studies, but instead by evaluating as directly as possible the achievement of learning goals.
- 10 The system should permit students to start, stop, and learn at their own paces, consistent with learner short- and long-range goals, situations, and characteristics.

This quotation can be regarded as a summarizing declaration of intent with which many distance educators can identify.

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### FACTS AND NUMBERS

Distance teaching primarily serves professional/occupational training, secondary and tertiary education. There can be little doubt that the former two applications are much more widely spread and also exert stronger social influence than the last-mentioned field of action. However, university education at a distance seems almost everywhere to enjoy a higher degree of prestige than applications in the other two areas. As shown above, this particularly applies to the official distance-teaching universities offering duly authorized degrees. In comparison with the many highly professional correspondence schools and other, often private, distance-teaching organizations, this may seem unjustified; nevertheless this impact of the distance-teaching universities is a historical fact.

### Organizations offering distance education

It would be almost as difficult to say how many distance-teaching institutions exist in the world as to state the number of conventional schools or universities. A comparative study of international distance education carried out at the FernUniversität in West Germany in 1986 listed some 1,500 distance-teaching institutions. Well-known distance-teaching universities are:

Allama Iqbal Open University, Pakistan  
Andhra Pradesh Open University, Hyderabad, India  
Athabasca University, Alberta, Canada  
Central Broadcasting and Television University, Beijing, China  
FernUniversität, Hagen, Germany  
Indira Gandhi National Open University, New Delhi, India  
Korea Air and Correspondence University, South Korea  
Kota Open University, Rajasthan, India  
Kyongji Open University, South Korea  
Nalanda Open University, Bihar, India  
The National Open University of Taiwan  
Open Universiteit, The Netherlands  
The Open University, United Kingdom  
The Open University of Israel  
Ramkhamhaeng University, Thailand  
Sri Lanka Institute of Distance Education  
Sri Lanka Open University

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Sukhothai Thammathirat Open University, Thailand  
Telé-Université (part of the network of the University of Quebec, Canada)  
Unsur (Unidad Universitaria del Sur), Colombia  
Universidad Estatal a Distancia, Costa Rica  
Universidad Nacional Abierta, Venezuela  
Universidad Nacional de Educación a Distancia, Spain  
Universidade Aberta, Portugal  
Universitas Terbuka, Indonesia  
University of Distance Education, Union of Myanmar, Burma  
University of the Air, Japan  
University of South Africa  
Yashwantrao Chavan Maharashtra Open University, Nashik, India

There are a number of distance-teaching organizations which do work similar to that of these universities and which might have been included in the list, among them the following:

The International University Consortium, Maryland, USA  
The National Distance Education Centre, Ireland  
North Island College, British Columbia, Canada  
The Open Education Faculty of Anadolu University, Turkey  
The Open Learning Agency, British Columbia, Canada  
The Open Learning Institute of Hong Kong

For university distance education within a dual-mode framework Australia has had, since 1989, eight distance-education centres, as follows:

Deakin University and Monash University, Victoria  
The University of New England and Charles Stuart University, New South Wales  
The University College of Central Queensland and The University College of Southern Queensland  
The University of South Australia  
The Western Australia Distance Education Centre (Murdoch University)

A central brokering company was founded in 1993 at Monash University. It is called the Open Learning Agency of Australia (King 1993).

In the USA many universities offer distance courses as well as

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their regular teaching on campus. The Open College in the UK, a creation of the late 1980s, has produced a range of 'training packs' serving open learning.

A great number of other private, state-owned, church or foundation-financed distance-teaching organizations, university departments, colleges of advanced education, and schools offering distance education are active in various parts of the world. Some of them are members of national and/or multinational professional bodies, such as the International Council for Distance Education (ICDE), the Association of European Correspondence Schools (AECS), the European Association of Distance Teaching Universities (EADTU), the Distance Education and Training Council, until 1994 called the National Home Study Council (NHSC) (based in the USA), the Open and Distance Learning Association of Australia (ODLAA), which until 1993 was called the Australian and South Pacific External Studies Association (ASPESA).

Whereas the distance-teaching universities are creations of the 1970s and 1980s (with the exception of the University of South Africa) many distance-teaching organizations which teach mainly at the secondary level or offer professional training are much older. Among traditional, still leading distance-teaching organizations of this kind can be mentioned the Australian TAFE colleges (TAFE = technical and further education) and the following, with dates of foundation:

International Correspondence Schools, USA (1891)  
Wolsey Hall, England (1894)  
American School, USA (1897)  
Hermods, Sweden (1898)  
NKS, Norway (1914)

Both the size and the working methods of the distance-teaching organizations vary to an extreme extent, as already shown in the presentation of the two opposing approaches (mentioned on p. 7). There are small, highly specialized institutions (teaching management, for example) with a total student body of one or two hundred people. At the other end of the scale are both officially established universities and private distance-teaching organizations which simultaneously teach hundreds of thousands of students. While in the 1990s the British Open University and the German FernUniversität have student bodies of between 120,000 and 40,000 participants, the French Centre National

d'Enseignement à Distance has more than 250,000 students enrolled (Dieuzeide 1985: 32), the big home-study schools in the USA each register 200,000-300,000 students (about four million students 'are enrolled at any given time' in schools accredited by the American National Home Study Council according to Verdun and Clark 1991: 19) and their European counterparts in the private sector have about a million students together. The distance-teaching universities in Thailand and the Central Broadcasting and Television University in China work with even larger numbers of students (Walter Perry 1984 and Doerfert, Schuemer and Tomaszewski 1989).

The methods and media used also vary greatly. In some developing countries, the written word is the only medium available and communication is frequently hampered by faulty postal services. Radio is often used or considered desirable. Television and satellite communications are available in many areas, not only in the developed parts of the world, and serve mass audiences, whereas the use of both mainframe and personal computers is on the whole limited to the more affluent countries.

Descriptions of the situation in individual countries can be found principally in detailed case studies. A number of descriptive and partly explanatory surveys of the international state of distance education are available, among them Walter Perry (1984); Keegan (1990); Kaye and Rumble (1981); Jenkins and Perraton (1980); Doerfert, Schuemer and Tomaszewski 1989; Minnis 1990; Peters 1990; Khoul and Jenkins 1990; Rumble (1985); Rumble and Harry (1982); Sewart, Keegan, and Holmberg (1983); Graff and Holmberg (1988); Henri and Kaye (1985); Holmberg (1985b).

#### Facts about distance students

There is no evidence to indicate that distance students should be regarded as a homogeneous group. The only common factor is that, with few exceptions, these students are adults and consequently are gainfully employed and/or look after their families. The 25-35 age group seems to be the largest in most organizations. Distance study evidently contributes to upward social mobility. Gradually older students too, not only those around 40 and 50 but also old-age pensioners, seem to show a preference for distance education.

These general statements are borne out by a great number of studies, among them Glatter (1968); Glatter and Wedell (1971); McIntosh, Calder, and Swift (1976); Ansere (1978); Flinck (1980); McIntosh, Woodley, and Morrison (1980); Bartels (1982, 1983); Woodley (1986b). Of interest also are the studies by Fritsch (1980) and Woodley (1983) of the reasons why applicants have withdrawn their applications to university study at a distance.

The reasons why adults choose distance education, as shown in both the sources mentioned and others, are primarily the convenience, flexibility and adaptability of this mode of education to individual students' needs. A predilection for entirely individual work is frequently referred to. In Flinck's study, 63 per cent of the population investigated (about 4,000) stated that they liked working on their own at the same time as they largely referred to the support given by the distance-teaching organization as an important reason to choose distance education; 73 per cent of the students mentioned this second reason. Free pacing, although a privilege not given to all distant students, was found to be an even more important argument in favour of distance education (Flinck 1980: 6-9).

Many distance students mention poor previous educational opportunities as a background for distance study. Physical handicaps, hospitalization, and even imprisonment occur as background factors, but apparently a majority of students in developed countries, which do offer real choices, choose distance education because they genuinely prefer it to other modes. This is, of course, to be expected from adults whose family, professional and social commitments make face-to-face teaching, bound by a fixed timetable, less attractive or unrealistic.

There are indications that distance students consider themselves independent and capable. An investigation by Göttert (1983), in which he reports on an interview study of more than 500 FernUniversität prospective and real students, is interesting in this context. These people 'saw themselves as more competitive, achievement oriented and assertive' than the average general population and student groups investigated. 'Only small differences were found between dropouts and persisters (after one year in distant study): the persisters (before enrolment) had portrayed themselves as more competent and successful in coping with academic and social demands' (Göttert 1983: summary before list of contents). Nevertheless, quite a few university dis-

tance students seem to doubt their ability to cope. This has produced counselling activities and various attempts to understand the distance learner as a 'whole person' (Kelly and Shapcott 1987: 7).

### THE ASSUMED POTENTIAL OF DISTANCE EDUCATION

It is often assumed that distance education is suitable exclusively or mainly for subjects wholly relying on printed study material, i.e. cognitive learning, mainly in arts subjects. Through the use of audio and video recordings, laboratory kits, computer programs, telephone contacts, and other media, a great number of other subject areas have shown themselves teachable and learnable at a distance. In fact, the results of language learning by means of distance-education courses have in some cases proved extraordinarily good, even as far as pronunciation (for which phonetic transcription has proved vital) is concerned.

Evidently work requiring equipment that individual distance students do not have available or experiments that could be dangerous if not performed under the supervision of a subject specialist have to be arranged face to face; also, in other cases supplementary face-to-face sessions can be useful (see pp. 113-16).

Experience shows, however that there is no need to exclude certain subjects from the possible application of distance education; even some aspects of medicine and surgery have proved to be subjects suitable for this form of education. The distance-education work done by the Centre for Medical Education of the University of Dundee in Scotland testifies to this.

The training of skills in the so-called psychomotor domain is often seen as more of a problem in distance education than it actually need be, above all at fairly elementary stages, in developing countries and elsewhere (see *About Distance Education* 23 1986: 6).

Distance education claims to serve students who are not situated or willing to benefit from comprehensive face-to-face instruction. Unless special measures are taken, it is thus an individual activity and mainly a means of study for adults mature enough to decide on their own ways of learning and to study on their own. Teleconferencing makes it possible to 'assemble' a class of students who may interact not only with the teacher but with

each other' (Garrison 1990: 15). Educators tend to regard this as a considerable advantage, whereas many students claim that they prefer individual study. Distance education above all attracts mature people with professional, social and family commitments and facilitates recurrent and permanent education. It is true that distance-education procedures are also used in schools for young people but, as this is a special application, it is disregarded here (see, however, pp. 146-9).

In a paper reflecting the position of distance education in the early 1990s Ljosa describes 'several roles which distance education should fill', i.e. balancing 'inequalities between age-groups', offering 'second-chance upgrading', providing 'information and education campaigns for large audiences', training 'key target groups', speedily and efficiently, catering for 'otherwise neglected target groups', offering education 'in new areas', extending 'geographical access to education', facilitating the combination of study 'with work and family life', developing 'multiple competencies' and offering 'trans-national programmes' (Ljosa 1992a: 28-29).

The repeated reference above to the maturity of distance students is indicative of the relevance of student independence in our context. At the very least, students are independent in carrying through a programme of study, i.e. in deciding where and when to learn, how much of a course to undertake at a time, when and how much to rest, when and how often to revise texts and exercises, etc. The independence can go much further, via entirely free pacing, free choice of examination periods, if any, to independent selection of learning objectives and course elements. How far student independence can and should go is a bone of contention which will be discussed further on pp. 165-72. Suffice it to say here that distance education undoubtedly has special potentials for student independence.

This brings to the fore the possibility of catering by distance education for academic socialization, which belongs to so-called affective learning (see p. 42). In the affective domain, which is concerned with values, emotions and attitudes, it is usually taken for granted that non-contiguous communication has less power to influence students than face-to-face meetings. However, experience shows that distance education can be effective in bringing about attitude change. This is borne out by studies of distance-education programmes in health and welfare work in, for

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example, Sweden and the United Kingdom (Rogers 1986). Sparkes rightly points to unforgettable television programmes as one of 'the most effective external influences in the affective domain' (Sparkes 1982: 7).

While it is thus in the nature of distance education that it can serve individual learners in the study they do on their own, in the cognitive, affective and psychomotor domains, courses developed can easily, and to great financial advantage, be used by great numbers of students. Distance education can be, and often is, a form of mass communication. This union of individualization and mass communication may appear as something of a paradox. Personal approaches and a conversational style are compatible with individualization (see pp. 125-7). In preparing a mass communication programme, on the other hand, it is practical to apply industrial methods including planning, rationalizing procedures, division of labour, mechanizing, automation, and controlling and checking. Peters, as already referred to, has made a systematic study of these methods. He describes distance education as an industrial form of teaching and learning (Peters 1973, 1983). The implied technological approaches do not prevent personal communication of a conversational character from being a basic characteristic of effective distance study. This applies even when computerized communication occurs.

Distance study is self-study but the student is not alone; he or she benefits from a course and from interaction with tutors and the supporting organization constituted by the distance-teaching institution. A kind of conversation in the form of two-way traffic occurs through the written or otherwise mediated interaction between the students and their tutors and others belonging to the supporting organization. Indirectly, conversation is brought about by the presentation of study matter if this one-way traffic is characterized by a personal approach (as it were, conversing with the students) and causes the students to discuss the contents with themselves. The conversation is thus both real and simulated. The simulated conversation is not only what Lewis calls internalized conversation caused by the study of a text (Lewis 1975: 69) but a relationship between the course developers and the students, created by an easily readable and reasonably colloquial style of presentation and the personal atmosphere of the course. This style of presentation stimulates activity and implies reasoning, discussing for and against, referring to the student's

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previous experience and thus avoiding omissions in chains of thought.

As will be evident from the following remarks, the present author finds the personal character of both real and simulated communication a most important characteristic of distance education, and indeed regards organized distance education as a mediated form of guided didactic conversation.

The picture that emerges shows distance education to have vast application potentials not only for independent study attractive to adults but also for mass education, through what has been described as industrial methods, and for highly individualized study and personal approaches with a great deal of rapport between the teaching and learning parties.