



Classic Theories of Distance Education

Context and Interpretations

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Abstract

This chapter explores the influence of three of distance education's classic theorists—Otto Peters, Börje Holmberg, and Michael Moore—on its subsequent conceptualization and practice. The classic theorists' understanding of theory and theorizing is discussed critically in the context of the articulation of each's particular theory. This is then contextualized in terms of the history of the development of distance education and its institutions, from Pitman's correspondence courses on shorthand, through correspondence schooling and higher

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education external studies, to the rise of the United Kingdom Open University in the 1960s. The latter's subsequent powerful influence on the theory and practice of open and distance education internationally is described as stimulating a fertile context for the classic theorists' endeavors. Finally, consideration is given to more recent scholars' interpretations and adaptations of the classic theories of distance education. This leads to a concluding reflection on the authors' engagement with distance education theorizing and the prospects for the future of distance education's theorizing and practice.

Keywords

Classic theorists of distance education · Guided didactic conversation theory · Industrialized form of education theory · Transactional distance theory · The OUUK and the rise of open and distance education · Interpretations of the classic theories of distance education

Introduction

Three theorists—Otto Peters, Börje Holmberg, and Michael Moore—have fundamentally influenced the way that “distance education” came to be named, articulated, and practiced from the late 1970s. Their theorizing and leadership helped shape the rise of open and distance education globally through agencies, such as the International Council for Open and Distance Education (as it was (re)named in 1982), the Commonwealth of Learning (formed in 1988), and, more generally, through UNESCO. Their theoretical works are described below and then juxtaposed critically to elucidate the different nature of their theorizing of the field.

Consideration is given to the educational practices and institutions—correspondence education, external studies, the establishment of the UK Open University (OUUK), etc.—that preceded or overlapped with the three theorists' early work which provided the context for the emergence and naming of the new field of “distance education.” Furthermore, their work is discussed in relation to the consequences for (open and) distance education policy, practice, and scholarship as reflected in the writings of their more recent contemporaries. The chapter proceeds to a discussion of other scholars' interpretations and theorizing from these foundational theories of distance education to contribute to retheorizing distance education as its practices and potential unfold in the twenty-first century.

The chapter closes with the authors' reflections on their engagement with distance education theorizing, research, and practice which drew on the work of the classic theorists and others. This leads to a consideration of the future direction of distance education's theorizing and practice.

Classic Theorists of Distance Education

In order to understand distance education, it is advantageous to examine its origins through a lens of its classical theories in a chronological order. Such an examination affords an understanding of the subsequent theoretical developments and the emergence of “new” theories, which build on, and advance, the preceding classical theories. We ascribe classic theories of distance education as those of Otto Peters (1973, 2003, 2007), Börje Holmberg (1983, 2003, 2005), and Michael Moore (1973, 1993, 1997) (a contributor to this volume). Their work was not only visionary for their times but also of fundamental importance to define distance education as a subdiscipline of education (Delling, 1971). In so doing, they set the concept of “distance education” apart from the theory and practice of correspondence studies, which emerged in the nineteenth century (Fritsch, 2001).

The rationale for defining the theoretical foundations developed by Peters, Holmberg, and Moore, respectively, as *classical distance education theories* is that each of these theories (i) has its specific epistemological grounding, (ii) is an independent epistemological construct, (iii) operationally defines distance education, (iv) has particular explanatory representations, and (v) has its own distinct identifiable descriptive constituents.

Based on the above rationale and in chronological order, Peters (1973) was arguably the first scholar who advanced a theory of distance education, namely, *distance education as an industrialized form of education*. The second major theoretical discourse on distance education was advanced by Holmberg with his *guided didactic conversation* theory (Holmberg, 1983). Subsequently, Moore (1993) developed the *transactional distance theory* which, alongside Peters and Holmberg’s work, can be categorized as a “classical” distance education theory.

Peters, Holmberg, and Moore with their respective theories based on different epistemological frameworks provided the foundations for distance education theories that followed. In so doing, they advanced significantly the scholarship of distance education. Thus, for scholars and practitioners of distance education, their theories are important for understanding the concept of “distance education” as it has mutated into its current forms.

Prior to dissecting classical distance education theories, it is useful to explain how each of the theorists defines “theory.” Peters, Holmberg, and Moore held their own particular understandings of what constitutes a theory; these contributed to each’s theoretical stances. Bernath & Vidal (2007, n.p.) cited Peters as defining “theory” as an “understanding of reality” and as “. . .an explanation, a systematic account of relationships among phenomena.” They noted that Peters referred to Garrison (2000, p. 3) stating that theory “. . .is a coherent and systematic ordering of ideas, concepts and models, with a purpose of constructing meaning to explain, to interpret, to shape practice.”

Pyari (2011, p. 95) described Holmberg as defining theory as being a “. . .systematic ordering of ideas about the phenomenon of a field of inquiry, and an over-arching logical structure of reasoned suppositions which can generate testable hypotheses” (Bernath & Vidal, 2007). Holmberg did not offer a generic

definition of theory but rather referred mainly to teaching-learning theories in a descriptive manner (Pyari, 2011, p. 95). He, thus, provided an understanding of distance education as guided didactic conversation (viz., communicative action) (Holmberg, 1985). It is possible to deduce what Holmberg perceived as “theory” from his comment that his theory arises from:

... the application of a methodological approach - empathy-creating conversational style – [which] leads to increased motivation to learn and better results than conventional presentation of learning matter. (Holmberg cited in Bernath & Vidal, 2007, n.p.)

Holmberg refers to Johann Gustav Droysen and Wilhelm Dilthey (Bollnow, 1967; Bernath & Vidal, 2007), thus trying to place his theory within the realm of hermeneutics and the concept of *Verstehen* (understanding). To explain, Holmberg’s concept of *Verstehen* is couched in the process of selecting and interpreting texts which are to be narrated. This is partially in line with Gadamer’s double hermeneutics (cf. Ginev, 1998; Gadamer, 1975). However, Holmberg interprets double hermeneutics in a different key. He proposes that there are two hermeneutics, rather than double hermeneutics in play. One is the author’s presentation of “facts” and the other is the interpretation of the “facts” by the reader. The presentation of “facts” may well be perceived as an empirical notion couched in *Erklären* (explaining), and the interpretation may be seen as couched in the process of *Verstehen*. Put simply, this means the author constructs a “factual” world, which the reader interprets by constructing the meaning from the author’s “factual” narrative (Juler, 1992).

Moore takes a similar view to that of Holmberg. Bernath & Vidal (2007, n.p.) explain that Moore argues that “. . . theory is the statement of what is known as the prelude for research that is discovering what is not known.” They argue that Moore sees theory as a map which encapsulates what is known and identifies what is unknown. Thereby, Moore perceives theory as an epistemic framework, including both empirical and hermeneutic inquiry modes, consisting of explanation (*Erklären*) and understanding (*Verstehen*) of given phenomena.

Having briefly identified the three classical theorists’ understandings of theory, it is now possible to turn to the epistemological constructs of their classical distance education theories specifically.

Epistemological Constructs of Classical Distance Education Theories

In order to comprehend and analyze a theory, it is necessary to establish its epistemological basis. That is, only when it is revealed what counts as knowledge and how it is constructed is it possible to understand a theory. A brief elucidation may be in place.

Bernath & Vidal (2007) report Holmberg as stating that:

[s]cholarly theories imply a systematic ordering of ideas about the phenomena of our field of inquiry and are usually of two kinds. One is concerned with *understanding*, the other with *explanation* and prediction. (n.p.) (Authors' emphases)

Thus, one should be able to ascribe to each theory an inquiry mode (Habermas, 1972), which in turn identifies the epistemological grounding.

Otto Peters' Distance Education as an Industrialized Form of Education Theory

Peters' (1971, 1973) industrialized form of education theory is premised on principles of industrialization in the 1960s and thus reflects the proposition that distance education is an industrialized form of teaching and learning. His theory is based on explaining (*Erklären*) distance education through his observations of its practice. In constructing his theory, Peters focused on technical aspects of distance education or what Habermas (1972) would term as an *empirical-analytical inquiry mode* with its *technical interests*. This allows Peters to firmly root his theory in technology and economics. From this epistemological vantage point, Peters contrasts distance education with face-to-face education and delineates the former as a standardized educational mass system. This system, according to Peters, is delineated by constituents, such as rationalization, division of work among cooperating individuals, mechanization of material production and dissemination, and planning and mass production akin to Fordism (Farnes, 1993; Campion, 1999). In effect, Peters' theory generates the same constituents as the operationalization of the theory. Thus, the theoretical and operational constituents of Peters' industrialized form of education may lead to the conclusion that it is akin to industrialized production processes (Peters, 1993a, 1993b).

Börje Holmberg's Guided Didactic Conversation Theory

In contrast, Holmberg's theoretical foundation is couched in the concept of understanding (*Verstehen*) and interpretation of the communication phenomena leading to *guided didactic conversation* theory. Holmberg et al. (1982) claim that his theory is both empirical and interpretative; however, a review of Holmberg's work shows that there is a limited substantive empirical basis underpinning his theory. To clarify, Holmberg focuses on distance education from an interpretive vantage point, providing an understanding concerning communicative and social interaction. This may be aligned with Habermasian interpretive (historic-hermeneutic) epistemology based on *practical interests* (Habermas, 1972).

Holmberg provided three theoretical stances: (i) the *guided didactic conversation theory*, (ii) the *empathy approach theory*, and (iii) a *one-to-one relationship between tutor and learner* theory. Holmberg tried to build his *empathy approach theory* on Popperian *critical rationalism* and empirical testing and on Bloom's taxonomy.

However, as far as the former goes, there is no evidence to show that his *empathy approach theory* has been tested and that it is falsifiable. Rather, Holmberg only hypothesized that an empathetic conversational style is motivational and promotes learning (Hülsmann, 2008).

Holmberg's *one-to-one relationship between tutor and learner* theory (Holmberg, 2003) hypothesized that distance education facilitates a *one-to-one association* between an individual learner and the learning facilitator. Holmberg (2005) saw this association in a distance educational environment as unique, perhaps akin to Oxbridge tutorials. This presupposes that each learner has a separate and independent communication conduit to their learning facilitator. Arguably, this may occur, but this theory fails to address the extent to which, in distance education, a *one-to-one association* exists between learners themselves.

Holmberg's main contribution to distance education is his *guided didactic conversation theory*. Arguably, this theory encompassed some elements of the two preceding theoretical notions. In *guided didactic conversation theory*, Holmberg (1983) transferred the responsibility for teaching (learning facilitation) to course designers. He argued that due to the space-time dichotomy in distance education, the communication process imposes the requirement to reorganize the teaching-learning process. He proposed that distance education cannot mirror the face-to-face teaching-learning environment. Thus, distance education needed to incorporate (i) the extrication of content presentation from the teaching-learning interaction and (ii) the receptive space-time interaction, whereby the main teaching responsibility is transferred from communicative action to content presentation (Holmberg, 1983, 2003, 2005). Although others previously had theorized instructional design as tutorials in print, Holmberg took this further by arguing that one can incorporate a Socratic dialogue as a communicative (inter)action into the content. In so doing, it is theoretically possible to shift the locus of teaching-learning process to course development. Holmberg's theory captured the aforementioned concept of Socratic dialogue cum communicative (inter)action into the realm of distance education.

Michael Moore's Transactional Distance Theory

Moore's *transactional distance theory* (Moore, 1992, 1993, 1997, 2013) is based on a proposition which allows for a nexus between the concepts of *understanding* and of *explaining* distance education. This theory represents the distinctive characteristics of the relationship between the learner and the learning facilitator within distance learning activities (cf. Moore, 1993). Thus, Moore's theoretical stance allows for the existence of idiosyncratic distance education practices which interpret and support social interaction allowing for learners' emancipation through Moore's (1972) notion of autonomy.

In essence, Moore's theory is located within three substantive constructs: (i) structure, (ii) conversation or dialogue as constituents of communicative action, and (iii) learners' autonomy. Structurally, Moore delineates an educational or learning experience, as determined by a learning activity (Moore cited in Holmberg,

1986, p.110). Communicative action or dialogue in Moore's concept of transaction identifies the distinct relationship between the learner and the learning facilitator. This brings the learning experience to the fore and articulates the meaning of such an experience for the learner. Learners' autonomy refers to degree to which learners are able to shape their aims and objectives and assessment and evaluation parameters.

These epistemological stances enabled the emergence of different and stand-alone distance education theories. To summarize, while Peters focused on the technical aspects of distance education leading to his industrialization theory, Holmberg focused on communicative action, and Moore bridges the understanding and communication gap between the learner and the learning facilitator due to the geographic and psychological distance.

It is evident that Peters, Holmberg, and Moore constructed their distance education theories from different epistemological perspectives. However, gradually each theory has been subjected to Kuhnian (Kuhn, 1996) paradigmatic shifts which enabled other scholars to advance the theoretical foundations of distance education, leading to different "new" theories and discourses to emerge. With this in mind, it is possible to consider the operationalization of each classical distance education theory at an operational level.

All three classical theories of distance education are substantively delineated by their operational level. In other words, the three classical theories emerged, or have been constructed through, an inductive epistemological approach. Peters, Holmberg, and Moore progressed from observing and understanding specific operationalizations to theorize broad generalizations. These generalizations formed the basis for the advent of distance education theories and subsequent operationalizations of distance education.

Operationalization of the Classical Distance Education Theories

From an operationalization perspective, Peters was arguably the first to have an effect on the operations of distance education, partly because he addressed the industrialization of distance education that was already evident, and his theory helped shape and manage its future models (Peters, 2003). In this respect, Peters (2007) emphasized that distance education needed to be viewed from the socioeconomic framework of the times. As such, he was theorizing during the period when (as we discuss in the next section) mass distance education—especially in the form of the nascent OUUK—was emerging. Key features of industrial society were discernible in distance education, such as the application of technologies (see Peters' [2013] critics of digitalization), division of labor, mass production, economies of scale, standardization of production, and organizational process rationalization.

The two operational "macro-factors" arising from Peters' theory are *organization* and *economics*. The former is aligned with the division of labor, the application of technologies, and the process rationalization. The latter is underpinned by economies of scale, mass production, and the standardization of production.

In comparison with Peters' theory, Holmberg's *guided* didactic conversation theory was less obviously operationalized in distance education. It may be argued that Holmberg's theory has been influential by recognizing the proposition that distance education in its diverse forms and levels is characterized by addressing the time-space dimension. This leads to operationalization of support services and learning design and its effectiveness across time and space. Operationally, the *guided* didactic conversation theory advocates an organized teaching-learning program and process (Holmberg, 1983, 1985) which is now integral to distance education.

At its operational level, the theory of transactional distance addresses the communicative action gap between the learner and learning facilitator due to the geographic distance (Moore & Kearsley, 2005). Operationally, this gap may be bridged by applying appropriate instructional design features as well as facilitating interaction between teachers and students (Bernath & Vidal, 2007). This, according to Moore, includes policies, procedures, and facilities at the institutional level, such as learning resources, design, delivery, and interaction to constitute the learning habitat. These may be viewed as operational "macro-factors" of transactional distance education. The operationalization of Moore's theory is based on program structure (i.e., course content analysis), dialogue (i.e., interactions between learning facilitator and learners), and autonomy (i.e., learner's participation in decision-making concerning the time, place, and substance of their learning) (Moore, 1972, 1976).

In order to appreciate the significance of the classic theories and their operationalization, we now turn to understand the historical context in which Peters, Holmberg, and Moore formed their theoretical positions.

A Background to the Emergence of Open and Distance Education Theorizing

As is explained above, our classic theorists of distance education had their intellectual and experiential roots in the mid-twentieth century. Holmberg first published on distance education in 1960, Peters in 1967 (see Zawacki-Richter, 2019), and Moore in the early 1970s. These were interesting times historically as the world emerged from the clouds of World War II into the sunshine of the modernizing 1960s and 1970s—notwithstanding the Cold War chill! These 1960s and beyond developments—in what became known as "distance education" by the 1980s—evolved alongside developments in media and communications technology into the (largely) online distance education world we have today. The work of the classic theorists, directly (through their leadership positions in distance education) and indirectly (through others' use, interpretations, and development of their writings), helped shape this world. The classic theorists, however, also benefited from the significant earlier developments of what came to be known as "distance education" from the 1980s.

The term "distance education" embraced the practices incorporated by the earlier terms, "correspondence education," "correspondence schooling," "external studies," "university extension," etc. These earlier forms can be traced back to the nineteenth

century when print (e.g., typewriting, typesetting) and communications (postal services) technology developed alongside the emerging needs for schooling and skills training. The “classic” early example is Pitman’s shorthand training being offered using postcards with written instructions and tasks sent to and from students via the new “penny postal” service in the 1840s in London and later throughout the UK. One hundred and sixty years later, Tait (2003) reflected on the Pitman’s courses as being especially significant in terms of the two-way communications and the individual support this enabled for the students. Striving for interaction between teacher and learner, and between learners themselves, has become an intense focus in pre-distance education theory and practice, especially in the work of Charles Wedemeyer in the USA (Latchem, 2019, pp. 11–12).

The early twentieth-century correspondence schooling became an important means of providing education for children in rural and remote communities in nations, such as Australia, Canada, and the USA, with large land masses and geographically distributed settlements. In Australia, Adelaide Miethke deployed the shortwave radio network developed for the Royal Flying Doctor Service, to enable teachers to provide scheduled “classes” over the air from the 1950s until the rise of telecommunications and the Internet replaced radio. An important consideration here is that such post-World War II educational developments were substantially influenced by their governments’ concerns for social and economic development for their populations. Doubtless, our classic theorists were influenced by the public adoption of such social and economic imperatives and the validation it gave to them to begin their theoretical journeys.

Arguably, one of the major twentieth-century developments in higher education was unfolded in the UK during the 1960s and influenced the work of the classic theorist. The Wilson Labour Government, elected in 1964 on a platform of social, economic, and educational reform (Hennessey, 2019), embarked on major reforms to primary schooling (Plowden Report, 1967) and the abolition of tripartite secondary education and the establishment of comprehensive education (“Circular 10/65”, n.d.). For people in higher education, especially those around the world working in forms of correspondence education, external studies, etc. (see Smith [1984], for example, from Australasia and the South Pacific), it was the establishment of the OUUK that really made a profound difference. It fuelled not only reform to tertiary education in the UK; it energized distance education theory and practice internationally and, of course, launched the idea of an “open university”: one that was open to all. Evans & Nation (1989) describe how Harold Wilson, after observing, in 1963, technical education by correspondence in Moscow, and also the work of *Encyclopedia Britannica* in its educational films became captivated with the idea of a “university of the air” for the UK. This eventually became the Open University with the British Broadcasting Corporation (BBC) providing broadcasts “over the air” (MacArthur, 1974, pp. 4–6; Perry, 1976, pp. 10–11). The Wilson Government established the OUUK as a major step toward modernizing post-War Britain through educating its citizens and, therefore, its workforce. It was to prove much more than that for the world and for theorizing distance education.

The OUUK was established in 1969 and enrolled its first students in 1971. Its first location was in the old BBC studios at Alexandra Palace in London; it later moved to new premises in Milton Keynes (then a “new town” growth area) 90 kilometers northwest of London. New BBC studios were included on the campus for the OU to develop the BBC radio and TV programs broadcast to its students (and anyone else with a TV). This was a major use of media and communications technology in distance education. This was possible in the UK because of the BBC’s national radio and TV broadcast coverage. This was something that Australia and Canada, for example, could not achieve (especially with TV) through their national broadcasters due to their smaller populations distributed across their vast expanses and different time zones, although, as noted previously, shortwave radio was used (such as for the School of the Air) and some local radio stations, too (Arger, 1989).

The OUUK’s integration of educational technologies was a core feature of its development. An Institute of Educational Technology (IET) was established to inform, research, and guide the OUUK’s course development. Harris (1987), in a study of the OUUK in the 1980s, observed “a cheerful operationalisation pervades the work of ‘educational technology’ . . .” (p.2). There appears to be little influence of the classic theorists over this period in the OUUK. Harris’s work makes it clear that there were many contradictions and tensions between the IET staff themselves and also with other academic and nonacademic staff. Indeed, Harris (1987, pp. 26–7) discusses the work of the Survey Research Department (SRD), which “in the early days at least was concerned with market research” and “reflected a strong concern for public relations” and lacked comparability with contemporary sociological or educational research or, one assumes, from the nascent classic theorists’ work, although Peters’ theory, in particular, related well to the SRD’s “industrial” approach. Harris reports that the SRD’s marketing and public relations focus met with “resistance from some junior members” of the SRD. (From 1985, this formed part of the new Student Research Centre [SRC] which remains today.) An example of these young resisters can be found in the work of the late Alistair Morgan. He was a passionate advocate for, and practitioner of, substantive qualitative research into distance students’ learning (Morgan, 1993). He argued strongly that the SRC (and others in the OUUK) should move “beyond (the) mindless data collection” of rudimentary surveys (Morgan, 1990, p.10) and the “mindless empiricism” that underpinned it (p.13).

Like Harris, Morgan saw that there was a rich vein of social and educational science theories that could be applied to the OUUK’s institutional research. A key point here, in terms of understanding the rise of the classic distance education theories, is that the OUUK was established to address the social and (higher) educational inequalities in the UK—not just to provide “regular” selective higher education at a distance; it was to be “open learning”—This theoretical concept reflected the political and pedagogical imperatives of the time (Jakupec & Nicoll, 1994).

The classic theorists of distance education were differently influenced by the OUUK’s rise to prominence in open and distance education. Moore was a OUUK staff member between 1977 and 1986. He then returned to the USA where

previously, in the early 1970s, he worked with, and was influenced by the work of, Charles Wedemeyer at the University of Wisconsin-Madison on correspondence education and independent learning (Diehl, 2013). More recently, Holmberg and Peters received honorary doctorates from the OUUK for their contributions to distance education. This suggests that there were some mutual influences between the theorists and the OUUK. We now turn to discussing how the classic distance education theories were subsequently interpreted by others.

Interpretations of Classical Distance Education Theories

The literature shows that there is no unified, general theory of distance education. Over 30 years ago, Keegan (1986) proposed that distance education theories fall into one of the following groups: (i) industrialization theories, (ii) independence and autonomy theories, and (iii) interaction and communication theories. However, nowadays, some distance education theories are based on established communication and educational theories (Pyari, 2011).

From Keegan's vantage point, the interpretation of distance education theories may well lead to the conclusion that it is a more industrialized form of education when compared to conventional face-to-face education. But this does not mean that other aspects of distance education, such as independence and autonomy, and interaction and communication are absent. Distance education, at an interpretative level and based on the classical theories, can be thus perceived as a systematically planned endeavor. The constituents of such an endeavor include didactic groundwork as it relates to teaching-learning activities and learners' choice including learners' independence and autonomy, supervision, guidance, and support. It is important that all these and other relevant constituents should be enacted within a framework of physical distance and often based on an asynchronous time frame. At interpretational level, this requires bridging the space-time gap using some form of technology, as well as forms of texts and media (Hawkridge, 2002).

It is possible to focus on the interpretation of distance education theories by using (i) Keegan's (1993) theory of teaching-learning integration, including two-way communication; (ii) Garrison's (1993) communication and learner control theory, emphasizing a nexus between technology and self-directed learning; and (iii) Verduin & Clark's (1991) theory of dialogue and support including structure and content and two-way digital mediation. The rationale for focusing on these three theories and projecting them into the realm of interpretation is twofold: First, they include the above-stated endeavors to various degrees. Secondly, they are constituted from the existing classic distance education theories and have their analytical frameworks which lend themselves to be translated into interpretational structures based on two or more of the classic distance education theories.

Keegan's Integration Theory of Teaching-Learning

Keegan's (1993) integration theory relies to a large extent on aspects of two-way communication. However, it also has partially its roots in Peters' (1983) notion of distance as a barrier which can be overcome using technologies and decision-making processes. This means overcoming barriers to enhance the relationship between actors through technology is seen by Keegan (1993) as a reintegration of the teaching-learning activities. Keegan (1996) provides an analysis of the classical distance education theories and articulates a new extended theory of distance education based on the following constituents:

- (i) The quasi-permanent separation of teacher and learner throughout the length of the learning process
- (ii) The influence of an educational organization both in the planning and preparation of learning materials and in the provision of student support services
- (iii) The use of technical media—print, audio, video, or computer—to unite teacher and learner and carry the content of the course
- (iv) The provision of two-way communication so that the student may benefit from or even initiate dialogue
- (v) The quasi-permanent absence of the learning group throughout the length of the learning process (p. 50)

Keegan (1993) believes that distance education requires activities similar to those of face-to-face educational transaction. He states:

... a theoretical structure for distance education focusing on the reintegration of the teaching acts by which learning is linked to learning materials may go some way to compensating for the location of the students, causing the lack of eye-to-eye contact which is so important in education. (Keegan, 1993, p. 131)

His view is important because it advocates face-to-face educational transactions which are found in Holmberg and Moore's theories. There is a subtle difference, however, in that the latter two theorists assume learners have a greater ability to take responsibility for their learning than does Keegan. Nevertheless, major aspects of Holmberg and Moore's theories reside in Keegan's integration theory of teaching-learning.

Garrison's Communication and Learner Control Theory

The center of Garrison's (1993) communication and learner control theory is the nexus between technology and self-directed learning. Garrison (2000) suggests that the focus of distance education theory should be understanding the teaching-learning processes which occur at a distance through utilization of a range of methods and technologies. He argues that distance education theories should reflect collaborative

teaching-learning, which are focused on adaptive teaching-learning transactions. Thereby, Garrison suggests changing from the classic distance education theories which focus on the organizational and structural aspects of distance education to one which focuses on transactional teaching and learning processes. The central concepts of Garrison's communication and control theory are educational transaction, learner control, and communication. These three concepts are underpinned by the facilitation of educational transactions and are influenced by communication theories.

Garrison's theory of communication and learner control also contains similar elements to those in Moore's transactional distance education theory. Garrison (1989, cited in Amundsen, 1993, p. 67) states that "...the educational transaction is based upon seeking understanding and knowledge through dialogue and debate..." and, therefore, necessitates two-way communication between teacher and learner. The proposition is that a two-way communication be administered in a way that control over the teaching-learning transaction is negotiated between the learning facilitator and the learner and should be supported by appropriate technology. The concept of learner and learning facilitator control is thus proposed partly instead of the concept of independence or autonomy embedded in Holmberg's *guided didactic conversation* theory and Moore's *transactional distance theory*.

Verduin and Clark's Theory of Dialogue: A Three-Dimensional Theory of Distance Education

Verduin & Clark's (1991) theory of dialogue is a three-dimensional distance education theory built on the classic distance education theories. It uses mainly Moore's *transactional distance theory* and Keegan's *integration theory of teaching-learning*. The three dimensions are as follows:

Dialogue/support dimension, which focuses on dialogue. In this sense, "dialogue" is applied as a full support for the benefit of the distance learner. In short, dialogue is the primary activity ensuring full support (Verduin & Clark, 1991).

Structure/specialized competence dimension as a definitional structure of the formality of the subject matter. Verduin and Clark argue that some subject matter or learning subjects may be basic and thus require only a minimal structure. Conversely, a subject matter may require a high structure. This applies especially to learning disciplines "...in which many years of study may be necessary before a learner is competent enough to set objectives and study methods or to take part in evaluation" (Verduin & Clark, 1991, p. 125).

General competence/self-directedness dimension. This dimension differentiates between suitable self-directedness or autonomy levels and assessment of the learner's general competence, to ascertain to which extent appropriate structure and dialogue have been afforded to the learner (Verduin & Clark, 1991).

Verduin & Clark (1991) suggest that these three dimensions may form a continuum allowing for diverse combinations. They perceive the combination as fitting most problem-based forms of distance education.

It is evident that the above interpretations of classical DE theories provided by Keegan, Garrison, and Verduin & Clark, respectively, not only have shed light on the above cited and discussed works of Peters, Holmberg, and Moore but also have extended it further. Their respective interpretations do not fit exactly into the three main categories stated above, namely, (i) industrialization theories, (ii) independence and autonomy theories, and (iii) interaction and communication theories. Keegan, Garrison, and Verduin and Clark were instrumental in crossing the boundaries of the classical distance education theories.

As one may expect, the rapidly evolving field of distance education from the 1980s prompted many more interpretations of the classical theories of distance education. For example, Rumble (1989) provided a wide-ranging analysis of the constructs of distance and openness, respectively. Perraton (1987) advanced a distance education theory focusing on teaching, administration, and assessment as three interrelated systems. Evans & Nation (1989) identified dialogue as the quintessence of practice, research, and theory in distance education. There are several others, too, some of which are reflected in this handbook but which are beyond the capacity of this chapter.

Concluding Reflections

The invitation from the editors to write a chapter on the classic theories of distance education prompted the authors to reflect on their first experiences in distance education. They both commenced at Deakin University's Institute of Distance Education in the mid-1980s with backgrounds in teaching and research in distance education. Their significant early work together was on the development and teaching of the Master of Distance Education (MDEd) program jointly offered by Deakin University and the University of South Australia (Calvert, Evans, & King, 1993). The MDEd provided students with a critical understanding of distance education's roots, theories, and practices. The final part of the program focused on learning about research methods and methodologies (Evans & Nunan, 1993) and then the students practicing a small piece distance education research using appropriate and ethical procedures (Evans & Jakupec, 1996). An important goal of the program was to strengthen research capacity in distance education by providing graduates with the background to pursue applied research and evaluation in their workplaces and, for some, doctoral research in (and through) distance education (Evans, 2008; Evans & Green, 2013).

To achieve these ends for the students, the teaching staff drew on the theoretical work of Holmberg, Moore, and Peters, plus the contributions of the (then) emerging scholars of open and distance education. Writing this chapter required returning to the authors' work at the time (e.g., Evans, 1989; Evans & Nation, 1989, 1992, 1996; Evans & Jakupec, 1996; Jakupec, 1996; Jakupec & Nicoll, 1994) to identify its foundations in the work of the classic theorists and those who interpreted it. Sadly, during this preparatory period, the authors learned that Börje Holmberg died at the age of 97 on April 10, 2021. Hence, distance education lost a leading figure in the

theory and practice of distance education. He was awarded honorary doctorates by the OUUK and Deakin University for his significant contribution to the field. It has been timely to recognize this work in here.

There are two inescapable major conclusions that emerge from reflecting on the work of the classic theorists. One is that the social imperatives of—and for—distance education persist into the twenty-first century. From schooling to universities, distance education is deployed to provide learning opportunities for people at times and places to suit their needs and circumstances (e.g., Jakupec, 2011). Indeed, the COVID-19 pandemic prompted governments in developed and developing countries to close schools and require them to “teach online.” Furthermore, universities continue to provide MBAs, MEds, M Nursing, etc., and even doctorates, for professionals to address the emerging national and global needs for an enlightened and informed workforce (Berge, 2013; Dunning & Evans, 2009; Evans, 2008; Evans & Green, 2013; Kuhne, 2013).

The second major conclusion is that distance education continues to reposition and repurpose itself by adopting and adapting new technologies to its purposes: from Pitman’s postcards in the nineteenth-century to the twenty-first-century virtual reality (Evans & Pauling, 2021). Such repositioning and repurposing sustain distance education at the forefront of educational change to address social and economic imperatives. A pertinent example is Meier and Jakupec’s (in press) work on the impact of COVID-19 on digitalization in higher education. As discussed above, such changes have not been without their critiques and challenges (Jakupec, 1996; Peters, 2013), and one may expect there will be more to come!

This chapter shows that critiques and challenges, especially those embedded within sound and substantive theorizing, are a fundamental component of the intellectual substance of distance education. The work of Otto Peters, Börje Holmberg, and Michael Moore provided the theoretical foundation upon which others have built over the recent decades. The cumulative effect is an expanding theoretical reservoir from which practitioners can draw, and to which they can contribute, to create future of distance education.

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