As new communications media have developed, discussion of the definition of "distance education" (DE) has increased. The following defining features of DE have been proposed: geographically remote, two-way communication; use of one or more technical media; mass delivery; control of educational institution; and predominance of independent study. In each case, however, examples of programs qualifying as bona fide DE without being characterized by the specific feature can be cited. Some authors have attempted to reframe the concept of distance by emphasizing the pedagogical aspects of the teacher-learner transaction (transactional distance). Learner autonomy and learning as action are two other issues that have been discussed extensively in relation to DE. Learner autonomy is seen as a requisite in highly structured situations, where learners must compensate for the lack of pedagogical flexibility. Simultaneously, learner autonomy is seen as indispensable when learners must deal with a lack of structure. Some have suggested that the format of DE programs include a structure that encourages learners to become proactive in assuming various learning strategies, committing themselves to the lifelong goal of self-directed learning. In the absence of in situ teacher-learner interactions, DE programs rely on a correct understanding of learner autonomy for their effectiveness. (Contains 15 references.) (MN)
DISTANCE EDUCATION AND LEARNER AUTONOMY: 
SOME THEORETICAL IMPLICATIONS
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ABSTRACT: No matter how we define distance education, the demands on learner autonomy and the opportunities for increased self-direction appear to be a constant feature of non-contiguous programs. This article discusses some of the implications of learner autonomy and self-directed learning in telematic programs.

RÉSUMÉ: Peu importe la définition que l’on privilégie, l’exigence accrue d’autonomie chez les apprenants représente une caractéristique commune des programmes d’éducation à distance. Cet article porte sur les conséquences de cette observation sur la programmation télématique.

The issue of defining “distance education” has been the object of much discussion in recent years. With the development of new communications media has come the realization that traditional “correspondence courses” are being replaced by new educational models, many of which rely on previously unknown technologies. Rumble (1989) gives us a breakdown of the main features of those curricular activities that are generally described as “distance education”.

First, the occasional or permanent separation of teacher and learner, in time and/or in space, is seen as perhaps the most universally agreed-upon defining characteristic of distance education, at least inasmuch as it relates to the “distance” half of the equation. Regardless of other variables in the organization of the programs, for example whether students actually meet at intervals or whether they are in contact with each other during the span of delivery, physical, or geographical distance is seen as a defining factor. The underlying supposition appears to be that the label “distance education” is applied to those curricular activities that can - and do - occur in spite of the physical separation between learners and useful learning resources. As we shall see, this may turn out to be less of an issue than anticipated, and the central features of distance education quite distinct from those associated with geography.

For teacher-learner interactions to qualify not only as “distant”, but also as “educational”, various criteria will, or at least should be applied depending on which definition of education one espouses, and on which author one comes across (Holmberg, 1986; Keegan, 1993). The provision of 2-way communication for example, seems to be a relatively widespread notion among theorists (Rumble, 1986). Other parameters include the use of one or more technical media (including print) and the possibility of mass delivery, the control and influence of an educational institution and the predominance of independent study (Keegan, 1996). Taken together, these elements have served to identify curricular activities that can be called both “distant” and “educational”, and to distinguish them from activities that fall in some other category.

Interestingly, each of these defining criteria of distance education can be challenged on the basis that we could easily imagine a particular program that does not conform to one or the other of their prescriptions, while at the same time, arguably, qualifying as bona fide distance education. For example, radio productions for health promotion are usually referred to as
educational programs, while they do not provide for “two-way communication”. Grass-roots community activities that have resisted all recuperation by colleges and universities nevertheless claim appartenance in a very real educational tradition - although they can hardly be said to be “under the control of an educational institution”. Similarly, the “industrialization” of learning programs (i.e. the fragmentation of teaching tasks and division of labour), and the “independent study” criteria could be overlooked or eliminated entirely, as is the case with computer conferencing networks, without anyone seriously entertaining the idea that they reside outside the realm of “distance education”. The only exception to this lack of absolutes is that in all cases, some kind of communication medium other than face-to-face speech is employed. But if we are to consider ordinary mail correspondence as a “technical medium”, then we might as well accept that ordinary speech is also, in itself, a “medium” used to convey ideas and emotions. Figure 1 lists the defining features of distance education found in the literature, and gives an example and a counter-example for each.

Fig. 1: What is “distance education”?

<table>
<thead>
<tr>
<th>Defining feature of distance education</th>
<th>Examples</th>
<th>Counter-examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographically remote</td>
<td>Learner in one location, teacher in another</td>
<td>In-house computer-based training program</td>
</tr>
<tr>
<td>2-way communication</td>
<td>Written or spoken feed-back from instructor</td>
<td>Mass media educational campaigns</td>
</tr>
<tr>
<td>Use of 1 or more technical media</td>
<td>Computer messaging or teleconference</td>
<td>Ordinary speech seen as a “medium”</td>
</tr>
<tr>
<td>Mass delivery</td>
<td>Large scale print or computer based training</td>
<td>Individualized instruction</td>
</tr>
<tr>
<td>Control of educational institution</td>
<td>University credits for off-campus courses</td>
<td>Grass-roots community development</td>
</tr>
<tr>
<td>Predominance of independent study</td>
<td>Learners studying at home by themselves</td>
<td>Computer network or study group</td>
</tr>
</tbody>
</table>

**Transactional distance**

Some authors have attempted to reframe the concept of “distance” by emphasizing the pedagogical aspects of the teacher-learner transaction. According to Moore and Kearsly (1996) we must consider “the subset of educational events in which the separation of teacher and learner is so significant that it affects their behaviors in major ways...In short, the *transactional distance* is such that special organizational and teaching behaviors are essential” (p.200). Moore (1972) first picked up on the idea of transactional distance, which he defined as the collection of factors that contribute to increase the communication gap between teacher and learner. More specifically, the degree of transactional distance is determined by the presence (or absence) of *dialogue* and by the extent to which a predetermined *structure* is built into (or lacking from) the learning activity.

Moore purports that high structure and low dialogue account for increased levels of transactional distance. Conversely, transactional distance can be reduced with an increase in dialogue and a minimizing of course structure. While the extent of both structure and dialogue can vary from course to course, low transactional distance would imply continuous dialogue with the
instructor and the opportunity to alter the instructional materials to meet the individual learning needs.

**Learner autonomy**

In regard to the pedagogical responsibility taken on by autonomous students, Wedemeyer (1973) considered the concept of learner independence, leading to self-directedness or learner autonomy. Moore (1972) cited learner-autonomy as the “second dimension” of independent study, which allowed for the development of programs that correspond to various levels of learner autonomy either anticipated or allowed.

However, there is some confusion regarding the effect of structure and dialogue on the requirement for learner autonomy. When structure is high and there is no opportunity for modification or discourse, learners must acknowledge their own educational needs and make their own decisions regarding their level of commitment to the program. According to Moore (1972), the greater the transactional distance, the more considerable the degree of learner responsibility that must be applied. However, distance education programs have mostly been criticized for their intractable designs which foster learner dependency, rather than learner autonomy. Moore himself (1986) stated that “Distance education and open learning programs are predominantly designed for students to be passive recipients of *pre-packaged past knowledge*” (in Kasworm/Yao, 1992, p.1).

In other words, the more highly autonomous the learners, the greater is the distance they can be comfortable with -- that is, “the less the dialogue and the less the structure.” (Moore/Kearsley, 1996, p.206) As well, “if there is neither dialogue nor structure, they must make their own decisions about study strategies and decide for themselves how to study, when, where, in what ways, and to what extent.” (Ibid., p.204)

But Moore had previously stated that *high structure* and less dialogue (seen as increased transactional distance) require enhanced learner autonomy. And “where less or little dialogue is possible or permitted, the course materials are tightly structured...but without the possibility of the individual learner modifying this in dialogueue with the instructor....In highly distant programs...learners have to take responsibility for making judgments and taking decisions about study strategies.” (Moore, 1993)

Thus, learner autonomy is seen as a requisite in *highly structured* situations, where the learner must compensate for the lack of pedagogical flexibility. Simultaneously, learner autonomy is seen as indispensable when the learner must deal with a *lack of structure*. This shows two very different views of learner autonomy: on the one hand, autonomy is a requirement for following a rigid set of learning activities. On the other, autonomy flourishes in an environment where there are minimal barriers to individual expression and control.

**Learning as action**

Kasworm and Yao (1992) suggest that the format of distance education programs should include a structure that encourages the learner to become pro-active in assuming various learning strategies, committing him/herself to the life-long goal of self-directed learning, as opposed to what Freire calls “banking education”. The question is, if learner autonomy is construed as having
a contradictory relationship with the fundamental features of distance education, how does one “encourage pro-active learning strategies”?

In the past, distance education literature has relied on models that situate learning independently from the intuitive interactions that occur between a learner and a human instructor. Because of this limitation, considerable attention has been given to theories of cognition that consider the process of learning as an intermediary between the input (i.e. the stimuli found or deliberately placed in the learning “environment”) and the output (i.e. the learner’s response to the stimuli - behaviors that show that learning has occurred). Recent theoretical developments in distance education seem to share this mechanistic outlook by stating that features of a learning environment, such as dialogue and structure, are related quantitatively to learning outcomes.

However, some authors point to the weakness of considering the act of learning merely as a causal link between a stimulus and a response.

For Kegan (1982), the act of making meaning combines the information processing capacities of the mind with the more fundamental experience of making sense of our own and others’ perceptions, emotions and actions. In essence, “...the evolution of the activity of meaning (can be) ... taken as the fundamental motion in personality” (p. 15). The notion of meaning-making thus transcends the mere elaboration of knowledge in the sense employed by constructivists.

Meaning is, in its origins, a physical activity (grasping, seeing), a social activity (it requires another), a survival activity (in doing it, we live). Meaning, understood in this way, is the primary human motion, irreducible. (Kegan, 1982, pp. 18-19).

By considering this particular form of meaning-making as the “irreducible” factor of human understanding, Kegan redefines the act of learning as a fundamental (indeed the fundamental) psychological impulse. In a similar perspective, Reed (1997) distinguishes between the notion of learner as receptor and as perceiver: “A perceiving organism is and should be an active, motivated observer, one that is hunting for stimulation, not passively receiving stimuli. Stimuli may exist for receptors, but they do not exist for perceivers.” (p. 268. Italics mine).

For Mele (1997), action philosophy carries considerable portent for learner-determined learning. For example, a causalist perspective which would attribute an action to a person’s intentions or “reasons” for doing something can be opposed to a non-causalist perspective which considers the subject’s intentionality as an undetermined event (i.e. which does not rely on a particular antecedent condition), thereby contributing little to our understanding of the chain of events that “caused” the action (Ginet, 1990). Taken together, these non-deterministic perspectives of “meaning-making” require that we adopt an interpretive approach for understanding specific learning “actions”.

Conclusion
Human consciousness is not a passive object which can be observed from the outside. Rather, our thoughts consist of a fluid, ongoing process, that “...performs an action which is that of knowing” (Russell, 1955, p. 840. Italics mine). In this perspective, human knowledge is a
subjective entity, indissociable from human experience. Indeed, May (1996) asserts that action and actor are a function of each other: "...the very consciousness which formulates an individual's ends cannot take place outside of the context of the action itself." (p. 39). One implication for research is that the learner's perceived reality is intimately related to his/her actions, to the extent that the instructional environment plays a secondary role to the learner's own symbolized understanding of the ambient context. This could explain the fact that adverse conditions are cited by self-directed learners as factors that promote, rather than hinder their learning (Bouchard, 1994). Another implication is that learning actions cannot be separated from their interpretation by the learner. Research into the various learning styles (Claxton, 1987) have shown that deep learners are very articulate when it comes to "explaining" how/why they learn. Surface learners, on the contrary, volunteer less self-interpretation when asked about their learning strategies, which suggests that learning ability is closely related to the ability to describe and explain one's own learning.

The fact that distance education relies on teacher-learner interactions that do not share all of the attributes of spontaneous verbal communication, implies that whatever those interactions are designed to be, they will be based on an explicit understanding of the learning transaction (rather than intuitive judgement or spontaneous interaction). This paper has attempted to demonstrate that depending on which model of learning one holds to be closest to reality (i.e. representing our "explicit understanding"), the design, delivery, and outcomes of distance education programs will vary greatly. Another implication is that in the absence of in situ teacher-learner interaction, distance programs rely to a greater extent on a correct understanding of learner autonomy for their effectiveness.

References
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