The conceptual view of independent study that is developed in this paper is based on discussions of four key ideas: (1) independent study is concerned with both learning and teaching; (2) independent study is concerned with the capacity of learners to be self-directing; (3) independent study systems are both internal and external to educational establishments; and (4) whether internal or external, independent study systems learners and teachers carry out their tasks separately from one another. Considered within this framework are aspects of learning processes, learner autonomy, the teaching-learning relationship, and distance education. It is concluded that the independent learner is independent of direction by others as well as the time-space bondage made necessary by traditional teaching, and two suggestions are made: when it is necessary to conduct programs of a contiguous kind, instructors must be at pains to foster and not infringe upon the learner's autonomy, and distance systems are preferable to settings of a contiguous kind for learners able to cope independently. Four references are listed. (MES)
INTRODUCTION

In the 1971 edition of the Encyclopedia of Education, our chairman, Professor Wedemeyer, defined independent study as follows:

Independent study consists of various forms of teaching-learning arrangements in which teachers and learners carry out their essential tasks and responsibilities apart from one another, communicating in a variety of ways for the purposes of freeing internal learners from inappropriate class pacings or patterns, of providing external learners with opportunities to continue learning in their own environments, and of developing in all learners the capacity to carry on self-directed learning. (1)

In my opinion this definition incorporates four key ideas and, I believe, we may arrive at a useful understanding of independent learning and teaching if we look at each of them. I say useful, because I hope we will obtain insights not only into theory, but also into the possibilities of developing independent study systems in the field of continuing health education.

The four key ideas are:

(1) Independent study is concerned with both learning and teaching.

(2) Independent study is concerned with the capacity of learners to be self-directing.

(3) Independent study systems are both internal and external to educational establishments.

(4) Whether internal or external, in independent study systems learners and teachers carry out their task separately from one another.
We will consider each of these four key ideas in turn.

**Independent Study Is Concerned With Both Learning And Teaching.**

In a previous paper, we were given Kimble's definition of learning as "a relatively permanent change in a behavioral tendency which results from reinforced practice," and we were also told that learning is "an outcome of a variety of life experiences." That is, of course, a perfectly respectable view of learning. It has been used to provide us with an intriguing account of the independent learner as a self-teacher. However, there is another point of view.

Kimble's definition views learning from the "outside". The view is that of the instructor who may, perhaps understandably, confuse the outcomes of learning with learning itself. An alternative view is that seen by the learner: a view I believe, which is more suitable as a starting point for a theory of independent study. If one looks out at the world through the eyes of a learner—you or me, for example—what does the world look like, and what does learning look like?

The world is, above all, perplexing. At any given moment some part of my world and cf yours is a source of mystery, problem, curiosity, disorder, even chaos. This is the starting point for a theory of independent learning. It is in man's restless nature to probe the mysteries and confusions of his world and to quench his insatiable thirst for understanding and for knowledge about his world.

Within some part of my "life space" exists an area of confusion and as I go about bringing order to that confusion I am engaged in the processes of learning. These processes are at two levels. At
the more conscious and more molar level, I assess situations, make plans to deal with problems, identify long and short term objectives, and set up criteria to establish if and when those objectives have been met. I proceed to gather information and ideas, make hypotheses, and eventually, after much testing, decide that my objectives have been met. What was confused becomes clear; what was a problem has been solved. And with solution and order, new areas for inquiry reveal themselves, and my quest starts anew. Such is the existential nature of Man.

At a molecular, and generally unconscious level, my learning activities include breaking my problem into its constituent parts, structuring the parts into meaningful patterns, abstracting relationships between these patterns, and seeking a clear and harmonious whole in what was previously confused and incomplete. In this view, learning is not a behavioral outcome; it is a process. It is every man's process of seeking order and meaning. The learner's reward is insight, or understanding: seeing the complete where previously there was incomplete, and seeing form where there was none before. "Learning is not a task or a problem," writes Jourard, "it is a way to be in the world. Man learns as he pursues goals and projects that have meaning for him. He is always learning something." (2)

My assertion, then, is that in a natural state all men are learners, and all learners are independent or autonomous. It is in the unnatural state that some of the processes of learning are managed for the learner by "another". To the extent that another suggests ways
for the learner to organize his perceptions and to the extent that another directs the learner to problems and their solutions, then the learner does not experience the full rigour of learning, or the full joy of winning the insights. If he is long and frequently denied that opportunity, his native capacity will be stunted and he will become a dependent learner.

Let me conclude these observations about learning and teaching with four points of interest:

First, it is not suggested that we adopt a romantic, Wordsworthian kind of philosophy of independent study, saying that since learning is a self-directed process the learner should be left to himself without outside assistance. On the contrary, I suggest the skills of learning can be sharpened, and the natural processes of planning, evaluating, and so on, can be trained. Furthermore, there is need to provide facilities, ideas, and information to the learner when he needs and seeks them; a point we will return to in speaking about teaching.

Secondly, the processes of learning do not change over the life span, but the concerns, the problems, etc. Studies of the adult life span by psychologists have given us the concept of developmental stages and tasks. At different stages of the life span the learner applies himself to tasks and problems of a qualitatively different kind, until, at the extreme of maturity, the healthy individual engages himself in problems of the spirit, the eternal, and the divine.

Thirdly, it seems likely that a particular kind of person is prone to surrender his learning autonomy and to become dependent. In our own
studies at the University of Wisconsin we are now looking at the work of a group of psychologists who have developed the concepts of field articulation, field dependence and field independence, in the hope that we may be able to obtain an instrument which will measure the characteristic learner-independence.

Finally, from this point of view, what is a teacher? A teacher is anyone who deliberately and systematically aims to assist learners to obtain insights. The assistance may be given in person, or in writing, in a book, a correspondence course, or in any of a variety of communications media. While a learner will struggle to make sense of his phenomenal field, with or without assistance, he is likely to make faster progress with proper help, especially in such tasks as information gathering. From the learner's point of view, teachers are many and different, and he moves among them, in the flesh, in print, living and dead. He draws on them, and at his will, he disposes of them.

**Independent Study Is Concerned With The Capacity Of Learners To Be Self-Directed**

For the dependent learner we can speak of a teaching-learning relationship, where the teacher's role is that of a director of learning, and the learner's role is to respond to the teacher's directions. The teacher tells the learner what is to be learned, how it is to be learned and when it has been learned. The independent learner needs, however, no such direction.
In contrast to teaching-learning and to emphasize the difference between dependent and independent study, we will use learning-teaching to indicate that the teacher's role is not that of the director of learning, but that of a resource in learning. In learning-teaching situations, it is the teacher who responds to the learner and the learner is self-directing in his learning activities. The function of the teacher in this learning-teaching relationship is to provide information and advice and to indicate the reasons for it. Allen Tough writes of this kind of teaching as "helping." (3) He indicates that the "helper" provides detailed information about the options that are open to the learner, but lets the learner make the decisions. The teacher as helper is a role similar to that of the consultant who enables someone else to do something, however, the consultant does not himself make and implement decision. The distinction between help and control is important to understanding the essential nature of independent study. It helps us realize that a learner can receive a great deal of help without giving up any of his autonomy, control or responsibility for learning.

Independent Study Systems Are Both Internal And External To Educational Establishments

The neglect of external independent study by many educators is, I suggest, a consequence of their looking at learning from the point of view of the teacher, not the learner. If it is assumed that teaching precedes learning, and learning is a consequence of teaching, then
obviously the closer the teacher is to the learner, the better he can influence him. Thus, the conventional teaching-learning environment is one in which learning and teaching are contemporaneous and contiguous; the teacher as he teaches is in immediate physical proximity with the learner as he learns. Communication in such situations is by the human voice and there is immediate, spontaneous, often emotionally motivated interactions between the learner and the teacher, and, usually, between the learner and other learners. This is the traditional, classical teaching-learning environment: the setting of the lecture, the class, the group discussion, the seminar. The distinguishing element in teaching and learning in this environment is what is usually called "social interaction", a relationship which assumes no delay in communication, no distance of space or time, between teachers and learners engaged in the social business of education.

If it can be assumed, however, that learning precedes teaching, that what a teacher gives to a learner is a consequence of what has already occurred to the learner, and that teaching is responsive rather than directive, then learning and instruction can take place in other situations. Learning and instruction can take place in situations external to educational establishments.

**Learners And Teachers Carry Out Their Tasks Separately From One Another**

Learning and instruction do take place in other situations and environments. Millions of learners, particularly adults, do not learn in classrooms, never meet or speak directly to their teachers,
and learn from teachers with whom they have no personal acquaintance at all. As contrasted to contiguous teaching-learning, theirs is a distant learning and teaching situation. Distance teaching may be defined as the family of instructional methods in which the teaching behaviors are executed apart from the learning behaviors, including those that in a contiguous situation would be performed in the learner's presence, so that communication between the teacher and the learner must be facilitated by print, electronic, mechanical or other devices.

In a distant learning-teaching situation, the teacher performs the tasks of teaching in some ways similar to, and in others different from, the ways of teaching in a contiguous situation. Similarly, the learner performs the tasks of learning differently. By a variety of techniques, the distance between the two is bridged, and the more effective the bridging, the less is the distance. The procedures used to facilitate communications between a learner and a teacher include such devices as books, correspondence programs, television, radio, programmed texts and teaching machines, computers, telephones, dial access systems and tape recordings. In these procedures a learner's "distance" from his teacher is not measured in miles or minutes. It is defined as a function of individualization and dialogue. In some procedures of distance teaching, the teacher is able to provide a program with devices which are responsive to the speed with which the student can learn. Programmed texts and computer assisted instruction
are such devices. Other programs do not permit such flexibility; these programs are prepared for distribution at a determined rate, in a determined sequence, and at determined times. Radio and television programs are of this nature. A program is said to be "individualized" to the extent that a learner can control the pace he receives information and the pace he makes his responses. A program permits dialogue to the extent to which a learner may communicate with his teacher. Thus, learners who receive instruction from a teacher by telephone are less distant than those who receive instruction from a radio teacher, or by correspondence. As measured by individualization and dialogue, programs of distance teaching can be classified from "most distant" to "least distant".

Learner autonomy is heightened by distance. Indeed, the learner is compelled by distance to assume a degree of autonomy that he might find uncomfortable in other circumstances. Similarly, the teacher in a distant situation is compelled to assume an ancillary and supporting role and to be used and drawn upon by the learner to the extent that the learner desires. When the teacher prepares instruction for a correspondence course, a radio broadcast, or a text, it is with the intention that his material will meet the goals established by learners and will be used in their pursuit of those goals. Whether the material is used is outside the distant teacher's control; the decision depends almost entirely on the worth of the material to the learner in the program. Distant learners
literally "turn on" to the instructional material that meets their goals and "turn off" to material which does not.

By comparison, in most contiguous situations, goal setting is entirely in the purview of the teacher, not the learner. The teacher also dominates the evaluative processes, invariably establishing the criteria of successful learning and passing judgment on whether the criteria have been satisfied. When teachers' goals do not coincide with learners' goals, as is often the case, learners through fear, apathy, or out of courtesy (or for a score of other non-learning motives) invariably adjust themselves to comply with established criteria and goals. So-called democratic and progressive instructors frequently encourage their learners to participate in these processes, but seldom do the results of that participation conform with the teacher's own wishes and intentions. That is hardly surprising as they are attempting to be "democratic" in what is an intrinsically authoritarian social setting. However much progressive teachers may protest, in their classrooms they have not been able to disassociate themselves from the role "in loco parentis", nor do they discourage learners from deferring to the authority that proceeds from the role.

We have shown that in independent study, the learner is likely to be more autonomous and teachers more auxiliary than in contiguous teaching and learning. Because of this, however, the events of teaching in independent study situations must be especially carefully contrived. Since independent study programs are to be communicated by non-human devices, these programs must be most carefully prepared.
with the teacher's aims and intentions unambiguously stated, the target population clearly defined and materials well devised, illustrated, and paced. The contiguous teacher can hope to improvise alternatives if he senses that what he has tried to communicate has not been understood. The distant teacher cannot. If his media permit, the distant teacher can arrange "feedback" as he tries to anticipate questions and problems and to prepare responses in advance of them. The principle is best seen in "branching" forms of programmed instruction. It is also seen in the bibliographic sources provided at the end of textbook chapters where learners are directed to sources for answers to his anticipated questions. In independent study, then, teaching is, paradoxically, both responsive and anticipatory.

Let us consider the analogy of learning-teaching with dining. A child sits expectantly at his mother's table, and consumes the meal she places before him. He may try to reject that which he finds unpalatable or seek extra helpings of what he enjoys, but the nature of the meal is limited, and determined by his mother, with little contribution from the child. By comparison, in a cafeteria, in anticipation of the patron's demands, a selection of dishes has been prepared and exposed to view. Those the diner likes he may select, those he dislikes he will certainly reject. His choice may be nutritionally sound, or foolish. He may come in search of a particular fare which he may find or, if unsuccessful, he may reject the whole offering and take his appetite elsewhere. So it
is with teaching-learning as compared with learning-teaching. In the former, the learner tastes only the intellectual foods prepared by his loving teacher, while in the latter his consumption is determined by his own appetite and the production of programs anticipating his demands. In independent learning-teaching theory, therefore, teaching may be, as Smith, calls it, "a system of actions intended to induce learning," (4) no inducement occurs, however, until the learner himself has already started to behave in the way of a learner even though the work of the teacher has anticipated that approach.

In conclusion, two questions seem appropriate.

(1) What is the independent learner independent of? He is independent, first, of other-direction; he is autonomous. Second, he is independent of the time-space bondage made necessary only by a tradition of dependent or "other-directed" teaching. The greater his autonomy, the more "distance" he can tolerate, and therefore the more he is independent.

(2) What is the practical significance of the view of independent learning I have described here? Let me make two suggestions. When it is necessary to conduct programs of a contiguous kind, instructors must be at pains to foster and not to infringe upon learner's autonomy. And finally, in the construction of educational system, settings of a contiguous kind should not be provided for learners able to cope independently but distance systems should be constructed when possible.
FOOTNOTES


