What I would like to do is explore with you what I think we know (and I will try to separate what we know from what we speculate about, as far as I can) about the behavior in the marketplace of adults as learners. Those of you who are in health education will find relevance in terms of patient teaching, of public health education, and even in pre-service and in-service education of health educators. Those of you who are not in health education can make applications to your respective fields of work.

Let me start by developing a little historical perspective. All of the great teachers of ancient history were teachers of adults, not teachers of children. In ancient times, Confucius and Lao-tse were teachers of adults, the Hebrew prophets and Jesus were teachers of adults; the ancient Greek educators Socrates, Aristotle and Plato were teachers of adults. The great Roman teachers Cicero and Quintillian were teachers of adults. The Institute of Alexandria where Euclid worked was an adult institution which did not admit persons under 18. It is interesting, therefore, that the writings about learning, the theorizing about learning in the ancient literature, were based upon experience of teachers with adults. And what they had to say about assumptions concerning learning were actually assumptions that we are now beginning to discover are true with adults.

A tragedy occurred in education between the 7th and 12th centuries. The writings of ancient teachers had been put on papyrus scrolls, which, at the fall of Rome, were deposited in the cellars of monasteries in Europe. And around the 7th century, the monks began to notice that the scrolls were decaying so they had a need to engage in a crash program of recopying scrolls. The only trouble was that by that time, about the 7th century, there were so few monks left who knew how to read and write that they did not have the manpower to do this, so they organized monastic schools. These were schools for young boys, and they were designed specifically for giving them enough training in reading and writing to be able to copy...
the scrolls. So monastic schools grew up in Italy, Germany, France, England, and Ireland.

In the 12th century, many of the nobility of Europe decided they would like to have education for their children, so they organized secular schools. When they organized the secular schools in the 12th century, they made a tragic choice, I think. The options available to them were to organize secular education according to those assumptions, theories, and practices of the ancient Greek teachers described on the scrolls, or to organize them according to the model of the monastic schools. They chose the latter.

So our Western education became organized around assumptions about learning that had been made by the monastic school teachers. The body of theory and practice of the monastic schools was called pedagogy. The term comes from the Greek words "paid" meaning child, the same stem as in pediatrics; and "agogus" meaning leader of or guide of. So pedagogy means the art and science of teaching children. And our whole educational system has been a pedagogical system ever since.

What are the basic assumptions around which pedagogy is organized? Let me review three or four of the main ones. The central assumption is that the learner is a dependent personality. And, therefore, in the pedagogical world the teacher is responsible for making all the decisions regarding learning.

A second assumption is that the learner's experience is of little worth in learning. It is the experience of the teacher, the textbook writer, the audiovisual aid producer, that has worth. The role of the teacher is to transmit knowledge or to direct the student to knowledge and then quiz him on his possession of it. This is essentially a transmittal motion of education.

A third assumption pedagogy makes is that learners become ready to learn whenever we tell them they are ready. Readiness is a function of instruction. I remember when I got into the fourth grade, I was told along with the other fourth graders, "Now children, you are ready to learn fractions." And I was bored for about three months because my older brother had taught me fractions a couple of years before. But this is the basic assumption—that the learner becomes ready to learn when you tell him he is.

A fourth assumption that a pedagogue makes is that the appropriate orientation of a learner to learning is content centered. The pedagogue makes the assumption that when a person comes into a learning situation, he is coming to acquire content.

You can see that the role of a teacher based on these assumptions is essentially one of shaping the learner into a predetermined mold that either he or some curriculum committee has determined the student should be shaped into. Then he transmits the content that the mold requires and judges the extent to which the transmission
has indeed been successful. Unfortunately, this model of the learning-teaching process was the only model that was available to teachers of adults when adult education started getting organized in this country.

I date the beginning of the adult education movement in this country in 1926, which was the date of the founding of the American Association for Adult Education. Naturally, a lot of education of adults had been going on before that, but this was the first time that those engaged in the education of adults were brought into an organized system. From the beginning, the teachers of adults taught adults as if they were children, because this was the only model that they had for education. But it is interesting to look at the old journals of the American Association of Adult Education to see how, with increasing frequency, there appeared articles by successful teachers of adults, that is, teachers who were able to hold on to their students. This is a very good criterion. Most adults are voluntary learners; therefore if they do not get what they want, they are free to leave. This is in contrast to most childhood learners who are compulsory learners; therefore teachers can be lousy and get away with it. This does not hold true in adult education; so there were articles by successful teachers of adults describing that they were doing, reporting on their experiences on teaching adults.

One of the teachers explained that he gave up quizzes after his third course, because after three courses he discovered the meeting after he gave a quiz he had only 50 percent as many students as the meetings before the quiz. So he stopped giving quizzes and substituted 15-minute conferences with students. He pointed out that he really got a lot more information in that 15-minute conference than in a one hour quiz.

So over the years, from 1926 until the 1950's, there began accumulating a body of literature that was really an analysis of experience—empirical, inductive discovery about adult learners. In the 1950's there were several attempts to bring together underlying principles that seemed to grow out of the report of successful experiences of teachers. My first book was called *Informal Adult Education* and that is precisely what it was, an analysis of reports by successful teachers, describing the principles that seemed to be common to the reports. So we began getting in the ’50’s a beginning of a body of theory and practice regarding adult learners.

In the early 1960's we began getting research focused directly on the adult learning process. One of the turning points in the research in our field was a book by Cyril Houle, who was my major professor at the University of Chicago. The book, *The Inquiring Mind*, was published by the University of Wisconsin Press. Houle engaged in depth interviews and case studies of 22 continuing learners to find out what went on inside them. What was the process as they engaged
in continuing their learning? He came up with some very interesting findings. Let me just share the central one with you. He found that there tended to be three kinds of adult learners. One was what he called goal-oriented. These were people who were learning with specific goals they wanted to achieve, like a better job. The second kind was what he called activity-oriented learners, people who just love to be in educational activities. It does not matter what they are learning, just so long as they are learning with other people. For example, a large percentage of the participants in Great Books Clubs were activity-oriented learners. And the third kind were what he called learning-oriented learners, who loved to learn for its own sake, no matter if it was on their own or with other people. It was the act of learning that caused them to engage in it.

One of Houle's students, a man named Allen Tough, got excited about this line of inquiry, and his doctoral dissertation was a creation of a design for an elaborate investigation of the adult learning process. When he went back to the Ontario Institute for Education after he got his degree, he received a large grant that enabled him to assemble a corps of researchers to carry on an extensive longitudinal study (that is still going on) about the adult learning process. His first set of findings was reported in a book called *The Adult's Learning Projects*. Tough's studies spawned a number of spin-off studies around the world.

Now let me just sketch out where we seem to be at the present time in regard to our understanding of adult learning and some of the implications of it for your practice. This body of theory and practice that started to emerge is now going under the label "andragogy," derived from the Greek word "aner" meaning adult. Incidentally, since I used it first in the literature in this country, I am often given the credit for coining it, but I am not that old. We have found the term in literature in Germany as early as 1833. There was a German gymnasium teacher who was teaching teenagers in the daytime and adults in the evening who wrote on the difference. In order for him to make it easier to talk about, he coined the word "andragogy" for his theory about working with adults, in contrast to "pedagogy," his word concerning working with teenagers. About 25 to 30 years after that, it was recoined independently by a French adult educator without even knowing that this appeared in the German literature.

I first learned about it in 1965, when a Yugoslavian adult educator came over to one of my summer workshops when I was at Boston University. At the end he came to me and said I was teaching and practicing andragogy, much to my surprise. He told me that in Yugoslavia adult education is referred to as andragogy and that in fact, the University of Belgrade created a faculty of andragogy parallel to but across the campus from the faculty of pedagogy. There are a
number of European Universities that have faculties of andra-gogy—Amsterdam has a faculty of pedagogy and andragogy.

What are the assumptions of andragogy that are different from those of pedagogy? As I describe these, keep in mind that I am not talking about assumptions appropriate for children versus assumptions appropriate for adults. That is the way I first started talking about it, and it came out as sort of the good guys versus the bad guys. As I see it now, those who make the assumptions I listed under pedagogy about learners, regardless of age, will teach pedagogically, whereas those who make the assumptions of andragogy, which I will not outline, will teach andragogically whether they’re teaching children or youth, as those assumptions become in tune with reality.

What I am saying is andragogy is an alternative set of ideas about learning. Many of these assumptions start being true early in childhood. As these assumptions become real and in tune with reality, then andragogical practices become relevant.

What are these assumptions? The first, the most important, and the one assumption that affects practice most is that a normal, natural part of the maturation process is for a person to move from a state of dependency to a state of increasing self-directedness. This assumption is supported by all sorts of research. Anthropologists were the first to point out that in nature where there is minimum interference with natural growth, the rite of passage in primitive tribes from childhood to adulthood is in early adolescence. Look where our rite of passage to adulthood is these days. I think that psychotherapy, a field many of you are interested in, has accumulated much evidence that a normal natural process of movement toward self-directedness has often been interfered with and thus has caused all sorts of psychological difficulties. Psychotherapy is concerned with helping people cope with the fact that they are adults but are behaving like children. We are getting a lot of hard research findings from the direct study of adult learners that there is indeed a deep need on the part of people as they grow and mature to become increasingly self-directed. The problem here is that although adults come into anything educational with a deep need to be self-directed, they have been conditioned to see themselves, in the role of learner, as dependent personalities. So they’ll enter anything labelled educational and put on the dunce hats of dependent learners. Even though they may be self-directing in every other aspect of their lives, as worker, spouse, parent, leisure time user, citizen—when they enter a classroom they will sit back passively and say “All right, teach me.” This is their conditioning.

We have a good deal of evidence that when the teacher accepts this announcement of dependency and does in fact treat the adult learner as a dependent personality, he induces in the learner a great deal of tension between his deep psychological need to be self-
directing on the one hand and his intellectual concept of the learner as dependent on the other. This induces all sorts of internal conflict in the learner and is one of the chief sources of resistance to learning.

I cannot help but think that a good deal of the problem that health educators have with getting adults to follow a regime of taking care of themselves is a result of their experience with the didactic directions they are getting on how to take care of themselves. The resistance is a product of the fact that they were treated as if they were children when given instructions.

In an attempt to remedy this situation, we have started building into our educational designs learning experiences that will help learners make the transition from seeing themselves as dependent learners to seeing themselves as self-directed learners. We have also built in skill training on how to be a self-directed learner. For example, I developed along with my students at Boston University a 3 hour module for all entering candidates. The module had these components: we first of all gave them a cognitive map that laid out the assumptions that differentiate andragogy from pedagogy and gave the framework for thinking about some of the implications. We found that they need to be able to intellectualize about the fact that there is a difference between being a dependent learner and a self-directed learner. (Incidently, my latest book is a little paperback called \textit{Self-Directed Learning} for learners and teachers that has brought together some of the cognitive maps and exercises that we have developed over the years.)

The second component that we built into this module is a relationship building and resource identification exercise. What we do here is simply put the students together in groups of four or five and ask them to share in the group something about what they are, something about their background, work experience, goals, or roles, and also something about who they are. I found this very important—to identify their own uniqueness—and I usually draw them out a little bit with the fact that I wear Indian jewelry. I wear it mostly because I like it but also because I grew up in Montana with Indians and have an attachment to and a feeling of obligation to support Indian crafts. So I am unique and it helps for them to be able to see me as unique and to see one another as unique.

We then have a skill-practice exercise on how to read a book "pro-actively," then another exercise on how to use human resources "pro-actively"—how to take the initiative in making use of human resources like teachers, peers, and supervisors. One of the purposes of this exercise is to help students make a shift from seeing one another as competitive rivals to seeing one another as resources and helpers. One of the deepest conditionings has been the attitude toward peers. Adults simply have a terrible time seeing other adults as resources for learning. If we want to help people become more
skillful in continuing learning, one of the things we must help them develop is an attitude that peers can be resources.

The second set of assumptions that andragogues make that is different from that of pedagogues has to do with the role of experience. Andragogues make the assumption that as a human being grows and develops, he accumulates a growing body of experience that itself becomes a resource for learning. Thus in the adult education methodology, there is a shift away from primary reliance on transmittal techniques to primary reliance on experiential techniques, techniques that make use of or build on the experience of the learners. Probably the most potent tool we now have in adult education is the analysis of experience. But we also make use of the learner's experience in direct activity, the way we organize our activities, the use of learning teams, learning project groups, field experience, etc.

A third assumption the andragogues make has to do with readiness to learn, how readiness develops, and we make the assumption that a person becomes ready to learn at the point at which he experiences the need to learn something in order to cope more effectively with a life situation he is facing. The procedures that we are developing for inducing readiness to learn have to do with engaging the adults in examining and envisioning what it would be like to be better, and then constructing a model of the better. This would be whatever the person is interested in being—a better parent, a better spouse, a better nurse, or a better teacher, etc. So a good deal of our new technology has to do with examining the better. There are two very specific sets of approaches on this that are proving very potent—one is value clarification, a set of techniques for engaging people in examining what their values are, what is important to them in life. Sidney Simon, at the University of Massachusetts has been the primary developer of the value clarification technique, in fact, his book is called Value Clarification. The other approach to engaging adults is examining the better is life planning of which career planning is a part. There are several techniques. Crystal and Bolles have been prime developers for a set of strategies for engaging adults in life planning.

A fourth assumption that we make is concerning a learner's orientation to learning. We see learners, adult learners in particular and childhood learners as they develop, coming in not to acquire content for its own sake, on the whole. It is unusual for a person to seek content for its own sake. The adult learner comes to education with a task-oriented or problem-oriented frame of mind. He is learning in order to get help in coping more adequately with some life task or life problem. He is problem-oriented.

This has a great deal to do with how we organize learning; the curriculum of adult education is beginning to look less like the tradi-
tional curriculum of childhood education. For example, I did an interesting project several years ago for one of my publications. I compared the catalogues of the University of Chicago's University College daytime program, which was oriented towards youth, with the evening college which had an adult clientele. I started with 1935, and, in the first set of catalogues I compared, there was no difference except color. The courses were called the same thing. I specifically remember that "Composition I" and Composition II" and "Composition III" appeared in both catalogues. By the mid 1940's when we had begun to have some speculative theorizing about adult learning, the evening college started to change. They started to title their courses differently. For example by 1946 "Composition I" had become "Writing Better Business Letters." "Composition II" had become "Writing for Pleasure and Profit" and "Composition III" had become "Improving Your Professional Communications." Do you perceive the difference between a subject-centered "Composition I" definition versus a task-centered or problem-centered definition "Improving Your Professional Communications"? It's not only the titles that changed, for the teachers started to teach differently. They started to discover the problems people were experiencing in communications, for example, and then to have the instruction deal with the problems.

Let me close by just sharing with you where I am now in terms of using an alternate to the traditional strategy in engaging learners in their plan of learning. Traditionally, the sequencing, the articulating of different kinds of learning is done in the curriculum itself. In elementary grades you move from first grade to second grade, etc. In college you move from freshman to sophomore to junior to senior. In adult education we haven't had that kind of articulation but we have had things like introductory, intermediate, and advanced. The basic notion was that all students would move at the same pace through the same sequence. In recent years there has been increasing experimentation with an alternative way of structuring learning. This vehicle is a learning contract. This is the procedure that I am using now exclusively in all of my graduate coursework, in all of our internship and field experience works, and in all of the in-service education programs that I am working with. We are using learning contracts.

Let me explain the form we use. The form has four columns. The first column is Learning Objectives. The second is Learning Resources and Strategies, and, incidently, my students have begun suggesting that we separate these into two separate columns, one column for Learning Resources and one for Learning Strategies. They were finding that they were getting rather confused about which was strategy and which was resource. The third column is Evidence of Accomplishment of the Objective, and the fourth col-
umn is Criteria and Means of Validation of the Evidence, which I added just last year because I found that I was getting overwhelmed with the evidence coming in to me to judge.

The contract has induced a lot of creativity on the part of the students and nails down for them what it means to have final responsibility for their own learning. The way this works is this: after I go with the students through the process of exploring what the content area is that we're going to be working in, and engaging them in a self-diagnostic process, I have them identify where they are weak and strong in relation to the model that we have developed together. Then they translate the diagnosed needs into learning objectives. For each objective the student will identify one, two, or three resources, material and human, and what strategies he will use for tapping those resources. Then he describes what evidence he is going to collect for himself that will show the extent to which he has accomplished this objective. Then he proposes to me a way that he will get that evidence validated by peers or resource people who have expertise in the area in which that given objective falls.

In a 15 week semester course I get this first-draft contract at about the end of the third week and then I have a week to respond, to react, to make other suggestions about clarifying objectives and about additional resources or strategies or better evidence. Sometimes I'll say "This evidence won't convince me, will it convince you?" And then they will come back with a revision that has better evidence in it. We also use this in our field work supervision, and we find that it helps the field supervisor when a student comes and shows his learning contract. It enables the field supervisor to take a much more educative role. It also inhibits the supervisor from exploiting the student, having him doing all the envelope-licking in the office, rather than engaging in activities that will produce learning.

The North Carolina Lung Association is just now experimenting with this procedure in patient teaching. Their physicians and nurses are having patients develop learning contracts with them as they are released from hospitals, or in their home visits. I even have some students who are using this form with illiterates, with people who can neither read or write. Their contracts are dictated into tape cassettes. At the end of the contracting session the student takes his cassette and walks away with it in his pocket, and, then when he comes back for a follow-up interview, he has the tape cassette, and they take it out and play it, refresh their minds about what it says and he gives evidence of what he has done.

I view all of education, especially now higher education and later secondary and elementary education, as moving very rapidly away from the medieval pedagogical model. The biggest development in higher education in the last five years has been the enormous proliferation of non-traditional study programs and external degree pro-
grams. These are programs that are freed up from boxing the stu-
dents into a lock-step sequence curriculum. Almost all external de-
gree programs are now using degree contracts. There are no
minimum numbers of credit hours required for getting a degree at
the Union of Experimenting Colleges and Universities or Empire
State College or Florida International or most of the other external
degree programs. Each student develops a contract with a panel of
mentors, specifying what he must learn to be awarded a degree.
When he produces evidence that learned that, then he gets his de-
gree.

This approach, which puts the emphasis on learning rather than
on the teaching, requires the teacher to perform a completely differ-
ent role. The teacher is no longer instructing or transmitting, but
now facilitating and being a resource person to self-directed learn-
ers. The heaviest burden on this new teacher is helping learners to
gain the skills of the self-directed learner. There will come a time
when all learners will enter the universities and colleges with these
skills, because I see the same trend occurring in secondary and ele-
mentary education. There is an elementary school, for instance, in
Charlotte, North Carolina, in which the first experience a 6 year old
has in the first grade is to making a learning contract. Then the
student engages in learning activities both alone and with other
students as specified by the contract. This kind of approach frees
the alternative schools from the criticism that they are proving unstruc-
tured learning. This is very tightly structured learning, and I think
learners need structure. The difference is that the structure is
tailor-made to their life situation.