ADULT LEARNING THEORIES

Learning Theory: Adult Education: Andragogy

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Typical adult learning theories encompass the basic concepts of behavioral change and experience. From there, complexities begin to diverge specific theories and concepts of inferences.

Andragogy

Andragogy is a fairly new science. Although it has a very long and rich andragogical practice as a theory, its systematic development only began in the 19th century. The second half of the 20th century is looked upon as the period of its most fruitful and most intensive development in which andragogy became a relatively independent scientific discipline. One of the main problems facing andragogy is that its systematic nature is more the result of other theoretical deliberations than those of its own. Different people have different understandings of andragogy. Some consider it a pedagogic discipline, others consider it an autonomous science within the framework of the general sciences of teaching and learning, while others see it as a method, skill, theory or model of adult learning. Malcolm Knowles first began labeling his work in adult education as andragogy in the late 1960's (Knowles, 1980). Knowles discovered through his work with adults that instructors needed to care about the actual interests of learners instead of focusing on what instructors believed were learners' interests. In Knowles' opinion (1980; 1984), the best educational experiences were cooperative, guided interactions between the teacher and learner with many available resources. During these experiences, the teacher helps guide the learner to develop his or her own potential. Based on his own observations, Knowles developed a set of five assumptions that enveloped his concept of andragogy. The five assumptions of andragogy are that adults are self-directed learners, adult learners bring a wealth of experience to the

educational setting, adults enter educational settings ready to learn, adults are problemcentered in their learning, and adults are best motivated by internal factors (Knowles, 1980). Andragogy, the intricate approach to adult education, is a science and an art. This multi-faceted branch of education is defined by the andragogical method coined by Malcolm Knowles in 1968. This division of education is one that has been established decades ago and has since then been built upon. Within the andragogical model, several assumptions about adult learners exist. Primarily, the model recognizes and correlates the notion of self-concept with an adult learner's approach to learning. With maturity comes a person's inclination to become a more independent and self-directed human being. In the realm of learning, adults respond to a modified type of teaching. Adult learners take responsibility for their learning process. Hence, teachers must structure their method to foster a learning environment in which adult learners can set goals and evaluate their progress. The second assumption featured in the andragogical model distinguishes that adult learners link new knowledge to their wide range of experience. Past experiences serve as a valuable resource in the classroom. Thirdly, adult learners exhibit an eagerness to learn and to further develop skills. Adult learners recognize the value of new knowledge as a means to develop in all respects. The model also makes the assumption that the orientation to learning is modified with adult learners. Adult learners are more inclined to apply new knowledge and skills without postponing. Lastly, the andragogical model recognizes that adult learners have an innate motivation to learn.

Adult Learners

In characterizing the average adult learner's profile, the learners actively seek the prospect expanding on their knowledge. While balancing the rigorous and time consuming aspects of learning with the demanding responsibilities of daily life, adult learners perceive learning as neither an inconvenience nor a waste. On the contrary, learning poses as the solution to any shortcomings in their already established routine. Often, adult learners seek opportunities to expand on their knowledge when they are faced with life changes that may challenge them to improve upon themselves. For example, when faced with a divorce or a job termination, learning emerges as a means of resolving such limitations. For this reason, adult learners are motivated and self-directed. Adult learners are characterized as goal-oriented students who choose to learn and value what they learn. Whether they are particularly interested in a topic and are learning for the mere sake of expanding upon their knowledge, or they are learning to acquire a specific skill, mature learners rely on new knowledge to progress themselves towards a purpose.

Characteristics of adult learners

One of the main distinguishing characteristics of adult learners is that they take responsibility for their learning. From the mature learner's perspective, optimal learning does not merely rely on a notable instructor. Learning is inaccessible, no matter what resources are provided, if the student himself does not take responsibility for acquiring the new knowledge. Mature learners assume control over the learning process by evaluating the progression of their learning in respect to their own individual goals. The assessment of why something should be learned and when it can be applied is

consistently integrated in the mind-set of self-directed adult learners. The concept of motivation seems to be an umbrella under which the majority of the assumptions of the andragogical model fall under. The integration of developmental psychology is crucial is assessing these assumptions that make up the model when contrasting the features of adult learning and adolescent/youth learning. Adult learners respond to both external and internal motivations. External motivations are often the surface rationale for adults to immerse themselves in the realm of education again. Whether it is to solidify a better job or a higher salary, an improvement in education is defined as the most straightforward route towards achieving these concrete objectives. An expansion on a degree leads to a higher position. This direct relationship is motivating in itself. It unofficially provides the learner with some assurance that the dedicated time and energy into learning will outcome in tangible achievement. To adult learners, however, it is the internal motivations that prove to be most compelling. Internal motivations adhere to adults' basic drive to progress as a being. Learning serves as a means of providing an adult with fulfillment, whether it is in terms of job satisfaction or self-esteem. It is a tool to improve the quality of life in an immeasurable manner. The expansion of an adult's knowledge grants the adult a sense of competence, which is invaluable. Adult learners need to know why they need to learn what they are learning. Does the reason correlate with their external and internal motivations? It is crucial that adult learners discover the value of what they are learning or the consequence of not learning what they are learning. There is a coherent relationship between motivation and the recognition of why material is important. From an instructor's perspective, it is pertinent to present new material in a manner so that it is connected to the learner's individual

values and objectives. If adult learners value what they are learning, they are further motivated. This concept is exhibited in the notion that adult learners choose what they study. Their motivation is partly due to the fact that they have discovered the value of learning a particular topic.

Instructional implications of adult learning

The theory of andragogy introduces several instructional implications in order to achieve optimal educational results. As a means of approaching adult learner's selfdirected nature, instructors must assume the role of the facilitator rather than a lecturer since an interactive learning environment is crucial to the adult learning process. The instructor's role to the adult learner is that of a mentor as well as an accessible reference. The instructor provides the adult learner with a support system, whose input lessens with time. With this approach, self-reliance is emphasized while refraining from isolating the student in the process. The gradual diminishing of the instructor's support effectively fosters an environment in which the learner achieves a sense of autonomy. The instructor poses as an expert to whom the student has adequate access yet allows the student to learn with independence. With the instructor's minimum yet available input, the student is not isolated when faced with the frustration of the learning process. Adult learners benefit significantly from self-designed learning projects. Again, the instructor's role as a resource and encourager is invaluable to such an active learning process. With self-directed learning projects, adult learners are able to control their learning pace to cohere to their individual learning style.

Knowles valued the experience learners brought to the educational environment.

He viewed it as an important resource for both learners and the facilitators (Knowles,

1980). He differentiated the quality of experiences of adults versus children based on the different types of roles they occupied in society. However, he also defined an adult in social and psychological terms (Knowles, 1980). Knowles acknowledged that in many instances adults were the best resources for one another, thus he encouraged and emphasized group discussion and collaborative assignments that would rely on the expertise within groups. Although Knowles first viewed andragogy as being a separate entity from pedagogy, he revised his views over time and stated the viewpoint that andragogy and pedagogy as being on a continuum, noting that there were times when either approach might be appropriate based on circumstances and needs of the particular learner (Knowles, 1984).

Theory into practice

Knowles (1980) called upon educators to employ a seven step process in order to implement and capitalize upon the assumptions of andragogy. These steps included creating a cooperative learning climate; planning goals mutually; diagnosing learner needs and interests; helping learners to formulate learning objectives based on their needs and individual interests; designing sequential activities to achieve these objectives; carrying out the design to meet objectives with selected methods, materials, and resources; and evaluating the quality of the learning experience for the learner that included reassessing needs for continued learning. This assumption implies that curriculum should be process based rather than content based to allow learners to develop content in accordance with their specific needs. The ability to make a connection between every day life and learning in the virtual classroom validates learners as individuals who possess knowledge that can be applied in other situations.

This is supported by Robinson (1992) who surveyed adult learners regarding the applicability of Knowles' assumptions to a distance education program. Participants reported that they valued utilization of their life experiences in the learning process and they enrolled in online courses because they felt a need to learn more information about a particular subject so that they could "perform more effectively" by using the information learned in some aspect of their lives (Robinson, 1992, p. 12). Online facilitators must release control of the virtual classroom to learners and allow them to apply their experience and knowledge to learning, while remaining cognizant of learner needs for guidance. Likewise, learners must be willing to draw on available resources and exercise self-responsibility to seek help when needed (Burge, 1988,p. 15). In order to structure an online class to meet individual learner needs, the suggestions for helping learners identify their personal objectives discussed above should be employed. In addition, a variety of the course assignments and group projects should seek to have learners draw on their personal experiences and needs, requiring learners to apply the theoretical concepts of the course to their real-life situations. For example, there are numerous theories that deal with bringing about effective change in organizations of all sizes. An assignment requiring learners to discuss theoretical application of one of these theories to a current or past life situation would help the learner apply theory to practice while also encouraging the learner to share individual experiences. Andragogical assumptions should be utilized in moderation based on the type of course and student preferences. Online course facilitators should know their audience as well as understand their needs, backgrounds, characteristics, and expectations. Online courses must be carefully structured to allow flexibility with learner input regarding

course goals and assignments, draw on learner experiences, and increase course value to the participants while staying in harmony with institutional regulations and requirements. Learners must be provided with clear expectations regarding online communication to foster interaction in the online environment. High levels of interactivity and interdependence should also be encouraged. Facilitators must be accessible for guidance so that learners receive direction on an individual basis. Feedback from both the facilitator and peers must be frequent and sincere to foster an educational environment of trust, mutual respect, and collaboration. Such an approach to learning online is consistent with Knowles' (1984) andragogical assumptions and the process he suggested for implementation.

Adult learning transformation

Adult learning is a vast enterprise with activities exceeding the combined total of those taking place in elementary, secondary and post secondary institutions. Adults learn in a multitude of settings including the home, the workplace, and a variety of community agencies. The objective of this learning is rooted from a variety of goals; personal development, increased job knowledge, and community problem solving (Merriam and Caffarella, 1999, P.318). Understanding the dynamics of learning continues to be of interest to educators, philosophers, psychologist and scientists. Learning has been described as the process of acquiring relatively permanent changes in understanding, attitude, knowledge, information, ability and skill through experience (Wittrock, 1977). Learning involves both the acquiring of the new and progressing from the old. Whether one does so intentionally or unintentionally, adult learners change in their awareness, perceptions, behavior and/or ways of knowing. Unique life

experiences, barriers, personality traits, learning style preferences and attitudes influence an individual's capacity for and involvement with learning. Technological innovations, the restructuring of the family and sociocultural diversity are a few of the social changes that have influenced how and what adults will learn. An understanding of the social context and the bigger picture is critical to any discussion of adult learning. Significant adult learning can occur in many contexts, other than in an educational institute. Through relationships with others, the media, travel, books and other sources, people can broaden their perspectives, adapt to or restructure their environment. There exists a reoccurring issue in the link between learning and experience within the theories and views of adult learning. Learning is often connected to discovery, transformation and the pursuit of making life more meaningful. It is the learner's experience that should be the resource of highest value in adult education. To be educated is not to be informed but rather to find illumination in informed living. Educators sometimes get caught up in mastering the techniques of teaching rather than pausing to reflect on understanding the process of learning whether it is that of their own or their students. One way to reflect on one's understanding about learning is by closely exploring what different theories/theorists state about the concept and process of learning in adulthood.

Perspectives on adult learning

To understand different theories and theorists' perspectives on adult learning, one must explore their insight. A behaviorist's orientation in adult education focuses on skills development and behavior change. The behaviorists emphasize on environmental manipulation and observable behavioral change as key elements in the learning

process. Learning is viewed as a hierarchical process during which one step is mastered before the next step is attempted. The teacher's role is to manage and control the learning environment by setting specific expectations and then monitoring the learner's progress. This notion is particularly evident in computer based instruction, competency-based education and demonstration and practice. As for teaching strategy applications, the behaviorists emphasize the importance of clearly defined language objectives and a breakdown of specific strategies that would lead to the desired goal. Positive reinforcement and the teacher being able to provide frequent feedback to learners with respect to their progress are a few examples. Merriam and Caffarella (1991, P. 28) note that the behaviorist orientation to learning underlies much educational practice, including adult learning. Skinner, in particular, has application of his theory to educational issues. As he sees it, the ultimate goal of education is to bring about behavior that will ensure survival of the human species, societies and individuals. The teacher's role is to design an environment that elicits desired behavior toward meeting these goals and to extinguish behavior that is not desirable.

Cognitive and constructivist perspectives of adult learning emphasize the importance of understanding the process of learning from the learner's perspective.

Jean Piaget, George Kelly, Bruner, Gagne and Briggs are key figures in the cognitivists' approach where the importance of the learner's mental processes are emphasized.

Piaget postulates that individuals move through qualitatively different ways of thinking from sensor motor to formal operations that include metacognition. Kelly's (1955) theory on personal constructs recounts the idea of the person as a scientist. Individuals understand themselves and the world around them by constructing personal and

tentative theories and models which serve as guides to predict and control events. For this reason, new experiences may lead to changes in the individual's perspective. It is a process of reorganizing experience in order to make sense of new information from the environment. The teachers should be able to help their learners build bridges by linking new ideas to the learners' prior knowledge and experience. Teachers are to construct activities and guide the learners' mental processes so that a balance or equilibrium is reached between the new knowledge and the underlying conceptual structures. Instructors may use schemata, which are general explanations given in advance of the main source of information, as a means to help learners find reference points for linking prior knowledge to new knowledge. This approach creates a deeper level of learning which involves understanding new material through critical reflection, questioning and discussing implications in different contexts. Briggs (1988 P. 187) notes that if the deeper level learning is to be fostered, students must first be aware of "their motives and intentions, their own cognitive resources, and of the demands of the academic tasks; and second, that they are able to control and monitor their consequent performance". He suggests that learners need to be given opportunities to interpret and encode information in their own words, develop questions and test themselves to see if they have attained their goals. The cognitivist and constructivist perspective of learners highlight the importance of the learners' readiness to learn and the relationship between their prior knowledge and the way in which they construct and try to find meaning from new information. Educators are viewed as those possessing the need to understand the way individual students perceive or interpret the task at hand, which consequently will help influence the way they approach the task.

The social learning theory integrates many of the ideas mentioned in the behavioral and cognitive views of adult learning. In Albert Bandura's (1977,1986) social learning theory, a synthesis of ideas about learning, motivation and cognitive mediations is presented. The theory stresses that learning is the reciprocal interaction between cognitive, behavioral and environmental factors. He emphasizes that learners' anticipations and cognitive mediation of their environments also determines their attention or focus on what they will learn. Bandura recognizes how specific beliefs that individuals have about their abilities influence their approach to learning and their learning outcomes. Bandura emphasized the importance of educators being able to understand their students' own beliefs about their ability as learners. Bandura also stresses that individuals learn through observing others. It is where individuals learn attitudes, beliefs and behaviors. The most important dynamic lies in the process of cognitive mediation where individuals construct cognitive models of social awareness and reality based on their social experiences in order to guide their decision-making and thinking about social behavior. They learn possible actions and their probable consequences. Two of these concepts gained prominence in the development of adult learning; situated cognition and cognitive apprenticeship. Situated cognition is when a skill or concept is used in a specific situation and requires meaning which it did not possess before, such as adopting a behavior or belief systems of a new social group. The cognitive apprenticeship approach to teaching involves six elements; modeling, coaching, scaffolding, articulating, reflecting and exploring.

The humanist approach to learning highlights the significance of the effective domain as it influences learning. Learning is neither solely a behavioral nor cognitive

process, but rather a process of personal growth and development. Humanist psychologists such as Abraham Maslow and Carl Rogers emphasize choice, freedom, creativity and self-realization as essential aspects of meaningful learning. In contrast to conceptualizing individuals in a mechanistic view, humanistic theory recognizes the complexity of individuals and the importance of an individual's perceptions that are rooted in the experience. Maslow (1954) developed a theory of human motivation based on a hierarchy of needs. Maslow emphasizes that the fulfillment of lower level needs is necessary if higher level needs are to be fulfilled. He views the need for self-actualization as the individual's desire to their fullest potential. Many ideas that surface in the writing of adult education, such as Kidd (1974), Knowles (1980), Freire (1970), Cross (1981) and Mezirow (1981) can be traced to humanistic psychology and philosophy. Collectively, these theorists emphasize a collaborative teaching approach that is grounded in the needs and interests of the students.

Transformational learning has become a focal point of theoretical and practical study in adult education over the last twenty years. It involves deep level changes in the existing values, attitudes, beliefs and ultimately the actions of individuals. The critical education theory of Paulo Freire (1970), Jack Mezirow's (1978, 1981) theory of transformation and Daloz's (1984) holistic perspective, have analyzed different dimensions of transformative learning in adults. Their ideas have been applied to adult education contexts that include literacy education, social change movements, environmental education, women's consciousness raising groups in the workplace, and critical media literacy.

Mezirow's transformational theory provides empirical work which he considers the foundation for formulating a comprehensive theory of adult education since it is considered a theory unique to adults. He promoted critical reflection as central to transforming our learning from experience. His thinking provided a significant challenge to academic beliefs by making the central task of adult education the critique of assumptions through critically reflective learning. His theoretical proposals were primarily tagged to andragogy, which initiated a series of attacks on the adragogists.

Whether one is involved in undergraduate, graduate, or continuing professional education, the learning transaction can be enhanced by understanding how adults learn and the conditions under which adults learn most effectively. Andragogy, self-directed learning, and transformational learning are three major contributions to the growing knowledge base of adult learning theory. Several new perspectives on adult learning in particular, consciousness and learning, situated cognition, and feminist pedagogy are examined for what they can contribute to adult learning theory. Several conclusions are advanced about the state of adult learning theory, and implications are drawn for continuing education in the health professions. Freud once wrote that education, like psychoanalysis and government is an impossible profession, as we can never know beforehand the outcomes of our endeavors. This is true for radical adult educators as it is for liberal educators, human resource developers, academics, etc.

Constraints

Although the principles behind andragogy are very applicable in most adult learning situations it is not necessarily limited to implementation within adult learning.

Historically, andragogy has been hard to classify. It has been referred to as "a theory of adult education, theory of adult learning, theory of technology of adult learning, method of adult education, technique of adult education, and a set of assumptions." The position of adult education within a post-modern landscape has been and continues to be a troubled one. In recent years, there has been much discussion about the significance of post-modernism and post modernity on the study and practice of adult education. There are complications of lifelong learning dealing with some of the changes that occurred between those times. In particular, the growth the performance of knowledge based on social norms or habits which has created a loss of mastery due to disbelief and confusion. Lifelong learning can be constructed as a post modern condition of education. There lies a debate concerning the significance of the post modern frame in the study of the education of adults. Many perceive it as the globalization of capitalist economic relations and the growth of postindustrial consumer oriented society within an information rich environment led by new technologies (Harvey, 1989). Others believe it to be a form of analysis associated with deconstruction and post structuralism which places it as a challenge to foundational certainties in thoughts and actions (Lemert, 1997). Further, others view it as promoting individualism and lifestyle practices of a consumer society (Featherstone, 1991). Some believe it provides a space for forms of radical and emancipator politics associated with new social movements and issues of gender, race, ethnicity, and sexuality. For many, postmodern undermines adult education's traditional commitment to social action and its historical alignment with working class organizations and other marginalized groups in society. For others, it undermines the commitment to liberal education of learning for its own sake and for

personal development. However, others believe that postmodern provides a conceptual and practical space for understanding and engaging with a fuller range of adult learning practices. It is a space that opens up possibilities for recognizing adult education as encompassing the multiplicity and diversity of practices of adult learning that are a characteristic of the contemporary scene which is suggestive of the post-modern condition.

Technology-based adult learning

According to the "Trends and Issues Alerts" "New Views of Adult Learning", by Susan Imel (1999), three areas have shown recent activity in adult learning; transformational learning, adult learning related to technology, and collaborative learning. Since the late 1980s, research and theory development in transformative learning have been a main focus. Some recent publications include a critical review of the literature (Taylor 1998), discussions of theoretical perspectives (Dikx 1998), transformative learning's relationship to adult development (Hopson and Welbourne 1998) and a description of transformative learning in practice (Livingston and Roth 1998). Technology developments have also affected adult learning research and theory building where technology is emerging as both a delivery system and a content area. The principles of adult learning theory can be used in the design of technology-based instruction to make it more effective. To facilitate the use of andragogy while teaching with technology we must use technology to its fullest. Arguments for the use of technology many times include statements about its flexibility and the ability of the learner to move through lessons anytime, anywhere, and at their own pace. These arguments also include

logical explanations of how a learner may adapt the lessons or material to cover what they need to learn and eliminate the material that is not appropriate or that they have already learned. To adapt to the needs of adult students, these definitions of technology-based learning must be utilized to make its design interactive, learner-centered and to facilitate self-direction in learners. Educators who are using adult education concepts in the development of their lessons must also become facilitators of learning. They must structure student input into their design and create technology-based lessons which can easily be adapted to make the presentation of topics relevant to those they teach. If these guidelines are followed, the instruction that is developed will be not only technologically workable but also effective from a learner's perspective. Malcolm Knowles' theory of andragogy allows teacher/facilitators to structure lessons which are part of a relevant learning environment for adult students.

Although learning in groups has had a long history in adult education, the focus has been on group process; helping learners think about group as opposed to individual learning. The effect of technology on group learning has also been established.

Transformative learning in adult, higher and continuing education has been around for over 25 years and continues to be the most researched and discussed theory in the field of adult education. Most significant is the predominance of literature, both conceptual and empirical, framed within the influential work on transformative learning theory by Jack Mezirow (2000, 1991). Transformative learning offers a theory of learning that is uniquely adult, abstract and idealized, grounded in the nature of human communication. It is a theory that is partly developmental, but even more it is about where 'learning is understood as the process of using a prior interpretation to construe a

new or revised interpretation of the meaning of one's experience in order to guide future action' (Mezirow 1996: 162). Transformative learning theory continues to be a popular area of research in the field of adult education as indicated by an increase in the number of peer-review journal publications and the initiation of a bi-annual international conference specifically on the study of transformative learning.

Theoretical frameworks for second language learning present a number of different perspectives. Analysis of errors made in language learning reveals the development of an inter language -- a set of rules made up by the learner that map the new language onto their native language. Correction of errors is important in helping the student understand the grammar of the new language. Theories of adult learning and literacy are more likely to provide an appropriate framework for second language learning compared to those concerned with child development. Acquisition and learning processes; the former involve understanding and communication while the latter are concerned with the conscious monitoring of language use (metacognition). Acquisition processes are more critical than the learning processes and should be encouraged through activities that involve communication rather than vocabulary or grammar exercises. Many language researchers emphasize the inter-relationships among listening, speaking, reading, and writing processes.

Adult learning in classroom setting

Theories of adult learning (e.g., Cross, Knowles, Rogers) that emphasize experiential learning, as well as theories of social learning (e.g., Bandura, Vygotsky), are important to military training because of the extensive interpersonal interaction involved,

particularly in the context of team performance. Training, TRADOC, the new center's mission is to identify, test, and evaluate, under controlled conditions, new methods of language instruction, and to apply in the institute's language courses the results of these activities. By working in survival language instruction, immediate needs arise for the status of military language instruction, its use, and sustainment problems. It is upon the instructor to create learning situations that are practical and problem centered to promote positive self-esteem. Military personnel of all ages, ranks and backgrounds attend language class which calls for providing a quality, well organized experience that uses time effectively while maintain respect to the individual learner. As the language instructor, I must validate and affirm their knowledge, contributions and successes. What the students know is a resource for me and can be integrated to the new ideas and concepts to be learned. I consistently try to build my plans around their needs by sharing my class agenda and assumptions and asking for input on them by using how students learn as a guide to their teaching practices constructivist epistemology is useful to teachers if used as a referent; that is, as a way to make sense of what they see, think, and do. Beliefs about how people learn whether verbalized or not, often help make sense of, and guide, our practice as teachers. The only tools available to a knower are the senses. It is only through seeing, hearing, touching, smelling, and tasting that an individual interacts with the environment. With these messages from the senses the individual builds a picture of the world. Knowledge cannot be transferred intact from the head of a teacher to the heads of students. The student tries to make sense of what is taught by trying to fit it with his/her experience. By consistent observation of the learning process in the classroom, learning is defined as adaptations

made to fit the world they experience. Students need to be given opportunities to make sense of what is learned by negotiating meaning; comparing what is known to new experiences, and resolving discrepancies between what is known and what seems to be implied by new experience. Generally speaking, the use of technology inside or outside the classroom tends to make the class more interesting. However, certain design issues affect just how interesting the particular tool creates motivation. One way a program or activity can promote motivation in students is by personalizing information, for example by integrating the student's name or familiar contexts as part of the program or task. Others include having animate objects on the screen, providing practice activities that incorporate challenges and curiosity and providing a context (real-world or fantasy) that is not directly language-oriented. Language learning is a highly cumulative process. It is like making a tower out of blocks: you keep building on top of what you did the day before. If you don't keep at the job steadily, pretty soon you're trying to put new blocks on top of empty space. Thus it is important to keep up with and learn what is being presented to you about a language day by day.

Foreign-language instruction emphasizes spoken vocabularies and pronunciation, covering grammar and written language only when required through a self-paced foreign-language training course that uses numerous research-based pedagogic and technologic innovations — including interactive 3D video game simulations — to teach what to say, how to say it, and when to say it. After just a few hours of study, anyone from beginners to advanced students learn and retain spoken communication skills regardless of their self-perceived learning aptitude or prior knowledge of the language. This is accomplished with three main pedagogic objectives: reduce trainees' frustration

and boredom, sustain their motivation even after hours of intense practice, and promote the quick transfer of acquired communication skills to the real world. The application of the course include mission rehearsals.

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