

Applying Andragogical Principles to Internet Learning

Susan Isenberg

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FOREWORD

Two distinct ideas are present in this title: andragogy and Internet learning. The history and origination of each started about the same time—1833. In this book, they are ultimately brought together as a “cutting-edge movement” and show great promise of benefit for the adult learners and society that will be served in this and coming generations.

Internet learning has its historical roots, background, and foundation in educational technology, dating back to more than a century. Correspondence Study in various content areas was the first among distance education offerings in numerous countries, states, cities, and institutions: Sweden in 1833, England in 1840, Germany in 1843, the United States in 1873, Illinois Wesleyan University in 1877, Edinburgh in 1878, New York in 1883, University of Wisconsin in 1885, London in 1887, University of Chicago in 1892, Moody Bible Institute—Chicago in 1901, Benton Harbor, Michigan in 1923 (the city where I was born), University of Nebraska in 1929, and prior to World War II in France.

Electronic Communications was next to come on the scene and has been changing ever since. Some systems stayed and some faded out with others taking their place. Europe had audio recordings for the blind and language teaching for all. Laboratory kits were used in teaching electronics and radio engineering. U.S. radio stations, in the 1920s, were first to be

involved in education. Experimental television teaching programs were introduced in the 1930s, with broadcast television courses coming in 1951. Satellite technology came in 1960, having varying success, and became cost-effective in the 1980s.

In the late 1980s and early 1990s, with the coming of fiber-optic communications systems, there was expansion of live, two-way, high-quality audio and video interaction in distance education. Full-motion, two-way interactive video, data (Internet), and voice services were beamed to an untold number of locations at the same time. All this became the backbone for computer telecommunications and asynchronous, Internet-based programs offered to distance learners. In addition, computer-mediated communications, computer conferencing, and computer networks have all become convenient ways to distribute materials to learners all over the world.

Numerous other things that appeared included short-wave radio, telewriter, audio teleconferencing, videoconferencing, multimedia technical centers, one-way television transmission with "talking heads," two-way audio (radio), two-way video / audio (TV), audio telephone and lecture notes, video satellite and telephone call back, telephone networks with printed materials and discussion at multiple sites, and others too numerous to mention.

All of these distance education systems have had writers like Holmberg (1986) identify numerous political, economic, and educational reasons for offering distance learning, including: (a) to increase educational offerings, (b) to serve educational needs of adults with jobs and family responsibilities in addition to social commitments, (c) to offer individual adults including disadvantaged groups and society-study opportunities, (d) to provide professionals with advanced-level learning, (e) to support educational innovation, and believing that this would be an economical use of educational resources.

'Andragogy' as a term was coined and first appeared in published form in 1833 by a German School Teacher, Alexander Kapp (a replica may be found at the following website: www.andragogy.net) Andragogy became popularized in the 1970s and 1980s in the United States, primarily through the work of Malcolm Knowles and others. However, Lindeman (1926) was credited with its original introduction into the United States.

Knowles (1970, 1980) defined andragogy as the "art and science of helping adults learn." The main structure of Knowles (1995) andragogical

expression took the form of a process design instead of a content design, with assumptions and processes. The six assumptions about adult learners are: (a) they are self-directing, (b) their experience is a learning resource, (c) their learning needs are focused on their social roles, (d) their time perspective is one of immediate application, (e) they are intrinsically motivated and want to problem-solve, and (f) they want to know a reason that makes sense to them as to why they need to learn something. The eight learning processes that adults want to be actively and interactively involved in are: (a) preparing for the adult learning experience, (b) a climate conducive to learning, (c) cooperative planning, (d) diagnosing their needs, (e) setting objectives, (f) designing the pattern and sequence of techniques, (g) conducting the activities, and (h) evaluating their progress to rediagnose their learning needs.

Later, Mezirow (1981) added to Knowles' conception of andragogy and developed a critical theory of adult learning and education that laid the groundwork for what he called a charter for andragogy that included 12 core concepts. Suanmali (1981) focused on the agreement of 174 adult educators, including professors and practitioners, and on 10 of Mezirow's core concepts that all related to self-direction in learning. The major theme of his study was that in assisting adults to enhance their capability of functioning as self-directed learners, the adult educator must: decrease learner dependency, help learners use learning resources, help learners define their learning needs, help learners take responsibility for learning, organize learning that is relevant, foster learner decision-making and choices, encourage learner judgment and integration, facilitate problem-posing and problem-solving, provide a supportive learning climate, and emphasize experiential learning methods.

In support of Knowles' ideas, Zmeyov (1994) clearly stated that Knowles' concept of andragogy scientifically finds the activity of the learners and teachers in the process of the determination of goals and tasks; of content, forms, and methods; of organization, technology, and realization of learning, and is considered now by many scholars and teachers as a fundamental theoretical base for adult education. Dover (2006) suggests that although Malcolm S. Knowles was not the first to use the term, his popularization of andragogy explains why Knowles is one of the most frequently cited theorists in adult education and is often referred to as "the father of adult learning."

With the emergence of Internet learning, many adult educators have sought to apply sound andragogical learning theory to its use. Numerous adult educators have emphasized their perception of how andragogy and Internet learning may be brought together.

Burge (1988) was one of the first to make a connection between andragogy and Internet learning. She said that one reason for distance educators to look at andragogy is the concept of quality. She asks the question: would an andragogical learner-centered approach contribute to or undermine academic rigor? She believed that a closer examination of the key implications of andragogy and a learner-centered view within the new classrooms of distance education contributes to academic rigor. It will also expand the definitions of helping adults learn to include more of the subtle qualitative aspects of learning. The quality of counseling and tutoring, as distinct from quality of course content, is another professional issue that benefits from a closer look at andragogy.

Bullen (1995) offered some words of caution on the use of andragogical principles in distance education. She suggested that distance educators need to examine the mandate of their operation, the purpose and nature of the courses, and the preferences and characteristics of their learners. Their application of andragogy needs to be moderate rather than radical. If andragogy were adopted on the strength of its underlying assumptions about adults, distance educators would do well to validate those assumptions in their own contexts.

Conner (1997–2003) strongly declared that andragogy refers to learner-focused education for people. Thus, in the information age, the implications of a move from teacher-centered to learner-centered education are staggering. Postponing or suppressing this move will slow our ability to learn new technology and gain competitive advantage. To succeed, we must unlearn our teacher-reliance.

Green (1998) comments on some important factors for consideration in online learning, and suggests that in andragogy, learners must balance life responsibilities with the demands of learning. Teachers guide learners to their own knowledge rather than supplying them with facts. Learners need to connect their tremendous amount of life experiences to their knowledge base and recognize the value of the learning.

In seeking to bring numerous factors together in online learning, *Andragogy* addressed the question of how to put the pieces together: learner, institution, and technology. He also focuses on who the learner is and that andragogy must be learned, designed to fit the learner, to incorporate technology positively (Thorpe, 1999).

Dewar (1999) articulated what she deems to be the important principles of andragogy / adult learning for consideration when facilitating adult learning online. Increasing and maintaining ones' sense of self-esteem and pleasure are strong secondary motivators for engaging in learning experiences. New knowledge has to be integrated with previous knowledge, which means active learner participation. Adult learning must be problem and experience centered. Effective adult learning entails an active search for meaning in which new tasks are somehow related to earlier activities. A certain degree of arousal is necessary for learning to occur. Stress acts as a major block to learning. Collaborative modes of teaching and learning enhance the self-concepts of those involved and result in more meaningful and effective learning. Adults generally learn best in an atmosphere that is nonthreatening and supportive of experimentation and in which different learning styles are recognized. Adults experience anxiety and ambivalence in their orientation to learning. Adult learning is facilitated when: (a) the learner's representation and interpretation of their own experiences are accepted as valid, acknowledged as an essential aspect influencing change, and respected as a potential resource for learning; (b) the teacher can give up some control over teaching processes and planning activities and can share these with learners; (c) teaching activities do not demand finalized, correct answers, and closure; (d) teaching activities express a tolerance for uncertainty, inconsistency, and diversity; and, (e) teaching activities promote both question-asking and question-answering and problem-finding and problem-solving. Adult skill learning is facilitated when individual learners can assess their own skills and strategies to discover inadequacies or limitations for themselves.

Osborn (1999) declared that andragogy has the potential to play an important role in distance learning. However, she found that students need to be coached in the principles of the approach so they understand the teacher's expectations. Most students have been trained to rely on their

teachers for leadership. Some need to be shown how to take responsibility for their own learning and become self-directing.

Moore (n.d.), in listing adult learner characteristics, provided the following implications for technology use: (a) Adults should be provided with adequate resources and technology tools to direct their own learning; (b) Adult learners should regularly be required to relate classroom content to actual life experiences; (c) Appropriate beliefs about learning are developed over time by providing students with many opportunities to ask their own questions and engage in personal inquiry; and, (d) Motivation and interest can be supported by designing authentic projects or tasks that the learner can see are relevant to their future needs.

Fidishun (n.d.) asserted that to facilitate the use of andragogy while teaching with technology, technology must be used to its fullest. In addition to the arguments of online being flexible for learning, self-paced, anytime, and anywhere, learners may also 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. The design must be interactive, learner-centered and facilitate self-direction in learners. Educators must become facilitators of learning, and structure student input into their design and create technology-based lessons that can easily be adapted to make the presentation of topics relevant to those they teach.

Commenting additionally on the value of andragogy in technological learning, Rossman (2003) posits that andragogy provides (a) a context for developing distance education programs, (b) a framework to build a climate conducive to adult learning, and (c) a process for involving the adult learner more actively in the distance learning process.

Gibbons and Wentworth (2001) expressed a concern about colleges and universities that are rushing at an alarming rate to answer the call of the growing number of online learners. They raised a crucial question: Can faculty make effective use of the online learning platform to design, construct, and deliver a meaningful online course that addresses the motivations, needs, learning styles, and constraints on nontraditional learners, while achieving the same learning outcomes as "on ground"? They seek to address this question by revealing the need for substantive differences between online and "on ground" teaching methodologies. They declare

that dialogue is the methodological heart of the online learning paradigm. They also support the idea that learning a subject well requires intensive discourse in any field or discipline and that the learners' need for individual dialogue contributes as much to the teaching and learning structure as the teacher offers in the way of course content or design. They further assert that those who teach online need to be trained (helped to learn) to respect the maturity of the adult learners and their motivations for learning. In this process of their being helped to become online faculty, they evolve from being an instructor and content expert to a facilitator and resource person. The new facilitator learns to create a course that emphasizes the primacy of the learner, grants a substantial measure of control to learners, and places learning directly in the context of learners' own experiences.

Barclay (2001) made it clear that Knowles' concept of andragogy became infused with humanistic psychology. Although subjected to much debate as to whether it should be considered a theory, method, technique, or simply a set of assumptions, andragogy now occupies an important place in the adult education field. It has engendered awareness of the learning needs of adults and is now emerging as a base of concepts applicable for learning at a distance.

Akande and Jegede (2004) made the case that adults in Nigeria are far behind children in achieving technological literacy. Their perspective to improve adult computer literacy skills in Nigeria holds the view that describes andragogy as one of the new sciences of education that is now gaining ground in many areas. It is democratic in the sense that the learner is seen as an active participant in the whole learning process. Thus, they conclude that andragogical methods are highly appropriate for adult education in computer literacy.

Oduaran et al. (2003) asserted that among other transformations in African university adult and continuing education, andragogy is taught as a mainstream course. Andragogy is also applied as the major principle guiding interactions among Information and Communication Technologies (ICT) and diversity.

Simonson et al. (2006) declares that most now consider Malcolm Knowles' work to be the theory of distance education because many times adults are involved in distance education and andragogy addresses frameworks for

programs designed for the adult learner. Brookfield (1986) asserts that the core of attaining adulthood is quite similar to adults perceiving themselves as self-directing persons.

Building on the previously stated assumptions and processes of andragogy as set forth by Knowles, Simonson et al. (2006) suggest a number of characteristics needed in distance / Internet education systems designed for adults. They are:

- The physical environment of the learning setting used by adults should enable them to be comfortable, the materials need to be in the letter size for them to see, and they need to be able to hear any sound connected with the program;
- The physiological environment should be one that promotes respect and dignity for the adult learner;
- Adult learners must feel supported and encouraged by the contents and ideas of the materials;
- A starting point for a program, or module of a program, should be the needs and interest of the adult learner;
- Program plans in the material should include clear course descriptions, learning objectives, resources, and sequences of the activities;
- General to specific patterns of content presentation work best for adult learners; and
- Active participation should be structured and fostered through the design of the materials.

Isenberg (2005) developed and tested the “Virtual Health Coach” Internet program that combines andragogical principles with Internet technology. It has numerous health issues being dealt with such as smoking, cessation, and weight loss. It is being used with the military, health care institutions, and is available online through website technology. The research indicates excellent success with the participants in dealing with health issues.

This original edition of *Applying Andragogy to Internet Learning* by Susan Isenberg represents a milestone in bringing together these two concepts— andragogy and Internet learning. Others have made suggestions about what is needed for bringing them together, but she has conducted the

research and knows what is needed. The book presents the “cutting-edge” requirements of lifelong learning for adults to retain mastery of their own destinies in a world of an accelerating rate of change and rapid globalization. It is a landmark in the presentation of a scientific foundation for research in andragogy and its roots in relationship to the very practical aspects of Internet learning. This is the only book I know that delivers such in-depth information and research actually applying andragogy to Internet learning—and it does that in the very crucial area of a Virtual Health Coach and health related concerns.

This book provides a break-through framework for bringing together the interaction of andragogy and Internet learning, while blending the practical and theoretical, the practice and research, and the technology and learning process. It presents a dynamic design to meet the goal of the International Commission on Adult Education for the Twenty-first Century, focusing on four pillars of learning: To know, to do, to live together, and to be. A fifth pillar of learning, learning to change, was added after the writing of this book to emphasize the lifelong nature of learning (Nurturing the treasure: Vision and strategy 2002–2007, UIE UNESCO Institute for Education, Hamburg, Germany). It addresses the multisided issue of “learning with a face-to-face teacher,” and “learning without a face-to-face teacher.” It presents a state-of-the-art picture of the themes that emerged during the human process: Interest, legalities, money, skill, relationships, doubt, trust, fun, leadership, getting it right, educational constraint, situational constraint, and evaluation. This book sets forth the integrated protocol elements of building this kind of Internet learning program that resulted from merging the protocol elements of these literature review and the protocol elements of the lived experience. Finally, this book is a very important contribution to the literature of adult education as well as a valuable resource for those individuals and teams who wish to build other adult / lifelong learning programs and systems, dealing with a variety of subject areas that will help in applying andragogy to Internet learning.

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