Name(s) of presenter(s): Cooper, Mary K. Ph. D.;
Henschke, John A. Ed. D.

Address: 269 Marillac Hall, Educational Leadership and Policy Studies, College of Education, University of Missouri, One University Boulevard, St. Louis, MO. 63121-4499 USA

Telephone[s]: 314-516-5946; 314-516-6085. /Fax: 314-516-5842

e-mail: cooper@umsl.edu   henschkej@missouri.edu

Andragogy Websites: http://www.umsl.edu/~henschke/   www.andragogy.net

Title of paper:

Additional Thinking about Andragogy – The International Foundation for Its Research, Theory, and Practice Linkage in Adult Education and Human Resource Development

Brief description:

This paper will address the idea that more than 88 major works published in English from national and international sources on andragogy are presented here, in order to provide a clear and understandable, international foundation for the linkage between the research, theory and practice of andragogy and its application to Adult Education and Human Resource Development.

Additional Thinking about Andragogy: The International Foundation for Its Research, Theory and Practice Linkage in Adult Education and Human Resource Development

Mary K. Cooper
University of Missouri – St. Louis

John A. Henschke
University of Missouri – St. Louis

More than 88 major works published in English from national and international sources on andragogy are presented here, in order to provide a clear and understandable, international foundation for the linkage between the research, theory and practice of andragogy and its application to Adult Education and Human Resources Development. The six themes provide a foundation for the linkage: Evolution of the term; historical antecedents shaping the concept; comparison of American and European understandings; popularizing of the American concept; practical applications; and theory, research, and definition.

Andragogy has been used by some as a code word for identifying the education and learning of adults. It has been used by others to designate different strategies and methods that are used in helping adults learn. Still others use the term to suggest a theory that guides the scope of both research and practice on how adults learn, how they need to be taught, and elements to be considered when adults learn in various situations and contexts. Again, still others consider andragogy as a set of mechanical tools and techniques for teaching adults. Then others consider that andragogy implies a scientific discipline that examines dimensions and processes of anything that would bring people to their full degree of humaneness. Nadler (1989) stated that HRD is based in learning, and every HRD practitioner should have an understanding of the theories of Adult Learning. There is a broad spectrum reflected in the practice of andragogy, and the extensive literature publication over a long period of time on andragogy [some of which will be introduced and discussed in this paper], opens the door for the theoretical framework of this study to be focused on andragogy.

Background

Although andragogy became popularized in the 1970's and 1980's in the USA through the work of Malcolm Knowles and others, its original introduction into the USA was in 1926 by E. C. Lindeman, and again in 1927 by Lindeman and M. L. Anderson. However, the term was first authored by Alexander Kapp (1833) nearly a century earlier in a German publication. (To see a copy of this publication please go to http://www.andragogy.net) Previous to and since the introduction of andragogy into the USA, extensive published English language literature has addressed and critiqued various aspects of its conceptual meaning and use. However, much of what has been published focuses only on its popularized use, reflecting either a wholesale support of Knowles' version of andragogy and the attendant excitement it generates, or a fairly straightforward debunking and dismissal for the reason of what some call Knowles' unscientific approach.

One the one hand, there are numerous instances and variations where adult educators tended in the direction of Knowles' version of andragogy with using a practical approach when facilitating adults learning within their own setting and context. Kabuga (1977) advocates using highly participative teaching/learning techniques with children as well as adults in his native Africa, despite the fact that he has not tested them there. Eitington (1984, 1989, 1996) promotes pro-active engagement of learners in most every situation throughout the book containing twenty-one chapters, six hundred pages, and one hundred usable handouts. Hoffman (1980) emphasizes the differences between children and grown-ups (adults) and children, with "schooling" being for children and "learning" being for adults. He affirms his successful use of active learning techniques in working with more than 600,000 adult participants. Baden (1998) developed and outlined twenty-seven different themes with accompanying interactive techniques that he perceives as being extremely useful in the process of helping association executives become more effective in fulfilling their responsibilities. Zemke and Zemke (1980, 1996) selected at least thirty ideas/concepts/techniques that they think we know for sure about adult learning. They asserted that if it is our job to train adults – whether they want to be trained or not – these ideas can give insight and practical help. The Nebraska Institute for the Study

of Literacy (no date given) summarized from Brookfield (1986), that in Andragogy, facilitating learning is a transactional encounter in which learner desires and educator priorities will inevitably interact and influence each other. Henschke (1995) focused on describing a dozen different episodes with groups in various settings, where he applied his *understanding and adaptation of Knowles' the theory of andragogy, and then detailed some of the results he considered successful of using that approach with the participants.*

On the other hand, there are numerous instances and variations where adult educators tended to dismiss Knowles' version of andragogy as being quite inadequate, unscientific, misleading to adult educators and lacking in understanding of the concept. Hartree (1984) asserts that if viewed from the psychological standpoint, Knowles' theory of andragogy fails to make good its claims to stand as unified theory because it lacks coherent discussion of the different dimensions of learning; and, equally, if viewed as philosophy, it falls short because it does not incorporate an epistemology. Davenport (1987) presents a case for questioning the theoretical and practical efficacy of Knowles' theory of andragogy, growing out of his research and perspective, perhaps adding to the confusion with his paradoxical definitions of andragogy and pedagogy and with his assumptions that lack clarity and solid empirical support. Davenport finished with the argument that some adult educators argue that adult education should simply drop the word from its lexicon. Jarvis (1984) writes that the theory of andragogy has moved into the status of an established doctrine in adult education, but without being grounded in sufficient empirical research to justify its dominant position. Brookfield (1986) claims that with andragogy [most probably as exemplified by Knowles] not being a proven theory, adult educators should be hesitant to adopt it as a badge of identity or calling themselves 'andragogues' with the attendant belief that it represents a professionally accurate summary of the unique characteristics of adult education practice. Pratt's (1987, 1993) stance appears to be that andragogy is a relational construct, and that the further debate of it, presents tension between freedom and authority, between human agency and social structures, thus seeming to stall the consideration of the usefulness of Knowles' conception of andragogy. Ferro (1997) charges that the use and meaning of the term, *andragogy,* has spawned a debate on the term and fostered the creation of additional unclear terms intended to define aspects of adult education; but he makes a plea for adult educators instead to concentrate on what they know best, the planning and delivery of learning opportunities for adults. Hanson (1996) calls for adult educators not to search for a separate theory of adult learning [andragogy], but rather that we remove many of the unsubstantiated assumptions based on almost utopian beliefs about the education and training of adults linked to uncontextualized views of learning and empowerment.

The weakness of the above picture is that both sides seem to stop short in their discussion and understanding of andragogy. The focus is mainly on the pros and cons of Malcolm Knowles' treatment and interpretation of the concept. Thus, our interest in researching the concept of andragogy takes us past the experience [albeit, a positive experience] of Knowles' presentation of it. We are interested in investigating all the literature we could find and had time to analyze. Of course, this is an ongoing search. In our quest, we found that most of the published material on andragogy that reaches beyond these limitations is largely untapped and not understood, but nevertheless provides a broader and deeper foundation of the concept and its application to the theory, research and practice of HRD and Adult Education within adult learning.

It has been suggested by Savicevic (1999) that andragogy is defined as a scientific discipline, which deals with problems relating to HRD and Adult Education and learning in all of its manifestations and expressions, whether formal or informal, organized or self-guided, with its scope of research covering the greater part of a person's life. It is linked with advancing culture and performing: professional roles and tasks, family responsibilities, social or community functions, and leisure time use. All of these areas are part of the working domain of the practice of HRD and Adult Education. It could be said that a clear connection is established from the research to practice of andragogy, with andragogy being the art and science of helping adults to learn and the study of HRD and Adult Education theory, processes, and technology relating to that end.

The Research

The purpose of this study was to answer the question: What are the major foundational English works published on andragogy that may provide a clear and understandable linkage between the research on andragogy and the practice of andragogy within the field of HRD and Adult Education? Following are two major underpinnings relevant for the decisions on what was included: Any material we became aware of in the English language,(since we only are able to speak or read in that language) that presents various aspects of the concept of andragogy as viable and worth consideration for the field of HRD and Adult Education on a world-wide basis; and, a presentation and view of the content of andragogy within any country of the world and with no date/time boundaries. A library search of various data bases was conducted: Sources also include The Adult Education Research Conference; Midwest Research-to-Practice Conference; Lifelong Learning Research Conference; Canadian Association for the

Study of Adult Education; Standing Conference on University Teaching and Research in the Education of Adults; Academy of Human Resource Development; Commission of Professors of Adult Education. Dissertation Abstracts International database was accessed and we found that there are more than 170 doctoral dissertations focused on the topic. From these databases we limited ourselves to selecting those that most notably contained a full emphasis on andragogy and not just a tangential mention of the term. Library materials that we had become aware of during a number of years were part of the material included. Bibliographical references in all of the above materials led us to more materials. Numerous international sources were tapped and included scientific research studies, theoretical think pieces, and reports on experiences and/or results from practical applications of andragogy. The interpretative form of research sought out the major themes in the text of works on andragogy that were studied. The major themes discovered are: Evolution of the term andragogy; historical antecedents shaping the concept of andragogy; comparison of the American and European understandings of andragogy; popularization of the American concept of andragogy; practical applications of andragogy; and, theory, research and definition of andragogy.

Evolution of the Term Andragogy

Van Gent (1996) asserts that andragogy has been used to designate the education of adults, an approach to teaching adults, social work, management, and community organization. Its future lies only as a generic term for adult education and as a complement to pedagogy, which has been used mainly to focus on the art and science of teaching children.

Nevertheless, in recent years pedagogy has been used to refer to, not just the art and science of teaching children, but to the teaching of both children and adults or as the art or profession of teaching. Thus, use of the term andragogy is not encouraged because of its being an unclear term (Ferro, 1997). However, Hooks (1994) says "the possession of a term does not bring a process or practice into being: concurrently one may practice theorizing without ever knowing/possessing the term..." (p. 61). Kaminsky (no date given) suggested that whether we have knowledge for naming something academically, or not, we may still be practicing pedagogy, andragogy, or any other 'gogy' or 'ism'. Thus, Henschke (1998a) asserts that long before the term andragogy appeared in published form in 1833, ancient Greek and Hebrew educators if not others used words that, although they were antecedents to andragogy, included elements of the concept that has come to be understood as some of the various meanings and definitions of andragogy. As an illustration of using words that may be unclear or do not have one precise definition, Webster (1996) includes 179 definitions of the word 'run'. However, we have not given up use of that term because of the multiplicity of definitions.

Picavey (2003) says that learnig family history in an andragogical way is much more important than just knitting names together. It is about culture, human behaviour, social relations, sociology, biology, psychology, philosophy, geography, economics, law, philology, you name it.

Smith (1996) provides a brief history of the use of the term andragogy. He then limits himself to presenting Malcolm Knowles' major andragogical assumptions, and addresses some general issues with Knowles' approach by exploring the assumptions including the surrounding, continuing debate.

Mynen (no date given) offers a personal statement on andragogy's meaning to him by focusing only on Knowles' assumptions. He seeks to address where andragogy came from, what it involves, and how one actually does it. He asserts his belief that andragogy may also be applicable to everyone including children, and considers the possibility that the distinction between adult and child learners may not be relevant anymore, but that the two may need to be merged into one..

Draper (1998) in providing an extensive, world-wide background on andragogy, reflects on and presents an overview of the historical forces influencing the origin and use of the term andragogy: the humanistic social philosophy of the 1700s & 1800s, early twentieth century labor movement in Germany and USA, international expansion of adult education since World War II, commonalities of different terminologies, the debate in North America, the progressive philosophy underlying andragogy in North America, stimulation of critical discussion and research, and the viability of andragogy as a theory. He concludes, "Tracing the metamorphoses of andragogy/adult education is important to the field's search for identity. The search for meaning has also been an attempt to humanize and understand the educational process."

Historical Antecedents Shaping the Concept of Andragogy

Wilson's (2002, 2003) research into the historical emergence and increasing value of andragogy in Germany and the USA, among other things discovers a connection between a foundational element in adults' capacity [even

into the later years] to continue learning – a concept labeled as 'fluid intelligence' – and its being enhanced through andragogical interventions in self-directed learning.

Allman (1983) predated Wilson regarding this same connection between plasticity in adult development. She asserted that this concept and research coupled with Mezirow's (1981) and Knowles' (1970, 1980) understanding of andragogy could be linked with her ideas on group learning and then merged into a more comprehensive theory of andragogy.

Heimstra and Sisco (1990) suggest a situation that gave rise to the emergence of andragogy as an alternative model of instruction to improve the teaching of adilts. They assert that mature adults become increasingly independent and responsible for their own actions. Thus, those adults are often motivated to learn by a sincere desire to solve immediate problems in their lives, have an increasing need to be self-directing, and in mnay ways the pedagogical model does not account for such developmental changes on the part of adults, and thus produces tension, resentment, and resistance. Consequently, the growth and development of andragogy as a way to remedy this situation and help adults to learn. Their article also presents an extensive list of 97 annotated bibliographical references related to andragogy.

Savicevic (1991, 1 999a) suggests that Socrates, Plato, Aristotle, the Sophists, Ancient Rome, the epochs of humanism and the renaissance, all reflect thoughts and views about the need of learning throughout life, about the particularities and manners of acquiring knowledge in different phases of life, about the moral and aesthetic impact. He also credits J. A. Comenius in the seventeenth century with being regarded the founder of andragogy with his primary wish to provide comprehensive education and learning for one and all to the full degree of humaneness, and urging the establishment of special institutions, forms, means, methods and teachers for work with adults. In addition, he theorizes that the institutional basis for adult education actually formed in the late eighteenth and early nineteenth centuries in Britain and other countries with the emergence of Mechanics' Institutes, workers' colleges & educational associations, university extensions, board schools for adult instruction, correspondence education, and people's universities.

Savicevic (2000) also provides a new look at some of the background and antecedents to andragogy on a much broader scale. However, the explanation of this book is a bit more appropriately place in the last secion on "Theory, Research, and Definitions of Andragogy."

Henschke (1998a) goes back earlier in history and claims that the language of the Hebrew prophets, before and concurrent with the time of Jesus Christ, along with the meaning of various Hebrew words and their Greek counterparts -- learn, teach, instruct, guide, lead, and example/way/model -- provide and especially rich and fertile resource to interpret andragogy. He expects that by combining a probe of these words and elements w ith other writings, a more comprehensive definition of andragogy may evolve.

Henschke (2004) also finds a deep involvement in andragogy, when he paraphrases Robert Forst's Poem [*Our Gift Outright*] which was delivered at the USA 1961Presidential Inaugural Ceremonies of John Kennedy and Lyndon Johnson. The paraphrase followed the line: Andragogy belonged to us before we belonged to andragogy..

Comparison of the American and European Understandings of Andragogy

Savicevic (1991, 1999a) provides a critical consideration of andragogical concepts in ten European Countries – five western (German, French, Dutch, British, Finnish), and five eastern (Soviet, Czech-Slovak, Polish, Hungarian, Yugoslav). This comparison shows common roots but results in five varying schools of thought: Whether andragogy is parallel to or subsumed under pedagogy in the general science of education; whether agology (instead of andragogy) is understood as a sort of integrative science which not only studied the process of education and learning but also other forms of guidance and orientation; whether andragogy prescribes how teachers and students should behave in educational and learning situations; the possibility of founding andragogy as a science is refuted; and, that e ndeavors h ave b een made t o f ound a ndragogy as a f airly i ndependent s cientific d iscipline. S avicevic (1999a, 1999b) clearly aligns himself with the fifth school of thought in that this research aims toward establishing the origin and development of andragogy as a discipline, the subject of which is the study of education and learning of adult in all its form of expression. Thus, it requires an understanding of andragogy in Europe and America through comparing and contrasting. He identifies the problem, the framework of study, the research methodology, the similar and different findings, and the various perspectives in these two places that have the longest traditions and/or strongholds in andragogy.

Clark (1999) considers that two books written in the 1920s began to change the term "adult learning" – Thorndike's *Adult Learning*, and Lindeman's *The Meaning of Adult Education*. In the 1950s, European educators started using the term "andragogy," from the Greek w ord "anere" f or adult, and agogus," the art and science of helping students to learn. They wanted to be able to discuss the growing body fo knowledge about adult learners in

parallel with pedagogy. In contrast to pedagogy - transmitting content in a logical sequence; andragogy seeks to design and manage a process for facilitating the acquisition of content by the learners.

Robb (1990) believes that South African andragogics can enable improved understanding between Continental European and American adult educationists. However, for this improvement to take place, he sees the need for three further studies: whether andragogy terminology is necessary; whether adult educationists are scientists; and, where adult educationists differ in America and Continental Europe, that could pave the way for a more adequate description of what andragogy is.

Popularizing of the American Concept of Andragogy

Anderson and Lindeman (1927) were first to bring the concept to America. Although they clearly stated that andragogy was the method for teaching adults, the term did not take hold in the new land until many years later.

Knowles (1970, 1980, 1989, 1995, 1996) indicated that he acquired the term the in 1967 from Dusan Savicevic. However, in conducting extensive research, Sopher (2003) determined that Knowles acquired the term from Savicevic in 1966. Nevertheless, after becoming acquainted with the term, Knowles infused it much of his own meaning garnered from his already extensive experience in adult education. He then combined his expanding practice around the world, his university teaching of budding adult educators, and the publication of *The Modern Practice of Adult Education: Andragogy and Pedagogy* during the 70s & 80s. This American version of andragogy became popularized as a result. The main structure of his andragogical expression took the form of a process design instead of a content design, with assumptions and processes. The assumptions about adult learners are: they are self-directing, their experience is a learning resource, their learning needs are focused on their social roles, their time perspective is one of immediate application, they are intrinsically motivated, they want to problem-solve, and they want to know why they need to know something. The learning processes adults want to be actively and interactively involved in are: preparing for the adult learning experience, a climate conducive to learning, cooperative planning, diagnosing their needs, setting objectives, designing the sequence, conducting the activities, and evaluating their progress.

Practical Applications of Andragogy

Lindeman (1926a, 1926b, 1961) presents an interesting picture of the method for teaching adults. Basically he asserts (1926a) in his first use of the word andragogy, that the method for teaching adults is discussion, which he says is different from the teaching of children. In his classic book *The Meaning of Adult Education* (1926b), he never uses the term andragogy, but does include a chapter entitled, "In terms of method." A thorough analysis of this chapter reveals that he extensively explores, describes and explains the discussion method. Consequently, it seems safe to assume that he laid the earliest groundwork in the U.S.A., for a major practical application of andragogy as the method for teaching of adults.

Mezirow (1981) developed a critical theory of adult learning and education, and laid the groundwork for what he called a charter for andragogy that included twelve core concepts. Suanmali's (1981) doctoral dissertation focuses on the agreement of 174 adult educators, including professors and practitioners, on the of those core concepts that all related to self-direction in learning. The major theme was that to assist adults to enhance their capability to function as self-directed learners, the educator must: decrease learner dependency, help learners use learning resources, help learners define his/her 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 supportive learning climate, and emphasize experiential methods.

Billington (1988, 2000) in her doctoral dissertation studied sixty men and women to determine what key factors helped them grow or if absent made them regress and not grow. The nine factors were: a class environment of respect; their abilities and life achievements acknowledged; intellectual freedom, self-directed learning, experimentation and creativity encouraged; learner treated fairly and as an intelligent adult; class is an intellectual challenge; interaction promoted with instructor and between students; regular feedback from instructor.

Brockett (no date given) affirms that the principles of andragogy have been applied successfully in a wide range of settings. These include business, government, colleges and universities, continuing professional education, religious education, adult basic education, and even elementary/secondary settings.

Knowles (1972) and Ingalls (1976) declare that there is a growing interest of many industrial corporations in the andragogical education process, with managers functioning as teachers, and that andragogy offers great potential for improving both interpersonal relationships and task effectiveness.

Knowles (No Date Given) also suggests that andragogy applies to any form of adult learning and has been used extensively in the design of organizational training programs, especially for "soft skill" domains such as management development. An examples he provides on this is for the design of personal computer training.

Nevins (no date given) adds to these assertions that successful business leaders are masters of andragogy. They need to be able to think-on-their-feet, quickly gather the facts and quickly make decisions. They recognize that time is not an ally and no-decision is a certain path to failure. On the other hand, they realize that in a short period of time they might not be able to get all of the facts to make a fully educated decision. Knowing that they must make a decision, they use the facts as they know them at the time and extrapolate them to the particular situation that they are faced with. This approach to decision making, he suggests, is the andragogical approach to learning.

Bragar & Johnson (1993) in addressing andragogy/adult learning in the business environment indicates that their research has identified five principles. The are as follows: Learning is a transformation that takes place over time; learning follows a continuous cycle of action and reflection; learning is most effective when it addresses issues relevant to the learner; learning is most effective when pepole learn with others; and, learning occurs best in a supportive and chellenging environment.

Simonson, et. al. (2003) identifies a number of characteristics needed in distance education systems designed for adults, and comes from Knowles' concept of andragogy. The characteristics are: the physical environment of a television classroom used by adults should enable them to see what is occurring, not just hear it; the physiological environment should be one that promotes respect and dignity for the adult learner; adult learners must feel supported, and when criticism is a part of discussions or presentations made by adults, it is important that clear ground rules be established so comments are not directed toward a person, but concentrate on content and ideas; a starting point for a course, or module of a course, should be the needs and interest of the adult learner; course plans should include clear course descriptions, learning objectives, resources, and timelines for events; general to specific patterns of content presentation work best for adult learners; and, active participation should be encouraged, such as by the use of work groups, or study teams.

Bullen (1995, June) offers in contrast, some words of caution on the use of andragogical principles in distance education. 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.

Moore (No Date Given), in coming from a university context, focuses attention on the term "adult" as referring to "all college students, undergraduate and above." He suggests that "andragogy" can be more broadly defined as all "learner-focused" education. In his listing of the adult learner characteristics, he provides the following implications for technology use: Adults should be provided with adequate resources and technology tools to direct their own learning; adult learners shoulld regularly be required to relate classroom content to actual life experiences; 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, motivation and interest can be supported by designing authentic projects or tasks that the learner can see are relevant to their future needs.

Dewar (1999) articulates what she deems to be important principles of andragogy/adult learning for consideation when facilitaiing 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; that 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 will enhance the self-concepts of those involved and result in more meaningful and effective learning. Adults will generally learn best in an atmosphere that is nonthreatening and supportive of experimentaton and in which different learning styles are recognized. Adults experience anxietry and ambivalence in their orientation to learning. Adult learning is facilitated when: The learner's representation and interpretation of his/her own experience are accepted as valid, acknowledged as an essential aspect influencing change, and respected as a potential resource for learning; the teacher can give up some control over teaching processes and planning activities and can share these with learners; teaching activities do not demand finalized, correct answers and closure; teaching activities express a tolerance for uncerrtatinty, inconsistency, and diversity; and, teaching activities promote both question-asking and –answering, 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.

Fidishun (No Date Given) asserts 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 appropoirate or that they have already learned. The design must be interactive, learner-centered and to facilitate self-direction in learners. Educators must become facilitators of learning, and 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.

Morrall (1993) raises the question whether andragogy may flourish outside of a sustained, concentrated time period, in a part-time, short-term course. Although some evaluations suggest that it may, the critical component contributing to its success appeared to be in the residential aspect of the program that was involved in enabling the implementation of andragogy.

Gibbons and Wentworth (2001) express 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 raise 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 non-traditional learners, while achieving the same learning outcomes as onground? They seek to address this question by revealing the need for substantive differences between online and onground 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.

Osborn (1999) declares that andragogy has the potential to play an important role in distance learning. However, she finds that students need to be coached in the principles of the approach so they underastand 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.

Conner (1997-2003) strongly declares 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.

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

Zhang (1996) tells about how andragogy was used in a major way to help the People's Republic of China move from a traditional planned economy toward the socialist market economy system. He tells that in the discussing educational theories in the development of andragogy, Deng XiaoPing pointed to adult education/andragogy as the key to developing human potential, skills, technology, talent and knowledge. This would be accomplished through a job training system, continuing education, adult basic education system, and adult higher and middle school education system.

Raslavicus (2003?) within the context of the College of American Pathologists, is convinced that in the future they will have to demonstrate what they have learned. He issues a warning that the time is nearing when it will no longer suffice to list on one's relicensure application or reapplication to the medical staff only the courses one has taken or the journals read. The requirement will be to *demonstrate* that one has maintained competence by showing something has been learned in the process.

Salama (2003) conducts a group discussion on architectural pedagogy and andragogy for educators, practitioners, scholars, and those intetrested in in-depth debate on architectural education teaching practices. The discussion involves the development of knowledge,values and cultural and philosophical positions.. The objective is to discuss: Theoretical assumptions, experiences, and experiments that pertain to the history of architectural education; design studios; teachng methods and techniques; learning settings; sustainability and andragogy/pedagogy, and othe issues of concern to education policy makers and universitry administrators.

Patterson (No Date Given) conducts a one-day, six-hour intensive teacher/learner andragogical seminar-workshop to help learners choose and use teaching methods that are consistent with how older youth and adults learn. This gets the learners involved in meaningful partisipation in in-depth Bible study.

The Board of Registration of real estate brokers & salespersons (No Date Given) included a category labeled 'andragogy' as part of the curriculum for the 30-hour instructor course. They include such suggestions as: Presenting new ideas by relating them to pre-existing learner knowledge, teach at learners' level not ove their heads, show specific benefit of new material to learners, encourage appropriate learner questions, be tolerant of all, use a variety of teaching methods that will involve all learners in the learning process, build learners' self esteem, call learners by name, and present key points by using examples as illustrations.

Imel (1989) mainly consentrates on answering the question 'is teaching adults different' by answering 'yes' and 'no' regarding the use of the andragogical model. She says that it mainly comes down to the following emerging considerations for practice. Determine the purpose of the teaching-learning situation, the context, the goals of the learners, and the material to be covered. Provide opportunities for teachers to practice learner-centered methods, by engaging teachers in learning technuiques especially suitable for adult students, such as small-group discussion methods, and effective use of non-traditional room arrangements. Select teachers on the basis of their potential to provide learner-centered instructional settings.

Lieb (1991) is involved in health services. His take on andragogy is the adults are autonomous and self-directed, have accumulated a foundation of life experiences and knowledge, are goal-oriented, relevancy-oriented, and practical. He focuses on what motivates adult learners, leaning tips for effective instruction in motivation, reinforcement, retention, transference, and insists that we "treat learners like adults."

Gehring (2000) is concerned about applying principles of andragogy in the correctional setting. His tentative conclusion affirms that although not all residents of correctional settings are ready to take full responsibility for their learning, there are some who are. These mature students, who deserve recognition as whole persons, will benefit from having the facilitator apply andragogical princlipes in their learning activities. Although residents of correctional situations are frequently "late bloomers," they are quite capable of learning and maturing.

Johnson (2000) believes that built into andragogy is a method for engaging learners in the discovery of meaning for them in their personal and professional lives. During his forty years in the field, in a wide variety of settings he successfully tested and applied this andragogical method with many participants affirming the results.

Henschke (1998b) emphasized that in preparing educators of adults, andragogy becomes a way of being or an attitude of mind, and needs to be modeled/exemplified by the professor. Otherwise, if we are not modeling what we are teaching, we are teaching something else. Knowles (1970, 1980) provided in his books numerous examples of the successful practice of andragogy.

Theory, Research and Definition of Andragogy

Simpson (1964) very early proposed that andragogy could serve as a title for an attempt to identify a body of knowledge relevant to the training of those concerned with HRD and Adult Education. He posited that the main strands could be parallel to what already existed in child education. The main strand would be the study of: Principles of adult education, the study of adults, educational psychology of adults, and generalized andragogical methods for teaching adults. He issued a call for adult education to do this.

Hadley (1975) developed an instrument of sixty (60) items that could assess an adult educator's orientation with respect to the constructs of andragogy and pedagogy, the Education Orientation Questionnaire (EOQ). These items were developed from a pool of more that 600 statements illustrating how pedagogical or andragogical attitudes and beliefs about education, teaching practices and learning were obtained.

The Nottingham Andragogy Group (1983) address their beliefs about adults and adults' abilities to think creatively and critically in learning settings. They describe methods, several features of a teaching and learning process, and some stages of course development centered around their notions about critical thinking. Section one deals with adult development; section two with the empirical and theoretical foundations for a theory of andragogy; and section three purposes a model and theory. They also report a belief that Alexander Kapp, a German teacher, first used the word andragogy in 1833 to describe the educational theory of Plato.

Poggeler (1994) listed ten trends which he hopes will be helpful for future development of European andragogical research, including: international knowledge, comparative understanding, political influences, a clear picture of *adult* as the 'subject' of adult education, concentration on the thirty to fifty age group, explaining the *social structure* of the clientele, "development-andragogy" of the Third World, criteria for successful learning and teaching, understanding the "lifeworlds" of the participants, and new types and alternatives of adult education. Some of these may also be applicable to the USA.

Zemyov (1994) clearly states that the most important trend in adult education in Russia is the application and further development of Knowles' (1970, 1980) theory of adult learning, andragogy, in the process of education. He further states that Knowles' concept of andragogy [the art and science of helping adults learn] "...which scientifically founds the activity of the learners and of the teachers in the process of the determination of goals and tasks, of content, forms and methods, of organization, technology and realization of learning, is considered now in Russia by many scholars and teachers as a fundamental theoretical base for adult education. The main scientific and practical problem for the adult educators consists in finding out the most appropriate combination of pedagogical and andragogical models of learning for obtaining assigned objectives of learning for a learner in an actual situation." (pp. 36 & 37).

Delahaye, et al (1994) measured student's orientation to andragogy and pedagogy by using the Student's Orientation Questionaire developed by Christian (1982), and found them represented as being orthogonal or at right angles to each other. This relationship reflects some of the complexities involved in adult learning.

Hoods Woods (1998) perceive andragogy, as related to wilderness teaching, being based on four environmental influences active in every being. They are: External [Physical]; Internal [Physical]; External [Spiritual]; and, Internal [Spiritual]. These four influences interact with one another to determine how successfully we will be able to face survival challenges in any environment.

Boucouvalas (1999) insists that although refined methodological or epistemological tools and indicators are critical for sound research in comparative andragogy, the role and influence of the 'self' of the researcher in the research process, is an equally critical element to be considered.

Johnson (2000) sees andragogy as an approach to learning that includes a focus primarily on the needs of the learner in every aspect of his/her life. He also asserts that given most, if not all definitions in the social science literature, andragogy could qualify as a theory or at least an emergent theory.

Rachal (2000) finds little empirical evidence that andragogy provides better results from learning than other approaches. However, he identifies from nineteen empirical studies, insights that may contribute toward helping "...establish...criteria for an operational definition of andragogy suitable for implementation in future empirical studies of andragogy." He later (2002) clearly identifies seven criteria: Voluntary participation, adult status, collaboratively-determined objectives, performance-based assessment of achievement, measuring satisfaction, appropriate adult learning environment, and technical issues.

The most comprehensive of all the publications on andragogy is a book that includes thirty of the author's publications within a twenty-six year period (Savicevic, 1999). His work has addressed how andragogy has and will shape the literacy, the work place, universities, training and research, the humanistic philosophies, the evolution and future of andragogy and the practice of adult education. He also provided a number of descriptions and definitions of andragogy.

Ovesni (1999) supports the idea that andragogy is to generate its own knowledge and is able to offer something to other sciences in scientific cooperation. Andragogy does not belong to any other science no matter what that other science is called. It is simply an integral part of a family of sciences studying education and is neither superior nor subordinate to any other science. Andragogy thus retains its independence from other sciences.

Ross (198_?) connects the concept of andragogy and its value with some of the research on teacher effectiveness. He believes that teachers behavior relates to student achievement relating to such things as: Clarity, variability, enthusiasm, task-oriented behavior, use of student ideas, types of questions asked, probing , and levelo of difficulty of instruction.

Reischmann (2000) indicated that in 1994 he changed the Otto Freiderick University, Bamberg, Germany, "Chair of Adult Education" to "Chair of Andragogy." His understanding differentiates "andragogy as the research" and "adult education as the practice" in the education and learning of adults.

Henschke (1998a) attempted a descriptive definition of andragogy that moved in the direction of calling it a scientific discipline of study. Furter (1971) proposed that universities recognize a science for the training of man to be called andragogy, with it purpose to focus not on children and adolescents, but on man throughout his life.

Merriam (2001) posits that the scholarship on andragogy since 1990 has taken two directions. One stream seeks analysis of the origins of the concept or its usage in different parts of the world, thus becoming a touchstone for professionalizing through the establishment of a scientific discipline. The other stream critiques andragogy for its lack of attention to the context in which learning occurs. She emphasizes that andragogy as one of the two "pillars" of adult learning theory (self-directed learning being the other pillar) will continue to engender debate, discussion, and research, thus suggesting that in so doing, it will further enrich our understanding of adult learning.

St. Clair (2002) only adds to the practice perspective of andragogy. He suggests that andragogy does not work for everybody, and it does not define adult education. However, he does allow that it is one theory for the 21st century that will maintain its role as a necessary component of the field's shared knowledge.

Savicevic (2000) adds another component to the scientific foundation and design of andragogy in his book. It is in the Serb language, but he has provided a summary in English. The summary is as follows: The study is dedicated to search of the roots of andragogical ideas starting from the antique civilizations up to the present time. We understand the term andragogical ideas as thoughts and concepts of persons about education and learning of adults, system of andragogical institutons that appeared in certain civilizations, as well as andragogical practice in which such ideas were realized. The structure of the study is made of the following parts – Conceptual and methodological frames of research; Searching for the roots of andragogical ideas; Andragogical ideas in the international context; Andragogical ideas in Yugoslav context; and, Comparisons and final general discussion. Each part is made of several chapters that are interconnected and logicallly linked.

Reischmann (2004) adds to the scientific basis of andragogy, some historical perspective on the why of various periods in its emergence and then lying dormant for extended decades. Much of his discussion centered on whether a term such as "andragogy" was necessary or that the field of adult education has been and will be able to flourish and do its work without a unique term.

Wilson (2004) contributes a new paradigm for the scientific foundation of andragogy that defines learning in respect to the anatomical make-up of the brain and its biological functions. It moves away fro a general definition to a specific definition, using empirical research conducted by the neuroscientists and biologists on memory, recall, learning, plasticity and experience.

Milligan (1995, 1997, & 1999) scientifically investigated andragogy. He conceptualizes his summary of it as the facilitation of adult learning that can best be achieved through a student centered approach that, in a developmental manner, enhances the student's self-concept, promotes autonomy, self-direction and critical thinking. However, despite some questions being raised, and lingering doubts, he believes that problem-based learning most notably used in nursing education has elements of andragogy within it.

Mazhindu (1990) establishes a foundational link between andragogy and contract learning. Thus, he asserts that contract learning [with its foundation in andragogy] may well help to facilitate continuous, menaningful and relevant learning throughout the nurse's career, that was begun in basic nurse education. Andragogy [contract learning] is suggested as one effective alternative to traditional nurse education.

Cooper and Henschke (2001) identified eighteen English language articles and studies as foundational to the theory of andragogy in its relationship to practice. Showing the continuing discovery and expansion of a much broader than Knowles' conception of andragogy, the number of documents referenced and analyzed in this article contributing to the international foundation for its research, theory and practice linkage now stands at more than eighty-eight. Most dictionaries up to this time have not included andragogy. However, Webster's dictionary (1996), showing some recent recognition of the term in modern vocabulary, includes the definition of andragogy as, "the methods or techniques used to teach adults" (p. 77).

Krajinc (1989) in echoing some others provides the most succinct and pointed definition of andragogy to date, and perhaps the most beneficial, as she states, "Andragogy has been defined as...'the art and science of helping adults learn and the study of adult education theory, processes, and technology to that end'."

Conclusions: Implications of Applications of the Findings to the Linkage of Practice, Theory or Research

Although it has not been possible to go into the depth needed for a better understanding of andragogy in this paper due to space limitations, hopefully the six major themes that have emerged are enough to encourage the adult education and human resource development practitioner, theorist and researcher to continue her/his exploration (theory, practice and/or research) of the concept of andragogy. Readers aware of other English language works that may add to the foundation of andragogy are invited and encouraged to inform the authors so as to add to the discussion and contribution of this topic within HRD and the Adult Education Fields and to the constituencies served by those involved.

This interpretative form of research sought out the major themes in the text of works on andragogy that were studied. The major themes discovered are: Evolution of the term andragogy; historical antecedents shaping the concept of andragogy; comparison of the American and European understandings of andragogy; popularization of the American concept of andragogy; practical applications of andragogy; and, theory, research and definition of andragogy. However, the most striking observation of all the themes is the strength of the foundation that will help advance adult education, which emerged in the last theme – the theory, research and definition of andragogy. Simpson gives four strands for the training of adult educators; Hadley developed a 60 item questionnaire assessing an adult educator's andragogical and pedagogical orientation; The Nottingham Andragogy Group addresses their beliefs about adults and adults' abilities to think creatively and critically in learning settings; Poggeler lists the ten trends which he hopes will help future andragogical research; Zemyov sees Knowles' view of andragogy as being

the fundamental scientific foundation of the theory base of adult education in Russia; Delahaye found an orthogonal relationship between adult students' andragogical and pedagogical orientation; Christian developed a 50 item instrument to measure student's andragogical and pedagogical orientation; Hoods Woods perceive andragogy as being based on four environmental influences active in every being; Boucouvalas posits the importance of the researcher in the research process; Johnson sees andragogy as fulfilling all the criteria of a theory; Rachal provides seven criteria for empirical research in andragogy; Savicevic's work in andragogy is the most comprehensive to date; Ovesni supports the idea that andragogy is to generate its own knowledge and is able to offer something to other sciences in scientific cooperation; Ross connects some of andragogy's value with its similarity to research in teacher effectiveness; Reischmann represents a shift of understanding in the direction of andragogy; Henschke calls for andragogy to be a scientific discipline of study; Furter proposed that andragogy be recognized in universities as a science for the training of man throughout his life; Merriam posits that scholarship on andragogy is one of the two major pillars of adult learning research and theory; Reischmann offers some historical perspective on the various periods that the term "andragogy" emerged and later receded; St. Clair allows that andragogy is one theory for the 21st century that will maintain its role as a necessary component of the field's shared knowledge; Savicevic adds another element to the scientific foundation and design of andragogy by searching its roots; Wilson offers a new paradigm of the function of the brain and its anatomy being much more closely allied with andragogy and learning than previously thought; Milligan summarizes andragogy as contributing vastly to the enhancement of human abilities of autonomy, self-direction, and critical thinking; Mazhindu established a foundational link between andragogy and contract learing; Cooper and Henschke provide an ongoing investigation into the comprehensive concept of andragogy; and Krajinc provides a very succinct and pointed definition of andragogy.

Another value of this research for practice is that much of the research emerged out of practice as indicated by the title of Dusan Savicevic's book (1999), *Adult Education: From Practice to Theory Building.* A final value of this research for practice is the benefit of those researchers and practitioners who are willing to intentionally use andragogy as a means for: finding out, learning, and ascertaining new things for their own growth; understanding and realizing fresh ways to improve their research or practice of HRD and adult education; and, enhancing the enlightenment and illumination of the adult constituents they serve on their journey to a full degree of humaneness.

In the USA, much of the study of andragogy has been based on a popularized version, which has its origins in the work of Malcolm Knowles. However, the first known use of andragogy is in 1833, where Alexander Kapp uses it in a discourse on Plato. Originally Lindeman only very cryptically introduced the concept to the USA in 1926, and repeated it with Anderson in 1927. While the concept has continued in Europe, often it has done so as a societal concept, going beyond education. The European and American versions have their differences, but continued study and research of both are necessary to make more visible andragogy's broad foundation, its linkage which fully understands the theoretical concept, and putting it into practice.

References

Allman, Paula. (1983). The nature and process of adult development, chapter 2.5. In *Education for Adults: Adult Learning and Education, Vol. 1,* Malcolm Tight (Ed. London: Croom Helm & The Open University. 107-123.

Anderson, M. L. and E. C. Lindeman. (1927). Education through experience: An interpretation of the methods of the academy of labor, Frankfurt-am-Main, Germany. *Workers' Education Research Series, Monograph No. 1.* New York: Workers Education Bureau Press, Inc.

Baden, Clifford. (1998). *Adult learning in associations: Models for good practice.* New York: American Society of Association Executives.

Billington, D. D. (1988). Ego development and adult education. Doctoral Dissertation. The Fielding Institute. Dissertation Abstracts International, 49(7). University Microfilms No. 88-16, 275.

Billington, D. D. (2000). Seven characteristics of highly effective adult learning programs. *New Horizons for Learning.* Seattle: New Horizons. http://www.newhorizons.org

Boucouvalas, M. (1999). Comparative thinking and the structures of adult cognition: An epistemological and methodological challenge for comparative adult education. In J. Reischmann, Z. Jelenc, & M. Bron, (eds.) *Comparative Adult Education 1998: The Contribution of ISCAE to an emerging field of study.* 65-76. Bamberg, Germany: ISCAE Proceedings.

Brager, J. & Johnson, K. (1993). *Adult learning: New research on continuous learning in the business environment.* Atlanta, GA: American Society for Training and Development Annual Conference.

Brockett, R. G. (no date given). Humanism as an instructional paradigm. Website:

http://www-distance.syr.edu/romiral&html (Listed also to appear as a chapter in C. Dills & A. Roomiszowski (Eds.), *Instructional deveopment: State of the art paradigms in the field* (Volume Three). Englewood Cliffs, NJ: Educational Technology Publications, in press.)

Brookfield, Stephen D. (1986). *Understanding and Facilitating Adult Learning.* San Francisco: Jossey-Bass Inc., Publishers.

Bullen, M. (1995, June). *Andragogy and university distance education.* Paper presented to the seventeenth conference of the International Council for Distance Education, Birmingham, UK. Website: http://www2.cstudies.ubc.ca/~bullen/bullen1.html

Burge, L. (1988). Beyond andragogy: Some explorations for distance learning design. *Journal of Distance Education/Revue de l'enseignement a distance (1988).*

Christian, A. C. (1982). *A comparative study of the andragogical-pedagogical orientation of military and civilian personnel.* Unpublished doctoral dissertation, Oklahoma State University, Stilwater, OK.

Clark, D. (1999). Andragogy. http://www.nwlink.com/~donclark/hrd/history/history.html

Conner, M. L. (1997-2003). Andragogy + Pedagogy. *Ageless Learner, 1997-2003.* http://agelesslearner.com/intros/andragogy.html

Cooper, M. K., & J. A. Henschke. (2001). Andragogy: Its research value for practice. In *Proceedings of the Midwest Research-to-Practice Conference in Adult, Continuing and Community Education.* Charleston, IL.

Davenport, Joseph III. (1987). Is there a way out of the andragogy morass? *Lifelong Learning: An Omnibus of Practice and Research,* Vol. 11, No. 3.

Delahaye, B. L., D. C. Limerick, & G. Hearn. (1994). The relationship between andragogical and pedagogical Orientations and the implications for adult learning. *Adult Education Quarterly,* 44, (4), 187-200.

Dewar, T. (1999). *Adult learning principles (a selection).* http://www.calliopelearning.com/adult.htm

Draper, J. A. (1998). The metamorphoses of andragogy. *The Canadian Journal for the Study of Adult Education,* 12(1), 3-26.

Eitington, Julius E. (1984, 1989, 1996). *The winning trainer, instructor, facilitator, teacher, conference leader, etc.* 3rd edition – 1996. Houston: Gulf Publishing Company.

Ferro, Trenton R. (1997). The linguistics of andragogy and its offspring. In *Proceedings of the Midwest Research-to-Practice Conference in Adult, Continuing and Community Education,* East Lansing: Michigan State University.

Fidishun, D. (No Date). *Andragogy and technology: Integrating adult learning theory as we teach with technology.* Malvern, PA: Penn State Great Valley School of Graduate Professional Studies.

Furter, Pierre. (1971). *Grandeur et misere de la pedagogie.* University of Neuchatel.

Gehring, T. (2000). A compendium of material on the pedagogy-andragogy issue. *Journal of Continuing Education, Vol. 51, Issue 1, pp. 151-163.*

Gibbons, H. S., & Wentworth, G. P. (2001). *Andragogical and pedagogical training differences for online instructors.* State University of West Georgia, Distance Education Center: Online Journal of Distance Learning Administration, Volume IV, Number III, Fall, 2001.

Hadley, H. N. (1975). *Development of an instrument to determine adult educator's orientation as andragogical and pedagogical.* Unpublished doctoral dissertation, Boston University School of Education, Boston, MA.

Hanson, Ann. (1996). The search for a separate theory of adult learning: Does anyone really need andragogy? In *Adult Learners, Education and Training 1.* Eds. Edwards, Richard; Hanson, Ann; and Raggatt, Peter. London: Routledge and The Open University. 99-108.

Hartree, A. (1984). Malcolm Knowles's theory of andragogy: A critique. *International Journal of Lifelong Education,* 3, 203-210.

Heimstra, R., & Sisco, B. (1990). *Individualizing instruction.* San Francisco: Jossey-Bass Publishers.

Henschke, J. A. (1998a). Historical antecedents shaping conceptions of andragogy: A comparison of sources and roots. In *Proceedings of the International Conference on Research in Comparative Andragogy.* Radovljica, Slovenia. 9/ 10-13/ 1998.

Henschke, J. A. (1998b). Modeling the preparation of adult educators. *Adult Learning,* 9 (3), 11-14.

Henschke, J. A. (2004). *My Gift Outright [Regarding Andragogy]* (Paraphrase of Robert Frost's *"Our Gift Outright"* Delivered at the USA Presidential Inaugural Ceremonies of JFK & LBJ, 1961.

Henschke, J. A. (1995). Theory and practice on preparing human resource development professionals. In *Proceedings of Academy of Human Resource Development Research Conference.* St. Louis: University of Missouri. 7-2.

Henschke, J. A. (2000-ff.). Website: http://www.umsl.edu/~henschke/andragogy/

Hoffman, Frank. (1980). *How to teach grown-ups.* Calabasas, CA: Practical Management Associates, Inc.

Hoods Woods. (1998). *Andragogy: The act, process, or art of imparting knowledge and skill to adults.* http://www.survival.com/gogy.htm

Hooks, B. (1994). Theory as liberatory practice. (from *Teaching to Transgress – as quoted by Kaminsky, Sherrie in "Comparing Pedagogy and Andragogy for Both Common and Dissimilar Meanings")* Website: http://www.usm.maine.edu/~dlarson/kaminsky2.htm

Imel, S. (1989). *Teaching adults: Is it different?* ERIC Digest No. 82. Identifier # ED 305495.

Ingalls, J. D. (1976). *Human energy: The critical factor for individuals and organizations.* Reading, MA: Addison-Wesley Publishing Company.

Jarvis, P. (1984). Andragogy: A sign of the times. *Studies in the Education of Adults,* 16, 32-38.

Johnson, Leo F. (April, 2000). *"Dialogues in andragogy."* A Paper Presented to a Doctoral Research Graduate Credit Seminar on Andragogy, conducted at the University of Missouri – St. Louis, Winter Semester, 2000.

Kabuga, Charles. (1977). Why andragogy in developing countries? *Adult Education and Development: Journal for Adult Education in Africa, Asia, and Latin America.* 8 pp.

Kamansky, Sherrie. (no date given). Comparing pedagogy and andragogy for both common and dissimilar meanings. Website: http://www.usm.maine.edu/~dlarson/kaminsky2.htm

Kapp, A. (1833). Die andragogik ober bildung im mannlichen alter. *Platons Erziehungslehre, als Padagogik fur die Einzelnen und als Staatspadagogik.* Germany: Minden und Leipzig.

Knowles, M. (No Date). *Andragogy.* http://tim.psychology.org/knowles.html

Knowles, M. S. (1970 & 1980 – original and revised editions). *The modern practice of adult education.* New York: Association Press, & Cambridge Book Publishers.

Knowles, M. S. (1989). Adult learning: Theory & practice. In L. & Z. Nadler, (eds). *The Handbook of Human Resource Development, Second Edition.* New York: John Wiley & Sons.

Knowles, M. S. (1996). Adult learning. In Craig, R. L., (ed.). *ASTD Training & Development Handbook: A Guide to Human Resource Development, Fourth Edition.* New York: McGraw Hill.

Knowles, M. S. (1995). *Designs for adult learning: Practical resources, exercises, and course outlines from the father of adult learning.* Alexandria, VA: American Society for Training and Development.

Knowles, M. S. (1972). "The Manager as Educator." *Journal of Continuing Education and Training.* Vol. 2, No. 2. Baywood Publishing Company, Inc., pp. 97-105.

Krajinc, A. (1989). Andragogy. In C. J. Titmus (ed.). *Lifelong Education for Adults: An International Handbook.* Oxford: Pergamon. 19-21.

Lieb, S. (1991). *Principles of adult learning.* Phoenix, AZ: Vision – South Mountain Community College. http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/adults-2.htm (& 1. htm)

Lindeman, E. C. (1926a). Andragogik: The method of teaching adults. *Workers' Education,* 4: 38.

Lindeman, E. C (1926b, 1961). *The meaning of adult education.* Montreal: Harvest House.

Mazhindu, G. N. (1990). Contract learning reconsidered: A critical examination of the implications for application in nursing education. *Journal of AdvancedNursing, 1990, 15, pp. 101-109.*

Merriam, S. B. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *The New Update on Adult Learning Theory.* San Francisco: Jossey-Bass, New Directions for Adult and Continuing Education, Imel, S., Editor in Chief, No. 89, Spring 2001. 3-13.

Mezirow, J. (1981). A critical theory of adult learning and education. *Adult Education,* 32(1). Fall. 3-24.

Mezirow, J. (1991). *Transformative dimensions of adult learning.* San Francisco: Jossey Bass. pp. 198-201.

Milligan, F. (1999). "Beyond the Rhetoric of Problem-Based Learning: Emancipatory Limits and Links with Andragogy." *Nursing Education Today, 19,* pp. 548-555.

Milligan, F. (1995). "In Defence of Andragogy." *Nursing Education Today, 15,* pp. 22-27.

Milligan, F. (1997). "In Defence of Androgogy. Part 2: An Educational Process Consistent with Modern Nursing Aims." *Nursing Education Today, 17,* pp. 487-493.

Morrall, P. (1993). "The Beginning of the End of Andragogy." *Senior Nurse, Vol. 13, No. 5,* September / October, 1993, pp. 42-44.

Moore, J. (No Date). *Site philosophy: Leaner-focused education, andragogy.* http://www.edtech.vt.edu/edtech/is/ocs.introp2.html
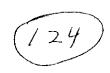
Mynen, M. (No Date). *What andragogy means to me.* http://www.instructordiploma.com/core/102%20b/victoria/mynen.htm

Nadler, L. & Nadler, Z. (Eds.) (1989.) *The Handbook of Human Resource Development Second Edition.* New York: John Wiley & Sons.

Nebraska Institute for the Study of Adult Literacy. (no date given). *Andragogy: Alternative interpretations and applications summarized from understanding and facilitating adult learning by Stephen Brookfield (1986).* Website: http://literacy.kent.edu/~nebraska/curric/ttiml/artsum.html

Nevins, S. C. (no date given). Andragogy versus pedagogy: The secret to successful business learning. Website: http://www.westchesterventuregrp.com/EntrepreneurForum/Andrag..

Nottingham Andragogy Group. (1983). *Towards a developmental theory of andragogy.* (Adults: Psychological and Educational Perspective No. 9). Nottingham, England: University of Nottingham Department of Adult Education.

Osborn, S. (1999). *Andragogy.* . Belgrade, Yugoslavia: Faculty of Philosophy. Forum Website: http://ifets.gmd.de/

Ovesni, K. (1999). *Andragogy as an integral part of educational sciences.* Belgrade, Yugoslavia: Faculty of Philosophy. Forum Website: http://ifets.gmd.de/

Patterson, B. (No Date). *The basics of andragogy – adult teaching / learning.* Gresham, OR: Adult Continuing Christian Education – A Mission Program of Strengthening Growing Christians and Churches. http://www.makedisciples.net/acce/basics_of_andragogy.asp

Picavet, G. (2003). *Andragogy: An introduction – Belgium/roots project.* http://Belgium.rootsweb.com/sci/andragogy.html

Poggeler, F. (1994). Introduction – Trends of andragogical research in Europe. In Jarvis, P., & F. Poggeler (eds.) *Developments in the Education of Adults in Europe.* Frankfurt am Main: Peter Lang, Studies in Pedagogy, Andragogy and Gerontology, Poggeler, F. (ed.) Vol. 21, 9-15.

Pratt, D. D. (1984). Andragogical assumptions: Some counter-intuitive logic. *Proceedings of the Adult Education Research Conference, No. 25.* Raleigh: North Carolina State University.

Pratt, D. D. (1988). Andragogy as a relational construct. *Adult Education Quarterly.* 38 (3). Spring. 160-172.

Pratt, D. D. (1993). Andragogy after twenty-five years. In *New Directions for Adult and Continuing Education: An Update on Adult Learning Theory.* Ed. Sharan B. Merriam. No. 57, Spring, 1993. 15-24.

Rachal, J. (2002). Andragogy's detectives: A critique of the present and a proposal for the future. *Adult Education Quarterly: A Journal of Reserarch and Theory.* 22, (3), May, 2002.

Rachal, J. (2000). *"Effectiveness of andragogy concurrent session presentation,"* American Association for Adult and Continuing Education Conference, Providence, RI, November, 2000.

Raslavicus, P. (2003?). "The 'Androgogy' of Learning." *College of American Pathologists* – From the President's Desk. Northfield, IL.

Reischmann, J. (2004). "Andragogy." *A Manuscript Prepared for Publicaton in an Encyclopedia.*

Reischmann, J. (2000). *Our understanding of andragogy.* Bamberg, Germany, Otto Freiderick University. Homepage: http://www.andragogy.net

Robb, W. M. (1990). Can South African andragogics improve understanding between Anglo-American and Continental European adult educationists? *Toward 1992 -- Education of Adults in the New Europe. Proceedings of the 20th SCUTREA Conference.* West Sheffield, England.

Ross, B. E. (198_?). "Integrating Andragogy with Current Research on Teaching Effectiveness." *Proceedings of the Lifelong Learning Research Conference.* Pp. 29-33.

Salama, A. (2003). *Architectural pedagogy and andragogy.* http://archnet.org/groups/apa/index.tel?n_days=5

Savicevic, D. (1999a). *Adult education: From practice to theory building.* Vol. 37. In F. Poggeler, (ed.) Studies in Pedagogy, Andragogy, and Gerontagogy. Frankfurt am Main: Peter Lang.

Savicevic, D. (2000). *The roots and evolution of andragogical ideas.* [Koreni I razvoj andragoskih ideja – in the Serb Language]. Beograd: Serbia [formerly Yugoslavia] Institut za pedagogiju I andragogiju Andragosko drustvo Srbije.

Savicevic, D.. (1999b). Understanding andragogy in Europe and America: Comparing and contrasting. In J. Reischmann, Z. Jelenc, & M. Bron, (eds.) *Comparative Adult Education 1998: The Contribution of ISCAE to an emerging field of study.* 97-119. Bamberg, Germany: ISCAE Proceedings.

Savicevic, D. (1991). Modern conceptions of andragogy: A European framework. *Studies in the Education of Adults, 23*(3), 179-201.

Simonson, M., S. Smaldino, M. Albright, & S. Zvacek. (2003). *Teaching and learning at a distance: Foundations of distance education.* (Second Edition). Columbus, OH: Merrill Prentice Hall.

Simpson, J. A. (1964). Andragogy. *Adult Education, 37* (4). 186-194.

Smith, M. K. (1996). Andragogy: The History and Current Use of the Term Plus an Annotated Bibliography. *The Encyclopedia of Informal Education.* http://www.infed.org/lifelonglearning/b-andra.htm Last Updated 6/15/04.

Sopher, M. J. (2003). *An historical biography of Malcolm S. Knowles: The remaking of an adult educator,* University of Wisconsin-Madison, Department of Continuing, Adult and Vocational Education. Unpublished Doctor of Philosophy Dissertation.

St. Clair, R. (2002). *Andragogy revisited: Theory for the 21st century – myths and realities 19.* http://www.cete.org/acve/testonly/docgen.asp?tbl-mr&id=109

Suanmali, C. (1981). *The core concepts of andragogy.* Doctoral Dissertation. Columbia University Teachers College. Dissertation Abstracts International, University Microfilms No. 8207343.

The Board of registration of real estate: Brokers & salespersons. (No Date). *Category: Andragogy – From a Curriculum for the 30 Hour Instructor Course.* http://www.mass.gov/dpl/boards/re/contedu/inst02.htm

VanGent, B. (1996). Andragogy. In A. C. Tuijnman (Ed.).*The International Encyclopedia of Adult Education and Training.* Oxford: Pergamon. 114-117.

Webster's Encyclopedic Unabridged Dictionary of the English Language – Updated Revised Deluxe Edition. (1996). New York: Random House Value Publishing, Inc.

Wilson, C. (2002*). A comparative study of the historical development of andragogy and the formation of its scientific foundation: In Germany and the United States of America, 1833-1999.* Doctoral Dissertation Draft in Progress, Tulsa, OK: Oral Roberts University.

Wilson, C. (2003). *A comparative study of the historical development of andragogy and the formation of its scientific foundation: In Germany and the United States of America, 1833-1999.* Tulsa, OK: Oral Roberts University. Unpublished Doctoral Dissertation.

Wilson, C. (2004). *Neuroandragogy: A Neurological Approach to Adult Education and Learning.* Farmingdale, NY: A Manuscript Being Prepared for Publication as a Book. [Possible Alternate Title: *Understanding Adult Brain Functions: A New Paradigm for the Study of Adult Education of Androgogy].*

Zemke, Ron, & Susan Zemke. (1981). Thirty things we know for sure about adult learning. *Adult Learning in Your Classroom.* Ed., Jones, Philip G. Minneapolis: Lakewood Publications, *Training Magazine,* June, 1981. In Chapter 4: Understanding the Adult Learner, 115-118.

Zemke, Ron, & Susan Zemke. (1996). Adult learning: What do we know for sure? In *The New Training Library: Adult Learning in Your Classroom.* Ed., Zielinski. Minneapolis: Lakewood Books. In Chapter 2: Understanding and Motivating the Adult Learner, 71-74.

Zhang, Wei. (1996). Adult Education in China. *International/Global Comparative Education in Adult Education, (Translated by Carole Yufang Huang).* Ed. Zhang, Wei. Beijing: Industrial Publishers.

Zmeyov, Serguey I. (1994). Perspectives of adult education in Russia. In *Developments in the Education of Adults in Europe. Vol. 21 of Studies in Pedagogy, Andragogy and Gerontology.* Eds., Jarvis, Peter, & Poggeler, Franz. Bern, Switzerland: Peter Lang. 35-42.