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FOCUSING ON THE SIX MAJOR THEMES IN THE GLOBAL PERSPECTIVE OF ANDRAGOGY: A JUNE 2015 UPDATE

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ABSTRACT

Andragogy has received various mixed reviews in the past. Some have analyzed it from a positive perspective. Others have analyzed it from a negative perspective, still others have viewed it from a neutral or passive point of view while some have ignored it altogether. Most of the discussions have limited their observations to how Malcolm S. Knowles addressed andragogy. There has been an inadequate investigation of the foundation and background of andragogy from a world perspective. This research presents more than 450 major works published in English from national and international sources on andragogy that may help provide a clear and understandable international foundation for the linkage between the research, theory, and practice of andragogy. Six major themes have emerged that provide a foundation for the linkage: The evolution of the term; historical antecedents shaping the concept; comparison of American and European understandings; popularizing and sustaining the American and world-wide concept; practical applications; and theory, research, and definition. This is a 2015 June update of an ongoing research on the major themes in andragogy.

Andragogy has been used by some as a code word for identifying the education and learning of adults. For others, it has been used 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. Yet some still think of andragogy as a set of mechanical tools and techniques for teaching adults. For another group 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 Human Resource Development (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.

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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 English language published 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.

On the one hand, there are numerous instances and variations where adult educators tended to strongly favor Knowles’ version of andragogy, by using a practical approach when facilitating adults learning within their own setting and context. Kabuga (1977) advocated using highly participative teaching/learning techniques with children as well as adults in his native Africa, despite the fact that he has not tested those andragogical techniques there. Eitington (1984, 1989, 1996) promoted pro-active engagement of adult learners in most every situation throughout a book containing twenty-one chapters, six hundred pages, and one hundred usable handouts. Hoffman (1980) emphasized the differences between children and grown-ups (adults), with “schooling” being for children and “learning” being for adults. He affirmed 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 toward accomplishing that job. The Nebraska Institute for the Study of Literacy (no date given) summarized Brookfield (1986), that in Andragogy, facilitating learning is a transactional encounter in which learner desires and educator priorities will inevitably interact with 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’ theory of andragogy, and then detailed some of the results he considered successful in using that approach with the participants. This list could go on, but these illustrate strong support for Knowles’ version of andragogy.

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, not well researched, being misleading to adult educators, and lacking in understanding of the concept. Hartree (1984) asserted 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 – an explanation for a way of knowing what one knows. Davenport (1987) presented 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 his argument that some adult educators strongly urge that adult education would simply be better off to drop the word from its lexicon. Jarvis (1984) wrote 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. While Brookfield (1986) claimed 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 appeared 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. Further, Ferro (1997) charged 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 made a plea for adult educators instead to concentrate on what they know best, the planning and delivery of learning opportunities for adults. Hanson (1996) called 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.

This list could also go on, but these expressions serve to illustrate opposition to Knowles’ version of andragogy. So why the varying views?

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 international 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 is 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; and the Commission of Professors of Adult Education. Dissertation Abstracts International database was accessed and we found that there are more than 200 doctoral dissertations including 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 also 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. 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 and sustaining the American and world-wide concept of andragogy; practical applications of andragogy; and, theory, research and definition of andragogy.

Evolution of the Term Andragogy

Kenyon and Hase (2001) suggest there is a need to move from andragogy towards truly self-determined learning, which is call heutagogy. In their estimation, andragogy apparently fails to deliver on this aspect of learning. They agree that Knowles through andragogy provided many useful approaches for improving educational methodology, but still has connotations of a teacher-learner relationship. Although it is the relationship that teaches, they argue that the rapid rate of change in society, and the so-called information explosion, suggest that we should now be looking at an educational approach where it is
the learner him/herself who determines what and how learning should take place. They suggest that heutagogy is appropriate to the needs of learners in the workplace in the twenty-first century. Despite its merit, this is an opinion that may still need to be questioned and questioned.

Van Gent (1996) asserted 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.

McKenzie (1977) presented the issue of andragogy. An explication of the classical approach versus the phenomenological approach to the issue of andragogy, viewed in the above approaches as an illusion which represents more jargon in the lexicon of educationese (classical), or as a significant contribution to philosophical discourse about adult education (phenomenological).

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) said “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) asserted 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. Savicevic (2000) also explored various antecedents to and backgrounds of andragogy before the term came into publication. As an illustration of using words that may be unclear or do not have one precise definition, Webster (1996) included 179 definitions of the word ‘run’. However, we have not given up use of that term in our vocabulary because of the multiplicity of definitions.

Mohring (1989) elaborated the erroneous usage of ‘Andragogy’ and ‘Pedegogy’. The use of the term ‘andragogy’ to mean education of adults and the term ‘pedagogy’ to mean education of children is etymologically inaccurate. Although pedagogy derives from ‘paid’, meaning child, from antiquity pedagogy also has stood for education in general--without reference to learners' ages. Andragogy derives from ‘aner’, meaning adult male and not adult of either sex. Given current efforts to purge English of sexist words, introduction of a term that excludes women is nonsensical. A new term based on the Greek could be coined. ‘Teleios’, not aner, is the Greek word for the English ‘adult’. Andragogy could be replaced by ‘teleiagogy’, a term that includes adults of both sexes.

Tanaka and Ever (1999) proposed ‘ergonagy’ as the new term for occupational-vocational education and training. The term is formed from the Greek terms ‘ergon’ (work) and
'agogos' (lead). Ergonagy integrates concepts associated with education and training related to preparation for, and performance of, work. The five case studies in Japan and in the United States provided evidence that neither pedagogy nor andragogy can be the sole strategy for occupational and vocational education and training. Rather, a combination of the two, in the form of ergonagy, is most appropriate in as much as it subsumes pedagogy and andragogy and more clearly defines and describes occupational-vocational education and training for better international dialogue, research, and comparative studies.

Kussrow (1997) proposed 'Holosagogy' instead of andragogy as a new, complete system of learning and teaching that applies to teachers and learners of all ages, cultures, and disciplines in all educational settings. According to facts about the human brain, human modalities, learning styles, and intelligences, the component of community, and an important cornerstone for the holosagistic paradigm, educators cannot expect earlier systems of teaching to respond adequately to a culturally diverse, information-based society and its educational needs.

Although andragogy has provided many useful approaches for improving educational methodology and has been accepted almost universally, it still has connotations of a teacher-learner relationship. Kenyon and Hase (2001) proposed 'Heutagogy', new educational approach where learners themselves determine what and how learning should occur. It may be viewed as a natural progression from earlier educational methodologies and may well provide the optimal approach to learning in the 21st century. The Public Sector Executive Management Program at Southern Cross University, which is a postgraduate course to train students to work as troubleshooters, problem solvers, and general consultants in charge of improvement, illustrated the use of a heutagogical approach. Heutagogical approaches to Australia's vocational education and training (VET) recognized the critical importance of learners in all aspects of the learning process.

Forrest and Peterson (2006) lament that despite radical changes in teaching assumptions, management educators have continued to use the archaic term pedagogy (the art and science of teaching children) to describe their work. Thus, pedagogy does not encompass the needs of adults common in management classrooms today. However, andragogy happens to be descriptive of the creation of an independent, adaptable individual. In addition, change is afoot and management educators already use techniques that take advantage of the current dynamic instructional strategies in andragogy. These andragogical underpinnings seek to help these adult learners become more self-directed, ready to learn, focused on using experience to inform their learning, and increasingly embracing a performance-centered orientation to learning.

Hugo (2003) put forward the perspective that andragogy is loosely defined as adult learning. However, more specifically andragogy is the formal term used to describe the process of educating and leading adults to fulfill their role as parent, educator, citizen or worker. Likewise, Picavey (2003) said that learning family history in an andragogical way is much more important than just knitting names together. The concept is about culture, human behaviour, social relations, sociology, biology, psychology, philosophy, geography, economics, law, philology, learning, education, and so forth.
Bron (2001) gave the rationale of how andragogy became a term interchangeable with adult education in European circles. It shows only one stage of development in asserting its connection with research, because in the USA the term andragogy at another stage meant the practice of the education and learning of adults. However, now andragogy and adult education are used synonymously in Europe.

Smith (1996) provided a brief history of the use of the term andragogy. He then limited 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. Also, Mynen (no date given) offered a personal statement on andragogy’s meaning to himself by focusing only on Knowles’ (1996) assumptions. He sought to address where andragogy came from, what it involves, and how one actually does it. He asserted his belief that andragogy may also be applicable to everyone including children, and considered 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.

Reischmann (2005) made a clear distinction in his definition between andragogy and adult education. He defined andragogy as the science of the lifelong and lifewide education/learning of adults. Adult education is focused on the practice of the education/learning of adults. He suggested that not until the reality of andragogy has sound university programs, professors, research, disciplinarian knowledge, and students, would it be shown whether the term andragogy would be needed for clarification of the reality. Another definition is that of Zmeyov (1998) who aptly defined andragogy differently from others. He said that andragogy is “the theory of adult learning that sets out the fundamentals of the activities of learners and teachers in planning, realizing, evaluating and correcting adult learning” (p. 106).

Knowles (1975) published his guidebook for learners and teachers on the topic of Self-Directed Learning. This was the first time that he labeled pedagogical as ‘teacher-directed’ learning and andragogy as ‘self-directed’ learning. Previously, pedagogy was for children and andragogy was for adults. Now his perspective was that where new, unfamiliar content was involved with children and adults, pedagogy was appropriate; and, where adults or children had some background in the content, andragogy was appropriate. Andragogy was the underlying philosophy, and self-directed learning was the way andragogy was to be implemented. He also presented the nine competencies of self-directed learning, as follows.

1. An understanding of the differences in assumptions about learners and the skills required for learning under teacher-directed learning and self-directed learning, and the ability to explain these differences to others.
2. A concept of myself as being a non-dependent and a self-directing person.
3. The ability to relate to peers collaboratively, to see them as resources for diagnosing needs, planning my learning, and learning; and to give help to them and receive help from them.
4. The ability to diagnose my own learning needs realistically, with help from teachers and peers.
5. The ability to translate learning needs into learning objectives in a form that makes it possible for their accomplishment to be assessed.
6. The ability to relate to teachers as facilitators, helpers, or consultants, and to take the initiative in making use of their resources.
7. The ability to identify human and material resources appropriate to different kinds of learning objectives.
8. The ability to select effective strategies for making use of learning resources and to perform these strategies skilfully and with initiative.
9. The ability to collect and validate evidence of the accomplishment of various kinds of learning objectives. (p. 61)

Knowles (1991) shares his dream of lifelong learning. In it he presents the eight skills of self-directed learning (SDL) and the andragogical competencies of performing life roles, as he tell how he conceives this kind of a learning system operating in the 21st century. The life roles he offers are: Learner, being a self (with a unique self-identity), friend, citizen, family member, worker, and leisure-time user. The Skills of Self-Directed Learning presented here were different from the ones presented in his 1975 *Self-Directed Learning* book.

1. The ability to develop and be in touch with curiosities. Perhaps another way to describe this skill would be ‘the ability to engage in divergent thinking’. [This is the most striking skill of SDL].
2. The ability to perceive one’s self objectively and accept feedback about one’s performance non-defensively.
3. The ability to diagnose one’s learning needs in the light of models of competencies required for performing life roles.
4. The ability to formulate learning objectives in terms that describe performance outcomes.
5. The ability to identify human, material, and experiential resources for accomplishing various kinds of learning objectives.
6. The ability to design a plan of strategies for making use of appropriate learning resources effectively.
7. The ability to carry out a learning plan systematically and sequentially. This skill is the beginning of the ability to engage in convergent thinking.
8. The ability to collect evidence of the accomplishment of learning objectives and have it validated through performance. (p. 1)

Nemeth and Poggeler, (Eds.) (2002) described the book entitled *Ethics, ideals and Ideologies in the History of Adult Education. Studies in Pedagogy, Andragogy, and Gerontagogy* as a comprehensive book in comparative adult education focusing on how personality, societal values and politics have influenced the mission of adult education,
contains 34 papers originally presented at a 2000 conference on the history of adult education. Several experiences and examples of major ideas and trends in the above areas were presented by many well-known adult educators.

Draper (1998) in providing an extensive, world-wide background on andragogy, reflected on and presented an overview of the historical forces influencing the origin and use of the term andragogy: The humanistic social philosophy of the 1700s & 1800s, the 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 concluded, “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” (p. 24).

Samaroo et al (2013) express concern about a debate that has engaged the attention of educators and scores of intellectuals is the longstanding issue of pedagogy versus andragogy. The nature of the debate, given the interdisciplinary theoretical assumptions that underpin the issue, has had a polarizing effect on these scholars; as a result, there has been the emergence of competing theories. This paper addresses the salient issues in the longstanding debate concerning the merits and demerits of pedagogy and andragogy and posits a new model, pedandragogy, which is a synthesis of the core elements of pedagogy and andragogy. Pedandragogy is a model that promotes and encourages the development of effective learning environments where self-engaged learning by individuals of all ages can be fostered. It is questionable that this article could have much weight in this discussion, since the left out the literature of some of the main researchers in andragogy around the world, and overlooked providing any substantive historic and complete definition of pedagogy. It would seem to be incumbent upon these authors, who want to bring these two points-of-view together into one new merged concept, that at least the original foundational literature of both would be presented as starting points.

**Historical Antecedents Shaping the Concept of Andragogy**

Wilson’s (2002, 2006) research into the historical emergence and increasing value of andragogy in Germany and the USA, discovered, among other things, a connection between a foundational element in adults’ capacity to continue learning even into their later years – a concept labeled as ‘fluid intelligence’ – and its being enhanced through andragogical interventions in self-directed learning. However, 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.

Feuer and Gaber (1988) shocks us with making a statement about a belief roaming around the HRD [Human Resource Development] World, saying the gospel in the HRD world is
that adults learn differently from children. However, they then raise a couple of questions: But do they really? And what does the answer imply about teaching methods? In this article they make such thought provoking statements and questions as: ‘There is a consistent overestimation of the adult learner’s readiness to be self-directing’; ‘As adults, our main resources for learning are life experiences, not teachers’; ‘If bosses decide what the worker needs to learn, doesn’t that strip the learner of self-directedness?’; and, ‘Is andragogy more a philosophy than a scientific theory?’ The authors suggest that there is nothing more important that understanding our learners, not just their instructional goals but their developmental stage. The more we know about them, the better we’re able to put ourselves in their shoes and the better our instruction will be. They go on to maintain that Knowles has done an enormous service to the field by creating a greater sensitivity among adult educators to the needs and interests of the learner. What links adult educators is that we all work in some capacity with adult learners; and it would be nice to develop a theory and knowledge base for the field. It may be an elusive goal, but one worth pursuing anyway because it causes us to learn more about the adult learning process.

Heimstra and Sisco (1990) suggested a situation that gave rise to the emergence of andragogy as an alternative model of instruction to improve the teaching of adults. They asserted 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 many 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 is a way to remedy this situation and help adults to learn. Their article also presented an extensive list of 97 annotated bibliographical references related to andragogy.

Cooke and MacSween, (Eds.) (2000) presented the relationship between adult education institutions and social movements. This is the 47th Volume of 61 Volumes set within the context of the Series Edited by Franz Pogglser within the broader topic of “Pedagogy, Andragogy, and Gerontagogy” published by Peter Lang Publishers. The book focuses on the inter-relationships between adult education/andragogical institutions and social movements, contains 31 papers originally presented at a 1998 conference on the history of adult education. A major sub-theme is the role of adult education as an agent of change or a form of social control. Another important sub-theme is that of cultural, political or religious identity, often linked with linguistic issues or liberation movements. 37 experts from 15 countries provide an international dimension for this work, which consists of 31 revised and enlarged papers originally presented in 1998 at the VII International Conference on the History of Adult Education. The language of publication is English. The period principally treated extends from the 18th to the 20th century. The links between adult education institutions and social movements are important not only for educational historians but also for social and cultural history.

Savicevic (1991, 1999a) suggested 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, and about the moral and aesthetic impact. He also credited 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 theorized 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 provided a new look at some of the background and antecedents to andragogy on a much broader scale. However, the explanation of this book, placed just a bit below this reference, will also have a bit different explanation appropriately placed in the last section on “Theory, Research, and Definitions of Andragogy.”

Henschke (1998a) went back earlier in history and claimed 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 an especially rich and fertile resource to interpret andragogy. He expected that by combining a probe of these words and elements with other writings, a more comprehensive definition of andragogy may evolve.

Savicevic (2000) expanded this foundation as he searched the roots of andragogical ideas starting from ancient civilizations up to the present time. There were six parts of this study. First, The conceptual and methodological frames of research included the hermeneutic, comparative and biographical. Second, the development of andragogical ideas and practice included time before literacy; ideas of ancient Greece with the sophists, Socrates, Plato, and Aristotle; antique Rome with Cicero, Seneca, and Quintillian; Jewish cultural and religious heritage; Christian ideas on education and learning of adults, and, the long period of human history in the Middle Ages. Third, contributions to andragogy through biographical studies included Komensky (Czech), Grundtvig (Denmark), Medinski (Russia), Lindeman and Thorndike (USA), and Friere (Brazil). Fourth, added were the andragogical ideas of Serbians (Yugoslavians) such as Markovic, Dragovic, Tucovic, Popovic, Filipovic, Rakic, Social Democrats and those in the workers movement. Fifth, included were the fact that learning of adults, is deeply rooted in society, spiritual life, philosophy, religion, and the historical roots reveal that andragogical [adult learning] ideas, practices and institutions extensively predate the pedagogical [teaching of children]; and this was based on the simple fact that in earlier and ancient time the education of children was the function and assignment of the family.

Henschke (2004) also found deep involvement in andragogy, when he paraphrases Robert Frost’s Poem [Our Gift Outright] delivered at the USA 1961 Presidential Inaugural Ceremonies of John Kennedy and Lyndon Johnson. The paraphrase follows:

Andragogy belonged to us before we belonged to Andragogy.
Andragogy was my longing desire in living, teaching and
learning for a few decades  
Before I was her educator. Andragogy was mine  
In undergraduate school, in graduate school, in theological  
seminary, in clinical training, in parish ministry, in doctoral  
studies, in university faculty, in consulting with various  
organizations throughout society,  
But I belonged to Pedagogy, still captive,  
Possessing what I still ws unpossessed by,  
Possessed by what I now no more possessed.  
Something I was withholding made me weak  
Until I found it was myself  
I was withholding from the dynamic, vibrant idea of Andragogy,  
And forthwith found new educational and living possibilities  
in surrender.  
Such as I was I gave myself outright  
(The deed of gift was many deeds of dialoguing with others about  
Andragogy)  
To Andragogy vaguely realizing a new idea embodying teaching,  
learning, and living  
But still unstoried, artless, unenhanced,  
Such as Andragogy was, such as she will become.

Comparison of the American and European Understanding of Andragogy

Mohring (1989) strongly argues that the use of the term ‘andragogy’ to mean education of adults and the term ‘pedagogy’ to mean education of children is etymologically inaccurate. Although pedagogy derives from “pais,” meaning child, from antiquity pedagogy also has stood for education in general – without reference to learners’ ages. Andragogy derives from “aner,” meaning adult male, and not adult of either sex. Given current efforts to purge English of sexist words, introduction of a term that excludes women is nonsensical. A new term based on the Greek could be coined. “Teleios,” not aner, is the Greek word for the English “adult.” Andragogy could be replaced by “teleiagogy,” a term that includes adults of both sexes.

Savicevic (1991, 1999a) provided 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 showed common roots but results in five varying schools of thought: (a) Whether andragogy is parallel to or subsumed under pedagogy in the general science of education; (b) Whether pedagogy (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; (c) whether andragogy prescribes how teachers and students should behave in educational and learning situations; (d) the possibility of founding andragogy as a science
is refuted; and, (e) that endeavors have been made to found andragogy as a fairly independent scientific discipline.

Savicevic (1999a, 1999b) clearly aligned 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 adults in all its forms of expression. Thus, it requires an understanding of andragogy in Europe and America through comparing and contrasting. He identified 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.

The European concept of andragogy is more comprehensive than the American conception, even though Europeans do not use the terms andragogy and adult education synonymously (Young, 1985). In addition, the primary critical element in European andragogy is that an adult accompanies or assists one or more adults to become a more refined and competent adult, and that there should be differences in the aims of andragogy and pedagogy (assisting a child to become an adult). Likewise, there should be differences in the relationship between a teacher and adult pupils and the relationship between a teacher and children.

Showing the strength of andragogy through its long history in Europe, Savicevic (2003) indicates that comparative andragogy has numerous elements that are essential in addressing this scientific research topic. Those eight elements included in the book are: Comparative perspectives of education and learning of adults; historically-comparative researching in andragogy; andragogical comparisons in our cultural environment; international dimensions of adult education; conceptual and linguistic standardizing in andragogical comparisons; theoretical and methodological scope of comparative andragogy; currents of constitution of comparative andragogy; and, conclusions concerning comparative andragogy. Savicevic (2006a) also addresses the diversity of andragogical ideas in an international framework, which is also becoming obvious in the expanding depth, breadth, worldwide nature of this research.

Knowles (1995) provided the most articulate expression and understanding of andragogy from the American perspective. The structure of the theory is comprised of two conceptual foundations: The learning theory and the design theory. The learning theory is based upon adult and their desire to become and/or to express themselves as capable human beings and has six components: (a) Adults need to know a reason that makes sense to them, for whatever they need to learn, (b) They have a deep need to be self-directing and take responsibility for themselves, (c) Adults enter a learning activity with a quality and volume of experience that is as resource for their own and others’ learning, (d) They are ready to learn when they experience a need to know, or be able to do, something to perform more effectively in some aspect of their life, (e) Adults’ orientation to learning is around life situations that are task, issue- or problem centered, for which they seek solutions, (f) Adults are motivated much more internally that externally.
Knowles’ (1995) conceptual foundation of the design theory is based in a process, and is not dependent upon a body of content, but helps the learner acquire whatever content is needed. There are eight components of the design process: (a) Preparing the learners for the program; (b) setting a climate that is conducive to learning (physically comfortable and inviting; and psychologically – mutually respectful, collaborative, mutually trustful, supportive, open and authentic, pleasurable and human); (c) involving learners in mutual planning; (d) involving learners in diagnosing their learning needs; (e) involving learners in forming their learning objectives; (f) involving learners in designing learning plans; (g) helping learners carry out their learning plans; and, (h) involving learners in evaluating their learning outcomes. Active involvement seems to be the watchword of Knowles’ (thus American) version of andragogy, and each step of the andragogical learning process.

Knowles (1970, 1972, 1980, 1989a, 1989b, 1995, 1996, no-date) successfully tested and refined this theory and design on a broad spectrum in numerous settings: corporate, workplace, business, industry, healthcare, government, higher education, professions, religious education, and elementary, secondary, and remedial education. Houle (1992) also emphasizes the impact of Knowles on American andragogy, and how he has worked this out in practice especially in non-school settings and the workplace. He went on to indicate that scholars and theorists may find great value in Knowles’ discussion of the development of learning theories in the educational literature, and his exploration of the roots of his own thinking about theorizing. He also spoke about Knowles’ work being practical and providing concrete examples and in depth case studies of how learning activities are planned, structured, and executed.

Davenport and Davenport (1985) brought Eduard Lindeman's contributions to adult education and andragogy into clearer focus and, in the process, delineates the specific contributions of Malcolm Knowles, discussed introduction of the term ‘andragogy’ to the United States, similarities in the theories of Lindeman and Knowles, and the unique contributions of each man to the development of andragogy.

Nevertheless, there was strong criticism of American andragogy, and that coming from Europe and Australia (Jarvis, 1984; Candy, 1991). At the time Knowles articulated andragogy, self-expression and personal development were in vogue. Thus, andragogy was best understood in curriculum terms as an expression of the romantic, was launched into a romantic philosophy, similar to it and receptive to it. So it would seem that andragogy emerged at a time when its romantic philosophical structures reflected the romantic structures of the wider society.

Welton (1995) leveled the assertion that,

the ‘andragogical consensus’ (anchoring the study of adult education in methods of teaching and understanding the individual adult learner), formulated by the custodians of orthodoxy in the American Commission of Professors in the 1950s and solidified by Malcolm Knowles and others in the 1960s and 1970s, has unraveled at the seams (p. 5).
The fundamental accusations expressed are that because of this perspective, adult education has abandoned its once vital role in fostering democratic social action, is on a shaky foundation, works to the advantage of large-scale organizations, and is conceptually inadequate to serve the interests of the disenfranchised in North American society.

Atherton (2011), on the other hand, expressed his view that in presenting andragogy, Knowles was quite arrogant, as well as a formulation that may be taken as an integration or summation of other learning theorists. It is axiomatic for Knowles that the role of the teacher is to provide opportunities for individuals to learn, and that the teacher cannot accept responsibility for their failure or refusal to do so: the task of learning itself is therefore owned by the learner. However, he does admit to being seriously unfair by indicating that he resents the smugly self-righteous way Knowles seems to have cornered the market in respecting and empowering adults in education.

Savicevic (1999b) indicated that Knowles was inconsistent in determining andragogy and thus has caused much confusion and misunderstanding. He identified six mistakes of Knowles regarding his perspective on andragogy that are presented here. First, Knowles defined andragogy as ‘science and art’ following in the footsteps of Dewey in doing the same thing with pedagogy. Second, he defined andragogy as the science and art of ‘helping adults to learn’ thus reducing it to a prescription or a recipe for how a teacher needs to behave in educating adults. Third, he declared andragogy as a ‘model’ for teaching even in pre-school, thus moving it away from just applying to adults. Fourth, he directed andragogy only toward problems of learning, thus neglecting social and philosophical dimensions of adults. Fifth, he emphasized an individualistic approach to learning and education with no link to adults’ existing circumstances, education level, and other factors relating to learning. Sixth, Knowles’ lack of historical awareness prompted him to think he was the first to use andragogy in the American adult education literature.

Grace (2001) considered that Knowles’ (hence the Knowlesian American) andragogy as a theory of how adults learn, ascended to prominence in the U.S. adult education after the 1970 publication of his book *The Modern Practice of Adult Education: Andragogy versus pedagogy*. By 1990 it was losing much of its punch as a result of the discussion and controversy surrounding it. He felt that Knowles’ perspective is too much caught up with individualization, institutionalization, professionalization, techno-scientization, self-directed learning, the politics of exclusion, maintenance, and conformity. Grace also believed it ignores resistance and transformation, and sees mainstream U.S. and Canadian adult education as having been complicit in sidelining cultural and social concerns, thus depoliticizing and decontextualizing adult learning. Although he saw Knowles’ andragogy as having been effectively dismantled in the 1980s and 1990s, Grace presents a vigorous case for its needing more of the same to neutralize its continued prominence and influence.

Despite Sandlin (2005) calling andragogy a cornerstone of adult education for many decades, she has serious reservations about its prominence, and critiques it within what she thinks are three main-trend perspectives in the field of adult education: Africcentric,
feminist, and critical. She also seeks to help remedy some of the problems with an adult education based on andragogy and to facilitate a different kind of adult education practice. What is apparent in this paper is a huge lack of knowledge and understanding about andragogy worldwide, but restricts her argument on Knowles’ variety of andragogy and what other adult education scholars have been saying for a number of years about Knowles’ view.

Jarvis (2006) suggested that Knowles’ formulation of andragogy raised a number of debates about whether adults and children learn differently. Thus, he argues that it is experience and not age affects learning. This is not counter to what Knowles asserted, but Jarvis sticks with his misunderstanding of Knowles’ perspective and thought his view solved a problem that he perceived was inherent in Knowles’ view of andragogy.

Although Andragogy has been posited as a theory of adult learning that provides a unifying concept for the practice of adult education, the assumptions of andragogy only indirectly adduce the needs of society and do not purport to accommodate the proprietary interests of institutions at all, it would seem that andragogy would not be appropriate as a unifying theory for adult education in corrections. Deboe (1982) provided an answer as first of all, because the purposes and aims of correctional programs do not reflect the existential goals of self-actualization. Furthermore, as a program design model, andragogy is dysfunctional in the prison milieu because the model requires that curricula relate to the developmental tasks of inmates’ social roles and addresses their here-and-now needs. Finally, it is paradoxical that andragogy appears to run counter to the objectives of correctional education because the theory may have tremendous potential to effect social change by helping inmates to look critically at the world around them, to realize responsibility for their existence, to utilize past experience for future growth, to anticipate life challenges and find creative solutions to them, and to perceive themselves as the source of acts rather than as reactive volatile products of an ominous world.

Others could be detailed but are too numerous to mention for lack of space here. Perhaps the reader may recall hearing from various other sources, some lack of enthusiasm about Knowles’ andragogy concept. However, just a capsule of few final ones may include the following: Hartree’s (1984) feeling that Knowles’ andragogy did not live up to what she interpreted as his desire for its becoming a comprehensive learning theory for adult education; Pratt’s (1993) perception that after 25 years, Knowles’ approach was lacking in its fulfilling a promise of being somewhat of a panacea for a teaching approach in all adult education; and, Shore’s (2001) perception that Knowles’ andragogy became a catalyst for unproductive debates framed along a binary path, such as adult/child, isolation/relation, objective/subjective, explicit/implicit, Black/White, and the list could go on.

Consequently, one may wonder how, in the face of all the criticism, Knowles’ (and thus the American) version of andragogy not only survives, but also thrives and remains robust in the adult education field? A number of explanations from different sources may shed some light on this question.
First, Knowles (1989b) provided a clue about a major ingredient necessary and quite obviously present in everything he did and everyone he touched deeply. In his development and revision of his theory he considered both pedagogical and andragogical assumptions as valid and appropriate in certain varying situations (to the delight of some, and to the dismay of others). The pitfall and problem he discovered with this approach is that ideological pedagogues will do everything they can to keep learners dependent on them, because this is their main psychic reward in teaching.

However, on the other hand, Knowles (1989b) saw that andragogues will accept dependency when it clearly is the reality and will meet the dependency needs through didactic instruction until the learners have built up a foundation of knowledge about the content area sufficient for them to gain enough confidence about taking responsibility for planning and carrying out their own learning projects. And even pedagogues, when they experience being treated like an adult learner, experience greater psychic rewards when learners become excited with learning, and began experimenting with andragogy. Knowles (1990) indicated the crucial importance of equalness, openness, democratic, realness, genuineness, prizing, acceptance, and empathic understanding on the part of the andragogue. The andragogical teacher/facilitator accepts each participant (student) as a person of worth, respects his feelings and ideas, and seeks to build relationships of mutual trust and exposes his own feelings regarding the relationship between the teacher and adult learner.

Second, Illeeris, (2004) a Danish adult educator for 30 years, who is not an andragogue, but a pedagogue, was convinced that adults need to be actively involved in developing and executing adult education programs. He asserted that it is of “… entirely decisive importance that the point of departure of planning is that the participants in adult education programs are adults, humans that both formally and in reality are responsible for their own actions and decisions” (p. 163). He went on to indicate here that he is quite in line with Knowles in his agitation for andragogy as a discipline, which is in many ways different from the pedagogy of children’s schooling and upbringing.

Third, Peters and Jarvis (1991) call Malcolm S. Knowles one of the best-known and most respected adult educators of all time. They had him provide an epilogue to their book, an andragogical vision of the future of adult education field.

Fourth, Long (1991) speculated that although Knowles’ form of andragogy is weak in empirical confirmation there are five reasons it has survived the criticism leveled against it: (a) The humanistic ideas underlying andragogy appeal to adult educators in general; (b) The limited empirical refutation of andragogy has not been strongly convincing; (c) Knowles’ reaction to criticism was flexible and encouraging, which permitted him to incorporate some of the criticism in his later revision of the concept; (d) Knowles is a leader in the field and is widely respected for other contributions; and, (e) The inclusion of Knowles’ concept of andragogy into the adult education knowledge base, has provided a framework for integrating several potentially useful ideas about adult learners, including self-directed learning.

Fifth, Griffith (1991) credited Knowles as being the best-known American adult educator. He has made numerous contributions to the literature of the field; with an orientation
toward practice that makes them attractive to teachers of adults in diverse settings and very likely has resulted in increasing the effectiveness of these teachers. In addition, his commonsense approach in his primarily descriptive rather than analytical writing has a wide appeal. His presentation of andragogy as a fresh way of thinking about adult education has attracted thousands of disciples from the ranks of practicing adult educators. Griffith concluded by saying that Knowles’ concept of andragogy has undoubtedly inspired countless practicing adult educators to adopt the term, to embark upon graduate study in the field, and to profess allegiance to their perception of the concept. Knowles has also stimulated a great deal of interest in the self-directed learner and the use of learning contracts (p. 105).

Sixth, Donaghy (2004) in the process of his doctoral dissertation had an interview with Allen Tough and what he had to say about Malcolm Knowles with his andragogical and self-directed learning perspective.

I don’t know what to say about him… I love the guy, we all did. He’s a wonderful man, a very special man and in fact he pioneered self-directed learning. We were very much in sync with each other, although we were on different paths but parallel paths, and we certainly admired and supported each other. Knowles was very approachable, even more so than Kidd and Houle. Knowles was on a first name basis with everyone. He had enormous amounts of energy and outgoing warmth, and he attracted an enormous number of students who carry on his work. Knowles documented the accomplishments of his students in each one of his books (p. 45).

Seventh, Maehl (2000), in addressing the philosophical orientations of a number of adult educators, suggests that Knowles led in the direction of making andragogy quite humanistic that gained wide adoption in the field. This also was fused with other philosophies, particularly in human resource development applications. He also emphasized that Knowles elaborated his ideas of self-directed learning within the context of andragogy. This influenced a generation of adult educators, through his sensitive and nurturing spirit, to adopt the practice of andragogy broadly. What drew and maintained a strong following was what Maehl described Knowles as advocating.

An adult learning program should facilitate access by providing easy approach, a welcoming environment, supportive services, and adaptability to individual circumstances. The program should establish a friendly climate of learning for adults, both in a physical facility that is suitable and in a psychological environment that is warm, mutually respectful, trusting supportive, and collaborative. The program should involve learners in diagnosing their learning needs, setting learning goals, designing a plan of learning, managing the learning experience, and evaluating learning outcomes. An important device for accomplishing all these steps in learner involvement is the learning contract that a learner and teacher, or facilitator, develop mutually. Knowles also believed the process
should be characterized by respectful acknowledgment of the learner’s previous experience; adaptability to changes in the learner’s circumstances during the course of learning; ongoing supportive engagement between the learner and the facilitator; and positive reinforcement, or feedback, to the learner (p. 78).

Eighth, Isenberg, (2007), 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, and does this in the very crucial area of health related concerns. She presents a dynamic design to meet the goal of the International Commission on Adult Education for the Twenty-first Century, focusing on five pillars of lifelong learning: To know, to do, to live together, to be, and to change. In addition, she presents a scientific foundation for research in andragogy and its in-depth roots in relationship to the very practical aspects of Internet learning. She sets forth an integrated protocol elements from the literature and the lived experience so that it is a valuable resource for those who may wish to build other adult / lifelong learning programs and systems, as well as to apply this process to other subject matter content areas.

Ninth, Houle (1996), in talking about Knowles’ work in andragogy said that it remains the most learner centered of all patterns of adult educational programming. He also added a number of other things. Knowles kept evolving, enlarging, and revising his point of view and therefore became something of a moving target, particularly since he was intimately involved with numerous projects at every level of magnitude in both customary and unusual settings all over the world. He could bring to discussions and debates a wealth of experience that his opponents could not match. In addition, some of his followers developed variant conceptions of andragogy, thereby enlarging the discourse. Knowles idea on andragogy had application to a wide variety of settings. Houle concluded by saying,

Those who wish to do so can wholly contain their practice in the ideas expressed by Knowles and others, establishing appropriate physical and psychological climates for learning and carrying forward all of its processes collaboratively. Far more significantly, andragogy influences every other system. Even leaders who guide learning chiefly in terms of the mastery of subject matter, the acquisition of skills, the facing of a social problem, or some other goal know that they should involve learners in as many aspects of their education as possible and in the creation of a climate in which they can most fruitfully learn (p. 30).

Clark (1999) considered 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 word ‘anere’ for adult, and ‘agogus’, the art and science of helping students to learn. They wanted to be able to discuss the growing body of 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) believed that South African andragogics can enable the improvement of understanding between Continental European and American adult educationists. However, for this improvement to take place, he saw 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.

Savicevic (2008) indicated that the roots of andragogy are deeper than certain contemporary authors mean. Historical and comparative research showed that the learning and education of adults have always been integral parts of human activity and of human aspirations to learn. Theoretical discourses on pedagogy vs andragogy were common during the second half of the twentieth century in the former Yugoslavia. Two schools of thought were formed: pedagogical and andragogical. The first considered pedagogy as an 'integral' science of upbringing; the second one considered andragogy to be a relatively independent science dealing with distinctions of learning and education of adults. There were interesting discussions on andragogy in other countries. The greatest numbers of supporters of the concept of andragogy as a social scientific discipline (or under another name) come from Central and Eastern Europe and from the USA.

**Popularizing and Sustaining the American and World-Wide Concept of Andragogy**

Lindeman (1926a) and 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, 1989b, 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 with 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 two editions of a book: *The Modern Practice of Adult Education: Andragogy vs. Pedagogy* (1970); and *The Modern Practice of Adult Education: From Pedagogy to Andragogy*. In 1970, he originally saw pedagogy as being for children and andragogy being for adults. In 1980, the change of subtitle reflected a shift from his originally seeing andragogy and pedagogy being at opposite ends of a continuum, toward andragogy being used appropriately with younger learners under certain circumstances and pedagogy being used appropriately with adults when they are learning something entirely new. This American version of andragogy became popularized as a result during this time. 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.

Knowles (1975) published his guidebook for learners and teachers on the topic of Self-Directed Learning. This was the first time that he labeled pedagogical as ‘teacher-directed’ learning and andragogy as ‘self-directed’ learning. Previously, pedagogy was for children and andragogy was for adults. Now his perspective was that where new, unfamiliar content was involved with children and adults, pedagogy was appropriate; and, where adults or children had some background in the content, andragogy was appropriate. Andragogy was the underlying philosophy, and self-directed learning was the way andragogy was to be implemented. He also presented the nine competencies of self-directed learning.

Boucouvalas and Henschke (2002) emphasized the cooperative nature of andragogy in a global setting. They asserted that adult educators around the world are all part of the same family.

Henschke (2006b) outlined the four major historical social movements that were interlinked with influencing Knowles and his influencing them, as he developed and became the adult educator [andragogue] that he did, and shaping his unique conception of andragogy. The four major movements were: Humanistic Educational Philosophy, Human Services, Group Dynamics, and Human Resource Development. Boudreaux. et al. (2002) examined a portion of the legacy of Malcolm Knowles through studying some of his personal correspondence, and studying it andragogically. Another example of continued interest in andragogy and the influence of Knowles came during the third quarter of 2006 – July, August, and September – was a request from Mauro Magnani, an adult educator from the Province surrounding Reggio Emilia in Italy. This request was for Marcie Boucouvalas, Leo Johnson, and John Henschke [all former students of Knowles] to conduct two workshops in that part of Italy in September, 2006. The workshop topics included: The work of Malcolm S. Knowles in andragogy; and, andragogical competencies for professionals facilitating adult learning/andragogy and taking responsibility for their own lifelong, continuing learning. Those adult education practitioners used these workshops to launch themselves into a continuing learning process of andragogy and Knowles’ contribution to the concept.

Boucouvalas (2008) highlighted the emphasis that Knowles gave to group / community / society in his treatment of andragogy. Earlier perspectives on the purpose of adult learning included its serving a higher purpose than just the individual. Examples were that the purpose of adult education was to solve problems of civilization, develop mature understanding of self, and understand society as well as to be skilled in directing social change. Philosophical issues confronting adult educators arose from a national conference debate on serving the needs of the individual vs. society. Interdependence of people working in a group exemplified the essentials of shared leadership and collecting and/or examining data about what is happening in a group.
Wilson (2005) conducted a predictive study and tested the theory of andragogy in a post-secondary educational setting, specifically focusing on adult learners in an MBA program. The study was one of the first to successfully isolate adult learners, a major step forward in testing andragogy. Results provided insight on one student outcome, learning and satisfaction, revealing that the MBA students were not influenced by andragogy with regard to learning outcomes. However, the study did reveal that student satisfaction with instructor and course was affected by the perception of andragogical teaching behaviors exhibited by faculty.

Gu & Ji (2004) illustrate that although the Peoples Republic of China is under a different political system than most other countries throughout the world nevertheless they have given attention to the andragogical prospective to educational programs as evidenced by Beijing Chinese Adult Education Associations translation of Andragogical terms.

Batson (2008) argues that the entire ontology (manifested beliefs about teaching and learning) of higher education is misconceived. It does not fit with the proven realities of learning and with the new nature of knowledge construction in a Web 2.0 world. The education world needs to say goodbye to pedagogy and help to andragogy to create a better fit. This is the time to implement in our teaching practice, five principles of andragogy: Letting your learners know why something is important to learn; showing your learners how to direct themselves through information; relating the topics to your learners’ experiences; connecting with their need so that they are motivated to learn; and, helping your learners overcome inhibitions, behaviors, and beliefs about their learning.

Fenwick (2008) mentioned that ‘learning processes’ in the workplace is recognized as an emerging concepts and new perspectives in the field of adult education. The study indicated four major topics on andragogical learning processes in the workplace that are important for addressing key purposes and issues of workplace learning from an adult educator's view: (1) emerging definitions; (2) emerging focus on practice-based learning processes; (3) emerging importance of identity and literacy; and (4) power and politics in learning.

Other professionals came into thoughts about andragogy and their own involvement with it that also help in sustaining it. Bezensek (2006) indicates that Professor Dr. hab. Jurij Jug is prominent in adult education and andragogy in Slovenia. In addition, is research and practical work and their results confirm that he is universally informed about the results of andragogical research and practice in Europe. Faber (2006) in discussing his way into andragogy became convinced that in the andragogical perspective of thinking and using this category, one could better discuss the problem of adults, independent of pedagogy, problems of self-education, life-wide learning, activities against lack of education, sense of responsibility, living after one’s own concept – all these perspectives could be touched by a theory of andragogy. Here we have to remember: Adults are not children – a simple statement, but this must be understood in all seriousness. Henschke and Cooper (2006) offer three important implications of applying their findings to practice, theory or research. First, much research on andragogy emerged out of practice, and thus there is a strong connection for applying these findings to the improvement of practice and theory. Second, the strength of the andragogical theory, research and definition foundation may advance
the practice of helping adults learn. Third, is the benefit to be derived by professionals willing to intentionally use andragogy, as a means to enhance the enlightenment and illumination of the adult constituents they serve on the journey to their full degree of humaneness.

A series of doctoral dissertations focusing on the work of Malcolm S. Knowles place him squarely in the center of helping to expand and further develop the concept of andragogy. These were produced over a number of years. First, Henschke (1973) saw Knowles as a ‘field builder’ in adult education with his ideas on andragogy becoming a central core of his contributions to the theory and practice of the adult education field. Second, Eskridge (1978), looking long range from that present time into the future, viewed Knowles as wholeheartedly committed to the concept of andragogy as the proper vehicle for the promotion of adult learning. Third, Martin (1982). She looked at the influences of Knowles, Lindeman and Vincent on the philosophical development of adult education. Fourth, Muller (1992) misinterpreted Knowles in that she critiqued his andragogical ideas from the philosophical perspective of progressivism rather than understanding his concept of andragogy from his predominately humanistic philosophical perspective. Fifth, Cooke (1994) observed Knowles in personal human terms and although he thinks it quite appropriate to designate him as the ‘father of American andragogy’, perhaps it would be better to just call him ‘Malcolm’ as he so many times referred to himself. Sixth, Sawyers (1994) conducted a comparative study on the philosophies of Knowles and Freire. Seventh, Sopher (2003) asserted that Knowles work is best understood by practitioners and researchers only if: It is historically accurate, within his humanistic philosophy, explained in the context of his times, recognizing the role that each of the four historical movements (humanistic adult education, human services, group dynamics, and human resources development) in the USA plays in Knowles’ theory of andragogy. Eighth, Henry (2009) undertook the task of an historical analysis of the development of thinking in Knowles’ principle writings. It would seem that one could fairly safely imagine that there will be more doctoral dissertations focusing on Malcolm S. Knowles’ connection with andragogy in the future.

Although the work of no other adult educator beside Knowles had been the subject of a doctoral dissertation, Risley (2012) successfully completed a dissertation research study entitled, „Exploring congruency between John A. Henschke’s scholarship and practice.” Andragogical Theme is Teacher Trust of Learnersl  

Newman (2007) declared he was not a fan of andragogy, he said that in his estimation Knowles had contributed something to adult education and andragogy that was quite unique. As he thought it through, he came to the conclusion that Knowles provided a means to assess the needs of adult learners, and he could not detect that any other adult educators provided such. They only had talked about assessing adult learner needs. Knowles had provided an elaborate system in which one came up with a model of competencies for being an excellent adult educator drawn from a number of sources. Then that same person would assess (on a Likert type scale) her/his level of functioning on each of the competencies. Next, the person would go back to the competencies and indicate the level s/he thought was required for effectively doing the particular task as hand. Finally, the person would select
the competencies to work on and improve that had be largest gap between their present level of performance and required level of performance.

Henschke (2009b) outlines and applies andragogy to four major elements of moving in the direction of staying ahead of the curve in developing and managing human capital. This idea seeks to address the importance of minimizing the cost of keeping a workforce up-to-date, while maximizing the timing and energy focused on having the resources available for accomplishing the mission of the corporation. The four major elements include: Elements in preparing and planning for change in developing and managing human capital; required competencies of the change agent in developing and managing human capital; methods for implementing change / making change happen in developing and managing human capital; and, organizational goals and results from changing in developing and managing human capital.

A review of theories, philosophies and principles by O’Bannon and McFadden (2008) has led to the development of the experiential andragogy model for practical use in non-traditional experiential learning settings and programs designed for adult learners. The experiential andragogy program model has six stages: (1) motivation, (2) orientation, (3) involvement, (4) activity, (5) reflection, and (6) adaptation. It needs to be tested through applied research to determine its strength in promoting individual personal growth and learning over a lifetime.

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’. Savicevic (2006b) reflects about his perception of Knowles’ position in sustaining andragogy over the long range of its history into the future.

Forty years in development of a science is not a long nor ignorable period. I met professor Knowles four decades ago and argued on term and on concept of andragogy. Since then, the term and the concept of andragogy enlarged and rooted in the American professional literature. There is no doubt that Knowles contributed to it, not only by his texts, but with his spoken word and lectures. He was a ‘masovik’, i.e. a lecturer on a mass events. He told me that he lectured on 10,000 visitor stadiums. As if he was inspired by an ancient agonistic spirituality! His contribution to the dissemination of andragogical ideas throughout the USA is huge. The history of andragogy will put him on a meritorious place in the development of this scientific discipline (p. 20).

Jackson and DuVall (1989) declared that methods based on teaching children are not appropriate for teaching adults. As early as 1929, the education literature contained references to successful teachers of adults as those who deviated from ‘sound’ pedagogical practices. The work of Malcolm Knowles solidified the field of adult education and established the term ‘andragogy’ to refer to the most appropriate methods for teaching adults. They proposed practical evidence of the National Ed.D. Program for Educational Leaders at Nova University which employed the andragogy as the major learning process
structures. The National Ed.D. Program for Educational Leaders was established at Nova University in 1972 in an attempt to meet the needs of administrators who had already earned their Master's degrees and who held appropriate credentials for their positions. Classes were held at locations convenient to students' homes, and research requirements focused on solving problems faced by administrators in their own professional settings. After 18 years, the program thrives. Its graduates hold positions of prominence throughout the country. The program has survived and grown, despite criticism from colleagues in tradition-bound programs, because it recognizes in a fundamental, systematic way, that adults can learn best when andragogy, not pedagogy, drives the structure of the learning process. The results pointed out that the need for an andragogy-based approach to education is most critical in advanced levels of education for practicing professionals. However, most graduate-level programs do not meet practicing educators' needs because they are based on 'preparation' rather than 'practice'.

MacFarland (1985) insisted that adult programs and adult vocational programs in particular, will play an increasingly important role in the nation's educational system, eventually absorbing the role currently played by secondary vocational education. Therefore, vocational educators must develop new approaches and new attitudes to prepare to serve an older student audience. The work of Malcolm Knowles in the area of andragogy contains many valuable insights as to the differences between adult and younger learners. In view of these differences, a seven-step model for providing vocational education to adults was developed. The parameters of the model are as follows: establish a climate conducive to adult learning, create an organizational structure that allows participative planning, diagnose learning needs, formulate appropriate learning objectives, design and implement appropriate learning activities, and evaluate for rediagnosis of learning needs.

Maughan and Mupinga (2010) put forward the rationale to understand that the linkage between adult learning theory, andragogy, and instructional technique is very basic. They state by understanding the fundamental ways adults learn, and creating or using methods in harmony with those learning styles to investigate content processes and problems in an area of study, one optimizes the teaching/learning process. To use instructional techniques that are not linked to adult learning theory makes the teaching/learning process ineffective and indiscriminate. They assert at best, learning might occur through serendipity.

McGrath (2009) also reviewed the evidence on how adult students learn through examining of Knowles' model of andragogy and explores how the theory continues to be important for practitioners in Ireland. The finding showed that Andragogy in essence aims to look at how learning in the classroom can be made more attractive for adult students. Therefore, it is imperative that lecturers/ tutors are aware of the fact that adult needs are very different to the needs of children in relation to classroom learning. Thereby, the teaching style that is adopted in the adult classroom should be the focus of attention for educational institutions, and this should be monitored to ensure that adult students enjoy the educational experience.

Merriam, et al., (2009) acknowledges that andragogy is here to stay. However, they suggest that the field needs to get on with five other important matters of understanding
adult learning and move beyond andragogy. These five other important matters of understanding adult learning which they suggest are: Transformative learning; spirituality and adult learning; embodied knowing; the neuroscience of adult learning; and, narrative learning. The major rationale for this appears to be a way focused on their concern with moving the field beyond centering andragogy at the heart of our adult learning theory, which they consider may expand the potential for engaging more adults in learning.

Moberg (2006) pointed out that many methods and principles apply well to both pedagogy and andragogy. An obvious example, Skinner’s work on reward and consequences to modify behavior works with students of all ages (Boshier, 2006). Both children and adults are motivated by good grades and avoid bad grades. Despite his flaws and detractors, Knowles’ central point is well taken; adults are different from children, they learn differently, and educators do well to teach adults differently.

Ockers (2011) positions her work in Andragogy regarding the help they seek to provide for others. It would be excellent if she is able to accomplish her vision with individuals and organizations, for at Andragogy we believe that everyone deserves to have the knowledge and skills to do a great job at work. We delight in supporting people to learn and grow, and seeing individuals, teams and businesses thrive through learning.

Another study that indicated the boon of Andragogy for adult learners. Patterson (1986) mentioned that principles of creativity and andragogy (the art and science of helping adults learn) are compared and found to be complementary especially in such areas as self-direction, active learning, and preference for the problem centered approach. Adult educators should utilize creativity research and creativity researchers should incorporate the principles of andragogy.

Pleskot-Makulska (2009) presented a paper on andragogy at the Commission on International Adult Education (CIAE) Pre-Conference of the American Association for Adult and Continuing Education (AAACE) Conference, November, 2009, in Cleveland, Ohio. Her excellent paper also appeared in the Proceedings of that Conference. To make certain her paper is represented accurately, following is the abstract she provided of that paper.

Volunteers and professionals have been working on adult education in Poland for many years. Thanks to them, millions of people have raise their level of education and their life opportunities. Recently, interest in adult education went up in Poland. Therefore, there is a stronger need to educate professionals necessary for the realization of goals and tasks set for the adult education sector. Various upper education institutions have been doing this for many years. Particularly in recent times steps are being taken to strengthen the position of andragogues in the job market in Poland. The presentation is centered around the system for their training in that country, with focus on education undertaken as part of the andragogical specialization at the Faculty of Education at the University of Warsaw. This analysis is mostly concerned with issues such as the position of adult education specialists in the job market in Poland and the factors
that shape it; historical traditions and contemporary programs of training of adult educators in Poland. (p. 143)

Pratt’s (1988) stance appeared to question the value of andragogy as a relational construct. He had supported it previously, but grew more skeptical of it as time progressed. He suggested that 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.

Reischmann (2011) created an andragogy description on Wikipedia, the free encyclopedia. It includes: A replica of the original published document in 1833 by A. Kapp, three understandings of it, Knowles’ assumptions, diversity and generalization, critique, the European development toward professionalization, andragogy as an academic discipline, references, suggestions for further reading, external links, and other related things to consider.

Ryan, et al. (2009) investigated the conversation initiated by Denis O'Sullivan in the 2008 issue of the 'Adult Learner' because he raises several important points about the nature of Irish adult education and the need to develop a rigorous theoretical basis for the authors’ work. The responses, albeit gathered on a modest scale and briefly analysed, demonstrate a sophisticated understanding of the ideas that underpin much of adult and community education and bear little resemblance to the redemptive discourse that O’Sullivan claims dominates adult education. In keeping with the ethos of learner-centredness, they conducted a small piece of research among some of the adult learners we are working with, asking them to describe their understanding of adult and community education. The responses repeatedly cited andragogy, self-directed learning and learner-centeredness as key characteristics of adult education. They also mentioned the importance of experience (which they transformed through learning); the role of adult education in achieving greater social equality; recognising the experience of alienation in other learning contexts and the need to belong; developing supportive learning (in which people learn from one another and co-construct knowledge); and creating more egalitarian relationships between tutors and learners. The conversation also needs to include sustained attention to important external forces that influence adult education (for instance national and global economic trends and the demands set by the state and international policy bodies). Finally, the researchers mentioned the need for educators and learners to continue this debate according to their own terms of reference.

Somers (1988) called attention again on the four key assumptions about adult learners that distinguish them from child learners and that thus abrogate the premises upon which traditional pedagogy. In traditional pedagogy, the role of the learner is one of dependency. Andragogy, on the other hand, recognizes the deep psychological need of adults to be self-directing, and the andragogical model encourages teachers to nurture and encourages learners’ natural maturation toward independence. The second postulate on which andragogy is based is that of the valued role of the learner's experience. This accumulated experience makes adult learners capable of peer helping and learning and thus makes group teaching methods better suited for adult learners than are passive information transmittal
techniques. The third assumption is that of adults’ readiness to learn, and the fourth is that of their psychological orientation to learning. In view of these assumptions, adult educators should use techniques to accelerate their students’ readiness to learn, including self-appraisal, career counseling, and simulation.

Svedlow (1997) investigated the lifelong learning in the museum based on andragogy, using the interview with older museum visitors and observation of a younger comparison group. The study revealed four interesting adult learning behaviors: social, theoretical, inquiry, and intuitive. The array of learning styles suggests a need for variety in the educational formats used in museums.

Thompson (1989) proposed a need for a complementary view of andragogy and pedagogy. The finding indicated that there is growing support for the view that the andragogical instructional approach is a necessary but not sufficient model for adult educators to utilize. It is effectively complemented by the pedagogical instructional model.

The American Association for Adult and Continuing Education (AAACE) established the Malcolm S. Knowles Award for Outstanding Program Leadership following andragogical principles. The University of Missouri-St. Louis, College of Education, Graduate Adult Education Program (2004) received this award at the AAACE Conference in Louisville, Kentucky. The UM-St. Louis Adult Education serves those working on Master of Education, Doctor of Education, and Doctor of Philosophy Degrees. Andragogical Principles are used in helping the numerous graduate finish their degrees and practice their art and science of helping adults learn in a variety of settings.

Thompson and Deis (2004) reviews and summarizes the literature that suggests a significant theoretical difference between andragogy and pedagogy. Centrally, the assumptions behind pedagogy [namely ‘child conductor’] do not always fit the needs of the adult learner. Conversely, andragogy focuses on the adult and provides a better model for the growing number of nontraditional students enrolled in many universities.

Totoraitis (2010) is convinced that an utmost priority of an andragogue is to establish contact with a human being. If this is the case, then, an andragogue’s primary task is to seek and establish this contact with another human and give the following message: I want to accomplish certain things in life but can’t achieve them on my own. In such a situation an andragogue’s task is to help overcome the barrier. Applying andragogical principles in one’s work means helping the learning person understand and decide with he/she wants to pursue and what kind of knowledge still has to be acquired to move forward, rather than ‘feeding’ the learning person with information.

Wallace (2000) asserts that professionals continue to learn throughout their careers. They make large investments in time and money in continuing education (CE). She maintains that familiarity with the principles of adult learning are essential whether you are selecting a learning program as a consumer or designing a program as a provider. She believes there are important differences in how children and adults learn, based on their different life roles, the amount of life experience they have, and their life goals. She references Knowles
(1973) book (on andragogy) when stating that adults are not a homogenous group; however, when it comes to learning, generally they: 1] Are much more self-directed than children, 2] Take responsibility for their learning experiences, 3] Seek learning experiences that are learner-oriented, 4] Have a large reservoir of life experiences to bring to and support new learning, 5] Flourish when their abilities and life achievements are acknowledged and respected, 6] Prefer a practical and immediately relevant approach, 7] Learn readily from their peers, 8] Have formed a dominant learning style and know what it is, 9] Want immediate and regular feedback, 10] Are ready to learn when an event in their personal/professional life sparks “the need to know”, 11] May be “education wounded” from earlier pedagogical experiences and, 12] Require “unlearning” to become an effective adult learner. She emphasizes that CE programs are a “billion dollar industry” and that professionals seek quality programs.

Wildemeersch, Finger, and Jansen (Eds.) (2000) described the relationship between the adult education including andragogy and social responsibility based on the book. In this book, 16 authors from Europe, Africa, and the United States reflect on the transformations that are currently taking place in the field of adult and continuing education. The 12 chapters are "Reconciling the Irreconcilable? Adult and Continuing Education Between Personal Development, Corporate Concerns, and Public Responsibility" (Matthias Finger, Theo Jansen, Danny Wildemeersch); "Modern Field and Post-Modern Moorland: Adult Education Bound for Glory or Bound and Gagged" (Richard Edwards, Robin Usher); "The Education of Adults as a Social Movement: A Question for Late Modern Society" (Peter Jarvis); "Flexibilization or Career Identity?" (Frans Meijers, Gerard Wijers); "Different Views on Literacy" (Max van der Kamp, Laurenz Veendrick); "Learning for Sustainable Development: Examining Life World Transformation Among Farmers" (Joke Vandenabeele, Danny Wildemeersch); "In Defense of Education as Problematization: Some Preliminary Remarks on a Strategy of Disarmament" (Jan Masschelein); "Adult Education and Training in the Framework of Reconstruction and Development in South Africa" (Astrid von Kotze); "The Transformation of Community Education" (Ruuw van der Veen); "Civil Society as Theory and Project: Adult Education and the Renewal of Global Citizenship" (Michael Welton); "Empowerment and Social Responsibility in the Learning Society" (Cees A. Klaassen); and "Reframing Reflectivity in View of Adult Education for Social Responsibility" (Theo Jansen, Matthias Finger, Danny Wildemeersch).

Henschke (2014) posits a definition of lifelong learning as a master andragogical principle/concept regarded as the continuous and never complete development, changes, and adaptation in human consciousness in an ever increasing number of situations. This paper provides thoughts on how an international conception came about and moved forward regarding reorienting Higher Education Institutions toward Lifelong Learning (LLL). The background of LLL in ancient times and its emergence in recent times is presented. My involvement is described in bringing this about as a concept, and doing the research to flesh-out the specific elements. This research includes: Developing a definition of LLL; bringing together the international partners from 19 countries to identify the seven major elements of a LLL Higher Education Institution; engaging two universities from opposite sides of the globe in articulating and listing the 78 measurable performance indicators [MPI] for LLL; bringing together participants for discussing the MPI, from 13
nations at an International Lifelong Learning Conference; and, actively involving a major International University (Chulalongkorn – Bangkok, Thailand) to go through the steps for setting in place and implementing its being a global player on the stage in moving forward that idea for the future of the world in general and the world of lifelong learning [LLL] – its length, height, depth, and breadth.

Henschke (2014, Forthcoming) provides a personal perspective and description of his learning experience on living a long, healthy life provides: An introduction, healthy life descriptions according to various age categories; a healthy long life depicted in relationship to various human values and human systems; dimensions of maturing for healthy long lives; for seekers of self-actualization reaching toward a long healthy life; his more personal side of this story in experiencing a long healthy life of 82 years thus far; a disclaimer on the reader being free to choose or not choose some of his guidance processes; how he came into adult education; numerous Bible instructions guiding and helping him learn in my long healthy life to date; a source of influence – an idea that takes hold on a person; andragogy took hold of him and eight central elements of this; additional promises from God enhancing to his health and lengthy life; a view by some other person than Henschke – Lori Risley; and, a conclusion to this matter from his point of view on tools, trends, and methodologies in adult and community health education.

Charungkaittikul and Henschke (2015) set forth the andragogical idea that today’s world may be characterized as the dawn of the new millennium of the learning society where knowledge is considered as a country’s most valued asset and primary source of power. In the increasingly intense competition among the international communities, Thailand has been respected as advancing the andragogical concept of and approach to transforming communities, cities and regions into learning societies engaged in a sustainable development strategy that promotes the continual learning of individuals – the smallest unit of society. It emphasizes balance among the economy, society, natural resources and environment; and, is transforming the Thai people into knowledge citizens and knowledge workers. These carry stipulations concerning lifelong learning, educational enhancement and global competitiveness aimed toward developing appropriate manpower to move the society toward sustainable happiness as compared and contrasted with maintaining the ‘status quo’. This article aims to identify the current situation of lifelong learning and education in Thailand; analyze and synthesize the five best learning society case studies; and propose guidelines for developing a sustainable lifelong learning society.

Henschke (2015, Forthcoming) designs this article to address: the introduction of lifelong learning from ancient times; dimensions of maturation as guides for lifelong learning; considering the andragogical approach in early, adult, and lifelong learning; counseling adult learners contributes added dimensions to facilitating lifelong learning; assessing life’s challenges within the decades of lifelong learning, core values, and human systems; 1997 – CONFINTEA V – Hamburg, Germany – lifelong learning emphasis only on older adults; 2009 – CONFINTEA VI – Belem, Para, Brazil – lifelong learning emphasis being throughout life; prominent role of higher education institutions changing toward lifelong learning; developing definitions of lifelong learning and learning in general; characteristic elements of lifelong learning higher education institutions; implementing challenges of
Practical Applications of Andragogy

Lindeman (1926a, 1926b, 1961) presented an interesting piece on the method for teaching adults. Basically he asserted (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 adults.

Knowles, (1968b) a short time after he published his first article on andragogy, was already applying andragogy in leadership training with the Girl Scouts. Although it was a new approach, it was enthusiastically embraced in that organization.

Knowles (1969) was also applying andragogy in his adult education graduate courses at Boston University. He used the approach of group self-directed learning as the means for implementing andragogy. Thus, he helped groups of students take responsibility for learning as much as they were able concerning a part of the subject matter of the course. Next, the various groups engaged the remainder of the class to actively learning that section of the course content. This was the way all the contents of the course were studied by the students.

Holmes (1980) objectives of this study were: (a) to determine the andragogical and pedagogical orientation of a selected group of adult educators; (b) to identify selected interpersonal behaviors of the adult educator sample and determine the relationship of these behaviors to andragogical and pedagogical orientations; and, (c) to determine if the relationship between interpersonal behaviors and an andragogical orientation differed from the relationship between interpersonal behaviors and a pedagogical orientation. The sample consisted of 197 Auburn University faculty and 103 Alabama Cooperative Extension personnel identified as experienced adult educators. The Educational Orientation Questionnaire was administered to determine the andragogical or pedagogical nature of the adult educator’s orientations. The Fundamental Interpersonal Relationship Orientation Behavior Scale was administered to identify interpersonal behaviors of the adult educators. Questionnaires were returned by 167 subjects (55.7 %). Results of the study indicated that: beliefs and attitudes about adult education were significantly different for the andragogical and pedagogical groups; a significant relationship existed between interpersonal behaviors and the orientations of adult educators categorized as andragogical; the relationship between interpersonal behaviors and the orientations of adult educators categorized as pedagogical was not significant.
Houde (2006) asserts that Andragogy [as Malcolm Knowles originally proposed it] has been criticized as an atheoretical model. Validation of andragogy has been advocated by scholars, and this article explores a method for that process. Current motivation theory, specifically socio-emotional selectivity and self-determination theory, correspond with aspects of andragogy. In conjunction, these two motivational theories could be used to test and validate the model. He explains the correspondence of the motivation theories with andragogy and proposes a process for validation. These two motivational theories are sound, current, and well-tested. Both have been cross-culturally validated. Self-determination theory has been examined in multiple cultures, and several studies in socio-emotional selectivity have focused on examining it in cultural contexts.

Drinkard and Henschke (2004) found nurse educators who have a doctoral degree in other than nursing (adult education to be specific) as more trusting of their learners in an andragogical classroom than nurse educators who have a doctoral degree in nursing. This was largely due to the lack of anything regarding how to facilitate the learning of adults in the nursing doctoral program, as contrasted with facilitation the learning of adults being a very prominent part of the adult education doctoral programs where andragogy is actively practiced.

Ingalls (1976) added to the idea of using andragogy in corporate settings, in which he identified nine dimensions that the manager needs to function as a person who helps his workers learn and keep up-to-date in their various fields. The nine dimensions are: Creating a social climate in which subordinates feel respected; treating mistakes as opportunities for learning and growth; helping subordinates discover what they need to learn; assisting the staff to extract learning from practical work situations and experiences; letting staff members take responsibility for designing and carrying out their own learning experiences; engaging staff members in self-appraisal and personal planning for performance improvement; permitting or encouraging innovation and experiments to change the accepted way of doing things if the plan proposed appears possible; being aware of the developmental tasks and readiness-to-learn issues that concern his staff; and, trying to implement a joint problem-finding and problem-solving strategy to involve his staff in dealing with day-to-day problems and longer-range issues.

The second in the series of doctoral dissertations focusing on the work of Malcolm S. Knowles, came from Eskridge (1978). He looked long range from that present time in 1978 into the future, viewing Knowles’ wholehearted commitment to the concept of andragogy as being the proper vehicle for the promotion of adult learning.

Knowles (1978), in this second edition of *The Adult Learner*, updated and added to his application of andragogy in HRD. He continued to be involved very much with corporate adult education and added some information that helped to clarify what was then the current situation.

Later, 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 focused on the agreement of 174 adult
educators, including professors and practitioners, on ten 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 a supportive learning climate, and emphasize experiential methods.

The third doctoral dissertation which focused on the work of Malcolm S. Knowles, was by Martin (1982). She looked at the influences of Knowles, Lindeman and Vincent on the philosophical development of adult education.

Despite the hesitancy that some had about Knowles involvement in andragogy, Knowles (1984a) third edition of *The Adult Learner* relating to HRD appeared at this time. He was still actively engaged in the field, although he had retired from his professorship some years earlier in 1978. Knowles updated and added to his application of andragogy to HRD in this third edition. He continued to be involved very much with corporate adult education and added some more information.

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.

Dwyer (1987) discussed the four assumptions of andragogy as stated by Knowles. Along with this she gives implications these assumptions have for teaching adults to be microcomputer literate.

Brockett (no date given) affirmed 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. However, Brockett (1984) also indicated that an andragogical approach works in using a proactive approach for developing written materials. In addition, Brockett (1983) substantiated that andragogy is being used to help hard-to-reach adults become more self-directed in learning to improve their lives. Knowles (1972) and Ingalls (1976) declared 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 suggested 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 example he provided on this is for the design of personal computer training.
England (2001) uses Knowles’ andragogical assumptions to examine the effectiveness of the discipleship training ministries of the Southern Baptist churches. It concludes with a subjective interpretation of the findings corresponding to the research questions. Implications of the study are included as well as how this study may be improved.

Ingalls (1972) provided the first handbook guide to using andragogy in helping adult educators [they called them ‘trainers’ in those days] become more systematic and consistent in their engaging learners in the learning process. This was developed and tested in a branch of the US Government.

Knowles (1973) focused a full application of his conception of andragogy toward the Human Resource Development (HRD) Movement. He worked vigorously in the corporate sector and thus saw the importance of testing and relating andragogy within it. He divided the listing of numerous learning theorists into the categories of mechanistic and organismic. His identifying andragogy as being in the organismic category helped cast, clarify and nudge the philosophy toward a more humane frame. This was the first edition of his book entitled *The adult learner: A neglected species*.

England (2007) analyzed how, if at all, the andragogical assumptions of Malcolm Knowles’s model was used with the students in the courses taught at the New Orleans Baptist Theological Seminary. Issues and practices within the ministry of Christian higher education created by the research are presented in addition to the implications for applying the findings to this organization.

Morland (2003) assert that business trainers, coaches, and instructional designers need to understand the dynamics of an andragogical model of adult learning. Despite the controversy elicited by Knowles on an artificially narrow definition of pedagogy, his andragogical insights into adult learning behaviors and motivations are generally accepted.

Engleberg (1984) elaborated that Andragogy, adult student motivation, life cycle theories, and adult education program responses and ways the speech communication program is especially suited to meet the needs of adult learners in community college communication courses.

Young (2003) analyzed the benefits phenomenon of learning in online continuing education programs for real estate practitioners, through the lens of Malcolm Knowles’ concept of andragogy – self concept of the learner, role of experience, readiness to learn, orientation to learn, and motivation to learn. Benefits included: access to learning materials in advance of beginning the program, learning available flexibly and students can self-pace, programs can enhance learning style of shy students, learning tailored to individuals and companies, learner focused with learning contract, self-directed learners, cheaper and convenient, much learner support with coaches and mentors and technical help.

Another use of the principles of andragogy is in the public school setting. The purpose of Stricker’s (2006) research was to determine the attitudes of principals toward teachers as
learners by answering the following question: Do principals understand adult learning (andragogy) and do they have the competencies to create the conditions conducive for learning in school based staff development? He found a relationship between principals and teachers that does not contribute to creating the conditions conducive for adult learning in school based staff development. He posited that principals in this district would benefit by a better understanding and implementation of andragogy. Teachers, on the other hand, would also benefit from gaining understanding and implementing self-directed learning so they may become actively involved in and take responsibility for their own continuing, lifelong learning.

Bellaire (2005) suggests a modified combination of andragogy and pedagogy to be used with participants transitioning into becoming an adult learner, and focuses on the appropriateness of andragogy as the approach of choice for teaching traditional undergraduate college students. Many college students enter post-secondary studies directly from high school and do not fit the mold of an adult learner as defined by the literature of andragogy. Based upon the findings of the study, the recommendation is for a combination of pedagogical and andragogical teaching methodologies to encourage the emergent adult learner to become an effective self-directed learner.

Godbey (1978) provided a practical guide for adult educators on applied andragogy for the Continuing Education of Adults. Key concepts such as a comparison of pedagogy and andragogy, a brief definition of adult education, a profile of the adult student, the importance of guiding and counseling the mature student and suggestions for helping students organize their time and clarify their motivations, adult development and special adult learning problems, teaching methods, suggestions for teachers to prepare and select a comfortable and appropriate role, understand student needs, and make a good first impression, and various learning atmospheres and areas where they are appropriate, as well as the goals of adult education are described. Therefore the topics needed to further inquiry as well as to offer practical suggestions on teaching adults.

Deveci (2007) studied andragogical and pedagogical orientations of 60 evening class adults learning English as a foreign language in Turkey. The results revealed that the adults were more andragogically oriented, but that they also had some tendencies toward pedagogy.

Blondy (2007) suggests that the usefulness and application of andragogical assumptions has long been debated by adult educators. The assumptions of andragogy are often criticized due to the lack of empirical evidence to support them, even though several educational theories are represented within the assumptions. The author analyzes the validity of andragogical assumptions related to adult learning and discusses application of these assumptions to the online learning environment, with the assertion that they represent an ideal starting point for adult educators to use in their online education instructional approach with adults.

Nevins (no date given) added 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.

Bellamio (2006), a Human Resource Development (HRD) Professional working in the Xerox Corporation, Italy, participated in a workshop conducted by Malcolm Knowles based on andragogy, using as a major resource the fourth edition of his book entitled, *The adult learner: A neglected species*. The workshop was held at the Xerox Learning Center in Virginia, near Washington, D.C., in the early 1990s. Bellamio was so impressed by the benefits he derived from Knowles’ workshop and the possible benefits he perceived to HRD Professionals in Italy, that he moved forward with having Malcolm’s book *The adult learner* translated into the Italian Language. He saw Malcolm’s andragogy this action for translating the book as helping Italian HRD professionals take responsibility for improving their sphere of influence within their corporations, in contrast to the very minimal possibility of their corporations becoming centers of andragogical development. This book and its andragogical concepts have been continuously used by adult education and HRD professionals throughout Italy since its translation.

Albon and Trinidad (2001) assert that university students are adults; therefore Andragogical approaches to learning should be implemented within universities. In (circa 2002), Albon and Trinidad advocate the following characteristics of andragogy are necessary to learning environments: 1. Letting learners know why something is important to learn; they must value the learning, 2. Mutuality of responsibility in defining goals, planning, and conduction activities that are based on the real needs of the participants, that is, showing learners how to direct themselves through information (self-direction), 3. Relating the topic to the learner’s experiences and using this experience as a springboard for developing objectivity, 4. Motivating people, as they will not learn until they are ready and motivated. Often this requires helping them overcome inhibitions, behaviors, and beliefs about learning; it requires a worth for the individual and their self-concept, 5. An open, democratic environment where individual differences in style, time, place, and pace of learning are integrated into the learning experience.

Bragar & Johnson (1993) in addressing andragogy/adult learning in the business environment indicated that their research has identified five principles. They 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 people learn with others; and, learning occurs best in a supportive and challenging environment. Adding to this, Morland (2003) asserts that business trainers, coaches, and instructional designers need to understand the dynamics of an andragogical model of adult learning. Despite the controversy elicited by Knowles on an artificially narrow definition of pedagogy, his andragogical insights into adult learning behaviors and motivations are generally accepted.
Goodall (2007) profiled Rev. Father Boniface Hardin, founder and leader of Martin University, the only predominantly Black University in Indiana that has served Indianapolis' poor, minority and adult learners for 30 years in an andragogical manner. In addition to running the university, Hardin has received dozens of awards and honors for his work in the community. The playwright and poet has produced and co-hosted television and radio programs and is versed in 15 languages. Hardin also uses his resemblance to the legendary abolitionist Frederick Douglass as a teaching tool. Thirty years ago, the Rev. Father Boniface Hardin envisioned a language school for African-Americans, but what he founded has become so much more. Hidden away in a nondescript complex in one of the poorest neighborhoods in Indianapolis, Martin University is so modest that students and faculty park their cars in a tiny dirt-and-gravel lot across the street. Teaching at Martin is based on the principle of andragogy, a method of teaching that is specific to adult learning. Now, founder and leader Rev. Father Boniface Hardin is planning to step down. His final day as president will be December 31, 2007 and he says that he is counting on students and faculty to select a leader who will continue his mission.

Cassity (2005) examines the increasing presence of nontraditional students in college classrooms, and how nontraditional students draw upon lived experience when writing across the curriculum. Research questions focused on how nontraditional student presence should shape professional discussion and teaching practice; the degree to which the participants in the study experienced writing-related anxiety; the strategies they used to work through it; and how they drew upon lived cultures and experiences when writing across the curriculum in order to negotiate their emerging academic identity. Findings demonstrated that the participants used their experiences critically and reflectively in their academic writing. These findings are framed by the theories of Malcolm Knowles’ andragogy concept and Timothy Quinnan’s articulation of the nontraditional student as postmodern phenomenon with process, post-process, and feminist composition theory, as well as with the critical theories of Paulo Freire, Henry Giroux, and Bell Hooks.

Pastrana (no date) indicates that Andragogy International is a universe of solutions to facilitate the evolution of companies to their full potential through education, training and consulting. Individuals receive an improvement of the quality and scope of the responsibilities with which they are entrusted. This accrues to the direct benefit of the company and the individuals themselves. However, in a word of caution, Sasmal (no date) attempts to juxtapose the Indian adult’s behaviors against the principles of andragogy defined by Knowles, and draws a realistic picture of the adjustments that must be made in truly identifying the principles of learning for the Indian adult. These are mainly that they prefer to play the loyal disciple rather than questioning the trainer’s authority, and that training programs must begin with a manual being provided to be considered effective. Nonetheless, the writer of A philosophy of adult education (no date) in a Power Point presentation makes a strong case for an andragogical philosophy of adult education. His/her reasoning is that business and industry spend $30 to $40 billion per year on adult education, equal to 2.55 million FTEs (Full Time Equivalents), the size of 65 universities in the State of Michigan, and we have a real opportunity for making a significant impact.
Other types of businesses were also finding the benefits of andragogy. Weinstein and Young (2003) analyzed the benefits phenomenon of learning in online continuing education programs for real estate practitioners, through the lens of Malcolm Knowles’ concept of andragogy – self concept of the learner, role of experience, readiness to learn, orientation to learn, and motivation to learn. Benefits included: Access to learning materials in advance of beginning the program, learning available flexibly and students can self-pace, programs can enhance learning style of shy students, learning tailored to individuals and companies, learner focused with learning contract, self-directed learners, cheaper and convenient, much learner support with coaches and mentors and technical help.

Nelson (2005) explored how five African American women empowered themselves to pursue professional careers in gospel music and employed Robert Yin’s case study design and was informed by Black Feminist Theory. The study explores the lack of educational opportunities and fairness within traditional learning venues for African American women due to racial prejudice, coupled with the struggle with gender inequality in a male-dominated field. The study found that the lack of traditional learning venues resulted in the women being self-taught, with findings supporting Malcolm Knowles’ theory of andragogy.

Wie (2003) articulated the aims, needs, motivation, skills, self-confidence, learning conditions and responsibility of learners in andragogy. The andragogical principles guarantee learning success and quality of adult learning. In andragogics: The learner determines the aim, motivation of learning is clear and high, learners have practical experience, the educational program is flexible, active teaching methods are used, the educational environment is safe and friendly, information is tested for applicability at the present moment, learners think critically, and learners choose the type of evaluation to be used.

Gross (2006) discovered that those who choose andragogy for their advanced study at the University of Bamberg, Germany, look more to a social learning reason – interest in facilitating people’s development. This is in contrast to altruistic motives dominated by helping. The focus here is on ‘facilitating, educating, and guiding people’. Reischmann (2005) finds continuous interest in andragogy in numerous countries: Grundtvig in Denmark, Friere in Brazil, the Danish ‘folkehojskole’, the English University Extension, the Swedish study circle, the American ‘encounter-group’, and the German ‘folk school’ in every city, town, village and hamlet throughout the country. Henschke (2006a) found that andragogy is a crucial component of re-orienting individual learners and higher education institutions toward a focus of lifelong learning. Kruse (2006) asserts that pedagogic techniques must be used to teach a person of any age to play a musical instrument. However, self-initiated musical behaviors may indicate that andragogical, self-directed thought patterns have also been assimilated.

Sayre (2005) pondered her experience and learning during her practice of andragogy in the corporate setting.

As we know in andragogy, some of the differences from pedagogy include knowing why you want to learn, being self-directed in learning, and ready to learn.
However, the truth is in organizational learning the participants don’t always want
to be in a given training program or learn a given skill. And they may think why
they are there because their boss or the organization wants them to be. They might
prefer to be back at the job, among other things. I tried various techniques, from
andragogy and HRD, to make ‘the why’ more obvious. This included involving
given employees and managers in the design and delivery of their own
department’s training as much as I could, which often made the program more
relevant to context. I tend to think that HRD program designed with the HRD and
adult education professional working with line managers, for instance, tends to
allow those closest to the ‘ground’ to participate in building the program. (p. 2)

Simonson, et al. (2003) identified a number of characteristics needed in distance education
systems designed for adults, that are derived 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) offered 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 needed 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.

Goodale (2002) investigates the professional development needs of faculty members who
are incorporating technology into their work. Findings report that faculty use technology
in their communication, teaching and research; however, many faculty members are not
integrating technology in instructional management, or in their gathering and analysis in
their research. Most identify time as their greatest barrier to success. Therefore faculty
members look for professional development opportunities designed to meet their needs,
from instructors who adhere to andragogical and constructivism principles. Andragogy,
pedagogy and constructivism are theories faculty members want to consider when
incorporating technology in their teaching and in their own learning, and systems theory is
relevant to faculty members working with technologies and best practices.

Akande and Jegede (2004) made the case that adults in Nigeria are far behind children in
achieving technological literacy. Thus, based on Knowles’ (1980) and Zmeyov’s (1998)
similar definition of andragogy, they explored the mutual opportunities among andragogy
and computer literacy to improve adult computer literacy skills in Nigeria. Their
perspective 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, andragogical methods are highly appropriate for adult education in computer literacy. Following this line of thinking, 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. Learners are goal oriented and know the purpose for their learning new information. Learning is self-initiated and tends to last a long time.

Moore (no date given), in coming from a university context, focused attention on the term ‘adult’ as referring to ‘all college students, undergraduate and above’. He suggested that ‘andragogy’ can be more broadly defined as all ‘learner-focused’ education. He also reflects on the self-directed or autonomous learner by referencing Knowles’ (1970) perspective as especially characteristic of learning in adulthood. Adults have a self-concept of independence. Their everyday lives are perceived as being capable of self-direction, and this is also the case in their learning. In his listing of the adult learner characteristics, he provided the following implications for technology use: Adults should be provided with adequate resources and technology tools to direct their own learning; adult learners should 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) articulated what she deems to be 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; 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 experimentation and in which different learning styles are recognized. Adults experience anxiety 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 uncertainty, 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) 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 (2000) posits that andragogy provides a context for developing distance education programs, a framework to build a climate conducive to adult learning, and a process for involving the adult learner more actively in the distance learning process.

Morrall (1993) raised the question of 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. Ellis (no date) focuses on an application of andragogy to a graduate-level web technologies course comprised of working professional students. Both student feedback and instructor opinion on the application of Knowles’ theory of andragogy to this course have been strongly positive. In seeking to bring numerous factors together in online learning, Thorpe (1999) developed a 24 slide Power Point presentation addressing 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 and to incorporate technology positively.

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 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. Additionally, Esposito (2005) found that emotional intelligence, a type of social and personal intelligence, is important to managing interpersonal relationships and interactions, especially in the business and educational sphere. These are the hallmark of andragogy that also offers more personalized and effective solutions for the learners.

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. Similarly, Paraskevas and Wickens (2003) tested the strengths and drawbacks of the Socratic Seminar, one teaching method of the andragogic model. This is a teacher-directed form of instruction in which questions are used as the sole method of teaching. This places students in the position of having to recognize the limits of their knowledge, and hopefully, motivating them to learn. This was found to be a very effective method for teaching adult learners, but should be used by the instructor with caution, knowledge, skill, and sensitivity, and depending on the personality of the learners.

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. Further, Hugo (2003) summarized key characteristics of learners and mediated learning scenarios, with special reference to the potential of andragogically oriented Interactive 3D Visualization and Virtual Reality (IVVR). He compared the effectiveness of these IVVR technologies with that of traditional pedagogical methods such as classroom training, self-study using media like text, broadcast video and audio, and other computer-based approaches.

Burge (1988) 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 rigour? She believed 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.

Warren (1989) makes a clear connection between andragogy and the assumptions N. F. S. Grundtvig makes about adult learners and learning. He indicates that Grundtvig’s assumptions drawn from his collected papers between 1832 and 1855 include: Students should bloom according to their individual capacity and not be crushed into conformity by externally-derived ideals; subject matter is not important, but study should be chosen according to interests and should be geared toward personal growth rather than scholarship;
reciprocal teaching is the ideal learning process engaged through the living word; and, the ultimate reason for learning is enlightenment of life – the grasp of religious/historical/poetic knowledge of one’s world, and thus of one’s self, integrated through both freedom and fellowship.

Knowles (1990) came out with the fourth edition of The Adult Learner book. In it he added the sixth assumption that adults need to know a reason that makes sense to them as to why they should learn some particular thing. This edition was the strongest. In this volume he indicated the crucial importance of equalness, openness, democratic, realness, genuineness, prizing, acceptance, and empathic understanding on the part of the andragogue. The andragogical teacher/facilitator accepts each participant (student) as a person of worth, respects his feelings and ideas, and seeks to build relationships of mutual trust and exposes his own feelings regarding the relationship between the teacher and adult learner.

Carlson (2005) sought to answer the question: What is the nature of the lived experiences of adults in the context of learning a foreign language in a formal learning environment? The theoretical framework of this qualitative study was grounded in Knowles’ andragogy, Tough’s self-directed learning theory, and Mezirow’s perspective transformation theory, as well as in the researches of adult foreign language learning and factors that influence that process. The purpose was to discuss the applicability of andragogy, self-directed learning theory, and perspective transformation theory in the adult foreign language learning process and to create an interdisciplinary discourse among the scholarships of adult education, psychology, and linguistics.

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.

Zhang (1996) told 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 told 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. Further, 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.
Knowles, et al. (1998) published this fifth edition within a few months of Knowles’ death. His collaborators appeared to be more intent on putting forward their own point of view of andragogy than preserving the full scope of the comprehensive perspective for which Knowles was known.

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

Oduaran, et al. (2004) 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. Likewise, Patterson (no date given) conducted 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 participation in in-depth Bible study. In the area of faith and belief, Jorgensen (1998) combines ideas of Knowles, Rogers, Jarvis and Ellen White into a comprehensive andragogical process for engaging Seventh-Day Adventist college students to think through their faith and what it means to them.

Isenberg (2005, 2007) developed and tested a ‘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.

Rostad (1998) outlined the library of the Nordic Folk Academy as a meeting place and an information center specialized in non-formal adult education, adult learning and andragogy. It possesses 20,000 volumes of books and 250 periodicals. It applies andragogy to make certain that people with low education, elderly people or people from sparsely populated areas avoid being marginalized.

In a very practical way, Chesbro and Davis (2002) connect education and health. On the health issue of osteoporosis (significant loss of bone density) he applied andragogy – a process of education – based intervention with adults, especially in this case with older adults.

Knowles, et al. (2005) presented a sixth edition of this work on Knowles’ andragogy, but it was mainly provided for an HRD audience that was interested moving andragogy forward on a track that was somewhat at variance of Knowles’ original work. This, of course, was published eight years after the death of Knowles.
The Board of Registration of real estate brokers & salespersons (2006) 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 over 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. Also, Imel (1989) mainly concentrated on answering the question ‘is teaching adults different’ by answering ‘yes’ and ‘no’ regarding the use of the andragogical model. She said 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 techniques 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.

Haugoy (2003) identified andragogy closely with various models of flexible open classrooms for the independent students, who can control their own learning processes, and have the will, motivation and discipline to continue working. Although these models go back to Gruntvig, they have found their way into Norway, Sweden, Denmark, Lithuania, Hungary, Malta, Spain, Belgium, and the Netherlands. Adding to the strong advocacy for using andragogy with adults in their learning, Wartenberg (1994) shows two seemingly disparate concepts of andragogy (the study of how adults learn) and whole language are compatible and should be considered by planners and implementers of adult literacy programs. Schneider (2003) suggests that andragogy is more suited for non-traditional learners, and pedagogy is more suited for a traditional instructional approach. Further, Stratton (no date) outlines the processes of andragogy and then poses various scenarios for solving adult learning problems with the andragogical perspective. And Penny (1998) addresses the question: What is the measuring stick for andragogy? Rather than moving grades as in pedagogy, andragogy lends itself to moving levels of true understanding. In andragogy, one achieves the objectives set forth. Beyond this, Kail and Cavanaugh (2004) say that lifelong learning is becoming increasingly important, but it should not be approached as merely an extension of earlier educational experiences, but viewed and implemented andragogically with the understanding that learning styles change as people age.

Chan (2010) articulates various applications of andragogy in a wide spectrum of disciplines. He suggests that pedagogy placed the importance on the role of the teacher in education. However, andragogy has been used in numerous countries as well as being adopted in such disciplines as education, medicine, criminal justice and management. In management education andragogy helps prepare people for their working environment, requires practical implementation of skills learned, helps them adapt to the ever-changing workplace, and contributes to their ability to solve problems. In criminal justice programs, the use of andragogy enhances and helps guide the design of learner-centered facilitation,
and develops competencies necessary for professionals in the field. The informality of andragogy encourages the involvement of learners in their learning experiences, in addition to it being timeless and applies to adult education in a multicultural world. Applying andragogy in medicine and doctor consultations helps them listen to patients’ ideas, concerns, expectations, and helps establish understanding, collaboration and improved relationships with patients, thus encouraging interdependency while releasing the vice grip of dependency. Andragogy’s use in police education/learning helps them become self-directed in dealing with community issues such as drug, crime, fear of crime, and urban decay.

Chan (2010) identified instances of andragogy being applied to numerous situations: education, medicine, criminal justice, and management. In addition, the artistic side of andragogy can capture all the thoughts of a shaman, a silent knower, as well as a deer talking in the wood. It offers an alternative to education dominated by the goals and philosophies of an undemocratic state. Doctor consultations are improved by establishing understanding, collaboration, and enhanced relationships with patients. It can also help improve and mature an educator in the way they deal with learners, and may possibly contribute greatly in helping adults to achieve their full level of humaneness.

Lieb (1991) was involved in health services. His take on andragogy is that adults are autonomous and self-directed, have accumulated a foundation of life experiences and knowledge, and are goal-oriented, relevancy-oriented, and practical. He focuses on what motivates adult learners, learning tips for effective instruction in motivation, reinforcement, retention, transference, and insists that we ‘treat learners like adults’. Likewise, Gehring (2000) was concerned about applying principles of andragogy in the correctional setting. His tentative conclusion affirmed 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 principles in their learning activities. Although residents of correctional situations are frequently ‘late bloomers’, they are quite capable of learning and maturing. In Andragogy: Prison literacy – (no author, no date) asserts that to appeal morally-cognitively to adult inmates, in at least a somewhat context and in study of their membership in the human community, is to entail the principles of andragogy (the learning of adults, as opposed to the teaching of children).

Charters (1977) stressed that adult and continuing education relies substantially on the competencies and characteristics of those adult educators who provide leadership in the field. These include: program and other administrators, supervisors, deans, directors, counselors, librarians and other support personnel, teachers, faculty and students of adult education, facilitators of adult learning, research workers, and board members of adult education agencies. Thus, he thought it reasonable to presume that they would practice what they preach and continue their own education, following the principles and practices of andragogy and adult education.
Colan, et al. (2003) asserts that andragogy is placed within the trends and context of adult education, variables affecting adult learning, a toolkit for facilitators, and various learning theories: Action learning, experiential learning, project-based learning, and self-directed learning. Somewhat parallel, Harriman (2004) addresses the essentials of andragogy/adult learning: Definition, questions whether it is different from the learning of children, principles, myths and nineteen [19] methods of how adults learn best online, including the structure and characteristics of each method. Taylor, et al., (2000) in their near 400 page volume, asserts that “...no discussion of approaches to teaching adults would be complete without mention of andragogy...” (p. 359), the approach developed by Knowles, who in their estimation combined it with constructivism, humanistic and cognitivist learning. Added to this, the writer of Andragogy: Adult learning theory (no date) provides andragogical assumptions about the design of learning, principles, characteristics, key successful factors, learner motivation, motivation barriers, curriculum design, and teaching delivery in the classroom.

Cooke (2010) puts forward the idea that if a librarian uses andragogical processes in their library instruction, it will become a useful tool to combat library anxiety and empower adult learners. This she bases on the literature in library science (specifically library instruction) and adult education which aims to arm librarians with a working knowledge of andragogy. Her reason for making this proclamation and considers it very important is that adults are becoming a much larger student demographic at colleges and universities around the world, and the specific needs, characteristics, and anxieties of adult learners are often overlooked. She considers that instruction librarians’ most valuable tool for working with adult learners is bibliographic instruction. Thus, effectively designed Andragogical sessions can alleviate the library anxiety of adult learners and empower them to become better students.

From a very practical standpoint, Carroll (1990) supports the andragogical point of view and vows that adults need to know why and the importance of learning something, to learn experientially, to learn problem-solving, and that they learn best when the topic is of immediate value to them. Knowles’ andragogy is considered by Livingstone (2001) as one theory that stresses the active practical engagement of adult learners in the pursuit of knowledge or cultural change. Mihall and Belletti (1999) provide an example of a one hour training program including objectives, a contrast of children and adults as learners, comparing the assumptions of pedagogy and andragogy, adult learning principles, present training methods advantages and drawbacks with appropriate application, participants giving feedback, and a quiz. As a quite practical ‘wrap-up’, Martin University webmaster (2006) sees andragogy as the place and process where adult learners (average age of 40) are involved in the learning process, and are encouraged to bring their considerable life and work experience into the discussions. Thus, adults often get better jobs, build their self-esteem and serve as role models to family and friends to their great benefit.

Chivers (2007) determined the ways in which postgraduate study in vocational fields supports the development of advanced competences amongst mid-career professionals was based on written communications passing between a limited number of students and one tutor on a single postgraduate study program. The quantified results demonstrated that the
main domain where mid-career professionals on this postgraduate course were most strongly challenged to learn and develop in advanced andragogical competences was the meta-competence domain on the Cheetham and Chivers model. Thus, tutors needed to focus strongly on supporting the very demanding learning leading to the growth of meta-competencies. Given the ready availability of relevant factual information to mid-career professionals in the information age, there is much less need to focus on teaching facts, although supporting the interpretation and application of such factual information by students retains great importance.

Noorie (2004) focuses on the lack of andragogical methodology in the Department of Energy’s training programs at the national and state level for building officials and inspectors who must monitor the Model Energy Code or a state code for maintaining energy efficient buildings. The research evaluated the effect of utilizing an andragogical approach in developing and delivering a revised Michigan energy code training curriculum for building inspectors and officials in Michigan. Most of the andragogical components incorporated in the training curriculum were found to be helpful in increasing the participants’ learning.

Bowman and Plourde (2012) perceive that andragogy has an environment that could be termed as quite unrestrictive. This may or may not be the case. Nonetheless, they advocate that emphasis needs to be on the most effective instructional environment for these teens and young adults with Intellectual Disabilities (ID). It is somewhat difficult to decipher all the intricate nuances of their research, but they at least include, in their andragogical perspective for this population, a combination of such things as: An integrated setting with other learners; support and aid as needed; articulating and outlining the possible choices they have available to them including the consequences that accompany each choice; having things that allow them to have significant control toward independence of a normalized life; orientation toward their learning being lifelong; a vital element of repetition, reinforcement, and practice; offering experiences that are more concrete than creative; and, helping them set learning goals that are relevant, realistic, attainable, purposeful and useful in each of the learner’s life.

Johnson (2000) believed 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. Further, 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 and application of andragogy. Knowles et al. (1998, 2005) added more examples of success in practicing and applying andragogy.

Cloud and Kritsonis (2008) proposed national implications for andragogy: implementing postmodernistic strategies and the ’Ways of Knowing through the Realms of Meaning’ for the improvement of ethical conduct for the improvement of public education by illustrating
the effectiveness of using the tenets described in the 'Ways of Knowing Through the Realms of Meaning' by Kritsonis (2007) to improve ethical conduct. Ten recommendations to implement the 'Ways of Knowing Through the Realms of Meaning' (2007) for the improvement of ethical conduct to enhance the overall effectiveness of the organization include 1) leadership, 2) instruction, 3) behavior management programs, 4) parental involvement, 5) staff development, 6) motivational strategies, 7) establishing climate, 8) establishing vision/ campus improvement plan, 9) extra-curricular activities/ fine arts program, and 10) personal selection. The six fundamental patterns of the realms of meaning outlined by Kritsonis: symbolics, empirics, esthetics, synnoetics, ethics and synoptics offer succinct guidelines regarding improving ethical conduct.

Vodde (2008) found that while a traditional, pedagogical, military model of training may have at one time served the needs and interests of police and society, its applicability and efficacy has been called into question. It was theorized that an andragogical (adult based) instructional methodology will serve as a more effective means for training police recruits. Andragogy, rooted in the belief that adults learn differently than children, bases its practices on the needs, interests, readiness, orientation, experience, and motivation of the adult learner. Considering these needs, andragogy focuses on facilitating a holistic, integrative, and collaborative approach to learning that places a strong emphasis on experiential learning. He concludes with the observation that while anecdotal data suggests that andragogy yields greater outcomes in learning and competencies when compared to a traditional, pedagogical, military model, the absence of empirical data served as an impetus to this study which revealed that an andragogical instructional methodology was more effective.

A trip during the spring of 2008 to the Republic of Mali in Western Africa brought with it the request from the High Council of Collectivities [HCC] of the Federal Government for me to conduct an introductory workshop on andragogy for their 702 members. They will then select a team of members to come to St. Louis, and be engaged deeply in the process of andragogy. Following this they will go back to their country and seek to implement the andragogical approach to conducting the governmental business. All this will be done over a period of a number of years.

Henschke (2009b) outlines and applies andragogy to four major elements of moving in the direction of staying ahead of the curve in developing and managing human capital. This idea seeks to address the importance of minimizing the cost of keeping a workforce up-to-date, while maximizing the timing and energy focused on having the resources available for accomplishing the mission of the corporation. The four major elements include: Elements in preparing and planning for change in developing and managing human capital; required competencies of the change agent in developing and managing human capital; methods for implementing change / making change happen in developing an managing human capital; and, organizational goals and results from changing in developing and managing human capital.

Henschke (2009a) led an adult education (andragogical – the art and science of helping adults learn and the study / research of the same) contribution through the Partners of the
Americas partnership of 43 years between Missouri, USA and Para, Brazil. This spreads over my making six trips to Brazil, in a period of 13 years, conducting 19 different courses all focused on andragogy; with a total of 428 participants from five Brazilian states, and 33 educational, corporate, and service agencies. Total instruction time for all the programs came to 351 hours.

In May, 2009, Henschke went to Belem, Para, Brazil for the seventh time and conducted the following Courses, Seminars and Workshops within a three-week period: 1. Univeridade Federal do Para [UFPA] – Barros Barreto Hospital Educational Division – 24 participants; 2. UFPA Undergraduate and Teachers of The Education and Language Departments – 44 and 34 participants in two different groups Bi-National Center for English Teachers – 30 participants; 3. University of Amazonia [UNAMA] – Undergraduate and Graduate Faculty and Students – 55 participants; 4. SESI – Professional Educators at the Para State Division of the Brazilian National Governmental Education Section Serving Learning and Work Related Needs in Industries, Corporations and Institutions – 275 participants; 5. UNAMA Undergraduate and Graduate Students Seminar Including Some of Their Faculty – 180 participants; and, 6. UFPA Students Who Are Preparing to be English Language Instructors That Are Ready to Complete Their Degree – 15 participants. Thus, the numbers related to adult education activities I have conducted (all focused on andragogy – the art and science of helping adults learn — during seven (7) trips I have made with Partners to Para within a time span of 24 years between 1985 and 2009 follow: 1128 = Adult Educators participated from Brazil in 28 = Workshops, Courses on using adult education methods and techniques, involving with 448 = Volunteer Hours of instruction in all the courses logged in Partners Counts, engaging 21 = Partner States from Brazil and USA represented by those participating from numerous 36 = Educational, Corporate, Industrial, Social Service, Religious, Healthcare, NGO, Commercial, Governmental Agencies and Institutions, on the visits, including preparation and follow-up activities.

The program that I designed and conducted with the folks in Brazil were without exception focused on the methods and techniques of teaching adults. More specifically, the content relates to the principles of adult education (andragogy – the art and science of helping adults learn). At this point, a capsule form of this content could be depicted in two ways which complement each other. The first one is oriented toward five building blocks of teaching teachers of adults how to teach adults. These include: Beliefs and notions about adult learners; perceptions concerning qualities of effective teachers; phases and sequences of the learning process; teaching tips and learning techniques; and, implementing the prepared plan (Henschke, 1987). The second one is about six assumptions and eight process elements. The assumptions are: Adults need to know why they should learn something; adults have a deep need to be self-directing; adults have a greater volume and a different quality of learning experience than youth; adults readiness to learn is tied closely with their needing to know or do something new in their life situation; adults enter into a learning experience with a task-centered orientation to learning; and, adults are motivated more by internal than external motivation. The process elements adults need are: Preparation for the learning; a climate conducive to learning; a structure for mutual
planning; engagement actively in their determining their learning needs; translating their learning needs into objectives; designing a pattern of learning experiences; conducting the learning experiences; and, evaluating the extent to which their objectives have been met (Knowles, 1996; Henschke, et al., 2003).

The eighth doctoral dissertation that focused on Malcolm S. Knowles’ contribution to andragogy was provided by Henry (2009). He undertook the task of an historical analysis of the development of thinking in Knowles’ principle writings. It would seem that one could fairly safely imagine that there will be more doctoral dissertations focusing on Malcolm S. Knowles’ connection with andragogy in the future.

I returned to Belem, Para, Brazil on November 23 until December 5, 2009, for another adult education (andragogy) purpose. I participated in the UNESCO International Civil Society Forum [FISC] Pre-Conference for NGOs, from November 28-30, 2009; and, I participated as a Member of the Official USA/UNESCO Delegation in the UNESCO CONFINTÉA VI [Sixth International World Conference in Adult Education for Governmental Organizations] from December 1-4, 2009. UNESCO conducts these conferences once every 12 years. As in the past, these are working conferences and will produce documents that will be used for the development of adult education in many countries around the world. There were 900 participants at the FISC from 120 countries, and 1150 participants at the CONFINTÉA VI from 144 countries. Of course, I was involved in contributing an andragogical perspective to and within the sessions.

Andragogical concepts have been identified as an educational approach for enhancing the society. The study of Out of Crisis: Reflections of an Iraqi and an American on Advocacy for Andragogy by Bright and Mahdi (2010) pointed out interesting findings. The study reflected on the significance of inclusive education (andragogical theory) in collaboration between American and Arab cultures in meaningful ways, with change, learning and teaching approaches that can influence political and social philosophies of leadership. They mentioned that education is a critical aspect in fostering and securing long term peace and stability. They explored the theoretical principles of andragogy, how it is considered a paradigm, and how it could enhance the exchange of cultural knowledge and friendship. They contended that andragogical adult educational theory, processes, and research are elemental to a vision of a peaceful world and a stabilized Iraq.

From all these examples, I hope it becomes clear that the term andragogy is much more than just a fancy word that many people have backed away from, because they had no previous clarity on the practical use of the concepts. The application of this concept in so many organizational settings, and types of institutions, may have implications for the practice of adult education in the minds of many more adult educators, when light is shed on how it may be used for the benefit of many more of the constituencies we seek to serve in adult education.

Howard (1993) finds a dilemma that emphasizes conflict between the preparing of nurses through a process of andragogy on the one hand, and the product of the accreditation of prior experiential learning (APEL) on the other hand. In examining the costs and benefits
of APEL, it is clear that it encapsulates all the major themes in nursing education. Nonetheless, it is not quick, easy or cheap as a process but requires time and effort from the learner (nurse candidate) to be of value. Consequently, on balance, it is not possible to support the contention that accreditation of prior learning is completely andragogical. There is a balance that needs to be sought between the process and the content in the important area of health care.

Hurt (2007) showed that adults often rely on software training to keep abreast of these changes. Instructor-led software training is frequently used to teach adults new software skills; however there is limited research regarding the best practices in adult computer software training. This study focused on identifying how software trainers use the minimalist approach to training, situated cognition, and andragogy in the software instruction of adult by interview two software trainers employed in the training department of a large organization located in the southern United States. The results of this study found that effective software training can be divided into five components: pretraining; systematic training; minimalist training; situated training; and andragogy. The resulted revealed that the final catagogy- andragogy is the most important mediating variable across this entire process. Both software trainers interviewed showed clear evidence that they used the principles of andragogy throughout the entire process.

Ingalls (1972) provided the first handbook guide to using andragogy in helping adult educators [they called them ‘trainers’ in those days] become more systematic and consistent in their engaging learners in the learning process. This was developed and tested in a branch of the US Government.

Klapan (2001a) pointed out the role of adult education theory and practice (Andragogy) is to create the assumptions that people become aware of latent educational needs and remove obstacles to their fulfillment. Educational needs of adult should be regarded as both human and societal needs. They should motivate and encourage individual development in accordance with social needs. Understanding and respect of adult needs are preconditions of every conceptualization of adult education. Therefore, it is needed to dedicate special attention to the nature of educational needs as the key question of Andragogy.

Klapan (2001b) remarked that conceptualization of educational needs in andragogy should be regarded as the key question of adult education theory and practice. Educational needs of adults should be regarded as both human and societal needs. They should motivate and encourage individual development in accordance with social needs. Understanding and respect of adult needs, adult education theory and practice should create the assumptions that people become aware of latent educational needs and remove obstacles to their fulfillment. The educational needs are the motivator of every act of education.

Knowles (1978) wrote the Andragogy: Adult Learning Theory in Perspective. Several major details were presented such as the historical development of interest in and theories about the process of adult learning, proposing andragogy as a unifying theory for the diverse institutions, clientele and activities of adult education. He also discussed theories
of Eduard Lindememan, American and European philosophies, and contributions from the Journal of Adult Education.

Knowles (1985) presented variety of applications in continuing education for the health professions from chapter 5 of “Andragogy in Action”. This article described a pilot project for physicians at the University of Southern California, in which the central theme is self-directed learning. Then follow three selections focused on the continuing education of nurses, including a policy statement and guidelines for self-directed continuing education in nursing.

Lai (1995) indicated that each component of andragogical philosophy holds important insights for adult Christian education. Thus, Christian adult education needs to consider more of the principles of andragogy. Andragogy, the science of adult learning, is based on the belief that the ways in which adults and children learn differ from five standpoints: self-concept, life experience, readiness to learn, time perspective, and orientation to learning. The works of Walter Ong, Malcolm Knowles, and Paulo Freire present an alternative, more participative modality through which educators and clergy can transmit theological processes and principles. A model process called a praxis cycle has been developed based on principles proposed by Ong, Knowles, and Freire and has been suggested as a model for delivering emancipatory education for Christian adults. According to the model, teachers/facilitators use dialogue to help students/disciples develop the competencies required to become biblically literate, critically conscious, and actively involved Christian citizens.

Larson (circa, 2012) at the Thomas M. Cooley Law School, Michigan State University, takes a bold step and proposes ‘teaching out of the box’, which for him means using the principles of andragogy (the six assumptions and eight elements in the process as espoused by Malcolm S. Knowles) as the way of carrying this forward. This seems unusual but he suggests that in today’s world, law students who will ultimately be lawyers in the real, rough-and-tumble, world will find it beneficial in that they will need to interact with people facing real problems / situations in the ‘real-world’ instead of just thinking that all they have to do is to feed people information from a law textbook.

Lemieux, Boutin and Riendeau (2007) revealed that there is an urgent need to develop a model of partnership between traditional universities and Universities of the Third Age, whose function is quite distinct from established universities' traditional role in teaching, research, and community services, ensuring better training for educators working with senior citizens. Determining the roles of teachers, supervisors, and students will facilitate greater cooperation, and allow for a linkage of Universities of the Third Age (U3A) with traditional faculties of education, as well as further refinement of the theoretical and practical professional andragogical training of future educators of older people.

LeNoue et al. (2011) vigorously and energetically assert their point of view regarding, “A world increasingly characterized by high digital connectivity and a need for life-long, demand-driven learning calls for the development of andragogies specialized to DML (digitally mediated learning) environments” (p. 6). They go on to make clear that in this
kind of situation instructors would best assume the role of guide, context provider, quality controller, and facilitator, thus encouraging learners to take responsibility for their own learning process in supporting the meeting of needs and accomplishment of personal goals.

Andragogy is applied for several purposes with different target groups. Lewis (1994) studied the use of the andragogy teaching and learning processes with African American adults at Martin University. He explained some of the difficulties encountered in teaching African American adults at Martin University such poorly prepared for higher education. Language differences between white Americans and African Americans, poor measures of intelligence. Also defined andragogy and he meaning of black andragogy that support and promote the development of adult learners.

Matai & Matai (2009) clarify that learning of how to acquire knowledge has been the main objective of conventional education, and in a minor fashion, the learning of how to realize. Cooperative Education is a new model that presents an alternation of Academic Periods at the university and work term periods. They label this as Andragogy. They assert that andragogy, which in Greek means, ‘man conduct science’ is based on a principle that many problems originated in higher education result from not considering the age of the group of students which is above the one to whom the pedagogy appropriated for is applied. It appears that if this perspective of problem-posing is espoused, andragogy may be effectively used as a way to address these situations and adopt the perspective of problem-solving. They apply this directly to university education and seek to restructure what transpires in university education to focus on dealing with the total society.

Reggy-Mamo (2008) applied an experiential approach to intercultural education at Beulah Heights University, a predominately African-American institution, specializes in reaching the adult student of average age 38. Most of these students have 9-to-5 jobs as well as family and church responsibilities; there are pastors, teachers, church administrators, health care workers, salespersons, bank tellers, security officers, postal workers, morticians, and so forth. The study indicated that as adults return to the classroom, they are most likely to succeed in courses that andragogically validate their work-based prior learning and competencies. Thus, the instructor's challenge has been to carefully develop an intercultural communication course designed specifically for the adult learners with the view to getting them actively involved experientially, making use of learning styles and the rich backgrounds that each of them brings to the classroom. At the beginning of the course, various interactive experiences are used to help students see themselves as a product of their own cultural environment. This is based on the assumption that knowing one's own culture makes a person more able to understand people from other cultures. As the course progresses, additional interactive experiences including cultural scenarios, case studies, simulation games, and mock visits are introduced to provide a context in which students can learn to apply intercultural communication principles, theories, and strategies appropriately when relating to people of different cultures, worldviews, and value systems.

Mariam Mercado (circa, 2012) Director of the AIU Virtual High School, provides their perspective on how andragogy operates in their educational system. Their Philosophy is: We believe that individuals have the ability to use their own potential to manage their
personal, global and cultural development. However, in order to expand that ability, students need to attain a sense of equilibrium, initiative and self-awareness. Their Vision is: The empowerment of the human race towards the individual’s achievement of self-initiative and control. Their Mission is: to be a one of a kind learning institution concerned about generating educational alternatives that will lead to a more efficient individual; empowering learners and helping them take advantage of the enormous array of available resources in order to eliminate the current range of unawareness, obsoleteness and limitations.

Meyer (1991) indicated that enhancing the self-concept and self-esteem of adult students in community colleges fosters and increases their academic success and life chances. Besides the study describes issues and defines terms, chapter II provides a literature review covering the history, description, philosophy, purpose, and mission of community colleges; and theories about adult development, psychosocial development, and principles related to andragogy, as well as the seminar modules: (1) The Postsecondary Educational Setting; (2) Nontraditional, Adult Student; (3) Adult Development; (4) Self-Concept/Self-Esteem; (5) Associated Dimensions; (6) Learning Environment; and (7) Andragogy.

Meyer (1977) indicated that Andragogy is one of the very effective way of assuring the competent and capable aging adult learners. Andragogy is shown to be a preretirement education process and the task-oriented training model of preretirement education.

Moberg (2006) pointed out that many methods and principles apply well to both pedagogy and andragogy. An obvious example, Skinner’s work on reward and consequences to modify behavior works with students of all ages (Boshier, 2006). Both children and adults are motivated by good grades and avoid bad grades. Despite his flaws and detractors, Knowles’ central point is well taken; adults are different from children, they learn differently, and educators do well to teach adults differently.

O’Sullivan, D. (2008) argued that adult educators should not be outside the remit of their own theorising. This is situated in terms of contemporary debates about the possibility of truth and certainty in understanding and changing the world. Maintaining the vision of adult education/andragogy as a transformative force in society while respecting the integrity of our students as co-participants in this process is identified as a pivotal challenge. Constraints on engaging with this challenge are analysed and further resources for turning theory on ourselves are suggested.

Ozuah (2005) in addressing the origins of pedagogy and andragogy, contends that andragogy is a more appropriate educational paradigm to strive for in medical education schools. However, where the learners, albeit adults, have no relevant prior experiences, it is appropriate to begin helping them learn from their dependence, but moving them toward self-directedness. Thus, five main learning theories have been described in the educational literature and may serve as useful vehicles for understanding some aspects of adult learning: behavioral theory, cognitive theory, constructivist theory, humanistic theory, and developmental theory. The goal of each learning theory follows: a) behavioral theory seeks change in observable behavior; b) cognitive theory seeks usable knowledge and
problem-solving know-how; c) constructivist theory seeks a process of knowledge acquisition and shared understanding, d) developmental theory seeks achievement by each learning of his or her maximum potential, and, e) humanistic theory seeks to provide a nourishing and encouraging environment for fostering and helping the natural tendency of people to flourish in learning. Consequently, a summary of adult learning principles are that adults learn best when:

- they want or need to learn something,
- in a non-threatening environment,
- their individual style needs are met,
- their previous experience is valued and utilized,
- there are opportunities for them to have control over the learning process,
- there is active cognitive and psychomotor participation in the process,
- sufficient time is provided for assimilation of new information,
- there is an opportunity to practice and apply what they have learned,
- there is a focus on relevant problems and practical applications of concepts, and,
- feedback is provided to assess progress towards their goals.

Ravn (2007) called attention to the fact that conferences for professionals rely on massive one-way communication and hence produce little learning for delegates—and to introduce an alternative, the ‘learning conference’, that involves delegates in fun and productive andragogical learning processes. Six learning processes for use during conferences are described: individual reflection; the buzz dyad; 'You have won two consultants, free of charge'; facilitated group work; the knowledge exchange; and lunch with gaffer tape. The study introduced the learning theory and learning techniques into an educational context which has resisted innovation, the professional conference as a forum for mutual inspiration and human co-flourishing. It offers alternatives to wall-to-wall lecturing: some simple processes for involving delegates so as to help them derive inspiration from the material presented and from each other.

Redden (2003) is a bit skeptical of those who are quite unquestioning about Andragogy. She emphasizes that by using some ideas from andragogy cautiously, all of us can make our online or classroom courses more attuned to our learners and therefore more successful.

Risley (2012a) carries the andragogical approach one step farther in describing the process of having the responsibility for developing, designing and implementing her doctoral comprehensive examination in andragogy. In addition, she provides her reflections on the process and analyzes the experience through the lens of Knowles’ six andragogical assumptions and eight process elements. This, in turn, is articulated as what could be considered a ‘best practice’ within the field of adult education as an illustration of research-to-practice connection.

Risley and Petroff (2012) give expression to their experience of deciding to take responsibility for implementing their andragogical approach to fulfilling the requirements of a doctoral research course in statistics. This was especially interesting and a novel
undertaking in light of the fact that on the first night of class the faculty member assigned seats to the ‘doctoral students’ in that course in a way that there would be one seat between each student and another. She indicated that she was having this seating arrangement because she knew that if she let them sit wherever they chose, they would ‘cheat’. She also informed them that in order to make doubly certain that the students could not cheat in the course, she had made up different quizzes and tests for each one of them. The doctoral students detected on the teacher’s part, that she was going to provide a psychological climate that lacked mutual respect, collaboration, mutual trust, support, openness, authenticity, pleasure, fun, and humanness. Although she did this throughout the course, the doctoral students trusted themselves and each other and learned statistics.

Ronan (1980) developed a model program based on Andragogy to find ways to bring illiterate and undereducated adults into Massachusetts adult education programs. Program activities were determined by the goals and objectives generated by the needs assessment of all participants (young adults) from schools, courts, welfare offices, and veterans and civic groups, including academic and life skills, occupational assessment and vocational training, and job placement. The study employed a summer component and pilot program, and an independent evaluator. Research indicated that active cooperation between agencies and local programs is a key factor in encouraging participation in adult educational programs and that occupational training and job placement should become integral components of existing programs.

Roberson (2002) mentioned that adult education (Andragogy) can incorporate with Travel by providing the impetus for education in a new school of travel. Andragogy seems more appropriate to learning in travel than the typical pedagogy represented in mass tourism. The study indicated that interaction with locals, preparation for the trip, having expert study guides, self-directed planning, length of stay, journaling, and discussion have the potential to foster education and meaningful travel. These nicely coincide with the philosophy of andragogy, especially mutual planning, an environment for participative learning, and discussing and chronicling one's experiences.

Shannon (2003) asserts that adult learning theory as espoused by Malcolm Knowles has become the basis for many educational strategies in medicine, but there are dangers in uncritically accepting theories without evaluating the evidence. The major areas of research on adult learning focus on self-directed learning, critical reflection, experiential learning, distance learning, and learning how to learn. As if all this is not enough, there is a multitude of learning theories for educators to make use of. The bottom line is that the more we understand about physicians as learners – what motivates them, what their needs are, what satisfies them, what helps them learning and change – the more effective our Continuing Medical Education (CME) efforts will be.

Tannehill (2009) provides one of the broadest and most encompassing studies of using andragogy for educating and servicing adult learners in post-secondary institutions. Data were gathered from 85 different institutions. Five major questions guiding this study focused on whether and to what extent (post-secondary) institutions, utilize the principles of andragogy to educate its adult learners; provide specialized support for the adult learners
in services, program delivery options, and awarding credit for prior non-traditional learning; apply best practices, as defined by andragogy, for adult learners; and, the most common principles and services, as defined by andragogy, that were utilized by institutions as categorized by the Carnegie classification. The results from these 85 higher education institutions demonstrated the importance of increased attention to andragogy and its impact on the student experience.

Terry (1988) applied andragogy methods of learning and teaching to foster moral development of adults within the institutional church. The results showed that moral development is a part of the healthy adult personality that continues throughout one's life. Churches, as societal institutions, play a vital role in the development of moral reasoning in adults and religious educators can foster it through andragogical methods of learning and teaching.


van Gent (1997) presented a review of the book 'Lessons in Beauty: Art and Adult Education'. This book explored the connections between art and education and, specifically, the links among the art of painting, the training of artists, and the education of adults. Five chapters discuss moralization, professionalization, aestheticization, musealization, and indoctrination. "Instruction and Diversion: Moral Lessons in Dutch Art" concentrates on the ethical education of adults with the help of techniques that belong to the world of the visual arts. 'Painters and Andragogues: Two Cases of Professionalization' focuses on the vocational training of painters. 'Art to the People: Ruskin and Morris in the Netherlands’ discusses the following the social, cultural, and educational climate in Great Britain after the Industrial Revolution; the ideas and activities of Ruskin and Morris; and their influence on leading figures in the multifaceted area of Dutch popular education. 'The Museum as Educator of Adults: Commercial Success and Social Failure’ examines the past of museums and results of museum education in the Netherlands. 'A Genealogy of Cultural Education: In Search of Discipline’ covers the following topics: successive practices with regard to a broadly defined 'cultural education' of adults; how two processes of professionalization took place, one in the field of strict 'art education', the other in the wider area of 'sociocultural work'; and the search for links between art and discipline using quotations from 'discursive networks’ closely connected with the past of Dutch cultural education.

Vatcharasirisook (2011) used the Modified Instructional Perspectives Inventory (MIPI), an Andragogical Assessment Instrument with seven factors, to examine employee job satisfaction and their desire to stay with the corporation where they worked. The factors included Supervisor empathy with subordinates, supervisor trust of subordinates, planning and delivery of instruction, accommodating subordinate uniqueness, supervisor insensitivity toward subordinates, subordinate-centered learning process, and supervisor-centered learning process. The study was based on the belief that the seven factors which encompassed beliefs, feelings, and behaviors of supervisors in helping subordinates learn,
based on andragogical principles of learning, are not only methods to help subordinates learn, but techniques to increase employee’s satisfaction and intention to remain with the company as well. Five hundred and thirteen Thai employees evenly distributed between banks, hospitals, and hotels. Three of the seven factors had either a direct or indirect influence upon employee job satisfaction and the employee’s intention to remain with the company. Supervisor empathy with subordinates, and supervisor trust of subordinates were found to be indirect predictors of employee’s intention to stay with the company through employee’s job satisfaction. Supervisor insensitivity toward subordinates was a direct predictor of employee desire to leave the company.

Wright (1985) described Andragogy and vocational education based on his experience as an instructor at the China Enterprise Management Training Center for four months. He presented a profile of the trainees, characteristics of the Chinese student, and a teaching methodology (discussing the interpreter, class monitor, faculty, classroom conditions and techniques, reading and evaluation).

Zwikael and Gonen (2007) indicated that games exemplifying andragogy are an effective teaching and classroom training tool, since they allow students to practice real-life events. In the area of project management, most games focus on the planning phase of a project. The study described a new game, called PEG--Project Execution Game that focus on real world problems during the projects execution. It was proved that a game is an effective tool for teaching the unstructured area of project execution, and gives the student a taste of real-life experience. The Project Execution Game can be implemented with students in project management training sessions. With this game, the students gain more practical relevant experience, as compared to alternative teaching techniques. Furthermore, the game can be used in organizational training to improve project managers' techniques and experience in reacting to unexpected events. Finally, it can also be used with project managers practicing before the actual execution of a big project.

Bowman & Plourde (2011) say that teens and young adults with Intellectual Disabilities (ID) meet the criteria of teen and adult learners chronologically, but may be deficient in many other areas of teen and adult learning. The spectrum of intellectual and adaptive capabilities among teens and adults with ID may be vast, with each individual being unique. Nonetheless, there are specific teaching and learning approaches that have been proven to be effective when working with teens and adults with ID. Best Andragogical Practices include: understanding and working with learning styles; spending the time that is vital for practice of repetition for memory retention; emphasizing aspects of their strength is in concrete experience; making provision for their short attention spans, helping them set goals; adapting materials to their needs; providing an atmosphere conducive to learning; and, pressing for learning improvement by prompting, modeling, scaffolding, and task analysis. Of utmost importance is that with them, as well as any learners, developing strong and close relationships once again affirms that ‘it is the relationship that teaches’.

This author (2012) cites Henschke’s (2000) andragogy website www.umsl.edu/~henschke and garners a road map for mentoring which is very andragogical, which works equally in the face-to-face situation as well as computer-mediated communication because of a strong
mentor/mentee relationship. The following phases are in the road map: relating/trusting (early), informing/advising (middle), facilitating/introducing alternatives and confronting/challenging (later), and modeling/motivating and encouraging/visioning (last). Mentoring is a transactional/transformational process, and it always results in participants learning something new – knowledge, understanding, skill, attitude, value, or interest; and, these new competencies can be transformations.

Beard (2013) studied the lived experiences of healthcare clinicians who participate in simulated ‘mock-codes’, thus dealing with crises in the healthcare setting. She used the andragogical assumptions and process elements of Knowles’ (1995) andragogy model as a lens to assess the clinicians approach to learning and conducting the mock code learning technique or intervention. Knowles’s definition of andragogy is the art and science of helping adults learn. His andragogical assumptions about adult learners include their need for: Knowing why they should learn something, self-directedness in learning, their experience being considered a resource for learning, their learning to be attached to their life tasks and roles, immediate application of their learning, and their learning motivation to be more internal than external. Knowles’s process elements for adults’ learning includes: Preparation, climate conducive to learning, mutual planning of the learning, self-diagnosis of their learning needs, learning objectives coming from their needs, learning design incorporates a variety of active techniques, active engagement in the learning activities, and self-evaluation of the learning. Clinicians began with a lack of understanding of principles of adult learning, varied in their instructional approach, had no understanding of how participants perceive the experience of ‘mock-codes’. Active engagement in the simulation experience of clinicians participating in and facilitating the ‘mock-code’ experience found their strengths to be that they are internally motivated, self-directed, and goal-oriented. Their weaknesses were their lack of understanding the application of assumptions to the actual practice of facilitating mock code simulations, especially in the elements of preparing the learners, setting and maintaining a climate conducive to adult learning, collaboratively or mutually planning the learning, and helping clinicians evaluate their learning.

Sims (2013) took an andragogical approach in conducting this phenomenological study to explore the burnout experiences among teachers and the ways they cope with the adverse conditions. Using in-depth interviews, the researcher was able to understand the personal meanings, expressed opinions, feelings, points of view, and other detailed descriptions of the participants. Administration issues, administrative workload, negative teacher/student relationships, and lack of student effort were themes associated with emotional exhaustion and depersonalization effecting teaching performance. In contrast, mental efficiencies, interpersonal relationships, and outside resources were themes associated with the coping activities/strategies of the participants, thus possibly minimizing depersonalization.

Beard (2014) investigated the andragogical leadership competencies Mary Sibley enacted as she founded and established Lindenwood University (originally named Lindenwood College for Girls) in 1827. Little has been written about Mary Easton Sibley, the founder of Lindenwood University in St. Charles, Missouri, which until its acceptance of men in the mid-20th century was the oldest women’s college west of the Mississippi River and
stands today, a thriving private coeducational institution, as the second oldest college west of that demarcation. This dearth of literature seemed unwarranted since Sibley was as progressive as her more famous East Coast contemporaries (Mary Lyon, Catharine Beecher, et al). All were motivated by the socially progressive Protestant evangelical movement known as the Second Great Awakening and by the founders’ quest for an enlightened citizenry. Sibley particularly embraced the founders’ notions of a useful, practical education. She was a strong-willed and generally admirable educational leader who founded a long-lived college during a cholera outbreak and in the face of criticism (for teaching young women to be independent and also for educating slaves at the St. Charles Sabbath School for Africans). This study shed new light on Sibley’s educational leadership through a comparative analysis using her spiritual journal and a book titled *Leaders: Strategies for Taking Charge* (1985, 2007) by USC professors emeriti Warren Bennis and Burt Nanus. The researcher examined whether evidence of Bennis and Nanus’ four leadership strategies or competencies could be found in Sibley’s journal, which she wrote primarily during the founding of Lindenwood (circa 1831), the rationale being that if contemporary leadership theory was evidenced nearly 200 years ago, it would likely be relevant 200 years hence, and therefore could be considered valid for today’s educational leaders. The analysis required the creation of decontextualized researcher statements that enabled the coding of an historical document using contemporary theory. The study showed strong evidence of most of the researcher’s statements (e.g., Leaders are singularly focused on their agenda and produce results, Leaders know what they want and communicate that clearly to others, Leaders challenge others to act, etc.) There was moderate evidence of competencies involving an awareness of strengths and weaknesses, and evidence of social scaffolding was weak, largely because of the nascent state of the college during the period studied.

Henschke (2014, Forthcoming) addresses a curriculum definition, especially as it relates to preparing teachers to be successful in working with adult learners. The main thrust is to clearly articulate some of the major elements needed to help the art and science of helping adults learn idea and practice of that process be as consistent/congruent as feasible. Reciprocity among empathy, trust, and sensitivity are considered to be crucial in the teaching and learning exchange. Competence and experience in andragogy is important even to the extent of selecting and using various techniques and methods in the learning experience, whether used with learners in higher-order thinking or used with lower-level learners. Techniques the author has found helpful are: mixing a lecture with discussion of questions raised by learners in response to content of the lecture; encouraging and giving learners opportunity to take more responsibility for their learning, thus becoming more self-directed; varying one’s approach for accommodating different learning styles each learner possesses; looking at a perspective of learning in various areas/pillars of life – being, knowing, doing, living together, changing, and developing sustainability. A true story is provided illustrating a principle of andragogy – doing in practice the same thing one believes and says.

Henschke (2015, Forthcoming) confidently declares that Malcolm S. Knowles stands as a giant catalyst at the juncture – past, present, and future – of andragogy (the art and science of helping adults learn) and self-directed learning (taking increased responsibility for one’s
learning) within the field of Adult Education and Human Resource Development. *Note: Malcolm considered andragogy to be his overarching concept of adult learning and self-directed learning as the strategy for implementing andragogy. I began learning with Malcolm more than 47 years ago at this writing in 2014, and in many ways have continued even to the present day. I anticipate that my learning with him will continue for many years to come. Though decades have passed, I can recall my first learning experiences with Malcolm S. Knowles as if it occurred yesterday. (He always liked everyone to call him Malcolm.) I remain captivated by each of my experiences of learning with Malcolm for a variety of compelling reasons. For more than 50 years until his death in 1997, Malcolm devoted his personal and professional life to exemplifying the theory and practice of andragogy and self-directed learning: as a speaker to audiences of 10,000 or less; as a university professor with a multiplicity of adult learners (his students); as a consultant to numerous institutions and corporations in countries around the world; as a writer of 19 books and 225 articles; and, as a very caring human being for any person with whom he happened to be meeting. I observed him being sought out at national conferences, studied with him in my doctoral program, and worked with him in various educational settings. Malcolm was just Malcolm through and through. Eight successfully defended doctoral dissertations have been written about various aspects of Malcolm’s work in andragogy. I believe Dusan Savicevic, a University Professor from Belgrade (from whom Malcolm received the concept of andragogy) is right when he said that the world-wide history of andragogy will put Knowles on a meritorious place in the development of this scientific discipline. From this point Henschke proceeds with his introduction of Knowles’ SDL Book.

**Theory, Research, and Definition of Andragogy**

Rosenstock-Huessy (1925) posed andragogy as the only method for the German people and Germany, despirited and degenerated in 1918 after World War I, to regenerate themselves and their country. He suggested that all adult education (andragogy), if it is to achieve anything original that shapes man, which arises from the depths of time would have to proceed from the suffering which the lost war brought them. Historical thinking is a fundamental dimension of andragogy, in that past events are to be analyzed for what can be learned from them so that past failures might not be repeated. In this way the past becomes unified with the present and future – history past becomes unified with present knowledge and action for moving us toward the future. In andragogy, theory becomes practical deed; in the responsible word, in the crucible of necessity, however, practical deeds become the stuff of theory. Andragogy is not merely “better” as an education method for this purpose it is a necessity.

Additionally, 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.
Knowles (1968a) presented his first published iteration of andragogy [a new label and a new approach] as being a major technological breakthrough in the field of adult education. For him this breakthrough was the conceptualization that adults learn differently from children. This breakthrough came as a result of a Yugoslavian adult educator introducing him to the term with Knowles attaching his own special philosophy and meaning.

Hadley (1975) developed an instrument of sixty 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.

Martin (1986) sets out the general theory of andragogy, with criticisms and reformulations described and explored, with the disciplinary boundaries pushed much wider by the end of the paper. He includes: The origin and formulation of Malcolm Knowles’ Theory of Andragogy, some criticisms of Knowles’ Theory, Defenses of the Theory of Andragogy in terms of Adult Development and in Terms of Social Psychology, with a Philosophical and Political Defense of the theory of andragogy. Some think this is a useful review of theories of adult learning, centered on the concept of andragogy, and producing a ‘state of the art’ report at the mid-1980s. It is detailed sufficiently for the general reader who wishes to know the area, and a helpful introduction to the serious enquirer who may seek to undertake more exacting study. As Martin points out, if the education of adults is to achieve its rightful, central and secure place in the education service ‘a coherent theoretical base’ is necessary; With the expectation that education and training provision for adults must increase, this a timely contribution to a developing area.

Likewise, Henschke (1989) developed an andragogical assessment instrument entitled, Instructional Perspectives Inventory (IPI) that included the following seven dimensions: Teacher empathy with learners, teacher trust of learners, planning and delivery of instruction, accomodating learner uniqueness, teacher insensitivity toward learners, learner-centered learning processes, and teacher-centered learning processes. The central and major core of this instrument was originally a focus on the teacher trust of learners. However, Stanton (2005) related the concepts with the concepts in readiness for self-directed learning, and there was not only congruence between the two, but also the IPI was validated as an almost perfect ‘bell-shaped’ measurement of an andragogical facilitator.

Adam and Aker (Eds.) (1982) examined factors in adult learning and instruction by exploring psychological factors in adult learning and instruction, and physiological factors. The authors discussed learning and instruction as processes, the stages and conditions of learning and instruction, remembering and forgetting, and tip for designing and managing instruction, and include a list of references. The physiological factors include the aging process, vision, hearing, learning, and performance (psychomotor skills and verbal communication).
The Nottingham Andragogy Group (1983) addressed 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 on 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. The perspective is clearly driven by research in adult development through life phases. They also reported a belief that Alexander Kapp, a German teacher, first used the word andragogy in 1833 to describe the educational theory of Plato.

Sopher (2003) asserted that Malcolm Knowles taught her more about adult education that even he realized. Her experience of learning with him in 1991 was a magical experience that she still recalled in 2003 as if it happened yesterday. For her, experiencing Knowles ‘the person’ and Knowles ‘the facilitator of adult learning’ was seamless – his modeling every aspect of what he taught and wrote, a process that was consistent, authentic and practical. In order to understand his method, one would need to experience it directly – it was like his facilitation of participants’ learning was done throughout any given day as with the grace of a skilled conductor directing an orchestra. Her thought was that the main reason Malcolm’s hierarchy of andragogy did not appear in his publications is that it would challenging for anyone to separate him personally and professionally. Moreover, it would have been more challenging for Knowles to reflect on details of his practice that are tightly intertwined to him on a personal level.

Toman (2005) intended to help inform decisions of resource professionals who must address the increasing severity of wildfire impacts. These professionals must communicate fire management messages, policy initiatives, and information in collaboration with outside stakeholders, including citizens of forest communities. Agency personnel have limited resources for outreach programs and must make informed choices regarding allocating time and efforts appropriately. Principles of adult learning theory (based on the concept of andragogy) are utilized to explore citizen evaluations of outreach methods in Arizona, Colorado, Oregon, and Utah. Findings suggest interactive formats were more effective than methods consisting of one-way information flows.

Baskas (2011) examined Knowles’ theory of andragogy and his six assumptions of how adults learn: They need to know a reason for learning something that makes sense to them; the concept of a learner is increasingly self-directing; the learner’s experience is a rich resource for learning by self and others; their readiness to learn develops from life tasks and problems; the orientation to learning is toward immediate application; and motivation is mostly by internal incentives and curiosity. He also provided evidence to support two of Knowles’ assumptions based on the theory of andragogy. These had to do with the role of experience, and motivation to learn. As no single theory explains how adults learn, it can best be assumed that adults learn through the accumulation of formal and informal education, and lifelong experiences. Results also revealed strong connections between Knowles’ six assumptions and learning methods of adult learners.
Blanchard, et al (2011), draw a clear and specific connection between andragogy and medical education. Given the amount of time residents teach, it is important to train them in adult learning principles and techniques. To do this, attending faculty must also be facile with learning theory, but faculty development programs often focus on teaching techniques rather than underlying constructs. Where residents’ teaching does not incorporate adult learning tenets, it may very well cause role conflict with junior learners. Blanchard, et al advance that teaching skills should be more clearly conceptualized for faculty and residents and incorporated into their respective curricula. It is also important for residents to explore their own assumptions about teaching and learning that affect their residents as teachers’ role.

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. However, Schugurensky (2005) argued that Knowles’ ideas about andragogy did not offer anything new to the field of adult education even though it made the list of those things chosen as a ‘selected moment of the 20th century’. However, he did acknowledge that Knowles’ theory has an impact on the field of education. Nevertheless, the argument he presented shows a woeful lack of understanding of the scope of andragogy in general and Knowles’ perspective in particular.

By contrast, Zmeyov (1994) clearly stated that the most important trend in adult education in Russia is the application and further development of Knowles’ (1970, 1980) theory of adult learning, or andragogy, in the process of education. Zmeyov further stated 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  (p. 36 & 37).

On the other hand, 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.

Challis (1996) submits that the current move towards outcomes or competence-based qualifications within the education and training arenas begs many questions about the
processes of learning as well as the measurable results. Her paper explores how far the principles embedded in the andragogic approach to adult learning through the accreditation of prior learning are at odds with a qualification system predicated on the measurement of performance. It proposes a model of student-controlled reflection that can lead to the identification of a range of prior achievements which may then form the basis for claiming credit, thus creating a bridge between two apparently opposed frameworks.

Henschke (1999) explored the gap between ‘learning’ and ‘performance’ within the andragogy concept relating to Adult Education and Human Resource Development [HRD]. Considering some of the literature in both areas within the Academy of Human Resource Development led him to indicate that the two distinct terms together are: different sides of the ‘same coin’; and their close relationship is the key to HRD.

In more recent years, however, some educators have begun to question this "split" between pedagogy and andragogy, preferring to view learning as a continuum rather than a dichotomy. Davenport and Davenport (1984) cited numerous references for and against the use of the term or theory of andragogy and summarized various schools of thought on its use. The term andragogy, often defined as the art and science of helping adults learn, has gained wide recognition during the last decade or so. Although used in the early 19th century, the term was popularized in this country by Malcolm Knowles in his book, The Modern Practice of Adult Education: Andragogy Versus Pedagogy (1970). The book was aimed at exploring a comprehensive theory that will give coherence, consistency and technological direction to adult education practice. Knowles' assumptions about adult and child learning were almost uncritically accepted and integrated into adult education practice. Continuing education for social workers was no exception, especially with the influence of Lindeman at the Columbia University School of Social Work. However, the use of the term is debatable and should serve as a caution to those continuing educators who blithely and routinely call for andragogical approaches to education and training. Andragogy may indeed have a role in continuing social work education, but its use appears limited to specific subjects, populations, and settings. It is no educational panacea, and its uncritical use is not in the best interests of educators, trainers, or learners.

Conner (1996) depicted andragogy’s major focus as understanding and adjusting our experiences and beliefs in relationship with the world we face on a daily basis. She questioned how we can expect to analyze and synthesize the extensive information with which we come in contact if we allow others to determine what should be learned, how it will be learned, and when it will be learned. She insisted that in order to succeed, we must unlearn our teacher-reliance. Further, Hoods Woods (1998) perceived 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.

Boechler, Foth and Watchorn (2007) determined the optimal andragogical uses of educational hypermedia for older adult learners, it is prudent to conduct research focusing on this particular participant group. However, the value of research findings, especially in
cross-sectional studies, may depend on attentiveness towards the specific needs of older adults. Ignoring these needs may lead to an underestimation of the capacity of older adults to use hypermedia applications for learning and communication. This paper also described the necessary changes in sampling, procedures, and protocols adopted to accommodate a sample of older adults in the testing of educational technology.

Drinkard and Henschke (2004) found nurse educators who have a doctoral degree in other than nursing (adult education to be specific) as more trusting of their learners in and andragogical classroom than nurse educators who have a doctoral degree in nursing. This was largely due to the lack of anything regarding how to facilitate the learning of adults in the nursing doctoral program, as contrasted with facilitation the learning of adults being a very prominent part of the adult education doctoral programs where andragogy is actively practiced.

Andragogy, a well developed science in Europe, is gaining greater acceptance in the United States. Daly (1980) pointed out that several recent theorists and researchers have reflected on the failure of ‘traditional’ secondary schools in relationship to the concept of the adolescent as an evolving adult capable of engaging the andragogical process (a concept supported by Piaget's theory of adolescent learning). Others, noting the UNESCO conceptual model of lifelong learning with its basis in Dewey and andragogical theory, have identified ‘untenable’ assumptions underlying education systems; these may be viewed as largely characteristics of the traditional pedagogical model. Understanding of andragogical theory, the study elaborated the distinction between andragogy (the art and science of helping adults learn) and pedagogy (the art and science of teaching children) that andragogical learning is self-directed while pedagogical is teacher-directed. The learner's experience is seen as a rich resource for learning, readiness develops from life tasks and problems (not dependent on maturation levels), orientation is task or problem-centered (rather than concept-centered), and motivation is based on internal incentives (rather than external rewards). Besides he mentioned that andragogy has its theoretical and philosophical bases in the work of John Dewey, E. H. Erikson, Jerome Bruner, Abraham Maslow, and Carl Rogers.

Ray and Chu (2005) examined the teaching styles and the student preferences for teaching styles of adult educators in Taiwan. The findings indicated that although the instructors tended toward the andragogical, there was still a significant difference between the teaching styles practiced and the students’ preference for teaching style. The researchers surmised that Eastern cultural influence contributes to this gap.

Glancy and Isenberg (2011) propose an expanded version of something very constructive that may happen as E-Learning [online learning] comes into prominence, and has increased rapidly in higher education. Early versions of online learning attempted to mirror the traditional face-to-face (FtF) classroom with generally less than favorable results. However, they propose a conceptual e-learning framework based on andragogy theory, transformative learning theory, and media synchronicity theory. Andragogy theory specifically addresses the adult learner as naturally self-directed. Transformative learning theory addresses the adult learner’s desire for new meaning that leads to a new perspective.
Media synchronicity theory addresses the best media for conveyance and convergence in communication of new information and knowledge creation. The conceptual e-learning framework support the self-directed adult learner and lifelong learning. E-learning based on this framework has the potential to out-perform not only current online platforms such as Blackboard and WebCT, but also traditional FtF learning for adult education and with better and different outcomes. It also gives a direction that may potentially improve FtF learning through the incorporation of the conceptual e-learning framework in the classroom.

Taylor (1986) offered a very strong and articulate research based model, for the andragogical process of transition into learning for self-direction in the classroom. This is from the learners’ point of view and has eight stations on a cycle of what may be characterized as a cultural journey. The process alternates between phases and transitions. The critical points are: (1) Equilibrium phase; (2) disconfirmation transition; (3) disorientation phase; (4) naming the problem transition; (5) exploration phase; (6) reflection transition; (7) reorientation phase; (8) sharing the discovery transition; and the next step is to come back to equilibrium.

Henschke (1987) posed an andragogical model for conducting preparation of new and seasoned adult educators to ready them for engaging adults in active learning. The five building blocks of this model are: Beliefs and notions about adult learners; perceptions concerning qualities of effective teachers; phases and sequences of the learning process; teaching tips and learning techniques; and, implementing the prepared plan.

Borges (2011) consists primarily in a theoretical review of the term andragogy as a science dedicated to adult education, which involves the use of differentiated teaching practice, according to surveys conducted by scholars concerned with learning adults, among them: Eduard Lindeman, Malcolm Knowles, John Henschke and Paulo Freire. The paper also presents a field study that means a search for diagnosis/analysis of the reality of English teaching practice among adults in the city of Belem of Para.

Boucouvalas (1999) insisted 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. Additionally, Johnson (2000) saw 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 asserted 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) discovered little empirical evidence that andragogy provides better results from learning than other approaches. However, he identified 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 identified seven criteria: Voluntary participation, adult status, collaboratively-determined objectives, performance-based assessment of achievement, measuring satisfaction, appropriate adult learning environment, and technical
issues. However, Ovesni (1999) supported 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.

Delahaye (1987) administered the student orientation questionnaire to 205 tertiary students to measure students’ orientation towards pedagogy or andragogy. Results indicated that the second factor is independent of the first factor. Thus, he argued that the relationship between pedagogy and andragogy is orthogonal.

Mason, et al. (2001) indicated that air carrier check airmen could benefit greatly from Henschke’s (1987) model in their preparation for becoming instructors in the pilot learning program. Most especially, they considered implementation of the plan will help pilot instructors display flexibility and an attitude of: Being open to ideas that differ from those in the design; caring and being capable of showing it; treating adults as individuals and recognizing that each is unique; supportiveness towards learners; and, considering the learning process as important.

The andragogical model of adult learning and education developed by Malcolm Knowles, the basis for much of ‘adult learning theory’, is summarized and reviewed in terms of its assumptions, principles and recommended practices. By recasting the model as a theory with attendant hypotheses, it is then critiqued in terms of its theoretical adequacy and empirical support. Clardy (2005) mentioned that andragogy is found wanting because it slights the full range of adult learning experiences, makes misleading distinctions between adult and child learners, minimizes individual differences between adult as learners, and does not adequately deal with the relationship between motivation and learning. Empirically, research testing the effects of andragogy provides inconclusive and contradictory outcomes. New directions for establishing a better theory of learning effectiveness are suggested.

Thompson and Deis (2004) reviews and summarizes the literature that suggests a significant theoretical difference between andragogy and pedagogy. Centrally, the assumptions behind pedagogy [namely ‘child conductor’] do not always fit the needs of the adult learner. Conversely, andragogy focuses on the adult and provides a better model for the growing number of nontraditional students enrolled in many universities.

Reischmann (2004) added some historical perspective on the why of various periods in its emergence and then lying dormant for extended decades, to the scientific basis of andragogy. 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.

Burholt, Nash, Naylor, and Windle (2010) argue that researchers should approach training (sic – I am very skeptical when researchers use the word training in the process of assisting
human beings in their process of learning) older people by using Andragogical (or geragogical) methods, and that in the absence of rigorous randomized controlled trials, they should report on both the success and failures of these methods to allow comparisons across studies. They consider that it is only by subjecting participatory research training (sic – there is that word again) programs to the scrutiny of the scientific community that we will be able to identify the essential elements of the art and science of andragogy that should be employed in training (sic) older adults.

Cooper and Henschke (2001a) were privileged to have the above article translated into Serbian. It was then published in the Andragogy Journal, published in Yugoslavia to an audience largely acquainted with andragogy in one of its most pure forms, as it is academically credible in the University of Belgrade.

Biao (2005) addresses the andragogical issue of a tendency on the part of other educators (and even other adult educators not inclined to consider the validity of andragogy as being part of adult education) to think that any educator can teach, administer, manage, research, etc., an andragogical academic program or course. One aspect of this he seeks to articulate is that in andragogy various appropriate terms are important to replace, drop, and put them in the place of the more general terms used in education. These replacement terms are: adult educational program replaces curriculum, learner replaces student, facilitator replaces teacher, and learning center or learning environment replace school. There are other aspects of this but these terms serve to illustrate the point that andragogy programs and courses need to be staffed by people academically prepared and competent in andragogy.

Roberson (2002) asserted that Knowles’ theory of andragogy not only captures the beginning of the adult education movement but also provides a perspective that is timeless and applies to adult education in the multicultural world. Nevertheless, he provides actions that critics of Knowles’ theory of andragogy have advised adult educators to take: Incorporate issues of diversity and culture into ways of knowing; move beyond the family and focus on the social, economic, and political system of the learner’s world; and, emphasize indigenous education. These may be questioned as to what they would contribute to the discussion on andragogy.

Aspel (2003) said, that to implement the concept of andragogy certain changes need to be made, even though the change from pedagogy to andragogy may be slow in coming. The changes are: (a) Adult learners need to know the why, what, and how of what is being taught; (b) They need to have a self-concept of their autonomous self-direction; (c) Their prior experiences need to be taken into consideration; (d) They need to be ready to learn; (e) Adults need to have an orientation to learning; (f) They need to understand their motivation to learn.

Ross (1987) connected the concept of andragogy and its value with some of the research on teacher effectiveness. He believed that teachers behavior relates to student achievement regarding such things as: Clarity, variability, enthusiasm, task-oriented behavior, use of student ideas, types of questions asked, probing, and levels of difficulty of instruction. Further, Monts (2000) suggested that various research issues regarding andragogy need to be explored, such as the effect of instruction of students in self-directed learning has upon
academic success. There is also the necessity of instructors and students needing training in andragogical teaching and learning in order to break away from the pedagogical mentality, and gain a greater effectiveness in the utilization of the andragogical model. To this end, 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. Additionally, Furter (1971) proposed that universities recognize a science for the training of man to be called andragogy, with its purpose to focus not on children and adolescents, but on man throughout his life. The perspective of Akande and Jegede (2004) holds the view that describes andragogy as one of the new sciences of education that is now gaining ground in many areas.

Merriam (1999) asserts that andragogy is one of the major ideas in adult education that derived from the practice of adult education rather than being informed by research and knowledge from other disciplines, especially psychology. Merriam (2001) also posited 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 emphasized 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. Similarly, Reischmann (2004) added some historical perspective on the why of various periods in its emergence and then lying dormant for extended decades, to the scientific basis of andragogy. 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.

Cooper, A. (nd., Circa, 1997) makes a strong link between Joyce & Weil (1996) non-directive model of teaching and Knowles’ Andragogical process in her action research interim report on work with 9th grade learning disabled students in a special education program at a secondary school.

Merriam, et al. (2007) present the six assumptions of Knowles’ andragogy [self-directedness of learners, experience as a resource for learning, needs based on tasks adult seek to accomplish and desire for immediate application, motivation mostly internal rather than external, and need their own reason why to learn something]. Next, two contentions were addressed: Whether andragogy was to be considered a ‘theory’ of adult learning; and, questioning if andragogy was only to be applied to adult learners. Then, recent critiques of Knowles’ andragogy were identified: Too much reliance on the individual being growth oriented; lack of attention to the context of where learning takes place; possibly leaving out the disenfranchised, learning in the work environment accruing to the advantage of corporations. Research on andragogy was lacking in empirical work, but it was
emphasized that it would not pass away very soon, since it had been very beneficial in numerous adult educators’ practice. This material is very obvious in its relying on Knowles’ andragogy, and almost no acknowledgment of the perspective on andragogy arising out of its broader world-wide context.

Bradley (2010) compared the outcomes among staff members of nonprofit social service agencies who participated in or completed andragogically-facilitated or a pedagogically-conducted online learning module on foundation grant writing. Effectiveness was measured on participants’ self-reported reaction to learning, program completion rates, achievement growth, and grant writing performance scores. Two open-ended response items were also included within the evaluation to add narrative depth to the empirical results via triangulation. Fourteen participants in each of the pedagogical and andragogical learning modules completed the program. The Andragogical group gave a more favorable rating of the course module than the pedagogical group. The andragogical participants reported a higher overall learner satisfaction with their module than the pedagogical participants.

Pinheiro (2001) found the perception of a multicultural international population of students in an American university indicated a preference for teaching-learning experiences congruent with the andragogical model. Their positive and preferred experiences were characterized by the andragogical themes of engagement and connectedness, while their negative and not preferred experiences were characterized by disengagement and disconnectedness. While St. Clair (2002) only added 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.

Kajee (2003) reported on the impact of andragogy from a study conducted with English as a Second Language (ESL) undergraduate students in a university in South Africa. Their online Site Philosophy tabulates the characteristics of adult learners according to Knowles’ conception of andragogy and their implications for the use of Information and Communication Technology (ICT) in adult learning, with the major impact of this environment bearing postitively on learner autonomy and self-directedness.

A Google Cache on Community Colleges (2004) related andragogy and brain plasticity which acknowledges that the brain expands with knowledge accumulation regardless of age. The brain like a muscle becomes stronger the more it is used. From the andragogical point of view, adults have an independent self-concept and exercise their brain muscle by directing their own learning. Additionally, Wilson (2004,2006) contributed 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 from 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 believed that problem-based learning, most notably used in nursing education, has elements of andragogy within it. Likewise, Mazhindu (1990) established a foundational link between andragogy and contract learning. Thus, he asserted that contract learning (with its foundation in andragogy) may well help to facilitate continuous, meaningful 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.

Ovesni (2000) proposed three concepts and models of andragogues’ professional preparation, based upon scientific research in andragogy. They are: model of professional preparation of andragogical personnel of general profile; model with viable tendency toward distinction; and, models of diversification with respect to the field of the system of adult education, i.e. the scope of the system and with respect to institutions and associations within which the process of education is performed. While 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’” (p. 19).

Heimstra and Sisco (1990), and Heimstra (no date) made what could be considered an extensive addition to the theory, research, and definition of andragogy. They provide annotations on 97 works related to andragogy, thus contributing to its international foundation. Heimstra says that applied correctly, the andragogical approach to teaching and learning in the hands of a skilled and dedicated facilitator can make a positive impact on the adult learner.

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. Later Savicevic (2006a) added his realization that this book presents to its readers almost 50 years of experience with andragogical ideas acquired in different social, cultural and educational environments that are reflected through the prism of his personal experience. He also observed that since his first visit to the USA in 1966 to the present time in 2006, the identifiable trace of andragogy on USA universities is that there has not been a single serious study on adult education and learning that did not refer to andragogy as a conception.

Previously, 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 two hundred, and more are waiting to get included on the list. Most dictionaries up to this time have not included andragogy. However, the Webster Encyclopedic Unabridged 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).

Savicevic (2000) added another component to the scientific foundation and design of andragogy in this 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 institutions 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 logically linked.

Reischmann (1999) sees andragogy at the academic level as the science of the education of adults. However, in Germany most scholars in andragogy still have direct connections to selected segments of the adult education providers and practitioners working in the field. Isac (2006) analyzed the five distinct features Iorga and Gusti explicitly or implicitly asserted concerning andragogy in the interwar Romania: There is a peculiar difference between andragogy as theory (i.e. the principles of adult education) and the practice of adult education. In their efforts to innovate, adult education was completely neglected during the Communist Regime from 1945 to 1989. As a consequence Romania did not have enough time to succeed with desirable outcome of reaching a uniquely Romanian theoretical paradigm of ‘andragogy’. Therefore, Isac suggests that it is now up to the post 1989 Revolution to reconsider and seek to renew these valuable traditions according to contemporary imperatives of the European Union.

Taking a stronger stance, Zmeyov (2006) from Russia, asserts that andragogy could be determined as the theory of adult learning that sets scientific fundamentals of activities of learners and teachers concerning the organization (i.e. planning, realization, evaluation, and correction) of adults’ learning. Andragogy considers the learner as the real subject of his/her learning process. Thus, the learner is a self-directed, responsible person, the principal performer. The teacher is primarily an expert in the learning technology and organizer of the cooperative activities in teaching and learning.

Cooper and Henschke (2007) present a fully documented perspective on andragogy which has been absent from all previous author’s published discussions. This has been an open and up-front facing of a topic (andragogy) that by many has been considered unimportant to the adult education field.
Baumgartner (2008) conducted an investigation into the implications of andragogy for curriculum and instruction. She included sections regarding andragogy: A short history, European conceptions, critiques, recent research, connections to the curriculum, principles, practice applications in the classroom, and a case study of impelling students to assume more responsibility for their own learning.

As if seeking to culminate and bring together all these valiant efforts, Savicevic (2006b) does a thorough historical tracing of the converging and diverging of ideas on andragogy in various countries. He dispels the notion of andragogy being part of pedagogy, but asserts that andragogy arose and emerged because of conflicts with some ideas surrounding pedagogy. He seeks to help lay a scientific research foundation for andragogy being the studying of the learning and education of adults, and the 21st century is a century of adult learning. Thus, he outlines what historical and comparative researchers tell us; emphasizes change of the paradigm from education to learning; provides a critical consideration of the pedagogy vs. andragogy relationship; and, highlights the convergence and divergence in the contemporary concepts of andragogy. He completes his analysis suggesting that deeper reconsideration of the terminology evolved in the field is needed, with a perceived although questionable necessity for constituting a science as the founding of a precise terminology.

Andragogy, originally brought to prominence by Malcolm Knowles, has been criticized as an atheoretical model. Houde (2006) examined the principles of andragogy through two current motivation theories: self-determination theory and socioemotional selectivity. The two motivation theories of self-determination theory and socioemotional selectivity add depth and perspective to andragogy. Using the theories, much of the underlying assumptions of andragogy could be validated through empirical research. Self-determination theory opens up the internal motivators that Knowles refers to in the principles of andragogy. Socioemotional selectivity theory gives insight into the ‘adult’ aspect of andragogy, and why adults have the motivations ascribed to them as well as differing perspectives than children. Each principle of andragogy is supported in to some extent through examination through the lens of self-determination theory and socioemotional selectivity. The study contributes to new knowledge in two ways. Connecting andragogy to recent psychological motivation theories adds a new dimension to this extensively-used model. Utilizing these theories to anchor a validation strategy for andragogy will help develop a sound argument for andragogy as a cross-culturally applicable model. The second contribution is in the realm of cross-disciplinary understanding in HRD. However, a planned process of testing the general concept and progressively narrowing the focus would enable a new branch of research to delve into the intricacies of andragogy.

Isopahkala-Bouret (2008) investigated the nature of learning in work role transitions from specialist roles to managerial roles in a context of a large international technology organization. Therefore, this study drew upon andragogy and a transformative learning theory to outline an interpretative framework and focuses on in-depth, narrative analysis of a small number of role transition experiences. As a result, the study revealed how first-time project managers and team leaders wonder about their abilities and actions; compare ‘self’ with role models; and become aware of the power aspect of managerial roles. Such
reflection eventually leads to a perspective transformation regarding ‘self’ and new roles. However, it also involves adaptation to the prevailing organizational norms, values, and leadership ideals. It added to an understanding of learning in transitions and informed those working in the human resource development or otherwise involved in the organizational transfer processes.

Kessels and Poell (2004) portray a perspective from andragogy, individual learning, and social capital theory as a contribution to the discussion on the relationship between adult learning theory and human resource development (HRD). They suggest that andragogy and social capital theory may contribute to transforming the traditional workplace into an environment conducive to adult learning, emphasizing the importance of social networks, partnerships, collaboration, interaction, and knowledge sharing. In addition, integrating learning into the day-to-day work environment is aided by meaningful relationships which social capital provides.

Different individuals still have very different understandings of andragogy. Some consider andragogy a pedagogic discipline, whereas others consider it a relatively autonomous science within the framework of the general sciences of teaching and learning. Klapan (2002) brought up the needed consideration of andragogy, a science of adult education in today’s world. In addition, it reviewed the main problems facing andragogy included its systematic nature is more the result of other theoretical deliberations than those of its own. Until the mid-19th century, andragogy founded its development mainly on prevailing communal, social, economic, political, and cultural conditions in various countries. In the 1950s, andragogy turned increasingly into a science whose goals were directed toward humans and their relationship to the world in which practice is only the result of human’s ‘spiritual praxis’. Andragogy must now deal with the theoretical organization of its theory, historically perceive its achievements thus far, and become connected with other sciences to accelerate its own development and simultaneously acquire an identity of its own and an internal coherence as a science.

Knowles (1993) articulates on a very critical variable in andragogy. It is the level of the learner’s skill in taking responsibility for his or her own learning. Consequently, he emphasizes the necessity of andragogues experimenting with building a “front end” (p. 99) into their program design. By this he means to first expose the adult learner to the notion of self-directed learning (in contrast to dependent didactic learning). Second is to practice some of the accompanying skills of self-directed learning—self-diagnosis, identifying resources, planning a learning project.

The concept of teaching and helping older adult learners is still in question. Lebel (1978) said that sufficient data exist to suggest the need for a theory of education for the elderly, significantly different from pedagogy or andragogy as traditionally defined. Gerogogy is recognized and suggested to further research in this field.

Long (1982) pointed out that the concept of adult educators’ borrowing from other fields for andragogy has been widely discussed in both North and South America. There were four general topics of interest to adult educators are identified as being informed by
knowledge from other disciplines: (1) learning and instruction, (2) participation and persistence, (3) program planning, and (4) research. Eleven illustrative kinds of questions in the four general topics identify areas in which the adult educator could look to research in other disciplines for varying degrees of assistance. Finally, illustrations are provided to show more specifically how other disciplines have contributed knowledge and assistance in the four general topical areas. In this section of the paper, information on anthropology, psychology, sociology, and other fields have provided useful information and models that have greatly enriched the field of adult education.

Moehl (2011) investigated the relationship of psychological type, as measured by the Myers-Briggs Type Indicator (MBTI) and instructional perspective, as measured by the Modified Instructional Perspectives Inventory (MIPI) among faculty across academic disciplines at four campuses of a public land-grant university. Results yielded a significant relationship between the MBTI and the MIPI. Findings provide evidence that variations in instructional perspectives among faculty members of similar MBTI types teaching in same academic disciplines do exist. Exposure to andragogical adult learning theories, methods, and/or instructional strategies accounted for a significant proportion of the variation.

Pew (2007) promoted critical thinking about pedagogy, andragogy, and their relationships to student motivation. This article does not offer answers or solutions to the paradoxes or real world challenges presented. The student’s motivation to achieve the end product of a higher education must be strongly ingrained and developed internally, and of sufficient strength to sustain goal-oriented progress in the best and the worst of motivational times. Therefore it is needed to create learning environments that let students draw on the internal resources that brought them to college in the first place. As instructors must focus on creating an environment where students can gain knowledge and skills in critical thinking and problem solving in their chosen areas of learning. However, adopting andragogical methodologies should include letting students know clearly what they can expect from higher education and what instructors expect from them as adult learners (including responsibility for their own motives and leadership in their learning process), develops in lifelong learners intrinsic behavioral drivers that are portable, dynamic, and student owned and controlled.

Podeschi (1987) examined research on andragogy and urged practitioners to examine the premises of scholarly discussion of the topic. In addition, he (1) explains why practitioners should examine researchers' premises, (2) reanalyzes the debate about andragogy, and (3) explores the implications for the application of research to practice.

Randal (2007) leads an online class discussion where it is proclaimed that Andragogy is derived from a male/masculine point of view and might be tied in its origins to what may be called patriarchal elitist views. However, after closer scrutiny her focus is on Knowles’ point of view, and her woeful lack of knowledge about the broad world wide perspective of the history and philosophy of andragogy, as presented in this paper (Henschke, 2011) is very apparent and obvious.
Risley (2012b) discovered an important aspect of finding out whether one adult educator, who espouses andragogy in scholarship, is congruent and consistent in practice and actually exemplifies andragogy. She triangulated this research through ten data sets and confirmed ‘saying and doing’ as a clear overlay and just about perfect fit. The eleven andragogical elements of teacher trust of learners measured were: purposefully communicating to learners that each is uniquely important; expressing confidence that learners will develop the skills they need; trusting learners to know what their own goals, dreams and realities are like; prizing the learners’ ability to learn what is needed; feeling learners need to be aware of and communicate their thoughts and feelings; enabling learners to evaluate their own progress in learning; hearing what learners indicate their learning needs are like; engaging learners in clarifying their own aspirations; developing supporting relationships with learners; experiencing unconditional positive regard for learners; and, respecting the dignity and integrity of learners. The ten data sets used in confirming that this adult educator’s scholarship and practice are andragogically congruent were: focus group of students in class regarding anticipated and actual trust; the teacher’s perception of his trust in students; course evaluations from Fall, 2009 through Spring, 2012; video recording of the adult educator facilitating 28 clock hours of class time with students; interviews with facilitator’s current and past colleagues, some who agree with andragogy and some who disagree; interview of the course facilitator; observations regarding the facilitator’s congruence of practice and scholarship; memories and reflections of the researcher on the facilitator.

Rivera (1982) discussed the breadth and direction of large-scale evaluative research in adult education and its implications for academics, their professional associations, and universities in general, also proposed the stage for an era of extensive cooperation among universities, professional associations, and academics concerned with the expanding critical area of evaluative research in adult and comparative education.

Robinson (1992) conducted a survey based on Knowles' andragogical principles received 294 responses (45 percent) indicating that Canada's Open College students enrolled for very pragmatic reasons, were intrinsically motivated, used life experiences in assignments but could not do so in examinations, and were not interested in self-directed learning, perhaps because of time requirements or lack of exposure to it.

Roberts’ (2007) purpose of research was to provide and conduct, according to the components of andragogy, classes on Fiscal Management at the Texas State Division on Fiscal Management, assess the classes using the andragogical components, and recommend way to improve the classes that are offered. The andragogical components he suggests were the following assumptions: The need to know a reason that made sense to them as to why they should learn something, their capacity for self-direction, their prior experience being valued, instruction being related to their life situations, being engaged in problem-solving, and motivation by internal or external pressures. The classes did not align with the andragogical model. Nonetheless, at least one of the two groups involved in the research expressed opinions that aligned with five of the six components. In addition, the following recommendations were made to improve and bring the classes closer to the andragogical model: more robust introductions, more self-directed learning activities,
applying the material whenever possible, structuring classes around work activities, and understanding and exploiting learner motivations.

Savicevic (2012) gives a broad-brush sweep in addressing a number of current major issues in andragogy research. He declares that research in andragogy cannot be reduced to research techniques. It includes theoretical ground as well. Theory is a research base for understanding. Philosophy is very important for research andragogy: spiritual values, aims of education and learning, conceptions of an adult person, Andragogical ethical reflection on theory and practice. Research in andragogy has its research context. The problem of methodology has been neglected. Research methods and procedures are not separate from philosophical grounds. Contradictions have appeared in andragogy over whether one should create knowledge through research or borrow the knowledge from other sciences. Since andragogy has become a university discipline, the link between teaching and research has been requested by some.

Shannon (2003) asserts that adult learning theory as espoused by Malcolm Knowles has become the basis for many educational strategies in medicine, but there are dangers in uncritically accepting theories without evaluating the evidence. The major areas of research on adult learning focus on self-directed learning, critical reflection, experiential learning, distance learning, and learning how to learn. As if all this is not enough, there is a multitude of learning theories for educators to make use of. The bottom line is that the more we understand about physicians as learners – what motivates them, what their needs are, what satisfies them, what helps them learning and change – the more effective our Continuing Medical Education (CME) efforts will be.

Taylor and Kroth (2009) employed a meta-analysis of the theory of andragogy and its search for a measurable instrument. The study explored three areas surrounding andragogy: (a) its concept and history, (b) its assumptions, and (c) its primary criticisms. The finding pointed out that the educational community embraced the concept of andragogy when it was brought into the mainstream by Knowles. Since 2000, articles and studies continue to be written incorporating andragogy with a particular discipline. What appears to be missing in the literature, however, is whether andragogy is present in the instructional design. The study revealed four major obstacles that affect the ability of andragogy being tested to produce empirical evidence: 1) whether andragogy is a theory of adult learning; 2) there is an absence of a clear meaning as to what procedures constitute andragogical practice; 3) andragogy faces a 'Catch-22' like situation; and 4) the extent to which the assumptions are characteristic of "adult" learners only. By assessing what worked and what did not work based on the andragogical assumptions incorporated, future classes/trainings can be more successful for learners.

Taylor, Kroth, and Lindner (circa, 2008) identify synergistic andragogy (SA) as bringing two or more adult learning groups together with the purpose of producing more learning than either group might experience individually. In order to create synergistic andragogy, six steps that have been identified are: a) identify two or more adult learning groups; b) identify a common theme central to both groups; c) identify a learning objective or end result for students to achieve; d) provide different means of Andragogical instruction; e)
bring groups together for a common learning experience; and, f) evaluate. They go on to explain how SA works and conclude that although it lacks empirical support, it shows signs of potential. This highlights the idea that we are able to do much more together than we can do alone.

Van Hook (2008) examined the early building blocks of intelligence and learning through signs and symbols, such as examined by Vygotsky and Freire. Then the inquiry moves into methods of achieving resonance as praxis of learning as expanded on by Freire, and connecting with students by addressing their multiple intelligences as described by Gardner, as well as their level of emotional intelligence as proposed by Goleman. Next is a brief consideration of the role of intention in learning, before moving on to the achievement of educational duration and transformation through principles of andragogy as considered by Knowles and others. The article wraps up with a contemplation of learning goals toward self-actualization through illumination and the sacrament of teaching, as expounded on by Maslow and Johnson. The finding showed that a theory of education well grounded in principles of andragogy, transformation, self-actualization, should represent a commitment to hope, aspiration, even love. The consideration of transformational learning as a partnership between the educator and the educatee is at the heart of andragogy, a concept grounded in a focus on the fully developed intention and desire of the adult to transform into a self-actualized being. Educators and students alike, as they consider the developmental possibilities of self-actualization, should realize the term does not imply a super-human achievement. The self-actualized person is not a perfected person, devoid of flaws and even guilt over inevitable human shortcomings. Self-actualization is a process rather than an end, and even personal shame may serve a developmental process. By providing an educational climate that resonates with adults, offers learning opportunities that coincide with the developmental intentions, respects andragogical rights and responsibilities, adult educators may find the opportunity to play a part in a true, enduring, transformation of humanity.

Cercone (2008) asserts that the online educational environment is increasingly being used by adults and should be designed based on the needs of adult learners. This article discusses andragogy, and important adult learning theory, and reviews three other adult learning theories: self-directed learning, experiential learning, and transformational learning. During this discussion, the theories are examined for the ways in which they may be applied to the design of online learning environments. In addition, the 13 characteristics of adult learners are examined, and an analysis of how these characteristics influence the design of an online learning is presented. Recommendations follow regarding how to design an online classroom environment while considering the application of adult learning theories. Of the 13 characteristics developed by the author, andragogy is the most comprehensive as it considers 10 of the characteristics, experiential learning only considers four [4] characteristics, self-directed learning theory considers three [3] characteristics, and transformational learning theory considers three [3] characteristics. The author provides a total on 93 techniques for helping address and enhance the 13 adult learner characteristics.

Wager (1982) united theory and practice, generating recommendations from the abstract findings of research in andragogy and instructional technology. Some of the findings and
recommendations included the following: (1) the key to more effective instruction seems to rest in the applications of instructional and behavioral technologies that have shown themselves to be influences on the degree of learning; (2) Carroll's "school learning model" provides a guide as to how these technologies function in reducing the time needed to learn a particular task or in increasing the time the learner is willing to spend in the learning situation; (3) in this context, technologies such as the study objective, use of the course grade as a study incentive, media use, self-paced instruction, and so on, can be viewed more objectively with regard to one's personal instructional preferences. (The Spanish translation of this monograph is included).

Wilson, (2005) conducted this predictive study which tested the theory of andragogy in a post-secondary educational setting. It produced a sound psychometric instrument (ALPDEQ) presumably “Adult Learning Professional Development Educational Questionnaire.” It is one of the first to successfully isolate adult learners, a major step forward in testing andragogy. Results provided insight of andragogy’s effect on two student outcomes, learning and satisfaction. The findings revealed adult learners enrolled in a MBA degree program provided evidence of learning and were not influenced by andragogy. However, satisfaction with instructor and course was affected by perception of andragogical teaching behaviors exhibited by faculty. The study included many exploratory faculty and student characteristic variables, never before studied, and results indicated characteristics, above and beyond age, gender, and ethnicity, were predictors to learning and satisfaction.

Baltus (2005, circa) asserts that andragogy as a term and theory has a rich history dating back to the 1800s. Malcolm Knowles plays a key part in the development of the andragogical model. The theory is based around his six assumptions about the characteristics of adult learners. These are: The need to know, the learner’s self-concept, the role of experience, readiness to learn, orientation to learning, and motivation. Andragogical implications for instruction are eight elements of instruction that are constructed in a manner that takes advantage of the six assumptions. The eight elements are: Prepare learners, provide a climate conducive to learning, shared planning, shared determination of learning needs, shared formulation of objectives, shared learning plan design, assist learners in completing their learning plans, and, shared learning evaluation. Andragogy has generated much debate since the sixties and continues to be a topic of discussion. It is an interesting theory with many applications – past, present, and future. It continues to grow in this generation. Only the future will tell what is in store for andragogy.

Moberg (2006) emphasizes Knowles’ et al (1998) lamentation regarding the paucity of “thinking, investigating, and writing about adult learning (p.35). He suggests that Knowles’ central argument tis that we learn differently as adults from how we learn as children, so we should tailor adult education accordingly. In fact, Knowles (1983) entitles an article that ‘adults are not grown-up children as learners’. Although Knowles insists on andragogy – not pedagogy, he did not coin the term andragogy. It was a German, by the name of Kapp that coined it, someone else brought it to the USA, and Knowles was the one who in his use of it, made it popular to many adult educators. Although others criticize
Knowles for overreach and his imperfect empirical sources, his central point is well taken that adults are not grown-up children. Furthermore, two of his assumptions are well founded: Adults have a higher level of background knowledge and life experience; and, adult, need to know why they should learning something, and the reason needs to make sense to them, not just because some educators told them they need to learn it.

Woodard (2007) tested the adult learning theory in informing a training program for newly-hired employees in industry, a training program was set up using Knowles’ concepts of andragogy. Evaluation results from before and after the new training program indicated that the perceptions of those in the new training program changed in a positive direction. This clearly indicates that the concept of andragogy does translate to the workplace.

According to Holyoke and Larson (2009) educators and trainers both focus on adult learning theory, or in some cases andragogy, when teaching. In the workforce, as well as in higher education, current literature pertaining to adult learners tends to lump all adults into the same category. Scant research exists that reviews the adult learner through a generational lens. This article examines the elements that engage and disengage adult learners in multiple classroom settings through a generational perspective. The authors suggest implications for adult education professional practices based on understanding as a teacher-trainer that generational characteristics influence expectations of how materials will be taught.

Taylor and Kroth (2009) conducts a meta-analysis of the theory of andragogy and its search for a measurable instrument. The article explores thee areas surrounding andragogy: (a) its concept and history, (b) its assumptions, and (c) its primary criticism. In examining these three areas, a foundation is established for the creation of an instrument to provide measurable data on the assumptions put forth by Malcolm Knowles. This may provide opportunity for andragogy to be based on empirical data.

Zamir (2010) proposes some updating of andragogy into a modern era following her recent experience in multicultural mediation. She analyzed different approaches to andragogy [‘Colonial’ and ‘Pluralistic’], which she conceptualized, from classical approaches in andragogy on the background of the historical periods that they developed. She asserts that modern andragogy should be seen in the context of multicultural societies, which created tools of multicultural mediation in Israel during the past 30 years. The multicultural mediation process relies on active listening and learning among the parties to the theory and practice of pluralistic andragogy. Thus, a mutual recognition and respect avoids any hidden interest of the state in power and control. Consequently, we may seek for truthful changes in attitude, politics and institutional arrangements in our society towards the other, where andragogy means to support his/her cultural self-identity.

This study by Prusakova (2010) represents an outcome of a research project entitled: Theoretical and Methodological Framework for the Analysis of Educational Needs of Adults. It is mainly focused on the andragogical theoretical basis for the analysis of educational needs. It is based on the results of primary andragogical research specifically focused on defining terms and on determination of applied andragogical disciplines according to interest (career, social and cultural andragogy). Furthermore, it is also focused
Wheaton and Hart (2012) concern themselves with the fact that because adult students are returning to college in record numbers, instructors must prepare to position these non-traditional students for academic success. The area they are most concerned about is writing proficiency. They present findings of a pilot study in which they gathered data on adult students’ perceptions of themselves as writers. The authors contend that one important aspect of enhanced student learning is the integration of self-directed learning activities into the instructional techniques. To support this contention the findings of this pilot study are situated within a context of scholarship from composition studies and adult learning theory, including andragogy. After analysis of the data and reflections on past teaching practices, practical recommendations are offered for facilitating student learning through the strategic implementation of the instructional model of self-directed learning.

Talbott (2012) addresses a new aspect of andragogical application through texting-based learning in her research. She studied texting-based learning in university courses and labeled it as possibly the next technology advancement in higher education institutions. This study investigated the efficiency of the process of texting to conduct college and university level courses using a cell or smart phone. The innovative research of existing technology on the cell phone and texting, also known as short messaging service (SMS), established a way to reach the underserved students or geographically remotely located students or students preferring texting-based learning to traditional or online courses. Andragogy, the theory of adult learning, and the learning contract with KUSAVI, representing knowledge, understanding, skills, attitude, value, and interest created the self-directed basis for the texting-based learning experience among university students. A new instructional method developed for the texting-based learning study included standardized texting abbreviations. A new instructional delivery mode developed when using texting-based (SMS) learning. Andragogues are researchers and facilitators of learning in higher education settings. This qualitative research study was conducted during the summer semester at a mid-western university in the United States of America. The study was triangulated with focus group sessions transcripts, the actual texting messages, and the researcher’s participation as the texting-based learning contract facilitator. Study participants from the university’s school of business and entrepreneurial studies, found texting-based learning convenient, efficient, and allowed for learning a wide range of topics and courses. Texting or phone calling was not allowed while students were driving or operating machinery, in order to maintain the safety of the participants and others. Results of the analysis concluded that texting-based learning might have a slight impact on the student’s efficiency while preparing formal written papers. However, the advantages outweigh the impact when considering the courses that are accessible to the underserved students. Advantages to the universities are potential reduced information technology staff for online learning, reduced facilities for traditional learning and increased enrollment associated with easier access to courses. Andragogues using the principles of self-directed learning married with texting technology have created a major advancement toward reaching the underserved student and those students preferring the efficiency of texting-based learning courses.
Henschke and Isenberg (2013) declare that to their knowledge, up to the present year 2014, no one has attempted to raise the question about whether andragogy has any influence upon the economy – in the USA, or any country around the globe. Andragogy has received mixed reviews in the past. Some have analyzed it from a positive perspective. Some have analyzed it from a negative perspective, and some have ignored it altogether. Very little if any effort has been devoted to researching the bottom line regarding the economic impact of andragogy, especially during this prolonged economic downturn in the USA, in addition to many other countries throughout the world. In this document, it is the authors’ objective to make an early (if not first) attempt to raise the question and address this issue. They look at the theories undergirding our practice of andragogy, eras of the scope of various writings in English concerning andragogy, and raises the question about whether economic implications of various applications of andragogy, and share some thoughts about future research trends in andragogy, including any possible connection it may have with the economy.

Bradley et al (2013) presents the idea that online professional development programs for adults are increasing in frequency. Numerous scholarly articles have been written that offer polemical or anecdotal evidence supporting the effectiveness of andragogically facilitated non-formal professional development courses, including those conducted online. However, few empirical studies have been conducted to validate their usefulness, especially those offered via the Internet. Such non-formal educational programming may be most conducive to both implementing and empirically testing a more purist definition of andragogy. This chapter explores the theoretical frameworks of andragogy, as well as existing experimental or quasi-experimental research studies, with a view toward creating more learner-centered non-formal educational transactions that meet the unique needs of adult learners. Lastly, suggestions for both practitioners and researchers alike are offered to help build the body of evidence-based research and extend practical advice to educators when designing and facilitating virtual learning programs for adults that emphasize professional development.

Henschke (2013) asserts that andragogy has received mixed reviews in the past. Some have analyzed it from a positive perspective. Some have analyzed it from a negative perspective, and some have ignored it altogether. Very little if any effort has been devoted to researching the economic impact of andragogy, especially during this prolonged economic downturn in the USA, in addition to many other countries throughout the world. This article looks at the theories undergirding his practice of andragogy, eras of the scope of various writings in English concerning andragogy, economic implications of his application of andragogy, and his thoughts about future research trends in andragogy.

Reischmann (2013) believes that andragogy is the discipline that deals with the lifelong and life-wide learning and education processes of adults. He usually expresses it with less impressive words: If I had the money that companies and administrations, hospitals and the military throw out of the window right now within a circle of 20 miles with because of poor and demotivating personnel management, unnecessary conflicts, incompetence of the workforce, and poor leadership of the managers, I would immediately be a millionaire! My
graduates, working in these organizations, for sure reduce this unnecessary cost, and even if they are only successful in 30% of the situations that is a lot of money. In addition, andragogy is a value to people, who are more happy in their daily work life, and develop a stomach ulcer many years later than most, or never. Our graduates are are searched for specialists on the job market. He says andragogues can do this kind of work. We do not talk any longer about some nice cultural entertainment a night per week: We talk about dollars, effectiveness, a human place in workplace and community. And not only for individuals, but likewise for society and country: International competition leaves back those national economies that do not invest in educated citizens. And that means investment in adult and continuing education. Because competencies are needed so fast (today), that we can not wait until the children bring these new competences from school. He identifies four [4] competencies in andragogy that are needed: Teaching, Counselling/Consulting, Planning/Organizing, and Research.

Freund (2013) pursued the primary objective of this project as to showing the important need of academic skills, specifically general education coursework, to the effectiveness of the technician’s expertise in the field of automobile repair. Additionally, he emphasized that one of the keys to the quality of the technician’s education is the method of instruction analyzed through an andragogical approach from Henschke’s five building blocks focusing on: beliefs and notions about adult learners, perceptions regarding the qualities of effective teachers, phases and sequences of the learning process, teaching tips and learning techniques, and implementing the prepared plan. He communicated with 35 diversely selected and cooperative employers, interviewed the through personal visits, acquired and analyzed a list of degree content requirements of 19 auto repair technology programs, and compared them with the specifications of the national WorkKeys research tools that indicated the following competencies at various levels of Applied Mathematics, Workplace Observation, Applied Technology, and Locating Information. He identified specific contributions academic courses provided to the instructional areas of automobile repair technology. Additionally, further research into increasing academic course content is justifiable and validated by the employer representatives’ responses in this study.

Lu (2014) addresses the issue that in higher education, teaching effectiveness in the classroom is a guarantee to improve the quality of education. However, teaching effectiveness comes from the personal motivation, perception and satisfaction in the teachers’ jobs. The merit incentive payment system is directly linked to teachers’ motivation and perception, which also directly or indirectly results in satisfactions with the teachers’ career and students learning in the classroom. This study investigates the relationships between teachers’ payment, teacher’s/student’s satisfaction, and teacher’s performance evaluated from an instructional perspective and certain factors such as ages, gender, degrees etc. in relation to teacher/student motivations and perceptions. Study participants were students and teachers both working and enrolled in four different higher education systems from 2012 to 2014 semesters in Nanjing, The Peoples’ Republic of China. Henschke’s (1989) Modified Instructional Perspectives Inventory (MIPI) [an andragogical measurement inventory] had been used in various situations to evaluate teacher performance in the class from instructional perspectives. The MIPI includes seven factors: Factor 1: Teacher Empathy with Students, Factor 2: Teacher Trust of Students,
Factor 3: Planning and Delivery of Instruction, Factor 4: Accommodating student Uniqueness, Factor 5: Teacher Insensitivity toward students, Factor 6: Experience-based Learning Techniques (Learner-centered Learning Process), and Factor 7: Teacher-centered Learning Process. The MIPI-s, an adaptation of the MIPI, will be used to evaluate student’s teacher performance in class from an instructional perspective. Students and teachers reported satisfaction with learning and teaching using a Likert-type scale is based on a demographic questionnaire. This study utilized a quantitative approach with standard multiple regression analysis and ANOVA. There were three dependent variables: teacher annual incomes, teacher satisfaction and student satisfaction. The independent variables included some covariates in relation to teacher motivations and perceptions and seven factors of MIPI/MIPI-S with 45-item respectively. The results of our regression analysis and ANOVA demonstrate significant relationships between teacher annual incomes and seven factors of MIPI/MIPI-S, and teacher’s/student’s satisfaction with teaching/learning as well. Our sample contains 457 teachers and 9,017 students. The data had been collected via online questionnaires.

Gillespie (2014) used the Modified Instructional Perspectives Inventory (a seven factor andragogical instrument) to investigate the significance of an andragogical staffing intervention in a proprietary educational system on employment outcomes year over year. Findings regarding the influence of Andragogy on placement outcomes for 2011 compared to 2012, the conclusions were as follows: There was no significant relationship of note, however, observably, the wider the gap, the lower the placement rate for 2011. However, the 2012 Employment Rate (ER) indicated that there was a moderate, negative relationship between the gap in Andragogical instructional perspectives and employment rates. The leader learners were operationally effective as a result of the instruction they received from the instructional leaders. The research results support this point, since 2012 employment rates related to the Andragogical gap indicating trust, and both 2011 and 2012 employment rates were dependent upon the region from which they were generated.

Henschke (2015, Forthcoming) began researching in trust in the late 1980s. The technology of my practice and research converged in an instrument which indicated the strongest factor being ‘teacher trust of learners’, and which I sought to enact in practice as ‘my trust of learners’ were quite consistent with each other. This instrument has been used in 20 doctoral dissertations with findings of the strongest factor being ‘teacher trust of learners’, including one study indicating the technology of his scholarship and practice being congruent. Trust is indicated in some of the general adult education literature, even in a highly unlikely place as a very brutal prison with its culture being transformed into a very humane place. To build upon the trust factor, the growing suggestions of the literature call for more research into the technology and practice of developing and advancing the reciprocal relationship of trust between faculty and learners.

Conclusions: Implications 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 and sustaining the American and world-wide 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.

Rosenstock-Huessy (1925) advanced the idea that andragogy is a necessity in which the past, present and future merges with theory becoming practical deeds; Simpson (1964) gave four strands for the training of adult educators; Knowles (1968a) presented his first published iteration of andragogy [a new label and a new approach] as being a major technological breakthrough in the field of adult education; Hadley (1975) developed a 60 item questionnaire assessing an adult educator’s andragogical and pedagogical orientation; Henschke (1989) developed an Instructional Perspectives Inventory with seven factors including teacher trust of learners; Stanton (2005) validated Henschke’s instrument in line with self-directed learning readiness; the Nottingham Andragogy Group (1983) addressed their beliefs about adults and adults’ abilities to think creatively and critically in learning settings; Toman (2005) found that in crisis situations like severe wildfire impacts, interactive andragogical formats were more effective than methods consisting of one-way information flows; Poggeler (1994) listed the ten trends which he hopes will help future andragogical research; Schugurensky (2005) did not understand the scope of andragogy in general and knowles’ idea of andragogy in particular; Zemyov (1994) saw Knowles’ view of andragogy as being the fundamental scientific foundation of the theory base of adult education in Russia; Delahaye (1994) found an orthogonal relationship between adult students’ andragogical and pedagogical orientation; Christian (1982) developed a 50 item instrument to measure student’s andragogical and pedagogical orientation; Henschke (1999) explored the gap between ‘learning’ and ‘performance’ within the andragogy concept relating to Adult Education and Human Resource Development [HRD]; Connor (1997-2003) pressed us to become more self-reliant and giving up our teacher-reliance; Hoods Woods (1998) perceived andragogy as being based on four environmental influences active in every being; Drinkard and Henschke (2004) found nurse educators who have a doctoral degree in other than nursing (adult education to be specific) as more trusting of their learners in and andragogical classroom than nurse educators who have a doctoral degree in nursing; Ray and Chu (2005) examined the teaching styles and the student preferences for teaching styles of adult educators in Taiwan; Taylor (1986) offered a very strong and
articulate research based model, for the andragogical process of transition into learning for self-direction in the classroom; Henschke (1987) posed an andragogical model for conducting preparation of new and seasoned adult educators to ready them for engaging adults in active learning; Boucouvalas (1999) posited the importance of the researcher in the research process; Johnson (2000) saw andragogy as fulfilling all the criteria of a theory; Rachal (2000, 2002) provided seven criteria for empirical research in andragogy; Ovesni (1999) supported the idea that andragogy is to generate its own knowledge and is able to offer something to other sciences in scientific cooperation; Mason, et al. (2001) indicated that air carrier check airmen could benefit greatly from Henschke’s (1987) model in their preparation for becoming instructors in the pilot learning program; Thompson and Deis (2004) reviews and summarizes the literature that suggests a significant theoretical difference between andragogy and pedagogy; Aspel (2003) encouraged us to change from pedagogy to andragogy even though it may be a slow transition; Ross (1987) connects some of andragogy’s value with its similarity to research in teacher effectiveness; Monts (2000) articulated the need for basic instruction of both teachers and students in andragogy; Reischmann (2000) indicated that in 1994 he changed the Otto Freiderick University, Bamberg, Germany, “Chair of Adult Education” to “Chair of Andragogy;” 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 its purpose to focus not on children and adolescents, but on man throughout his life; Reischmann (2000, 2004 & 2005) represented a shift of understanding in the direction of andragogy; Adande & Jegede (2004) hold that andragogy is one of the new sciences of education that is now gaining ground in many areas; Merriam (1999) claims that andragogy derived from adult education practice and not from research in other disciplines; Merriam (2001) posited that scholarship on andragogy is one of the two major pillars of adult learning research and theory; Reischmann (2000,2004,2005) offered some historical perspective on the various periods that the term “andragogy” emerged and later receded; Merriam, et al. (2007) present the six assumptions of Knowles’ andragogy [self-directedness of learners, experience as a resource for learning, needs based on tasks adult seek to accomplish and desire for immediate application, motivation mostly internal rather than external, and need their own reason why to learn something]; Pinheiro (2001) found that international students in American universities prefer learning experiences with the andragogical themes of engagement and connectedness; St. Clair (2002) allowed 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 (1999b) added another element to the scientific foundation and design of andragogy by searching its roots; Kajee (no date) reported that with ESL students, the major impact of andragogy and technology is on learner autonomy and self-directedness; Wilson (2004, 2006) offered a new paradigm of the function of the brain and its anatomy being much more closely allied with andragogy and learning than previously thought; A Google Cache in Community Colleges (no date) found that in andragogy adults have an independent self-concept and exercise their brain muscle by directing their own learning; Milligan (1995, 1997 & 1999) summarized andragogy as contributing vastly to the enhancement of human abilities of autonomy, self-direction, and critical thinking; Mazhindu (1990) established a foundational link between
andragogy and contract learning; Ovesni (2000) proposed three concepts and models of andragogues professional preparation based upon scientific research in andragogy; and, Krajinc (1989) provided a very succinct and pointed definition of andragogy; Heimstra and Sisco (1990, and Heimstra (no date) contributes an annotation of 97 works related to andragogy; Savicevic’s work in andragogy is the most comprehensive to date (1991, 1999a, 1999b & 2000); later Savicevic (2006) discovered that in the forty years since he first visited the USA in 1966, all serious studies in adult education and learning in the USA universities referred to andragogy as a conception; Cooper and Henschke (2001) provided an ongoing investigation into the comprehensive concept of andragogy; Savicevic (2000) added the scientific dimension of searching for the roots and ancient background of ideas connected with andragogy worldwide; Reischmann (1999) views andragogy as the science of adult education, but still see most andragogical scholars in Germany connected to the providers and practitioners of adult education; Isac (2006) sees post interwar Romania as still needing to develop a uniquely Romanian theoretical paradigm of ‘andragogy’; Zmeyov (2006) declares andragogy as the theory of adult learning that sets scientific fundamentals of learning activities for learners and teachers; Cooper and Henschke (2007) present a fully documented perspective on andragogy which has been absent from all previous author’s published discussions; Baumgartner (2008) conducted an investigation into the implications of andragogy for curriculum and instruction; and, Savicevic (2006b) historically traces the converging and diverging of andragogical ideas in various countries, with a plea for constituting a science as the establishing of a precise terminology.

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 theorists, 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.

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