

Henschke, J. A. "Beginnings of the History and Philosophy of Andragogy 1833-2000." In *Integrating Adult Learning and Technology for Effective Education: Strategic Approaches*. Wang, V., [Ed]. IGI Global, Hershey, PA, December, 2009.

Beginnings of the History and Philosophy of Andragogy 1833-2000

Abstract: *Andragogy had a very slow beginning over a period of almost one century as a term referring to the theory and practice of adult education. Numerous elements were involved in the seventy years it took to establish its foundation: starting in England and the USA; andragogy and human resource development [HRD]; andragogy and self-directed learning [SDL]; conflict between supporters and detractors; comparing European and USA perspectives; trust in learners' abilities; scientific foundation of andragogy; skepticism and its counter-balance; and, antecedents of andragogy. Trends in usage and considering its possible benefits set the tone for the future of andragogy from 2000 forward.*

Introduction

History and philosophy of andragogy was chosen as the topic to be addressed rather than history and philosophy of adult education. The reason for this is that there are already numerous published volumes of the history of adult education: M. S. Knowles – *History of the adult education movement in the United States*; Stubbelfield, H. W., and Keane, P. – *Adult Education in the American Experience: From the Colonial Period to the Present*; Kett, J. F. – *The pursuit of knowledge under difficulties: From self-improvement to adult education in America, 1750-1990*; and, Fieldhouse, R. and Associates – *A history of modern British adult education*. These are a few of the excellent published volumes on the history of adult education. There is one strong volume that is now in its third edition on the philosophy of adult education: Elias, J. and Merriam, S. B. – *Philosophical foundations of adult education*.

This chapter is mainly limited [with a few exceptions] to a chronological history and the accompanying philosophy of andragogy during the initial 167 years, in line with when the English language documents were published.

Background of Nearly a Century 1833-1927

The term 'andragogy', as far as we know, was first authored by Alexander Kapp (1833), a German high school teacher. In the book entitled 'Platon's Erziehungslehre' (Plato's Educational Ideas) he describes the lifelong necessity to learn. He begins the book with a discussion on childhood. However, from page 241 to 300 he turns attention to adulthood – Andragogy or Education in the man's age [a replica of the document is available at <http://www.andragogy.net>]. Kapp argues that education, self-reflection, and educating the character are the first values in human life. He then refers to vocational education of the healing profession, soldier, educator, orator, ruler, and men as the family father. Here we find patterns which repeatedly can be found in the ongoing history of andragogy: Included and combined are the education of inner, subjective personality ('character'); outer, objective competencies (what later is discussed under 'education vs. training'); and, that learning happens not only through teachers, but also through self-reflection and life experience, which makes it more than 'teaching adults'.

The term andragogy lay fallow for many decades, perhaps because adult education was being conducted without a specific name to designate what it was. Nonetheless, in the 1920s Germany became a place for building theory and another German resurrected the term. 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 historical 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 educational method for this purpose; it is a necessity.

About the same time, Lindeman (1926a) from the USA traveled to Germany and became acquainted with the Workers Education Movement. He was the first to bring the concept to America. Although he clearly stated that andragogy was the method for teaching adults, the term did not take hold in the new land until many years later. Lindeman 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. Moreover, 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 USA for a major practical application of andragogy as the method for teaching adults. In addition, Anderson and Lindeman (1927) reiterated the concept as it was brought to the new land of America.

Establishing the Foundation of Andragogy 1964-1980

England and the USA 1964-1970

Another extensive period of time elapsed until the term andragogy was used again in published literature. This time, it appeared in Great Britain. Simpson (1964) 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 Adult Education. He posited that the main strands could be parallel to what already existed in child education. The four main strands were the study 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, Dusan Savicevic, introducing him to the term with Knowles attaching his own special philosophy and meaning.

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.

Knowles (1970) indicated that he acquired the term in 1967 from Dusan Savicevic. [It was actually in 1966]. However, 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 quite broadly fleshed out his ideas on andragogy through the publication of *The Modern Practice of Adult Education: Andragogy vs. Pedagogy*. He originally saw pedagogy as being for children and andragogy being for adults. This American version of andragogy became popularized as a result following 1970. 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 at that time were: (1) they are self-directing, (2) their experience is a learning resource, (3) their learning needs are focused on their social roles, (4) their time perspective is one of immediate application. The learning processes adults want to be actively and interactively involved in are: establishing a climate conducive to learning, planning cooperatively, diagnosing their needs, setting objectives, designing the sequence, conducting the activities, and evaluating learner progress.

Andragogy and Human Resource Development (HRD) 1971-1973

Furter (1971), from France, proposed that universities recognize a science for the training of man to be called andragogy. The purpose would be to focus, not on children and adolescents, but on man throughout his life.

Ingalls (1972) provided the first handbook as a guide to using andragogy in helping adult educators [referred to as 'trainers'] become more systematic and consistent in their engaging learners in the learning process. This was developed and tested in a branch of the U.S. Government.

In the same year, Knowles (1972) declared that there was a growing interest of many industrial corporations in the andragogical education process, with managers functioning as teachers (or facilitators of learning), and that andragogy offers great potential for improving both interpersonal relationships and task effectiveness. Knowles (n.d.) 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.

A series of doctoral dissertations over a number of years, focusing on the work of Malcolm S. Knowles, placed him squarely in the center of helping to expand and further develop the concept and philosophy of andragogy. In the first one, 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.

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. Then Knowles 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.

Andragogy and Self-Directed Learning (SDL) 1975-1981

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 [*the learner*] myself (sic) 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 [*the learner's*] my (sic) 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 skillfully and with initiative.
9. The ability to collect and validate evidence of the accomplishment of various kinds of learning objectives. (p. 61)

Hadley (1975) in his Doctoral Dissertation at Boston University developed and validated an instrument of 60 items [30 andragogical and 30 pedagogical] that could help in assessing an adult educator's orientation with respect to the constructs of andragogy and pedagogy. The instrument was labeled as the Education Orientation Questionnaire (EOQ). The 60 items were developed from a pool of more than 600 statements illustrating how pedagogical or andragogical attitudes and beliefs about education, teaching practices and learning were obtained.

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: (1) creating a social climate in which subordinates feel respected; (2) treating mistakes as opportunities for learning and growth; (3) helping subordinates discover what they need to learn; (4) assisting the staff to extract learning from practical work situations and experiences; (5) letting staff members take responsibility for designing and carrying out their own learning experiences; (6) engaging staff members in self-appraisal and personal planning for performance improvement; (7) permitting or encouraging innovation and experiments to change the accepted way of doing things if the plan proposed appears possible; (8) being aware of the developmental tasks and readiness-to-learn issues that concern his staff; and, (9)

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.

Kabuga (1977), an adult educator from Africa, broke ranks with strict adult education processes and advocated using highly participative teaching/learning techniques with children as well as adults in his native Africa. He was quite committed to and convinced of the value of the andragogical idea in all education, despite the fact that he had not tested those andragogical techniques with other than adults.

The second in the series of doctoral dissertation 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.

Hoffman (1980), very much a practitioner, 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.

Knowles (1980) revised and updated his classic work on *The modern practice of adult education*, thus changing the subtitle from 'andragogy vs. pedagogy' to 'from pedagogy to andragogy'. In addition he added the fifth assumption – adults are motivated more intrinsically (*internally*) than extrinsically (*externally*). He also added up-to-date illustrations from the field, thus supporting some progression and advances in the practice of andragogy. This revision and slight change in perspective was based on friends' who were in K-12 education, commenting that andragogy also worked for them in their classrooms.

Mezirow (1981), adding to the discussion on andragogy, 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 that would help with an organized and sustained effort to assist adults to learn in a way that enhances their capability to function as self-directed learners. The core concepts are:

- 1) Progressively decreases the learner's dependency on the educator;
- 2) Help the learner understand how to use learning resources – especially the experience of others, including the educator, and how to engage others in reciprocal learning relationships;
- 3) Assist the learner to define his/her learning needs – both in terms of

Immediate awareness and understanding the cultural and psychological assumptions influencing his/her perceptions of needs;

- 4) Assist learners to assume increasing responsibility for defining their Learning objectives, planning their own learning program and evaluating their program;
- 5) Organize what is to be learned in relationship to his/her current personal Problems, concerns and levels of understanding;
- 6) Foster learner decision making – select learner-relevant learning experiences which require choosing, expand the learner's range of options, facilitate taking the perspectives of others who have alternative ways of understanding;
- 7) Encourage the use of criteria for judging which are increasingly inclusive and differentiating in awareness, self-reflexive and integrative of experience;
- 8) Foster a self-corrective reflexive approach to learning – to typifying and labeling, to perspective taking and choosing, and to habits of learning and learning relationships; (sic)
- 9) Facilitate problem posing and problem solving, including problems associated with the implementation of individual and collective action; recognition of relationship between personal problems and public issues;
- 10) Reinforce the self-concept of the learner as a learner and doer by providing for progressive mastery; a supportive climate with feedback to encourage provisional efforts to change and to take risks; avoidance of competitive judgment of performance;

appropriate use of mutual support groups;

11) Emphasize experiential, participative and projective instructional methods; appropriate use of modeling and learning contracts;

12) Make the moral distinction between helping the learner understand his/her full range of choices and how to improve the quality of choosing vs encouraging the learner to make a specific choice. (pp. 21-22)

Suanmali (1981), a doctoral student of Mezirow, focuses his dissertation research on the agreement he found that 174 adult educators, including professors and practitioners, had on ten of those twelve core concepts of Mezirow (1981) that all related to self-direction in learning. All items except numbers eight and twelve were included. The major theme that came out of his research 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.

Conflict Between Supporters and Detractors 1981-1984

Zemke and Zemke (1981) selected at least thirty ideas/concepts/techniques that they thought they knew for sure about adult learning/andragogy. These ideas lend themselves to three divisions: motivating to learn, designing curriculum for adults, and working with adults in the classroom. 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.

Christian (1982) provided the perspective of assessing the Student's Orientation Questionnaire (SOQ). This instrument is similar in arrangement to and based upon 25 pedagogical and 25 andragogical items from Hadley's (1975) Educational Orientation Questionnaire (EOQ).

Allman (1983) regarded the connection between brain plasticity (fluid intelligence) and 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.

Both the Nottingham Andragogy Group (1983) and, Allman and Mackie (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.

Brockett (1983) substantiated that andragogy is being used to help hard-to-reach adults become more self-directed in learning to improve their lives. Brockett (no date given) also 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. Moreover, Brockett (1984) also indicated that an andragogical approach works in using a proactive approach for developing written materials.

Eitington (1984) promoted pro-active engagement of andragogy with adult learners in most every situation throughout a book containing 21 chapters, 600 pages, and 100 handouts.

Nevertheless, some lack of enthusiasm about Knowles' andragogy concept was reflected by 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. She also 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.

Jarvis (1984) wrote that the theory of andragogy had moved into the status of an established doctrine in adult education, but without being grounded in sufficient empirical research to justify its dominant position. 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. He also viewed andragogy as having been connected with a sign of the times when romantic curriculums were dominant, and with that passing, andragogy was losing much of its appeal.

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.

Not to be deterred at this point, Knowles (1984b) presented the first book in which he cites thirty-six extensive case examples of applying andragogy in practice, revealing what worked and what did not, and summarizing the lessons that could be learned from experience in the effectiveness of andragogy in various settings. This wide ranging array of connections with various groups included

applications of andragogy in these settings: Business, Industry, and Government; colleges and universities; education for the professions; continuing education for the health professions; religious education; elementary and secondary education; and remedial education.

Comparing the European and USA Perspectives 1985-1988

Young (1985) perceived the European concept of andragogy as being more comprehensive than the American conception, even though he considered that Europeans do not use the terms andragogy and adult education synonymously. 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.

Taylor (1986) offered a very strong and articulate research based model that reflected 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.

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. Nevertheless, he suggested that in Andragogy, facilitating learning is a transactional encounter in which learner desires and educator priorities will inevitably interact with and influence each other.

Ross (1987) connected the concept of andragogy and its value with some of the research on teacher effectiveness. He believed that teachers' behavior relate 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.

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.

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 field would simply be better off to drop the word from its lexicon.

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 counseling and tutoring, as distinct from quality of course content, is another professional issue that benefits from a closer look at andragogy.

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.

Trust in Learners' Abilities 1989-1991

Eitington (1989) continued to promote pro-active engagement of adult learners through andragogy in most every situation throughout this second edition of his book. He thought andragogy had very practical use and was well received in the situations where he conducted adult education workshops.

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, accommodating learner uniqueness, teacher insensitivity toward learners, learner-centered learning processes, and teacher-centered learning processes. The central and strongest major core of this instrument was originally and still is a focus on the teacher trust of learners. There are 11 items that teachers exemplify trust of learners:

1. Purposefully communicating to learners that they are each uniquely important;
2. Believing learners know what their goals, dreams and realities are like;
3. Expressing confidence that learners will develop the skills they need;
4. Prizing the learners to learn what is needed;
5. Feeling learners' need to be aware of and communicate their thoughts and feelings;

6. Enabling learners to evaluate their own progress in learning;
7. Hearing learners indicate what their learning needs are;
8. Engaging learners in clarifying their own aspirations;
9. Developing a supportive relationship with learners;
10. Experiences unconditional positive regard for learners; and,
11. Respecting the dignity and integrity of learners. (Pp. 4-5.)

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: (1) students should bloom according to their individual capacity and not be crushed into conformity by externally-derived ideals; (2) subject matter is not important, but study should be chosen according to interests and should be geared toward personal growth rather than scholarship; (3) reciprocal teaching is the ideal learning process engaged through the living word; and, (4) the ultimate reason for learning is enlightenment of life – the gaps of religious/historical/poetic knowledge of one's world, and thus of one's self, integrated through both freedom and fellowship.

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.

Knowles (1989a, successfully tested and refined this theory and design of andragogy on a broad spectrum in numerous settings: corporate, workplace, business, industry, healthcare, government, higher education, professions, religious education, and elementary, secondary, and remedial education.

In another work at this time 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 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. 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.

Nadler (1989) stated that HRD is based in learning, and every HRD practitioner should have an understanding of the theories of Adult Learning. This was a crucial observation, because many in HRD have overlooked that consideration.

Krajinc (1989) in echoing some others provides the most succinct and pointed definition of andragogy to that date, and perhaps one of the most beneficial definition, 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).

Knowles (1990) came out with the fourth edition and strongest 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. In addition, he underscored the crucial importance of equalness, openness, democratic, realness, genuineness, prizing, acceptance, and empathic understanding or adult learners 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.

From a very practical standpoint, Carroll (1990) supported the andragogical point of view. She vowed 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.

Heimstra and Sisco (1990) made what could be considered an extensive addition to the theory, research, and definition of andragogy. They provided annotations on 97 works related to andragogy, thus contributing to its international foundation. Heimstra said 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. He also 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, and have an increasing need to be self-directing. 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.

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. Andragogy (contract learning) is suggested as one effective alternative to traditional nurse education.

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.

Knowles (1991) shares his dream of lifelong learning. In it he presents the eight skills of self-directed learning (SDL) and the 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 unique person, 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)

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, which addressed an andragogical vision of the future of the adult education field.

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.

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. 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).

Lieb (1991) was involved in health services. His perspective 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'.

Scientific Foundation of Andragogy 1991-1995

Savicevic (1991) 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: (1) Whether andragogy is parallel to or subsumed under pedagogy in the general science of education; (2) Whether agology (instead of andragogy) is understood as a sort of integrative science which not only studied the process of education and learning but also other forms of guidance and orientation; (3) whether andragogy prescribes how teachers and students should behave in educational and learning situations; (4) the possibility of founding andragogy as a science is refuted; and, (5) that endeavors have been made to found andragogy as a fairly independent scientific discipline. Moreover, he clearly aligned himself with the fifth school of thought in that the kind of research he was conducting 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.

Savicevic (1991) also 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 17th 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 to 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, Boarding schools for adult instruction, correspondence education, and people's universities.

At this time, there was again strong criticism of American andragogy coming from Candy (1991) in Australia. At the time Knowles articulated andragogy, self-expression and personal development were in vogue. Thus, self-directed learning and andragogy were gaining some prominence in becoming known as autonomous learning.

In addition, a third doctoral dissertation focusing on Malcolm Knowles involvement in andragogy was done by Muller (1992). She 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.

Houle (1992) in contrast, emphasized the impact of Knowles on American andragogy, and how he 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.

The struggle regarding andragogy and Knowles involvement in it was still heating up. Pratt's (1993) perception that after 25 years, Knowles' approach to andragogy did not fulfill a promise of being somewhat of a panacea for a teaching approach in all adult education. Pratt had become somewhat guarded about his earlier involvement in the andragogical approach.

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.

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 (n.d., circa, 1993) 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,

Newman (1993) 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, as elaborated by Knowles" (p. 49).

Kaminsky (1993) 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'. This is the reason she selected that idea from hooks. She finds Ferro's (1997) remarks snobbish and exclusionary sounding as it appears that he does not want anyone, other than 'linguists', to try and name the world, or even to make up new ways of naming things. She argues that he wants that job to belong to the expert name-makers, who, it seems, can never be adult educators, let alone people who have never seen the inside of a college or high school.

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). It is sometimes later that this kind of practice is given a label that comes into common use.

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.

Zmeyov (1994) clearly in support of andragogy, 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).

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.

Delahaye, et al. (1994) measured student's orientation to andragogy and pedagogy by using the Student's Orientation Questionnaire (EOQ) 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. Basically, he conceived the maturity of the adult learner as moving from lower to higher through the four stages of learning, as follows: 1) low andragogy / high pedagogy; 2) high andragogy / high pedagogy; 3) high andragogy / low pedagogy; and, 4) low andragogy / low pedagogy.

The fourth doctoral dissertation focusing on Knowles' view of andragogy was Cooke (1994) who observed Knowles in personal human terms and he thought it quite appropriate to designate him as the 'father of American andragogy', Perhaps, however, he considered that it would be better to just call him 'Malcolm' as he so many times referred to himself.

Knowles (1995) provided the most articulate expression and most complete 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 than 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, (g) 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.

Milligan (1995) 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.

Henschke (1995) focused on the description of a dozen different episodes with groups in various settings. In these, he showed results he considered successful in using the andragogical approach with the participants.

Skepticism and Its Counter-Balance 1995-1998

Welton (1995) leveled one of the most vigorous assertions against andragogy and Knowles's influence in it, 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).

Welton went on to express that 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.

Eitington (1996) was continuing to revise his book *The winning trainer* and use his andragogical approach with great success with many audiences. The contrasting perspectives made for some cogent debate in the field.

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.

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. He considered that 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.

Hanson (1996) from the other side of the discussion, 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 un-contextualized views of learning and empowerment.

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 (n.d., circa, 1996) 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.

Zemke (1996) updated his ideas about andragogy / adult learning. He more strongly emphasized learning designs being: problem-centered learning, having pre-program assessment, integrating information, containing true case studies, orienting toward various learning styles, supporting growth and changing values, and including transfer strategies.

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).

Most dictionaries previous to 1996 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). However, this was a definition that did not exactly coincide with various definitions from the adult education field. 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. This would seem to give impetus that andragogy could still be appropriately used in adult education, despite there was no common agreement on a single definition.

However, Ferro (1997) insists that use of the term andragogy is not encouraged because of its being an unclear term. He 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.

Conner (1997) 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. She also 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.

Milligan (1997) continued to support his original investigation of andragogy (1995) in which he conceptualized his summary of it as the facilitation of adult learning that can best be achieved through a student centered approach.

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, Billington (1998) found that the andragogical process of self-directed learning used in a doctoral program positively influenced a number of things. These were: The ego growth in doctoral students, their intrinsic motivation, the time they spent in the program, their desire for stimulation, their embracing challenge, and their ability in high level of complexity relating to pacing.

Jorgensen (1998) combined ideas of Knowles, Rogers, Jarvis and Ellen White into a comprehensive andragogical process. He suggested this for engaging Seventh-Day Adventist college students to think through their faith and what it means to them.

Antecedents of Andragogy 1998-2000

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. He attempted a descriptive definition of andragogy that moved in the direction of calling it a scientific discipline of study. This he posed in contrast to what others considered to be a fading influence of andragogy. He 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.

Zmeyov (1998) 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).

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).

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. Knowles, et al. (1998) presented this revised fifth edition, but it was much changed from the previous four editions, thus moving andragogy into what was a somewhat different direction from the earlier editions.

Green (1998) comments on some important andragogical factors he suggests need to be considered in online learning. These factors include that in andragogy: (1) teachers need to guide learners to their own knowledge rather than supplying them with facts; (2) learners must balance life responsibilities with the demands of learning; (3) learners need to connect their tremendous amount of life experiences to their knowledge base and recognize the value of the learning; (4) learners are goal oriented and know the purpose for their learning new information; and, (5).learning is largely self-initiated and tends to last a long time.

Henschke (1998b) also 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.

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.

The most comprehensive of all the publications on andragogy is a book that includes thirty of Savicevic's (1999b) publications within a twenty-six year period. 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.

Boucoulalas (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, Milligan (1999) added more support to his scientifically investigated andragogy (1995 & 1997). More evidence agreed that the facilitation of adult learning can best be achieved through a student-centered adult learner approach.

Dewar (1999) articulated what she deems to be important principles of andragogy/adult learning for consideration when facilitating adult learning online. Increasing and maintaining one's 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.

Savicevic (1999b) however, indicated that Knowles was inconsistent in determining andragogy and thus had caused much confusion and misunderstanding. He identified six mistakes of Knowles regarding his perspective on andragogy. 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.

Mihall and Belletti (1999) provide an example of a one hour training program. It includes: objectives, a contrast of children and adults as learners, comparing the assumptions of pedagogy and andragogy, adult learning principles, current training methods' advantages and drawbacks with appropriate application, participants giving feedback, and a quiz.

It has been suggested by Savicevic (1999b) 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.

Reischmann (1999) saw 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.

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.

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: (1) who the learner is, (2) the fact that andragogy must be learned, (3) designed to fit the learner, and, (4) to incorporate technology positively.

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, 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.

Merriam (1999) asserted that andragogy is one of the major ideas in adult education that was derived from the practice of the adult education field or discipline. rather than being informed by research and knowledge from other disciplines, especially psychology.

Henschke (1999) explored the gap between 'learning' and 'performance' within the andragogy concept relating to Adult Education and HRD. Considering some of the literature in both areas within the Academy of Human Resource Development [AHRD] 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.

Savicevic (2000) also explored various antecedents to and backgrounds of andragogy before the term came into publication. In this he 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 indicates this study as dedicated to search for 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 several chapters that interconnected and logically linked, and is divided into the following five parts. 1. Conceptual and methodological frames of research includes: The nature and characteristics of research of andragogical ideas; and, methodological frame of researches. 2. Searching for the roots of andragogical ideas includes: Adult learning before literacy; Ancient Greek civilization; activity of sophists; Socrates; Plato; Aristotle; diffusion of Greek culture and science; Ancient Rome; Jewish cultural heritage; Middle ages; and, reversal which brings New Century. 3. Andragogical ideas in the international context includes: The work of Jan Amos Komensky; ideas of Gruntdvig and their practical realization, thoughts of E. N. Medinsky; view of E. C. Lindemann; Thorndike's comprehension; and, thoughts of Friere. 4. Andragogical ideas in Yugoslav frame and context includes: Practical realization in Yugoslav cultural space; social philosophy of Svetozar Markovic; Radovan Dragovic; Dimitrije Tucovic; Dusan Popovic; Filip Filipovic; activities of the Serbian social democrats in practice; and, thoughts of Vicentije Rakicc. 5. Andragogical comparisons and conclusions included a final general discussion.

Ovesni (2000) proposed three concepts and models of andragogues' professional preparation, based upon scientific research in andragogy. They area model of professional preparation of andragogical personnel of general profile; a 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.

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.

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.

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. He also 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 [much of that time he worked in some capacity with Malcolm Knowles], in a wide variety of settings he successfully tested and applied this andragogical method with many participants affirming the results.

Trends of Research

Some trends which may be helpful for future development of both qualitative (i.e. phenomenology) and quantitative (i.e. empirical) research in andragogy, could include: 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 'life-worlds' of the participants, and new types and alternatives of adult education. Even a bit more specific may be some empirical evidence to clarify whether andragogy provides better results from learning than other approaches that emphasize teaching or facilitating adult learning.

Conclusions

Andragogy was first authored by Alexander Kapp (1833) a German high school teacher. He asserted andragogy as education at the man's age including self-reflection, and educating the character are the first values in human life. Patterns in andragogy encompassed the inner, subjective personality, and outer, objective competencies, that learning happens not only through teachers, but also through self-reflection and life experience, which makes it more than teaching adults.

Lindeman (1926) brought andragogy to the USA from the Workers Education Movement in Germany. He laid the earliest groundwork in the USA for a major practical application of andragogy as the method for teaching adults. Although the term lay fallow for many years, Knowles (1970) helped establish the foundation for it in the USA. The foundation was initially based on assumptions and processes as follows. The assumptions were the self-directedness of adults, their experience being a resource for learning, learning needs grew out of their social role tasks, and

immediate application of learning was one of its hallmarks. The process elements were setting a climate conducive to learning, mutual planning of learning by teachers and learners, self-diagnosis of learning needs, learning objectives growing out of needs, designing a pattern of learning experiences, conducting the activities, and evaluating the progress made in learning.

Hadley (1975) developed and validated an instrument entitled Educational Orientation Questionnaire of 60 items that could help in assessing an adult educator's orientation with respect to the constructs of andragogy and pedagogy. Knowles (1975) provided a self-directed guide for learners and teachers including a list of required skills of self-directed learning. Mezirow (1981) provided a charter for andragogy, with Suanmali (1981) undergirding it with his research in the field, that solidly established self-directed learning as the cardinal principle and major approach for implementing andragogy. The Nottingham [UK] Andragogy Group (1983) added critical thinking to the andragogy equation, with much attention directed to research in adult development through life phases.

Among other things, Hartree (1984) felt that Knowles' andragogy did not live up to what she interpreted as his desire for its becoming a comprehensive learning theory for adult education. In addition, Jarvis (1984) estimated that the theory of andragogy had moved into the status of an established doctrine, but without being grounded in sufficient empirical research to justify its dominant position. Moreover, Jarvis thought that andragogy had been connected with a sign of the times when romantic curriculums were dominant, and with that passing, andragogy was losing much of its appeal.

Not to be deterred at this point, Knowles (1984b) presented the first book in which he cites 36 extensive case examples of applying andragogy working in practice within various groups: Business, industry, government, colleges, universities, education for the professions, continuing education in the health professions, religious education, elementary and secondary education, and remedial education. 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. The phases and transitions are: equilibrium, disconfirmation, disorientation, naming (sic) the problem, exploration, reflection, reorientation, sharing (sic) the discovery, and back to equilibrium. Nonetheless, Davenport (1987) asserted that because of the lack of clarity and solid empirical support, that adult education would simply be better off to drop the word andragogy from its lexicon.

Henschke (1989) developed an andragogical assessment instrument entitled Instructional Perspective Inventory which was later validated. The central and strongest core element in it which includes 11 items is the teacher trust of learners and the learners trust in their own ability to learn. Knowles (1991) added a crucial dimension to the skills of self-directed learning – the ability to develop and be in touch with curiosities. Savicevic (1991) provided a critical consideration of the scientific foundation of andragogical concepts in ten European Countries: Five western – German, French, Dutch, British, Finnish; and, five eastern – Soviet, Czech-Slovak, Polish, Hungarian, Yugoslavian. Moreover, he aligned himself with the endeavors to found andragogy as a fairly independent scientific discipline, the subject of which is the study of education and learning of adults in all its forms of expression. Poggler (1994) listed ten trends which he hopes will be helpful

for development of European andragogical research, including: International, comparative, political, adult as a subject, 30 to 50 age group, social structure, development-andragogy in the 3rd World, criteria for successful teaching and learning, understanding participant 'lifeworlds', and new adult education types and alternatives.

Welton, (1995) expressed that the fundamental accusations against the andragogical consensus is that adult education has abandoned its once vital role in fostering democratic social action. Thus, it is on a shaky foundation, which works to the advantage of large-scale organizations, and is conceptually inadequate to serve the interests of the disenfranchised in North American society. However, counter to this point of view, Houle (1996) said that Knowles' work in andragogy remains the most learner-centered of all patterns of adult educational programming. He states that andragogy influences every other system, with the leaders knowing 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.

Henschke (1998) 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 of andragogy. He attempted a descriptive definition of andragogy that moved in the direction of calling it a scientific discipline of study, in contrast to what others considered to be a fading influence of andragogy. 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. He closed by saying that tracing the metamorphoses of andragogy / adult education is important to the field's search for identity, and the search for meaning has also been an attempt to humanize and understand the educational process.

In a very timely manner, the most comprehensive of all the publications on andragogy is a book that included 30 of Savicevic's (1999b) publications within a 26 year period. He claimed that andragogy is defined as a scientific discipline, which deals with problems relating to Human Resource Development 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. However, in this work he also criticized Knowles as being inconsistent in determining andragogy and thus had caused much confusion and misunderstanding. He identified six mistakes of Knowles regarding his perspective on andragogy: Defined andragogy as 'science and art'; defined andragogy as the science and art of 'helping adults to learn' thus reducing it to a prescription how a teacher needs to behave in educating adults; declared andragogy as a 'model' for teaching even in pre-school; directed andragogy only toward problems of learning, thus neglecting social and philosophical dimensions of adults; emphasized an individualistic approach to learning and education; and, lacked historical awareness of the first use of andragogy in the USA.

.

Savicevic (2000) also explored various antecedents to and background of andragogy before the term came into publication. The study is dedicated to search for the roots of andragogical ideas start from the antique

civilizations up to the present time. Billington (2000) found that with 60 men and women ages 37 to 48, a number of key factors relating to andragogy that helped them to grow, or if absent made them regress and not grow. Among all of the andragogical factors, self-directed learning is one of the most prominent and important.

REFERENCES

- Allman, P. (1983). The nature and process of adult development. In M. Tight (Ed.). *Education for adults: Adult learning and education* (pp. 107-123), vol. 1, chapter 2.5, London: Croom Helm & The Open University.
- Allman, P., & Mackie, K. J. (Eds.). (1983). *Towards a developmental theory of andragogy*, Nottingham, UK: The University of Nottingham, Department of Adult Education.
- Anderson, M. L., & Lindeman, E. C. (1927). *Education through experience: An interpretation of the methods of the academy of labor*, Frankfurt-am-Main, Germany. *Workers' Education Research Series*, Monograph no. 1, New York: Workers Education Bureau Press, Inc.
- Baden, Clifford (1998), *Adult learning in associations: Models for good practice*, New York: American Society of Association Executives.
- Billington, D. D. (2000), *Seven characteristics of highly effective adult learning programs*. *New Horizons for Learning*, Seattle: New Horizons, <http://www.newhorizons.org>
- Billington, D. D. (1988), *Ego development and adult education*, Doctoral Dissertation, The Fielding Institute, Dissertation Abstracts International, 49(7), University Microfilms no. 88-16, 275.
- Boucoulas, M. (1999), *Comparative thinking and the structures of adult cognition: An epistemological and methodological challenge for comparative adult education*. In Reischmann, J., Jelenc, Z. & Bron, M. (Eds.). *Comparative Adult Education: The Contributions of the International Society for Comparative Adult Education [ISCAE] to an Emerging Field of Study*. Ljubljana, Slovenia: Slovenian Institute for Adult Education and ISCAE. (Pp. 65-76).
- Brager, J., & Johnson, K. (1993). *Adult learning: New research on continuous learning in the business environment*, Atlanta, GA: American Society for Training and Development Annual Conference.
- Brockett, R. G. (1984, February). Developing written learning materials: A proactive approach. *Lifelong Learning: An Omnibus of Practice and Research*, 7(5),16-18, 28.

- Brockett, R. G. (1983, April). Self-directed learning and the hard-to-reach adult. *Lifelong Learning: An Omnibus of Practice and Research*, 6(8), April, 1983, 16–18.
- Brockett, R. G. (no date given), *Humanism as an instructional paradigm*, Website: <http://www-distance.syr.edu/romira1&html> (Listed also to appear as a chapter in C. Dill & A. Roomiszowski (Eds.). *Instructional development: State of the art paradigms in the field*. Volume 3, Englewood Cliffs, NJ: Educational Technology Publications.
- Brookfield, S. D. (1986), *Understanding and Facilitating Adult Learning*, San Francisco: Jossey-Bass Inc., Publishers.
- Burge, L. (1988). Beyond Andragogy: Some explorations for distance learning design. *Journal of Distance Education*, 3(1), 5-23.
- Candy, P. (1991). *Self-direction for lifelong learning: A comprehensive guide to theory and practice*. San Francisco: Jossey-Bass Publishers.
- Carroll, J. M. (1990). *Learner characteristics: When working adults sit down to learn*, www.spsu.edu/htc/hughes/com. Date Retrieved: May 4, 2004.
- Christian, A. C. (1982). *A comparative study of the andragogical-pedagogical orientation of military and civilian personnel*. Unpublished doctoral dissertation, Oklahoma State University, Stillwater, OK.
- Clark, D. (1999). Andragogy. <http://www.nwlink.com/~donclark/hrd/history/history.html>. Date Retrieved: October 10, 2002
- Conner, M. L. (1997). Andragogy + Pedagogy. *Ageless Learner*, **Error! Hyperlink reference not valid..** Date Retrieved: October 22, 2007.
- Cooke, J. C. (1994). *Malcolm Shepherd Knowles, the father of American andragogy: A biographical study*. University of North Texas, Denton, Texas, Unpublished Doctor of Philosophy Dissertation.
- Davenport, J. III. (1987). Is there a way out of the andragogy morass? *Lifelong Learning: An Omnibus of Practice and Research*, 11(3), 17-20.
- Delahaye, B. L., Limerick, D. C., & Hearn, G. (1994). The relationship between andragogical and pedagogical orientations and the implications for adult learning, *Adult Education Quarterly*, 44(4), 187–200.
- Dewar, T. (1999), *Adult learning principles (a selection)*, **Error! Hyperlink reference not valid..** Date Retrieved: October 22, 2007.
- Draper, J. A. (1998), The metamorphoses of andragogy. *The Canadian Journal for the Study of Adult Education*, 12(1), 3–26.
- Eitington, J. E. (1989), *The winning trainer, instructor, facilitator, teacher, conference leader, etc.* (3rd ed. – 1996). Houston: Gulf Publishing Company.

Ellis, H. J. C. (no date, circa, 1993). *Andragogy in a web technologies course*. Hartford, CT: Rensselaer at Hartford, Department of Engineering and Science.

Eskridge, R. C. (1978), *The literary contributions of Malcolm Shepherd Knowles to the process of adult education*, St. Louis University, Missouri, Unpublished Doctor of Philosophy Dissertation.

Ferro, T. R. (1997). The linguistics of andragogy and its offspring. In J. Levine, (Ed.). *Proceedings of the Midwest Research-to-Practice Conference in Adult, Continuing and Community Education*, East Lansing: Michigan State University. pp. 29-34.

Furter, P. (1971). *Grandeur et misere de la pedagogie*. University of Neuchatel. In E. Faure (Ed.), *Learning to be: The world of education today and tomorrow* (p. 116). UNESCO Paris, 1972.

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

Green, J. (1998), *Andragogy: Teaching adults*. In B. Hoffman (Ed.). *Encyclopedia of Educational Technology*. Retrieved February 11, 2006, from file://C:/Dociments.

Griffith, W. S. (1991), *The impact of intellectual leadership*. In J.M. Peters & P. Jarvis (Eds.), *Adult education: Evolution and achievements in a developeing field of study* (pp. 97-120). San Francisco: Jossey-Bass Publishers.

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

Hanson, A. (1996). *The search for a separate theory of adult learning: Does anyone really need andragogy?* In R. Edwards, A. Hanson, & P. Raggatt (Eds.). *Adult learners, education and training 1* (pp. 99-108). London: Routledge and The Open University.

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

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

Henschke, J. A. (1999). Historical Antecedents Shaping the Terms Performance and Learning in Human Resource Development: An Exploratory Study. *In Proceedings of the Academy of Human Resource Development Research Conference.* ([Ed.] Kuchinke, K. P.) Alexandria, VA: 1999.

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

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

- Henschke, J. A. (1995). *Theory and practice on preparing human resource development professionals*. In *Proceedings of Academy of Human Resource Development Research Conference* (pp. 1-11), St. Louis: University of Missouri.
- Henschke, J. A. (1989). *Identifying appropriate adult educator practices: Beliefs, feelings and behaviors*. In C. Jeffries, (Ed.), *Proceedings of the Eighth Annual Midwest Research-To-Practice Conference in Adult, Continuing and Community Education* (pp. 89-95). St. Louis, MO: University of Missouri.
- Henschke, J. A. (1987). *Training Teachers of Adults. Materials and Methods in Adult and Continuing Education: International – Illiteracy*. (Ed. Kleivins, C.). Los Angeles: Kleivins Publications, Inc. Pp. 414-422.
- Henschke, J. A. (1973), *Malcolm S. Knowles: His contributions to the theory and practice of adult education*, Boston University, Massachusetts, Unpublished Doctor of Education Dissertation. Available at the following website: <http://www.umsl.edu/~henschke>
- Henschke, J., and Cooper, M. (2007a) Additions toward a thorough understanding of the international foundations of andragogy in HRD and Adult Education. An. Inst.de Ins. "G.Barit" din Cluj-Napoca, Series umanistica, tom. V, 2007, pp. 7-54. [This is the 2007 Yearbook of the Romanian Institute of Adult Education.]
- Hoffman, F. (1980). *How to teach grown-ups*, Calabasas, CA: Practical Management Associates, Inc.
- Hoods, Woods (1998). *Andragogy: The act, process, or art of imparting knowledge and skill to adults*, <http://www.survival.com/gogy.htm>. Date Retrieved: October 23, 2007.
- Hooks, B. (1994), *Theory as liberatory practice* (from *Teaching to Transgress – as quoted by Kaminsky, Sherrie* in "*Comparing Pedagogy and Andragogy for Both Common and Dissimilar Meanings*"). <http://www.usm.maine.edu/~dlarson/kaminsky2.htm>.
- Houle, C.O. (1996). *The design of education*. (2nd ed.). San Francisco: Jossey-Bass.
- Houle, C.O. (1992). *The literature of adult education: A bibliographic essay*. San Francisco: Jossey-Bass.
- Hugo, J. (2003). *A comparison of and characteristics of educational multi-media*. Uganda: Naledi3Dfactory and UNE.
- Imel, S. (1989). *Teaching adults: Is it different?* ERIC Digest, no. 82, Identifier # ED 305495.
- Ingalls, J. D. (1976), *Human energy: The critical factor for individuals and organizations*, Reading, MA: Addison-Wesley Publishing Company.
- Ingalls, J. D. (1972). *A trainers guide to andragogy*. Washington, D. C.: United State Department of Health, Education and Welfare.

- Jarvis, P. (1984). Andragogy: A sign of the times. *Studies in the Education of Adults*, 16, 32–38.
- Jorgensen, H. K. (1998), *Adult learning theories and religious education for seventh-Day Adventist college students: From theory to practice*, Silver Spring, MD: 332-98 Institute for Christian Teaching, Education Department of Seventh-Day Adventists; Presented for the 22nd Faith and Learning Seminar held at Seminar Schlossbogenhofen St. Peter Am Hart, Austria, August 9–21, 1998.
- Kabuga, C. (1977). Why andragogy in developing countries? *Adult Education and Development: Journal for Adult Education in Africa, Asia, and Latin America*. Reprinted in Knowles, M. S. (1990). *The adult learner: A neglected species* (4th edition) Houston Texas: Gulf Publishing Company, pp. 233-239.
- Kajee, L. (no date). *Making waves, not just surfing the net: ICT and learning in the ESL classroom*, Johannesburg, South Africa: University of the Witwatersrand, Unpublished paper.
- Kamansky, S. (no date given), *Comparing pedagogy and andragogy for both common and dissimilar meanings*, <http://www.usm.maine.edu/~dlarson/kaminsky2.htm>. Date Retrieved: July 18, 2004.
- Kapp, A. (1833). *Die andragogik ober bildung im mannlichen alter. Platons Erziehungslehre, als Padagogik fur die Einzelnen und als Staatspadagogik*, Germany: Minden und Leipzig.
- Knowles, M. S. (1996). *Adult learning*. In R.L. Craig (Ed.), *ASTD Training & Development Handbook: A Guide to Human Resource Development* (4th ed.) (pp. 254-265), New York: McGraw Hill.
- Knowles, M. S. (1995). *Designs for adult learning: Practical resources, exercises, and course outlines from the father of adult learning*, Alexandria, VA: American Society for Training and Development.
- Knowles, M. S., (1991). *Lifelong Learning: A Dream*.
<http://www.newhorizons.org/future/Creating the Future/crfut knowles.html>
- Knowles, M. S., (1990). *The Adult Learner: A Neglected Species* [Fourth Edition] Houston: Gulf Publishing Company.
- Knowles, M. S. (1989a). *Adult learning: Theory & practice*. In L. Nadler & A. Nadler (Eds.), *The handbook of human resource development* (2^d ed.) (pp. 6.1 -- 6.23). New York: John Wiley & Sons.
- Knowles, M. S. (1989b). *The making of an adult educator: An autobiographical journey*. San Francisco: Jossey-Bass Publishers.
- Knowles, M. S. (1984a). *The Adult Learner: A Neglected Species* [Third Edition]. Houston: Gulf Publishing Company.
- Knowles, M. S. (1984b). *Andragogy in action: Applying modern principles of adult learning*. San Francisco: Jossey-Bass Publishers.
- Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy, Revised Edition*. New York: Cambridge Book Publishers.

- Knowles, M. S. (1978) *The Adult Learner: A Neglected Species* [Second Edition]. Houston: Gulf Publishing Company.
- Knowles, M. S., (1975). *Self-Directed Learning: A guide for learners and teachers*.
- Knowles, M. S. (1973). *The Adult Learner: A Neglected Species*. Houston: Gulf Publishing Company.
- Knowles, M. S. (1972). *The manager as educator*. *Journal of Continuing Education and Training*, 2(2), 97-105. Baywood Publishing Company, Inc.
- Knowles, M. S. (1970). *The modern practice of adult education: Andragogy vs. Pedagogy*. New York: Association Press.
- Knowles, M. S., (1969). "An Experiment with Group Self-Directed Learning: The Learning Teaching Team," Chapter 13 in Runkel, Harrison, and Runkel, *The Changing College Classroom*, Jossey-Bass, 1969.
- Knowles, M. S., (1968b). "How Andragogy Works in Leadership Training in the Girl Scouts," *Adult Leadership*, October, 1968.
- Knowles, M. S., (1968a). "Androgogy, Not Pedagogy," *Adult Leadership*, April, 1968.
- Knowles, M. S., Holton, E. F. III, & Swanson, R. A. (1998). *The adult learner* (5th ed.). Houston: Gulf Publishing Co.
- Krajinc, Anna (1989): Andragogy. In C. J. Titmus (ed.): *Lifelong Education for Adults: An International Handbook* Oxford: Pergamon, p. 19-21
- Lieb, S. (1991), *Principles of adult learning*, Phoenix, AZ: Vision – South Mountain Community College, <http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/adults-2.htm> (& 1.htm).
- Lindeman, E. C. (1926a). *Andragogik: The method of teaching adults*. *Workers' Education*, 4, 38.
- Lindeman, E. C. (1926b, 1961). *The meaning of adult education*, Montreal: Harvest House.
- Long, H. B. (1991). *Evolution of a formal knowledge base*. In J.M. Peters & P. Jarvis (Eds.), *Adult education: volution and achievements in a developing field of study* (pp. 66-96). San Francisco, Jossey-Bass Publishers.
- Maehl, W. (2000). *Lifelong learning at its best: Innovative practices in adult credit programs*. San Francisco: Jossey-Bass Inc., Publishers.

- Mazhindu, G. N. (1990). Contract learning reconsidered: A critical examination of the implications for application in nursing education. *Journal of Advanced Nursing*, 15, 101–109.
- Merriam, S. B. (1999). The development of the discipline of adult education in the United States. *Andragogy Today: Interdisciplinary Journal of Adult and Continuing Education*, 2(3), 31–49. Published by: Adult and Continuing Education of Korea.
- Mezirow, J. (1981, Fall). *A critical theory of adult learning and education*. *Adult Education*, 32(1), 3–24.
- Mezirow, J. (1991), *Transformative dimensions of adult learning*, San Francisco: Jossey Bass, pp. 198–201.
- Mihall, J., & Belletti, H. (1999). *Adult learning styles and training methods: Forget those 13,000 hours*, FDIC ADR.
- Milligan, F. (1999). Beyond the rhetoric of problem-based learning: Emancipatory limits and links with andragogy. *Nursing Education Today*, 19, 548–555.
- Milligan, F. (1997). In defence of andragogy, Part 2: An educational process consistent with modern nursing aims. *Nursing Education Today*, 17, 487–493.
- Milligan, F. (1995). In defence of andragogy. *Nursing Education Today*, 15, 22-27.
- Moore, M. (1986). Self-directed learning and distance education. *Journal of Distance Education*. „Revue de L’enseignement a Distance”, 1-15, Retrieved December 28, 2004, <http://cade.athabasca.ca/voll.l/moore.html>
- Morrall, P. (1993, September-October). The beginning of the end of andragogy. *Senior Nurse*, 13(5), 42–44.
- Muller, L. H. (1992). Progressivism and U. S. adult education: A critique of mainstream theory as embodied in the work of Malcolm Knowles, Teachers College, Columbia University, New York City.
- Newman, A. P. (1993). *Prison Literacy: Implications for Program and Assessment Policy*. Bloomington, IN: ERIC Clearinghouse on Reading and Communication Skills. ED 363 729. P. 49. Unpublished Doctor of Philosophy Dissertation.
- Newman, A. P. (1993). *Prison Literacy: Implications for Program and Assessment Policy*. Bloomington, IN: ERIC Clearinghouse on Reading and Communication Skills. ED 363 729. P. 49.
- Mynen, M. (no date, circa, 1997), What andragogy means to me, <http://www.instructordiploma.com/core/102%20b/victoria/mynen.htm>. Date Retrieved: December 3, 2003.

Nadler, L., & Nadler, Z. (Eds.). (1989). *The handbook of human resource development* (2d ed.). New York: John Wiley & Sons.

Newman, A. P. (1993). *Prison Literacy: Implications for Program and Assessment Policy*. Bloomington, IN: ERIC Clearinghouse on Reading and Communication Skills. ED 363 729. P. 49.

- Nottingham Andragogy Group (1983). *Towards a developmental theory of andragogy*, Adults: Psychological and Educational Perspective, no. 9, Nottingham, England: University of Nottingham Department of Adult Education.
- Osborn, S. (1999). *Andragogy*, Belgrade, Yugoslavia: Faculty of Philosophy. Forum Website: <http://ifets.gmd.de/>
- Ovesni, K. (1999), *Andragogy as an integral part of educational sciences*, Belgrade, Yugoslavia: Faculty of Philosophy. Forum Website: <http://ifets.gmd.de/>
- Peters, J. M., & Jarvis, P. (1991). *Adult education: Evolution and achievements in a developing field of study*, San Francisco: Jossey-Bass Publishers.
- Poggeler, F. (1994). *Introduction – Trends of andragogical research in Europe*. In P. Jarvis & F. Poggeler (Eds.). *Developments in the Education of Adults in Europe*, Volume 21 (pp. 9-15) Frankfurt am Main: Peter Lang, Studies in Pedagogy, Andragogy and Gerontology.
- Pratt, D. D. (1993, Spring). *Andragogy after twenty-five years*. In S. Merriam (Ed.). *New Directions for Adult and Continuing Education: An Update on Adult Learning Theory*, no. 57, 15–24.
- Pratt, D. D. (1988, Spring). *Andragogy as a relational construct*. *Adult Education Quarterly*, 38(3), 160–172.
- Pratt, D. D. (1984). *Andragogical assumptions: Some counter-intuitive logic*. Proceedings of the Adult Education Research Conference, no. 25, Raleigh: North Carolina State University. No Page Numbers Provided.
- Rachal, J. (2000). *Effectiveness of andragogy*. Concurrent session presentation. American Association for Adult and Continuing Education Conference, Providence, RI, November, 2000.
- Reischmann, J. (1999). *Adult education in Germany: Roots, status, mainstreams, changes*. *Andragogy Today: Interdisciplinary Journal of Adult and Continuing Education*, Published by Adult and Continuing Education of Korea, 2(3), 1–29.
- Robb, W. M. (1990). *Can South African andragogics improve understanding between Anglo-American and Continental European adult educationists?* In *Toward 1992 – Education of Adults in the New Europe. Proceedings of the 20th SCUTREA Conference* (pp. 71-77). West Sheffield, England.
- Rosenstock-Huessy, E. (1925). *Andragogy – 1925*, Retrieved October 26, 2005, **Error! Hyperlink reference not valid..**
- Ross, B. E. (1987). *Integrating Andragogy with Current Research on Teaching Effectiveness*, in *Proceedings of the Lifelong Learning Research Conference*, pp. 29–33.

Rostad, S., (1998). Nordic Folk Academy Socrates Project entitled 'The Public and the Library'. Nordic Council of Ministers, St. Strandstraede 18, DK-1225 Copenhagen K, Denmark. Found at the following website: <http://x-stream.fortunecity.com/melrose/81/sweden.htm>

Savicevic, D. (1999a). *Adult education: From practice to theory building*. Volume # 37 in a series Edited by F. Poggeler. Series entitled: Studies in Pedagogy, Andragogy, and Gerontology. Frankfurt am Main: Peter Lang.

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

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

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

Smith, M. K. (1996). *Andragogy: The history and current use of the term plus an annotated Bibliography*. In *The Encyclopedia of Informal Education*, <http://www.infed.org/lifelonglearning/b-andra.htm>, Last Updated 6/15/04.

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

Taylor, M. (1986). Learning for self-direction in the classroom: The pattern of a transition process. *Studies in Higher Education*, Vol. 11, No 1, 1986.

Taylor, K., Marienau, C., & Fiddler, M. (2000). *Developing adult learners: Strategies for teachers and trainers*. San Francisco: Jossey-Bass Inc., Publishers.

Thorpe, Dr. E. (1999). *Andragogy and technology*, thorpet@mail.mohawke.on.ca. June 23, 2008, from Dissertations and Theses: A&I database. (Publication No. AAT 3194155).

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

Warren, C. (1989). Andragogy and N. F. S. Grundtvig: A Critical Link. *Adult Education Quarterly*, Volume 39, Number 4, Summer, 1989, 211-223.

Wartenberg, A. D. (1994). *Andragogy and whole language*. Paper presented at the Annual Meeting of the Delaware Valley Reading Association (Merion, PA), 3/15/94. (ERIC Documentation Reproduction Service No. ED 365958)

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

Welton, M.R. (1995). *In defense of lifeworld*. Albany, NY. SUNY Press.

- Young, G. (1985). Andragogy and pedagogy: Two ways of accompaniment. *Adult education quarterly*, 35(3), 160–167.
- Zemke, Ron, & Zemke, Susan (1996). *Adult learning: What do we know for sure?* In ____ Zielinski (Ed.), *The New Training Library: Adult Learning in Your Classroom* (pp. 71-74) Chapter 2 Understanding and motivating the adult learner) Minneapolis: Lakewood Books.
- Zemke, R., & Zemke, S. (1981). *Thirty things we know for sure about adult learning*. In P. G. Jones (Ed.), *Adult Learning in Your Classroom* (pp. 115-118) (Chapter 4 Understanding the adult learner). Minneapolis: Lakewood Publications, *Training Magazine*, June, 1981, pp. 115-117.
- Zhang, Wei (1996). *Adult education in China*. In W. Zhang (Ed.), *International/global comparative education in adult education*(pp. 99-119). (Carole Yufang Huang, Trans.). Beijing: Industrial Publishers.
- Zmeyov, S. I. (1998). Andragogy: Origins, developments and trends. *International Review of Education*, 44(1), 103–108.
- Zmeyov, S. I. (1994). Perspectives of adult education in Russia. In . Jarvis & F. Poggeler (Eds.). *Developments in the Education of Adults in Europe* (pp. 35–42). Studies in Pedagogy, Andragogy and Gerontology, volume 21, Bern, Switzerland: Peter Lang.
- (no author & no date), *A philosophy of adult education*. A Power Point Presentation.