

# **Neuroandragogy: A Neurological Approach to Adult Education and Learning**

*By Clive Wilson*

## **Foreword**

**“Andragogy” as a term was coined and first appeared in published form in 1833 by a German School Teacher, Alexander Kapp. A replica can be found at the following website: [www.andragogy.net](http://www.andragogy.net) . For Kapp andragogy or education in adulthood included and combined the education of inner, subjective personality (‘character’) and outer, objective competencies; and learning happens not only through self-reflection and life experience, and is more than ‘teaching adults’. Kapp justified ‘andragogy’ as the practical necessity of the education of adults. Then the term lay fallow for more than 85 years.**

**By, 1920, Adult Education in Germany had become a field of theorizing. However, in 1921, Eugen Rosenstock, a German Social Scientist connected with the Frankfurt Academy of Labor, reintroduced the term ‘andragogy’. A new direction emerged with the theory and practice of adult education. Andragogy now described sets of explicit reflections related to the why, what for and how of teaching adults. It was used especially in the Workers’ Education Movement, but did not receive general recognition.**

**In 1926, Eduard Lindeman, borrowing from the Workers’ Education Movement, introduced the term andragogy for the first time in the United States of America (November, 1926, “Andragogik: The Method of Teaching Adults.” *Workers’ Education 4: 38*). He declared andragogy as the true method by which adults keep themselves intelligent about the modern world. It represents the learning process as one in which theory and practice become one – a process according to which theoretical knowledge and practical affairs become resolved in creative experience. In andragogy theory becomes fact; that is, words become responsible acts, accountable deeds, and the practical fact**

**which arises out of necessity is illumined by theory. Nevertheless, the term did not take hold in the USA until many years later.**

**In the 1950's andragogy began to be found in publications in Europe. In 1957, a German Teacher named Franz Poeggler, published a book entitled: *Introduction to Andragogy – Basic Issues in Adult Education*. The term was then picked up by adult educators in Switzerland (Hanselman), Yugoslavia (Ogrizovic), and the Netherlands (ten Have). Andragogy was known only to insiders, alternatively more oriented to practice or to theory, without formal training for adult educators, some very limited theoretical knowledge, no institutional continuity of developing such a knowledge, and no academic course of study. Adult Education was still an unclear mixture of practice, commitment, ideologies, reflections, theories, mostly local institutions, and some beginning academic involvement of individuals. However, an increasing differentiation between doing and reflecting began to develop.**

**In 1968, Malcolm Knowles published his first article in the USA with a provocative title 'Andragogy, not Pedagogy'. Following this in 1970 was the original publication of his book entitled: "The Modern Practice of Adult Education: Andragogy vs. Pedagogy." This event was a catalyst for andragogy gaining prominence [especially in the USA, but also in other parts of the world] in the theory and practice of the field of adult education. In 1980 this book was released in a second edition and strengthened the case Knowles made for andragogy. In fact, within North America, no view of teaching adults became more widely known, or more enthusiastically embraced, than Knowles' description of andragogy.**

**Knowles' description included assumptions in the following areas: Concept of the learner being self-directing; learner's experience being a fertile resource for learning; readiness to learn primarily focused on the learner becoming able to perform more effectively in some aspect of their lives; orientation to learning focused on situations they face and/or problems they need to solve; motivation to learn is more and more internal rather than external; why they need to learn a given thing has to be based on a reason that makes sense to them. The processes for learning included the following areas: Preparation, climate conducive for learning, mutual planning of learning, active engagement in**

diagnosing their learning needs, developing the learning objectives based on their learning needs, designing a pattern for using various techniques in their learning experiences; conducting the learning experiences, and evaluating what they have accomplished in their learning. As a result of the prominence of Knowles' approach in helping adults learn, a scientific research, theory and practice foundation for Andragogy was beginning to emerge.

In 1981, Mezirow released his Charter for Andragogy, in an article entitled: "A Critical Theory of Adult Learning and Education." *Adult Education* 32, 1, pp. 3-24. This 12 Item Charter emphasized that Andragogy, as a professional perspective of adult educators, must be defined as an organized and sustained effort to assist adults to learn *in a way that enhances their capability to function as self-directed learners*. Chidchong Suanmali, obtained the support from 176 Professors of Adult Education for 10 of the 12 Andragogy Charter Items in his doctoral dissertation entitled: *The Core Concepts of Andragogy*, conducted at the Teachers College, Columbia University, New York City.

In 1991, Dusan Savicevic asserted that one school of thought has endeavoured to found and establish andragogy as a fairly independent scientific discipline. Those in favor of this conception want to constitute andragogy as an integral science of adult education and learning which has its own scientific structure and system of subdisciplines, the subject of which is to study individual areas of adult education and learning which differ one from the other. [Savicevic, D. (1991). Modern conceptions of andragogy: A European framework. *Studies in the Education of Adults*, 23(3), 179-201.]

Zemyov (1994) clearly states that the most important trend in adult education in Russia is the application and further development of Knowles' (1970, 1980) theory of adult learning, andragogy, in the process of education. He further states that Knowles' concept of andragogy [the art and science of helping adults learn] "...which scientifically founds the activity of the learners and of the teachers in the process of the determination of goals and tasks, of content, forms and methods, of organization, technology and realization of learning, is considered now in Russia by many scholars and teachers as a fundamental theoretical base for adult education. The main scientific

and practical problem for the adult educators consists in finding out the most appropriate combination of pedagogical and andragogical models of learning for obtaining assigned objectives of learning for a learner in an actual situation.” [Zmeyov, Serguey I. (1994). Perspectives of adult education in Russia. In *Developments in the Education of Adults in Europe. Vol. 21 of Studies in Pedagogy, Andragogy and Gerontology*. Eds., Jarvis, Peter, & Poggeler, Franz. Bern, Switzerland: Peter Lang. 35-42.]

Draper (1998) in providing an extensive, world-wide background on andragogy, reflects on and presents an overview of the historical forces influencing the origin and use of the term andragogy: the humanistic social philosophy of the 1700s & 1800s, early twentieth century labor movement in Germany and USA, international expansion of adult education since World War II, commonalities of different terminologies, the debate in North America, the progressive philosophy underlying andragogy in North America, stimulation of critical discussion and research, and the viability of andragogy as a theory. He concludes, “Tracing the metamorphoses of andragogy/adult education is important to the field’s search for identity. The search for meaning has also been an attempt to humanize and understand the educational process.” [Draper, J. A. (1998). The metamorphoses of andragogy. *The Canadian Journal for the Study of Adult Education*, 12(1), 3-26.]

Henschke (1998) goes back into ancient historical foundations and claims that the language of the Hebrew prophets, before and concurrent with the time of Jesus Christ, along with the meaning of various Hebrew words and their Greek counterparts -- learn, teach, instruct, guide, lead, and example/way/model -- provide and especially rich and fertile resource to interpret andragogy. He expects that by combining a probe of these words and elements with other writings, a more comprehensive definition of andragogy may evolve. He also attempted a descriptive definition of andragogy that moved in the direction of calling it a scientific discipline of study. [Henschke, J. A. (1998). Historical antecedents shaping conceptions of andragogy: A comparison of sources and roots. In *Proceedings of the International Conference on Research in Comparative Andragogy. Radovljica, Slovenia. 9/10-13/1998.*]

Savicevic (2000) adds another component to the scientific foundation and design of andragogy in a book. The summary is as follows: The study is dedicated to search of the roots of andragogical ideas starting from the antique civilizations up to the present time. We understand the term andragogical ideas as thoughts and concepts of persons about education and learning of adults, system of andragogical institutons that appeared in certain civilizations, as well as andragogical practice in which such ideas were realized. The structure of the study is made of the following parts – Conceptual and methodological frames of research; Searching for the roots of andragogical ideas; Andragogical ideas in the international context; Andragogical ideas in Yugoslav context; and, Comparisons and final general discussion. Each part is made of several chapters that are interconnected and logically linked. [Savicevic, D. (2000). *The roots and evolution of andragogical ideas*. [Koreni I razvoj andragoskih ideja – in the Serb Language]. Beograd: Serbia [formerly Yugoslavia] Institut za pedagogiju I andragogiju Andragosko drustvo Srbije.]

Rachal (2002) finds little empirical evidence that andragogy provides better results from learning than other approaches. However, he identifies from nineteen empirical studies, insights that may contribute toward helping establish criteria for an operational definition of andragogy suitable for implementation in future empirical research studies of andragogy. He clearly identifies seven criteria: Voluntary participation, adult status, collaboratively-determined objectives, performance-based assessment of achievement, measuring satisfaction, appropriate adult learning environment, and technical issues. [Rachal, J. (2002). Andragogy's detectives: A critique of the present and a proposal for the future. *Adult Education Quarterly: A Journal of Reserarch and Theory*. 22, (3), May, 2002.]

By 2004, Cooper and Henschke in their scientific research identified more than 88 English language articles and studies from international sources as part of the scientific foundation to the theory of andragogy and its relationship to practice. [Many of these documents are posted on the “Andragogical Concepts” Section of my Andragogy Website: <http://www.umsl.edu/~henschke> ] The six themes which emerged from the references listed in the paper provide a foundation for the linkage: Evolution of the term; historical antecedents shaping the concept; comparison of American and European understandings;

popularizing of the American concept; practical applications; and theory, research, and definition. [Cooper, M. K., & J. A. Henschke. (2001). *Additional Thinking About Andragogy: The International Foundation for Its Research, Theory and Practice Linkage in Adult Education and Human Resource Development*. In *Proceedings of the 2004 Commission on International Adult Education PreConference, American Association for Adult and Continuing Education*. Louisville, KY, November 1-3.]

This original edition of *Neuroandragogy: A Neurological Approach to Adult Education and Learning* by Clive Wilson represents a landmark in the presentation of a scientific foundation for research in adult learning and its roots in and relationship to the adult human brain. This is the only book I know that delivers such in-depth information and research about the scientific foundation of how adults learn. This book provides the framework of neuroandragogy and focuses purposefully on the adult brain, its cognitive functions and its graduation, all in relationship to the education of the adult and the adult's learning habits. It presents a state-of-the-art picture of the tenants of Neuroandragogy: Its relationship to pedagogy, research, the chronological age of the adult, adult learning, differences between the adult and child brain, how adult and child learning processes are different, the positive effects of education on the biological and physiological functions of the adult brain, why age-related physical changes do not dictate decrease in brain plasticity, testing and the adult brain, and the adult educator. The book is an important contribution to our literature as well as a valuable resource for those individuals who wish to contribute to andragogy as a scientific discipline of study.

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