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## **TESTING ANDRAGOGY WITH ADULT LEARNERS INTERNATIONALLY IN THE USA, BRAZIL AND AUSTRIA**

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### Abstract

University Faculty have occasionally been asked if they model the kind of teaching they ask of their teacher candidates and the adult educators with whom they work in the public arena and the marketplace. On the one hand autonomous individuals or self-directed learners resist learning conditions that are incongruent with their self-concept. However, on the other hand, autonomous individuals or self-directed learners flourish with learning conditions that help them realize their unique potential. Nonetheless, not all adult learners are self-directed. Depending on their knowledge and experience with the content, an adult learner can actually be in two stages of learning at one time. This has again been shown to be the case in the experiences of the authors in the USA, Brazil and Austria. This paper describes each of the authors' journey in continuing to realize how to reach and teach various learners based on where they are in their understanding.

As a Teaching Assistant in the Teacher Education program and the University of Missouri-St. Louis (UM-St. Louis), I [Amy Narishkin] taught methods courses to pre-service elementary teachers. At the same time, I was a doctoral student taking classes in Adult Education.

During one of my semesters at UM-St. Louis, I took a course entitled "The Adult Learner." In that class, my colleagues included a nutritionist, accountant, pastor, and among others, a chef. In that classroom, I was the only educator of both adults and children. As the course progressed and we learned about teaching adults from an andragogical perspective, I began to wonder how teaching adults was different from teaching children. Initially, the teaching methodology seemed similar and applicable to people of all ages. In both cases, as an example, the teacher needs to build on prior knowledge, provide an agenda, clarify the lesson's objective, and summarize the lesson. When I shared this observation and asked our professor if she would explain the difference, she suggested that I use my question as the foundation of a self-directed project for the class.

My question was, "What's the difference between andragogy and pedagogy?" With that question in mind, I went to the university's library. In front of me on a piece of paper, I ready to compare and contrast the two theoretical concepts. After doing various searches in the literature, I was unable to find any research that could give me any insight. I had drawn a Venn diagram and written Andragogy and Pedagogy in the circles. I sat in the library, looking at my Venn diagram, stumped. Then, as if by providence, in walks Dr. Cooper, another professor in the Adult Education program. As soon as she saw me, she walked over and asked, "What's going on?" I shared my dilemma with her.

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She sat down with me. Thoughtfully, she said she did not think the relationship could be organized in a Venn diagram. I asked if she thought the concepts could be organized on a continuum. She did not think a continuum represented the relationship either because the two concepts are a part of each other. In talking further about the relationship, we decided on two circles but this time, a smaller one inside a larger one (see Figure 1). The smaller circle was labeled 'Pedagogy' and the bigger circle 'Andragogy.' At that point, I saw that I needed to revise my question to reflect my new understanding of the relationship. Instead of, "What is the difference..." I changed it to, "What is the relationship between andragogy and pedagogy?"

With the revised question and new diagram, I went back to my search for relevant literature. This time, it was as if someone had thrown open a window and the research flew in. First, I found Imel's (1995) article that defined adult learning. One side note, before Dr. Cooper left me to my work, she had pointed out that when I define the two concepts, I need to use traditional definitions of the words. With her advice in mind, using Imel's work, pedagogy is defined (in the smaller circle) as:

- Traditionally formal education,
- Accountability is lockstep, and
- Teacher-directed learning theory.

Andragogy (in the larger and encompassing circle) is defined as:

- Traditionally incidental and informal education,
- Accountability is individualized, and
- Self-directed learning theory.

Next, I used Knowles' (1990) historical context to further define the two concepts. Pedagogy included:

- Assumptions about learning that were organized in the Middle Ages.
- Preparation for Monastic life; children were trained to read and write to later transcribe sacred texts.

Andragogy included:

- Assumptions about learning that were lost with the fall of Rome.
- Learning is a process of discovery; including dialogue and case study.

Also, using Imel's (1995) work, I began to see the concepts as hierarchical in the nature of learning. I saw how pedagogy fits inside andragogy as the first step toward independent learning. Imel explains that learning for a student is initially subject-oriented. Students acquire outlined content. Secondly, learning is consumer-oriented. Students learn based on an expressed need. Finally, (in andragogy) learning is transformational (or emancipatory). In this phase the learner is free to gain perspective through critical reflection. See Figure 1.

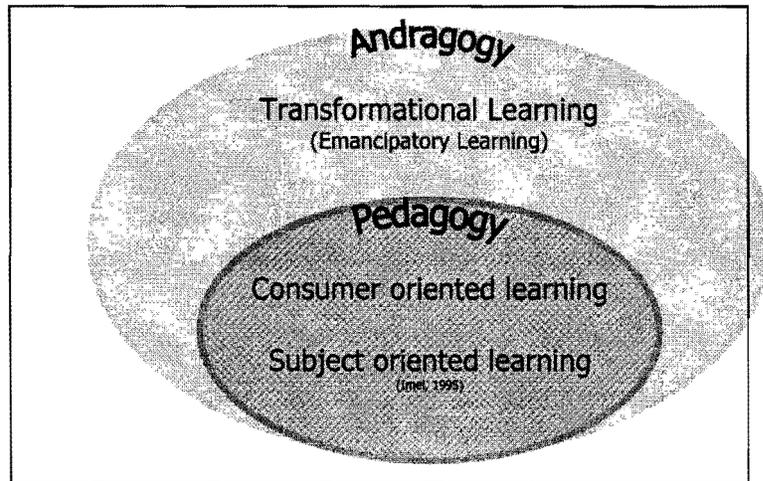
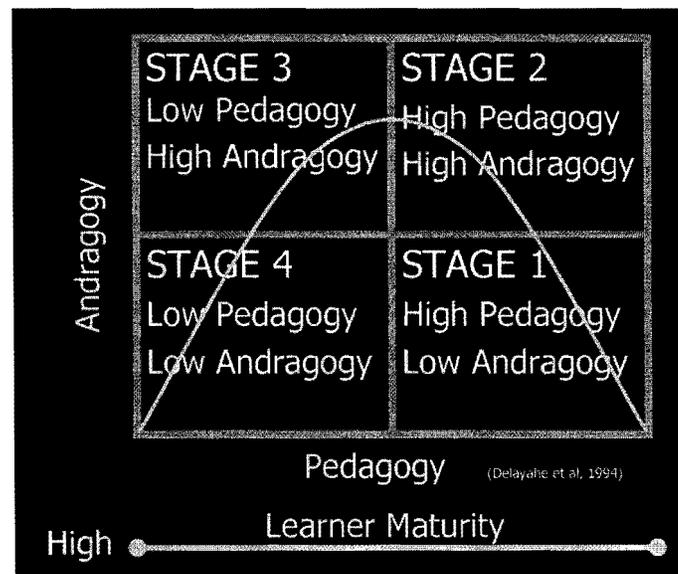


Figure 1. Relationship Between Andragogy and Pedagogy

At this point I was concerned that by being hierarchical, I had only confirmed that the relationship reflected a continuum. I sensed that the relationship was more complex but had no evidence. Then I found Delahaye, Limerick, and Hearn's (1994) study. In their study, the authors wanted to determine if the relationship between andragogy and pedagogy was more complex than a continuum. Using a Student Orientation Questionnaire, they discovered that the relationship is orthogonal. Depending on the learner's knowledge and experience with the content, a student can actually be in two places at one time. See Figure 2.



Source: Delahaye et al., 1994, p. 196

Figure 2. Orthogonal Relationship between Andragogy and Pedagogy

Grow (1991) illustrates how a learner can be in two places at one time with his Staged Self-Directed Learning Model. See Figure 3.

<b>Four Stages of Learning</b>			
<i>Stage</i>	<i>Student</i>	<i>Teacher</i>	<i>Example</i>
1.	Dependent Coach	Authority; immediate feedback	Drill; informational lecture
2.	Interested	Motivator; guide	Inspiring lectures plus guided discussion; goal setting; learning strategies
3.	Involved	Facilitator	Discussion facilitated by teacher who participates as equal; group projects
4.	Self-directed	Consultant; delegator	Internship; dissertation; individual work or self- directed study group

(Grow, 1991)

Figure 3. Four Stages of Learning [Figure Adapted from Grow, (p. 129), not a Table]

With the orthogonal relationship of andragogy and pedagogy, along with the four stages of learning, I had new insight on my role as a university professor. I understood that the teaching methods I found to be effective with both children and adults still held true. However, armed with this new knowledge, I needed to conduct initial needs assessment (either formal or informal) for individual students. Finally, for those students who are in stage four of Grow's model need to be given the opportunity for Self-directed learning.

#### Application of Andragogy in Brazil.

John A. Henschke has been to Brazil seven times and has conducted workshops, seminars and courses for adult educators mainly in Belem, Para, Brazil. These have transpired over a period of 24 years from 1985 to 2009. They have been through the Partners of the Americas, Inc., through which Missouri, USA and Para, Brazil have had a 43 year partnership (Henschke, 2009b). In May, 2009, he went to Para for the seventh time and the major theme in all these sessions focused on 'the art and science of helping adults learn'. The total numbers of the activities are as follows:

- 1128 = Adult Educators participated from Brazil in
- 28 = Workshops, Courses on using adult education methods and techniques,  
involved with
- 448 = Volunteer Hours of instruction in all the courses logged in Partners Counts,  
engaging
- 21 = Partner States from Brazil and USA represented by those participating from  
numerous
- 36 = Educational, Corporate, Industrial, Social Service, Religious, Healthcare, NGO's.

During Henschke's seventh visit in May, 2009 the following Courses , Seminars and Workshops were conducted.

1. Univeridade Federal do Para [UFPA] – Barros Barreto Hospital Educational Division – 24 participants
2. UFPA Undergraduate and Teachers of The Education and Language Departments – 44 and 34 participants in two different groups
3. Bi-National Center for English Teachers – 30 participants;
4. University of Amazonia [UNAMA] – Undergraduate and Graduate Faculty and Students – 55 participants;
5. SESI – Professional Educators at the Para State Division of the Brazilian National Governmental Education Section Serving Learning and Work Related Needs in Industries, Corporations and Institutions – 275 participants;
6. UNAMA Undergraduate and Graduate Students Seminar Including Some of Their Faculty – 180 participants; and,
7. UFPA Students Who Are Preparing to be English Language Instructors That Were Ready to Complete Their Degree – 15 participants

One of two major andragogical themes were followed in these workshops: (a) Building Blocks for Adult Learning; and (b) Using a Dynamic, Living, Interactive Lecture to Help Adults Learn. All of the sessions were very interactive and much give and take information was shared between and among the participants, the groups, and the leader.

The structure of the “Building Blocks for Adult Learning” is as follows: (a) Identify the things that made a learning experience good / excellent / great. (b) Identify the things that made a learning experience bad. (c) Address the following questions:

If when you are preparing to teach a class with adults, what would / do you focus on regarding their beliefs and notions about adults as learners?

If when you are preparing to teach a class with adults, what would / do you focus on regarding their perceptions concerning the qualities of effective teachers?

If when you are preparing to teach a class with adults, what would / do you focus on regarding the phases and sequences of the learning process?

If when you are preparing to teach a class with adults, what would / do you focus on regarding teaching tips and learning techniques?

If when you are preparing to teach a class with adults, what would / do you focus on regarding implementing the prepared plan?

(c) What idea[s] from the session would you like to try out back home and how do you intend to carry that forward? (Henschke, 1987)

The structure of “Using a Dynamic, Living, Interactive Lecture to Help Adults Learn” for the participants is as follows: (a) Before a presentation, the audience can be asked to serve as “listening teams” according to the section of the room where they are sitting – one section to listen to the presentation for points requiring clarification (the Clarification Team), another for points with which they disagree (the Rebuttal Team), another for points they wish to

have elaborated on (the Elaboration Team), and a fourth for problems of practical application they wish the speaker to address (the Application Team). (b) Then the speaker gives a short lecture or presentation on an appropriate topic. (c) After the lecture or presentation the teams are asked to “buzz” in groups of four or five to pool their thinking about points they want raised. (d) Then one member of each group gives a summary of its deliberations or asks a question the group has generated. (e) The speaker responds to each item in turn, until time runs out or all items are discussed (Henschke, 2009a; Knowles, 1980).

The first session conducted was at Universidade Federal do Para [UFPA] – Barros Barreto Hospital Educational Division with 24 participants. Ana Isabel (Belle) Macedo translated. Henschke only speaks English and the participants speak Portuguese. The structure of this one was “Building Blocks for Adult Learning.” We started with the exercise of recalling a learning experience that you considered good / excellent / great. Identify what was good about it. Work in groups and get your answers to the question. Share it in the large group. I ended with the comment that they should remember those things mentioned and seek to implement those things in their practice. Then I repeated that process to have them remember a learning experience that was exceptionally bad / terrible / made them wish to get out of where it was happening. They generated their answers in groups; then shared with the large group. I ended with the comment that they should remember those things mentioned and seek to make certain they did not do those same things in their own classes they teach or will teach. Then I had each go back and identify one good thing they heard they would implement, and one terrible thing they would make certain to eliminate. Then they shared with the total group. Then we moved them into the first building block of [five] which asked the question: If when you are preparing to teach a class with adults, what would / do you focus on regarding their beliefs and notions about adults as learners? They worked in groups and then shared their answers with the total group. This came at the end of the session and I gave them each a packet for identifying their learning style. They also completed the Instructional Perspectives Inventory and other specific andragogical techniques.

The second session was in two parts with the UFPA Undergraduate and Teachers of The Education and Language Departments – 44 and 34 participants in two different groups. Their topic was “Building Blocks for Adult Learning.” Cintia Castro [Eduardo’s wife] took me to UFPA and got me started with the Undergraduate students at UFPA [the Federal University of Para] who are preparing to be teachers of English as a Second Language. Forty-four people enrolled there. We conducted this in English. They thought it was fantastic. We met for the afternoon session with another group of undergraduate students who are also English Language Teachers in preparation. There are thirty-four students enrolled. I did the same with them as I did with the morning group. They were very interested and involved. Each session saw another excellent level of active participation. When we came to the UFPA to begin the afternoon session, it was raining in buckets. We tried to start the course and the lights & electricity went out completely. We were talking about rescheduling the afternoon session for Thursday afternoon, May 21. Just then the lights and electricity came back on. We had the session on Tuesday afternoon and finished the course. They gave me a gift – it was a hand carved jewelry box. I said that my wife, Carol, would love it, and probably would lay claim to it. [She did lay claim to it after I arrived home and she saw it.]

The third session was with the Bi-National Center for English Teachers – 30 participants. This is an English Language School for folks who are learning to be teachers of English. We did the course in English. This topic was also: “Building Blocks for Adult Learners.” The plan was to finish the course at 6 PM. We finished the class at the Bi-National Center about 20 minutes until 6 p.m.. It was very interesting. In the PM session that started at 3 p.m., we had a couple of girls that had to leave and go to class at the UFPA for their English Class. They told me how much they liked what we did and it helped them a great deal. They took the materials with them from the session they would miss at the end. For the next to the last session I had them tell about the learning / teaching technique they had used which they considered to be the most successful they had ever used, and the positive the results they had from it. They did and then I told them that they should remember some of these successful experiences others had, and that they, as well as their students, could use them and benefit from them. The last thing I asked them to do was to outline what one or two ideas they had received from the sessions we had, and outline how they planned to use those ideas in their jobs, as well as the obstacles and resistances they anticipated encountering, and how they would seek to overcome them. When they were finished, I said that I thought we could dismiss a few minutes early. They sat there and did not move. Earlier in the day, we had a discussion that indicated they could not dismiss their classes early, that no matter what, if they were done 10 minutes early, or however early, they had to fill up the time with some other activity. So, when our session was completed, they did not move because of this rule. So I said again that they could leave, but they did not move. So I added, unless it is too traumatic, you can leave because I have dismissed your class. They finally got up and left slowly.

The fourth session was with the University of Amazonia (UNAMA) Undergraduate and Graduate Faculty and Students – 55 participants. This is a private university and previously the former Dean of Education (Ana Celia Bahia) had spent some time in my home and working with our College of Education at the University of Missouri-St. Louis. We used the “Building Blocks for Adult Learning” process during the three evenings we had the course. The sessions were very interactive and they participated very eagerly. We completed our session with the Faculty and Students at UNAMA this evening. This was the closing night of the class at UNAMA. Ana Celia was not able to come. They expressed their deep appreciation for all the things we had discussed during our session. They are eager to learn new things in their practice as adult educators. During the last session we had a time when all the participants shared the most successful adult educational technique that they had positive results with their students. They shared some excellent and captivating stories !!! Then we had them do the part where they talk about how they will implement at least one thing that they learned during the course. They shared some excellent things and many of them indicated how they appreciated my conducting the class in a way that reflected the importance I placed on what they had to say and their contributions.

The fifth session was a workshop that we conducted with SESI – Professional Educators at the Para State Division of the Brazilian National Governmental Education Section Serving Learning and Work Related Needs in Industries, Corporations and Institutions – 275 participants. Those registered beforehand were 238, and those who “walked-in” numbered 40. A busload of 100 persons from SESI had come from 70 kilometers away – Braganza, Para, Brazil. Ana Isabel Macedo and Eduardo Costa translated for me during the sessions. The first part I had the

participants inquire into the “Five Building Blocks for Adult Learning” that I also consider as a Curriculum Development Process. We divided them into five different groupings and each developed their answer to the one of the five building block questions -- If / when you are preparing to teach a class with adults, what would / do you focus on regarding their: (a) ...beliefs and notions about adults as learners? (b) ...perceptions concerning the qualities of effective teachers? (c) ...phases and sequences of the learning process? (d) ...teaching tips and learning techniques? (e) ...implementing the prepared plan? During the second part I had them experience the adult learning technique of my “Dynamic Living Lecture” described above. This was to illustrate and demonstrate an adult learning technique that could be used with a large group of people to actively involve them in the learning process. The topic I used in the lecture was on the assumptions about adult learners. Their questions focused on what I said and were ones that asked for clarification, provided a rebuttal, asked for elaboration, and requested me to address problems of practical application. One group added a question regarding how I thought my approach to curriculum lined up with Paulo Friere’s (the patron saint of adult education in Brazil) ideas about curriculum. I responded by saying that I have looked at nine (9) different curriculum models in adult education and Friere’s model stayed mainly in the area of planning, rather than establishing numerous steps in the process as the others had. My speculation was that he did this because of concern about being co-opted by a system if he developed many steps in the process. This concern was reflected in his classic book *Pedagogy of the Oppressed* (1970).

The sixth session was a large group from UNAMA Undergraduate and Graduate Students Seminar including some of their faculty – 180 participants. I used the “Dynamic Living Lecture” process. I divided them into the four different groupings – clarification, rebuttal, elaboration, and application. My short lecture topic was on andragogy – the art and science of helping adults learn. They were very interested and asked some very pointed questions. Our session lasted about two hours and TV Cameras were there for presenting some of this on the local TV news report. The participants were actively involved and Fabihano Dias, the man in whose home I was staying at the time, was very excited about the session and how actively the students and faculty were engaged.

The seventh session was a class of UFPA students who are preparing to be English language instructors that were ready to complete their degree – 15 Participants. Some of them had been in my sessions that had been done earlier at UFPA the first Tuesday after I had arrived in Belem, but we finished two weeks later instead of the first Thursday I was in Belem because of the bus strike. One young man asked the first question of the session about what I thought was the essence of adult learning and education. I shared with him a number of things and then I asked if others had questions. We filled the whole time with addressing their questions. They asked many deep questions and shared many of their pains, hopes and dreams. One person said to me that she was certain I had worked hard trying to balance all the things I had to do, and asked how I made it through my doctoral program and until now in my work. I said in all honesty I don’t know how I made it, but just struggling and putting one foot in front of another. Also, it was a call from the Lord to my wife and me and she was [and still is] very much supportive. One lady said that she has a husband, children, work, study, church, and many things to do, so she just seems to not able to get it all done. I shared the importance of taking time for herself. One guy asked if I was an English language teacher and I said that I teach teachers of adults how to teach adults--the process of adult education. Another lady said she has a husband, children, work in

the morning, afternoon and evening, study, home to keep, and her husband, mother, and father all tell her she doesn't need to work and she feels like giving up. I encouraged her to never give up--like the cartoon of the bird with the frog half way swallowed and the frog had his hands tightly clutched around the bird's neck, with the cartoon caption being, "never give up." When I was telling one class earlier at UFPA about my career desire of becoming a professor of adult education, one young man asked me if I ever considered changing careers from trying to become a professor of adult education to something else, and I said, No, never. I suggested to the lady, whose family doesn't think she needs to work or study to become a teacher and is ready to give up, that she needed to take time for herself, or she would ultimately reach a point where there would be nothing left in her to give and her health would break physically and mentally. I also suggested that she never give up, and suggested that take a longer period of time to finish her school degree program and that she find a friend to talk with periodically about her struggles and pressure. I also said that God worked six days in creation and then rested the seventh day, and maybe she needed to rest also. I told her that one day if she didn't give up her family would be proud of her, and she would be so delighted that she had not given up. An older guy said he was a testimony of never giving up and he thanked me for encouraging this lady. We ended the session and many thanked me for being so kind and caring and encouraging,

#### Application of Andragogy in Austria

John A. Henschke has travelled to numerous foreign countries and worked in adult education and human resource development in 19 of those countries. However, he had not worked in Austria prior to his Summer, 2009 venture there. He was invited to Feldkirch, Austria, a mid-sized city at the Eastern end of the Lake Konstanz, where Germany, Austria and Switzerland join together, near the Alps Mountain region.

John conducted a public lecture on one evening for three hours. This involved faculty and administrators from the Feldkirch Teachers College, Corporate personnel, community citizens, city officials, and students in the Master's Degree Cohort studying andragogy at the College. There were 55 people who participated. They were interested in linking the andragogy academic program and the students / faculty / administrators, with citizens of the community, government entities, and corporate interests. The topic of the lecture was along the lines of staying ahead of the curve in human capital management and self-directed learning. The structure of the public session was similar to what was used in Brazil, of "Using a Dynamic, Living, Interactive Lecture to Help Adults Learn" for the participants as follows: (a) Before a presentation the audience can be asked to serve as "listening teams" according to the section of the room where they are sitting – one section to listen to the presentation for points requiring clarification (the Clarification Team), another for points with which they disagree (the Rebuttal Team), another for points they wish to have elaborated on (the Elaboration Team), and a fourth for problems of practical application they wish the speaker to address (the Application Team). (b) Then the speaker gives a short lecture or presentation on an appropriate topic. (c) After the lecture or presentation the teams are asked to "buzz" in groups of four or five to pool their thinking about points they want raised. (d) Then one member of each group gives a summary of its deliberations or asks a question the group has generated. (e) The speaker responds to each item in turn, until time runs out or all items are discussed. One of the concerns expressed after the public lecture was that insufficient time was spent addressing self-directed learning. This made me aware that somewhere, near the end of any given andragogical session that is conducted, time and space

needs to be provided to the participants if some topics of interest had been overlooked and / or had not been given sufficient time within the scope of the session. Then, if and when the topic is indicated, time could be taken to discuss and deal with it.

During the following two days, John conducted an andragogical workshop for a Cohort of 19 Master's Degree Graduate Students at the Feldkirch Teacher's College. It was part of the course work in this academic program. It was focused on the topic of "Building Blocks for Adult Learning." The structure of the workshop was similar to what was used in Brazil, as follows. (a) Identify the things that made a learning experience good / excellent / great, (b) Identify the things that made a learning experience bad, (c) Address the question--If when you are preparing to teach a class with adults, what would / do you focus on regarding their beliefs and notions about adults as learners? (d) If when you are preparing to teach a class with adults, what would / do you focus on regarding their perceptions concerning the qualities of effective teachers? (e) If when you are preparing to teach a class with adults, what would / do you focus on regarding the phases and sequences of the learning process? (f) If when you are preparing to teach a class with adults, what would / do you focus on regarding teaching tips and learning techniques? (g) If when you are preparing to teach a class with adults, what would / do you focus on regarding implementing the prepared plan? (h) What idea[s] from the session would you like to try out back home and how do you intend to carry that forward? There was an adjustment made (in accordance with andragogical principles) in which the participants asked some questions that were not part of the agenda and we addressed those. This took time from the agenda but demonstrated that needs of the participants sometimes take precedence over content and even may be accommodated within the process design.

### Summary

What becomes clear to us was that andragogy is a concept that is worth being tested in various situations. In these instances it was found to be workable within an undergraduate setting, a public meeting, and academic interests in a graduate setting. Although these situations were dealt with in three different countries – USA, Brazil, and Austria – with three distinctly different cultures, andragogy is applicable in each of the settings. Obviously, each situation and culture needs to have unique responses regarding learning. Nonetheless, the concept of andragogy is flexible and can be adapted and interlinked in numerous settings and different peoples.

### References

- Delahaye, B., Limerick, D., & Hearn, G. (1994, Summer). The relationship between andragogical and pedagogical orientations & implications for adult learning. *Adult Education Quarterly*, 44(4), 187-201.
- Grow, G. (1991, Spring). Teaching learners to be self-directed. *Adult Education Quarterly*, 41(3), 125-148.
- Henschke, J. (2009a). The dynamic of a living lecture in career and technical education. In V. Wang (Ed.), *Handbook of research on e-learning applications for career and technical education* (pp. 655-- 667 Chapter 51 ). Hershey, PA: IGI Global.

- Henschke, J. (2009b). Engagement in active learning with Brazilian adult educators. In G. Strohschen (Ed.), *Handbook of blended shore learning: An international adult education handbook* (pp. 121-136). Springer Science+Business Media, LLC: NY.
- Henschke, J. (1987). Training teachers of adults. In C. Klevins (Ed.), *Materials and methods of adult and continuing education* (4<sup>th</sup> ed.) (pp. 414-422). Los Angeles, CA: Klevens Publications in Adult and Continuing Education, Inc.
- Imel, S. (1995). Teaching adults: Is it different? *Myths and realities*. (ERIC Document Reproduction Service No: ED 381 690)
- Knowles, M. (1990). *The adult learner: A neglected species*. Houston, TX: Gulf Publishing Company.
- Knowles, M. (1980). *The modern practice of adult education: From pedagogy to andragogy* (2<sup>nd</sup> ed.). Englewood Cliffs, NJ: Cambridge Book Company.