

Journal of Zhejiang University SCIENCE  
 ISSN 1009-3095  
<http://www.zju.edu.cn/jzus>  
 E-mail: [jzus@zju.edu.cn](mailto:jzus@zju.edu.cn)



## Full time adult credential students' instructional preferences at California State University, Long Beach: pedagogy or andragogy?

WANG Victor

(Occupational Studies Department, California State University, Long Beach, USA)

E-mail: [cwang@csulb.edu](mailto:cwang@csulb.edu)

Received Sept. 10, 2003; revision accepted Oct. 16, 2003

**Abstract:** This study investigated the instructional preferences of full time adult credential students after they took a live course called Principles of Adult Education at California State University, Long Beach (CSULB) in the fall semester of 2002. These full time adult credential students had been working on their adult teaching credentials to meet the competencies specified by the California Commission on Teacher Credentialing. The course introduced students to Andragogy developed by Malcolm Knowles out of the andragogical model developed by Lindeman (1926). The study used Principles of Adult Learning Scales (PALS), advanced by Gary Conti in 1983 to measure instructional preferences. Data were collected from 30 (100% of 30) full time adult credential students enrolled in a live course to determine their instructional preferences of helping adults learn. The results of the study showed in most cases these adult learning professionals taught adult students andragogically; in some cases they taught adult students pedagogically.

**Key words:** Andragogy, Principles of Adult Learning Scales (PALS), Instructional preferences, California State University  
**Document code:** A **CLC number:** G472.5

### INTRODUCTION

The implementation of andragogy, the art and science of helping adults learn, to enhance adult learning has been a key issue in the education and training of adults in the 21st century. The significance of the study was to determine how adult learning professionals practice andragogy after 30 years of its purposeful implementation. Andragogy, according to Nuckles (2000), is a concept in adult education that flows directly from humanistic educational philosophy. The andragogical model was first developed by Edward Lindeman (1926). Malcolm Knowles, developed andragogy, the art and science of helping adults learn, from Lindeman's andragogical model. In andragogy, Knowles

(1970) emphasized strongly the helping role of adult educators.

The purposeful application of andragogy is important in creating a learning process to meet today's adult students' needs. Recognizing a need to educate and train adult credential students to teach andragogically, the Occupational Studies Department at CSULB has increasingly promoted both a live course and an online course called Principles of Adult Education as a means to help adult learning professionals move from a pedagogical model to an andragogical model. It is widely asserted that the whole educational enterprise was frozen into the pedagogical model (Knowles *et al.*, 1998).

The purpose of this study was to determine

whether full time adult credential students taught adult students andragogically or pedagogically after being introduced to the andragogical model. These adult credential students, who might have taught adult students pedagogically before being introduced to andragogy, completed a course titled Principles of Adult Education, which was designed to teach adult credential students to incorporate andragogical methods into their teaching.

Students in the CSULB Occupational Studies Programs usually are classified as non-traditional students; they come from such backgrounds as police and military officers, firefighters, secondary and postsecondary instructors and teachers, corporate employees, and many others. This study does not focus on all students; rather, it focuses on the full time adult credential students who have been teaching adult students in their own disciplines and those adult credential students who will become instructors of adult students in the future.

The researcher hopes that the findings of this study can be used to redirect teaching so that adult instructors can implement andragogy in a flexible manner. As Knowles (1984) pointed out, andragogy as a set must be viewed as "a system of elements that can be adopted in whole or in part. It is not an ideology that must be applied totally or without modification. In fact, an essential feature of andragogy is flexibility".

## BACKGROUND

The Designated Subjects Credential (DSC) program at CSULB was developed to meet the competencies specified by the California Commission on Teacher Credentialing. The program is accredited by the National Council on the Accreditation of Teacher Education (NCATE). This two-level program first helps occupational and adult teachers develop survival-level classroom skills and then assists them in making the transition to full-time professional educators.

**Adult Education** According to Dr. Paul Bott, Chair of Occupational Studies Department, the Occupational Studies Department at CSULB began

offering this adult teaching credential in 1976. Every semester, 20 to 30 full time adult credential students enroll in a live course called Principles of Adult Education. Over the years, the Occupational Studies Department at CSULB has successfully graduated hundreds of full-time adult credential students that have been teaching adult learners in the state of California. This credential is required to teach an academic subject matter in a public adult school. California Commission on Teacher Credentialing suggested that adult learning professionals help adult learners learn, using the andragogical methods as advocated by adult education leaders.

## THEORETICAL FRAMEWORK

In this adult teaching/learning era, people's first reaction to the role of an adult educator as a content transmitter may be negative. Rogers (1969) argues that the aim of education must be the facilitation of learning, and he defines the role of the teacher as that of a facilitator of learning. The notion of an adult educator as a facilitator was developed in detail by Rogers (1951) in his five "basic hypotheses," the first of which was: we cannot teach another person directly; we can only facilitate his learning. This hypothesis stems from the proposition in his personality theory that "Every individual exists in a continually changing world of experience of which he is the center," and "The organism reacts to the field as it is experienced and perceived." This approach requires a shift in focus from what the teacher does to what is happening in the student. Because Tough's (1971) studies were concerned with the self-directed learning projects of adults, he has focused on the "helping role" of the teacher or other resource person. Knowles (1989) described andragogy as a theory in which he emphasizes the role of an adult educator as a facilitator. One of the international leaders in Adult Education, Jarvis (2002) explains andragogy in an analogical manner by saying that teachers are not 'fount of all wisdom'. Jarvis further states that teachers now no longer: 1. have a monopoly on

transmitting knowledge; 2. determine or legislate on matters of knowledge but they may be interpreters of different systems of knowledge; 3. deal with truth but they certainly teach truths; 4. teach with unchanging knowledge but now they deal with scientific knowledge that is transient; 5. are confined to the classroom, but like the ancient teachers they may have to function where their learners are; 6. teach only theoretical knowledge but now they also help learners acquire practical knowledge; 7. can assume that their learners know nothing about the subjects that they teach but must learn to build on knowledge acquired by their learners from a wide variety of sources.

These adult education leaders suggest that andragogy represents the best way to teach adults, especially when adult education is compared to youth education. However, Pratt (1998) pointed out that there are many people engaged in adult education who do not see themselves as andragogical "facilitators". For some, this resistance is due to their own personality and their preferences for teaching in a more directive style. Others have no choice, due to the nature of the content they teach. Knowles *et al.* (1998) further explained that whether adult educators need to provide andragogical facilitation or traditional instruction depends on the adult learners' personal autonomy and their experience with a subject matter.

Adult educators are faced with the complex task of adjusting teaching to learning, often with little or no training in how to teach. Brookfield (1990) posited that flexibility can facilitate learning by better meeting the needs of the adult learners. The present study was intended to identify and examine instructional preferences of full time adult credential students at the Occupational Studies Department, California State University, Long Beach to find out whether pedagogy or andragogy is practiced after these full time adult credential students take a course called Principles of Adult Education.

## METHODOLOGY

The overall purpose of this study was to de-

termine the instructional preferences of adult learning professionals who have been working on their adult teaching credentials at the Occupational Studies Department, CSULB. Most importantly, study findings provided a better understanding of how adult credential students view their teaching preferences. The seven factors generated by Conti's (1983) survey instrument known as PALS (Principles of Adult Learning Scale) represent the preferred instructional practices that parallel the core principles of andragogy. The study was designed to identify and examine the instructional preferences of adult credential students who have been teaching adult students in their own disciplines and those who are working on credentials to become instructors of adults in the future. Conti's (1983) survey instrument appeared to have considerable congruence with the research. The PALS was widely used to gather perceptual, or attitudinal data from samples of adult populations.

The target population for this study was comprised of full time adult credential students enrolled in a live course called Principles of Adult Education through the Occupational Studies Department at CSULB in the fall semester of 2002. The experimentally accessible population was 30 full time adult credential students; 30 full time adult credential students responded to the survey. These full time adult credential students were 30 to 63 years old. About one third (7 students) of them were ESL instructors in adult schools. The rest of the respondents were adult instructors in hospital, prison and law enforcement settings. The data collection process was completed after the students had completed the survey near the end of the fall semester of 2002.

The overall PALS score, according to Conti (1983) could be broken down into seven factors containing the basic elements that make up an adult instructor's teaching mode. The survey instrument was hand delivered to the 30 full time adult credential students who happened to be present in the live course in the fall semester of 2002. The support of the collaborative mode in the adult education literature is reflected in the factor titles. The survey, utilizing a Likert scale from five to zero with five

being the highest (support for the concept implied in the factor name) and zero the lowest (support for the opposite concept), was used to identify the instructional preferences of adult learning professionals at the Occupational Studies Department, CSULB. Adult educators' mean score on each of the seven factors on PALS was calculated by using SPSS. The mean score of 2.5 is the midpoint between 0 and 5. High mean scores in each area as defined by Conti (1983) represent support for the concept implied in the factor name. Low mean scores indicate support for the opposite concept.

## FINDINGS

The study considered data (Table 1) generated by a 44-item questionnaire. The questionnaire was completed by 30 participating full time credential students at the Occupational Studies Department, CSULB in the fall semester of 2002. The questionnaire represents the basic assumptions that make up the philosophical foundation of the andragogical model and the collaborative mode of instruction.

Factor 1, Learner-Centered Activities asked the adult educators to rate their instructional preferences. Full time credential students at the Occupational Studies Department, CSULB indicated that they supported a learner-centered approach to teaching. They did not favor formal testing over informal evaluation techniques, nor did they rely heavily on standardized tests. They did not encourage students to accept middle class values. They did not exercise control of the classroom by assigning quiet deskwork, by using disciplinary action when needed, and by determining the educational objectives for each student. They did not tend to practice one basic teaching method. They did not support the conviction that most adults have similar style of learning. They practiced behaviors

that allowed initiating action by the student. The classroom focus was upon the learner and learner-centered activities.

Factor 2 asked respondents to rate Personalizing Instruction. Full time credential students at this department, CSULB indicated that they did a variety of things that personalize learning to meet the unique needs of each student as defined by Conti (1983). Their objectives were based on individual motives and abilities. Their instruction was self-paced and they used various methods, material, and assignments. They encouraged cooperation.

Factor 3 required respondents to rate Relating to Experience. Full time credential students at this department, CSULB indicated that they did plan learning activities that took into account their student's prior experience and encouraged students to relate their new learning to experiences. To make learning relevant, these adult learning professionals organized learning episodes according to the problems that the students encountered in everyday living. When it comes to solving problems, their focus was not just on coping with current problems or accepting the values of others. Instead, the adult learning professionals who supported relating to experience did encourage their students to ask basic questions about the nature of their society. When it is screened through experience, such conscious-raising questioning could foster a student's growth from dependence on others to greater independence.

Factor 4 asked respondents to rate Assessing Student Needs. Full time credential students at this department, CSULB indicated that they did not treat each student as an adult. They did not try to find out what each student wanted and needed to know. The Adult learning professionals who did not support this mode did not accomplish assessment through a heavy reliance on individual conferences and informal counseling. They did not diagnose existing gaps between a student's goals and present

**Table 1 Mean score on the seven factors**

<i>n</i> =30	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
M	3.66	2.84	2.32	2.36	2.03	2.83	3.14
SD	1.23	1.22	1.11	1.33	0.88	1.42	1.21

level of performance. They did not assist their students in developing short range as well as long-range objectives.

Factor 5 required respondents to rate Climate Building. Knowles (1970) listed setting a friendly and informal climate as the first step in his andragogical model. Full time credential students at this department, CSULB indicated that they did not encourage dialogue and interaction. They did not allow breaks. They did not eliminate barriers by utilizing the numerous competencies that adults already possessed as building blocks for educational objectives. These adult learning professionals did not encourage risk taking. They did not accept errors as a natural part of the learning process. Such an environment was not a microcosm of the total society. In it adult learners could not experiment and explore elements related to their self-concept, practice interpersonal skills. Failures did not serve as a feedback device to direct future positive learning.

Factor 6 asked respondents to rate Participation in the Learning Process. Full time credential students at this department, CSULB indicated they supported participation in the learning process. Therefore, these adult learning professionals had their students identify the problems that they wished to solve and allowed the students to participate in making decisions about topics that would be covered in class. They encouraged an adult-to-adult relationship between teacher and students and they involved the students in developing the criteria for evaluating classroom performance.

Factor 7 required respondents to rate Flexibility for Personal Development. Full time credential students at this department, CSULB indicated they viewed themselves as facilitators. They did not determine the objectives for the students at the beginning of the program, nor did they stick to them regardless of the idiosyncrasies that might arise from divergent student needs to situations. A well-disciplined classroom was not viewed as a stimulus for learning. They did not avoid discussions of controversial subjects that involved value judgments or issues that related to a student's self-concept. These adult learning professionals reject this rigidity and

lack of sensitivity to the individual. They viewed personal fulfillment as a central aim of education. To accomplish this, flexibility was maintained by adjusting the classroom environment and curricular content to meet the changing needs of the students, and issues that related to values were addressed in order to stimulate understanding and future personal growth.

## CONCLUSION

The andragogical model still represents the best way to teach adults, especially when adult education is compared to youth education. Rachal (2002) pointed out that the very nature of the adult in a learning setting demands, with few exceptions, andragogical or at least quasi-andragogical methods. Kaupins' (2002) research result suggested that adults prefer more participative and interactive teaching methods. During class discussions, full time credential students who took the live course called Principles of Adult Education in the fall semester of 2002 said that they taught adult students in their own disciplines pedagogically before because that was the way these full time credential students were taught. They reported that they did not know the difference between pedagogy and andragogy until they took the course called Principles of Adult Education at CSULB. They further indicated that they would teach adult students andragogically since it represents the best way to teach adult students. It is so true that Knowles' ideas (andragogy) sparked a revolution in adult education and training (Feur and Gerber, 1988). Brookfield, positing a similar view, asserted that andragogy is the "single most popular idea in the education and training of adults" (1986).

To guide these full time credential adult students in meeting adult students' needs, the main goal has been to adopt the core principles of andragogy outlined by Knowles *et al.*(1998). The six core principles of andragogy match each of the seven factors in PALS advanced by Conti (1983) for evaluating teaching in adult education. The original principles of andragogy are as follows:

1. The need to know. Adults need to know why they need to learn something before undertaking to learn it.

2. The learners' self-concept. Adults have a self-concept of being responsible for their own decisions, for their own lives.

3. The role of the learners' experiences. Adults come into an educational activity with both a greater volume and a different quality of experience from youths.

4. Readiness to learn. Adults become ready to learn those things they need to know and be able to do in order to cope effectively with their real-life situations.

5. Orientation to learning. In contrast to children's and youths' subject-centered orientation to learning (at least in school), adults are life-centered (or task-centered or problem-centered) in their orientation to learning.

6. Motivation. While adults are responsive to some external motivators (better jobs, promotions, higher salaries, and the like), the most potent motivators are internal pressures (the desire for increased job satisfaction, self-esteem, quality of life, and the like).

High mean scores in the majority of the seven factors indicated that full time credential students at this department, CSULB adopted the andragogical model in helping adult students learn. By adopting these principles along with their corresponding components, such as having a sound philosophy of adult education, prevalent adult teaching theories, thorough understanding of the characteristics of adult learners and paying special attention to individual differences, subject matter differences and situational differences, these full time credential students can teach adult learners andragogically rather than pedagogically. Given the very nature of adult learners, the andragogical practice could be a win-win situation for both adult educators and adult learners themselves.

However, the low mean scores in factor four and factor five confirmed Knowles *et al.*'s 1998 research. According to their views, whether adult learning professionals need to provide andragogical

facilitation or traditional instruction depends on adult learners' personal autonomy and their experience with a subject matter. The findings of this study raised a philosophical issue regarding how andragogy should be successfully implemented in the education and training of adults. Powerful as it has been for the past 30 years, andragogy plus flexibility may best facilitate adult learning.

## References

- Brookfield, S.D., 1986. *Understanding and Facilitating Adult Learning*. Jossey-Bass, San Francisco.
- Brookfield, S.D., 1990. *The Skillful Teacher: On technique, trust, and Responsiveness in the Classroom*. Jossey-Bass Publishers, San Francisco.
- Conti, G., 1983. Principles of adult learning scale. Online. Available: <http://www.okstate.edu/education/ses/hraepals.html>.
- Feur, D., Gerber, B., 1988. Uh-oh ... Second thoughts about adult learning theory. *Training*, **25**(12):125-149.
- Jarvis, P., 2002. *The Theory & Practice of Teaching*. Kogan Page, London.
- Kaupins, G., 2002. Trainer opinions of selected computer-based training methods. *Journal of Education for Business*, **77**(6):319-323.
- Knowles, M.S., 1970. *The Modern Practice of Adult Education: Andragogy Versus Pedagogy*. Association Press, New York.
- Knowles, M.S., 1984. *Andragogy in Action*. Jossey-Bass, San Francisco.
- Knowles, M.S., 1989. *The Making of an Adult Educator*. Jossey-Bass, San Francisco.
- Knowles, M.S., Holton, E.III., Swanson, A., 1998. *The Adult Learner*. Gulf Publishing Company, Houston, TX.
- Lindeman, E.C., 1926. *The Meaning of Adult Education*. New Republic, New York.
- Nuckles, C.R., 2000. Student-centered teaching: Making it work. *Adult Learning*, **11**(4):5-6.
- Pratt, D.D., 1998. *Five perspectives on teaching in adult and higher education*. Krieger Publishing Company, Florida.
- Rachal, J.R., 2002. Andragogy's detectives: A critique of the present and a proposal for the future. *Adult Education Quarterly*, **52**(3):300-308.
- Rogers, C.R., 1951. *Client-Centered Therapy*. Houghton-Mifflin, Boston.
- Rogers, C.R., 1969. *Freedom to Learn*. Merrill, Columbus, Ohio.
- Tough, A., 1971. *The Adult's Learning Projects*. Ontario Institute for Studies in Education, Toronto.