

own beliefs; your *lowest* score reflects a philosophy that is *least* like yours. For example a score of 95–105 indicates that you *strongly agree* with that philosophy; a score of 15–25 indicates that you *strongly disagree* with a given philosophy. If you find your scores fairly equal among all of the philosophies, or spread among three or more, you may want to spend some time clarifying your beliefs and values and looking for possible contradictions among them.

Most educators have a clear primary philosophical orientation, or share two that are stronger than others. Typical combinations are: Liberal and Behavioral, Progressive and Humanistic, Progressive and Radical, or Humanistic and Radical philosophies. On the other hand, it is quite *unlikely* that you would have high scores in both Liberal and Radical, or Behavioral and Humanistic philosophies. These philosophies have key underlying assumptions that are inherently contradictory. (For example, the primary purpose of Behavioral Education is to ensure compliance with expectations or standards set by others, whereas Humanistic Education is intended to enhance individual self-development—which may or may not meet anyone else’s expectations or standards.)

There is no “right” or “wrong” philosophy of education. The Philosophy of Adult Education Inventory is designed to reflect back to you some of your own beliefs, not to make judgments about those beliefs. It is up to you to decide how your beliefs may influence your decisions and actions as an educator, and how your personal educational philosophy may be well suited, or perhaps not the best match, for the educational setting in which you work.

CHAPTER 4

Identifying Your Teaching Style

GARY J. CONTI

Do some lessons seem to work much better than others? Are you puzzled about how to organize your next unit? Do you seem more comfortable using some techniques than others? Reasons for classroom situations such as these can be uncovered by exploring the concept of teaching styles.

Most of those who teach do so because they enjoy it. While some argue that the teacher is the most important variable in the classroom (Knowles, 1970), the question remains of whether it makes any difference what the teacher does in the classroom. Reports such as the *Nation at Risk* argue that educators have been remiss in their duties and that they are doing a terrible job of educating people. In many states, legislators who know nothing about learning theory or education are defining the curriculum and prescribing what teachers must do. To counteract this attack upon teaching and to regain control of their own profession, educators must ask, “Why are we as educators open to such a political attack, and why are we so inept in dealing with it?”

One major reason for such an attack is that teachers as a group are not able to clearly state their beliefs about teaching. What is our view of the nature of the learner? What is the purpose of the curriculum? What is our role as a teacher? What is our mission in education? Until we are able to clearly articulate our position on these types of questions, we will remain open to attack.

One way for teachers to begin to arrive personally at answers to these questions is to assess their own teaching style. Such an assessment will pinpoint their specific classroom practices and relate them to what is known about teaching and learning. As you

approach identifying your teaching style, you should be keenly aware of how professional knowledge is created. Much of the formal knowledge for a profession is generated from basic and applied research which is usually conducted within a university setting. Accepted knowledge is rather technical and is usually identified by systematic, hypothesis-testing research. This type of knowledge has been referred to as technical rationality. Unfortunately, real-world problems do not present themselves in a clear, well-defined structure suitable for laboratory research. Unexpected situations force practitioners to think in novel ways. They have to reframe the problems they face daily and construct a new reality for dealing with them. By using their prior knowledge and experiences, they are able to deal with new situations as they arise. As they reflect upon their responses to these situations, they acquire new knowledge for future action (Schon, 1987).

This reflection-in-action approach to professional practice is a problem-solving process. It starts with people and their needs. Importantly, it keeps people at the center of the entire process. In doing so, it asks a different set of questions and a different type of question from research. Significantly, it draws a different set of conclusions from research. Rather than just suggesting conclusions related to a narrow hypothesis or to additional types of research that need to be done, it takes a chance at trying to explain what is happening with the people being served. It views knowledge as constantly developing and supports attempts to experiment with that knowledge.

The teaching style research has been undergoing this developmental process. During the past decade, instruments have been developed for identifying the teaching styles of adult educators, and studies have been conducted to explore the impact of these styles on the adult learners. A clear picture is beginning to emerge from this research; it reinforces the need for teachers to assess their style and to reflect upon the implications which that style has for their learners in the classroom.

WHAT IS TEACHING STYLE?

Teaching style refers to the distinct qualities displayed by a teacher that are persistent from situation to situation regardless of

the content. Since it is broader than the immediate teaching strategies that are employed to accomplish a specific instructional objective, it cannot be determined by looking at one isolated action of the teacher. To identify one's style, the total atmosphere created by the teacher's views on learning and the teacher's approach to teaching must be examined. Because teaching style is comprehensive and is the overt implementation of the teacher's beliefs about teaching, it is directly linked to the teacher's educational philosophy. According to Heimlich and Norland (1994), "Your personal philosophy of teaching and learning will serve as the organizing structure for your beliefs, values, and attitudes related to the teaching-learning exchange" (p. 38). Lorraine Zinn's *Philosophy of Adult Education Inventory* (see Chapter 3) can be used to explore your educational philosophy orientation. Research with the *Philosophy of Adult Education Inventory* (Hughes, 1997; Martin, 1999; O'Brien, 2001) reveals that educational philosophy and teaching style are directly related and that the process that discriminates groups in this relationship is the educator's view of the role of the teacher in the teaching-learning process (O'Brien, 2001, pp. 172–174). While several philosophical schools exist, they differ in the instructor having either a teacher-centered or learner-centered teaching style.

The teacher-centered approach is currently the dominant approach throughout all levels of education in North America and is closely related to the ideas of B. F. Skinner. This approach to learning assumes that learners are passive and that they become active by reacting to stimuli in the environment. Elements that exist in this environment are viewed as reality. Motivation arises either from basic organic drives and emotions or from a tendency to respond in accordance with prior conditioning. Thus, humans are controlled by their environment, and the schools which are social institutions have the responsibility of determining and reinforcing the fundamental values necessary for the survival of the individual and the society. In this teacher-centered approach, the teacher's role is to design an environment which stimulates the desired behavior and discourages those that have been determined to be undesirable.

A teacher-centered approach is implemented in the classroom in several ways. Learning is defined as a change in behavior. Therefore, acceptable forms of the desired behavior are defined in overt and measurable terms in behavioral objectives. Outcomes are often described as competencies which the student must display after com-

pleting the educational activity. The attainment of the competencies is determined by evaluating the learner with either a criterion-referenced or a norm-referenced test. Through such a method, both the teacher and learner are accountable for the classroom activities.

Although a teacher-centered approach is widely practiced in adult education, the learner-centered approach is strongly supported in the field's literature. This approach is closely associated with the writings of Abraham Maslow and Carl Rogers. A learner-centered approach assumes that people are naturally good and that the potential for individual growth is unlimited. Reality is relative to the interpretations that individuals give to their surroundings as they interact with them. Consequently, behavior is the result of personal perceptions. Motivation results from people's attempts to achieve and maintain order in their lives. Their experiences play an important role in learning. In this process, learners can be expected to be proactive and to take responsibility for their actions.

In the classroom, learner-centered education focuses upon the individual learner rather than on a body of information. Subject matter is presented in a manner conducive to students' needs and to help students develop a critical awareness of their feelings and values. The central element in a learner-centered approach is trust; while the teacher is always available to help, the teacher trusts students to take responsibility for their own learning. Learning activities are often designed to stress the acquisition of problem-solving skills, to focus on the enhancement of the self-concept, or to foster the development of interpersonal skills. Since learning is a highly personal act, it is best measured by self-evaluation and constructive feedback from the teacher and other learners.

Teachers often practice elements from these two schools of thought. Some draw exclusively from one school while others prefer an eclectic approach. Whatever their approach, their "spontaneous, skillful execution of the [teaching] performance" can be referred to as "knowing-in-action" (Schon, 1987, p. 25). While this knowing-in-action may allow the teacher to get by on a daily basis, it does not address the important issue concerning the effectiveness of the style the teacher is using. To know if that style makes a difference in student learning, teachers must first identify their teaching style and then critically reflect upon their classroom actions related to that style.

IDENTIFYING YOUR STYLE

As an adult education practitioner, you can assess your teaching style with the Principles of Adult Learning Scale (PALS) (see Appendix B at end of chapter). This 44-item instrument measures the frequency with which one practices teaching/learning principles that are described in the adult education literature. High scores on PALS indicate support for a learner-centered approach to teaching. Low scores reveal support for a teacher-centered approach. Scores in the middle range disclose an eclectic approach that draws on behaviors from each extreme.

Your teaching style can quickly be assessed with PALS. On a six-point Likert-type scale ranging from Always to Never, your responses indicate the frequency with which you practice the behavior in the items. The scale can be completed in approximately 10 to 15 minutes. Self-scoring involves converting the values for the positive items and then summing the values of the responses to all items. Scores may range from 0 to 220. The average for PALS is 146 with a standard deviation of 20. Although the instrument is classroom oriented and was originally designed for use in the adult basic education setting, the normative scores for PALS have remained consistent across various groups that practice adult education.

Your score can be interpreted by relating it to the average score for the instrument. Your overall teaching style and the strength of your commitment to that style can be judged by comparing your score to 146. Scores above 146 indicate a tendency toward the learner-centered mode while lower scores imply support of the teacher-centered approach.

Standard deviations refer to positions on the standard, bell-shaped curve. Most scores will be within one standard deviation of the mean; that is, they will be between 126 and 166. Movement toward these scores indicates an increased commitment to a specific teaching style. Scores that are in the second standard deviation of 20 to 40 points different from the mean indicate a very strong and consistent support of a definitive teaching style. Scores that are in the third standard deviation and are at least 40 points from the mean indicate an extreme commitment to a style.

The total score indicates the overall teaching style and the strength of the teacher's support for this style. While this score is

useful for providing a general label for the instructor's teaching style, it does not identify the specific classroom behaviors that make up this style. However, the overall PALS score can be divided into seven factors. Each factor contains a similar group of items that make up a major component of teaching style. The support of the collaborative mode in the adult education literature is reflected in the names of the factor titles. High scores in each factor represent support of the learner-centered concept implied in the factor name. Low factor scores indicate support of the opposite concept. Factor scores are calculated by adding up the points for each item in the factor.

Factor 1 in PALS is "Learner-Centered Activities." This main factor is made up of 12 of the negative items in the instrument. These items relate to evaluation by formal tests and to a comparison of students to outside standards. If you scored low on this factor, it indicates a support of the teacher-centered mode with a preference for formal testing over informal evaluation techniques and a heavy reliance on standardized tests. It further indicates support for encouraging students to accept middle-class values. You favor exercising control of the classroom by assigning quiet desk-work, by using disciplinary action when needed, and by determining the educational objectives for each student. You see value in practicing one basic teaching method and support the conviction that most adults have a similar style of learning. However, if you scored high on this factor, you support the collaborative mode and reject these teacher-centered behaviors. Your opposition to these items implies that you practice behaviors that allow initiating action by the student and that encourage students to take responsibility for their own learning. Your classroom focus is then upon the learner.

Factor 2 is "Personalizing Instruction." This factor contains six positive items and three negative items. If you scored high on this factor, you do a variety of things that personalize learning to meet the unique needs of each student. Objectives are based on individual motives and abilities. Instruction is self-paced. Various methods, materials, and assignments are utilized. Lecturing is generally viewed as a poor method of presenting subject material to the adult learner. Cooperation rather than competition is encouraged.

Factor 3 is "Relating to Experience" and consists of six positive items. If you scored high on Factor 3, you plan learning activities that take into account your students' prior experiences and

encourage students to relate their new learning to experiences. To make learning relevant, learning episodes are organized according to the problems that the students encounter in everyday living. However, this focus is not just on coping with current problems or accepting the values of others. Instead, students are encouraged to ask basic questions about the nature of their society. When this is screened through experience, such consciousness-raising questioning can foster a student's growth from dependence on others to greater independence.

Factor 4 is made up of four positive items related to "Assessing Student Needs." If you scored high in this area, you view treating a student as an adult by finding out what each student wants and needs to know. This is accomplished through a heavy reliance on individual conferences and informal counseling. Existing gaps between a student's goals and the present levels of performance are diagnosed. Then students are assisted in developing short-range as well as long-range objectives.

Factor 5 is "Climate Building," and it also contains four positive items. If you scored high on "Climate Building," you favor setting a friendly and informal climate as an initial step in the learning process. Dialogue and interaction with other students are encouraged. Periodic breaks are taken. You attempt to eliminate learning barriers by utilizing the numerous competencies that your students already possess as building blocks for educational objectives. Risk taking is encouraged, and errors are accepted as a natural part of the learning process. In the classroom, your students can experiment and explore elements related to their self-concept, practice problem-solving skills, and develop interpersonal skills. Their failures serve as a feedback device for you to direct future positive learning.

The four positive items in Factor 6 relate to "Participation in the Learning Process." While Factor 2 focuses on the broad location of authority within the classroom, this factor specifically addresses the amount of involvement of the student in determining the nature and evaluation of the content material. If you scored high on this factor, you have a preference for having your students identify the problems that they wish to solve and for allowing them to participate in making decisions about the topics that will be covered in class. Encouraging an adult-to-adult relationship between teacher and students, you also involve the students in developing the criteria for evaluating classroom performance.

Factor 7 contains five negative items that do not foster “Flexibility for Personal Development.” If you scored low on Factor 7, you see yourself as a provider of knowledge rather than as a facilitator. You determine the objectives for the students at the beginning of the program and stick to them regardless of changing student needs. A well-disciplined classroom is viewed as a stimulus for learning. Discussions of controversial subjects that involve value judgements or of issues that relate to a student’s self-concept are avoided. If you scored high on this factor, you reject this rigidity and lack of sensitivity to the individual. You view personal fulfillment as a central aim of education. To accomplish this, flexibility is maintained by adjusting the classroom environment and curricular content to meet the changing needs of your students. Issues that relate to values are addressed in order to stimulate understanding and future personal growth.

EVALUATING YOUR TEACHING STYLE

Instruments such as PALS are useful for describing one’s style. However, more knowledge than scores on an instrument is needed in order to make judgments concerning the value of the identified style. The established theory base for adult education supports the collaborative mode as generally the most effective way of helping adults learn. However, it does not distinguish among the diverse audiences and settings in which adult education is practiced. When adult educators operate in this multitude of situations, their “knowing-in-action” tells them that this general rule needs more specificity. Four field-based research studies with PALS provide additional information for making judgments concerning teaching style and for translating the “technical rationality” of the knowledge base into theory-in-action.

While PALS has been used in numerous formal studies, four have directly linked teaching style to student performance. The relationship of teaching styles to student achievement was investigated in an adult basic education program (Conti, 1984). This program in South Texas had basic level literacy classes, high school equivalency classes, and English-as-a-second-language classes. The teaching style of 29 part-time teachers in the program was measured and related to the achievement levels of their 837 students.

The statistical results indicated that the teacher’s style had a significant influence on the amount of the student’s academic gain. However, the gains were not totally in agreement with the established adult education knowledge base. In the preparatory courses for the high school equivalency examination, the teacher-centered approach was the most effective. In these classes, students are very goal-oriented, and this goal has a short timeline. They want to pass the equivalency examination as soon as possible. The opposite situation exists in the basic level and English-as-a-second-language classes. Here, the students are concerned with the long-term process of acquiring reading, mathematics, and language skills. This process involves the student’s self-concept, and acceptance by a caring teacher is important. Consequently, the learner-centered approach was most effective in these classes. Instead of suggesting that one style is superior to another as implied in the knowledge base, this study indicated that educators needed to switch their argument from a consideration of which style is best to one of when is each style most appropriate. It supported teacher’s gut-level reaction from knowing-in-action that the situation and needs of the learner influence the effectiveness of different teachers.

A second study involved allied health professionals returning to college credit classes for continuing education purposes (Conti & Welborn, 1986). The 256 health professionals involved were nontraditional students attending classes outside the customary delivery schedule. Their academic success was related to the teaching styles of the 18 instructors in the program. Once again, statistical evidence indicated that teaching style can affect student achievement. However, the findings once again modified the established knowledge base. As suggested in the existing literature, students of the learner-centered instructors achieved above average scores; however, the greatest gain was with the moderate learner-centered group rather than the intermediate learner-centered group which had higher PALS scores. For the other approach, students of teachers with a moderate or intermediate preference for the teacher-centered approach achieved less than all other students. Yet, students of teachers who had a strong preference for the teacher-centered approach and who scored the lowest on PALS achieved above the mean. Although this study was limited by a small range of teaching styles among the instructors, it provided further evidence that teaching style is an important variable influencing

student performance. Furthermore, it revealed that either style could be effective when practiced to the proper degree in a given situation.

A third study examined a student performance other than academic achievement. In a study involving 27 inmates and 10 selected teachers, it was found that teaching style did influence a student's level of moral development (Wiley, 1986). Inmates who studied with learner-centered instructors progressed to higher levels of Kohlberg's stages of moral development than those who were with teacher-centered instructors. Most of the growth was attributed to allowing the inmates to take responsibility for determining how they would personally undertake their learning once the broad parameters of the curriculum had been determined.

A fourth study was designed to overcome the limitation of the small sample size of teachers of the three previous studies (Conti & Fellenz, 1988). It involved 80 teachers from the tribally controlled community colleges of the Indian reservations in Montana. This group contained a wide range of teaching styles; PALS scores ranged from 2.5 standard deviations below to 2.5 standard deviations above the mean. When the sample of students for the study was duplicated for each student completing a class, 1,447 cases were available. The findings from this large group of students experiencing a full range of teaching styles provided clarity to the findings of the previous studies. Unlike the other studies, the overall teaching style score was not significant. However, the scores for six of the seven factors in PALS were significant. When these scores were placed on the same graph, the composite graph indicated a general pattern of "M." The peaks of the "M" represented teachers who scored very high in either approach to teaching; their students tended to achieve higher grades than students with other type teachers. The middle of the "M" represents those who were less committed to one approach and who had a tendency to be eclectic; their students tended to achieve about average grades. The bottom of the outside legs of the "M" represent those who were extremely high in their commitment to either teaching style approach; except for the area of testing and classroom control, students of these teachers tended to achieve below the average. Thus, while the learner-centered approach was generally effective, above average grades were obtained by students with teachers who were strongly committed to a definitive teaching style regardless of whether it was a teacher-centered or learner-centered style. These teachers believed

strongly in a specific approach to teaching. In the classroom, they consistently implemented complementary elements of a comprehensive educational philosophy. While they were consistent, they were not extreme. They did not indoctrinate and were flexible enough to consider human needs. As a result, students could anticipate and understand their actions.

WHICH STYLE IS BEST FOR YOU?

As a teacher, you do not randomly select your teaching style, and you do not constantly change your style. Instead, your style is linked to your educational philosophy which in turn is a subset of your overall life philosophy. Therefore, your ethical, spiritual, and political beliefs will provide clues to possible elements of your educational philosophy.

Rather than picking a teaching style from the literature and seeking to emulate it, you should strive for consistency within your natural style which stems from your life philosophy. After identifying your general style, look for consistency within the various factors that compose that style. Your individual factor scores from PALS can highlight areas of inconsistency. Within each factor, look for items that have scores that are radically different from the other items in the factor; these will identify inconsistent areas in your classroom practices. Critical reflection is called for in areas that are inconsistent. Such reflection may lead to changes in either your educational philosophy or to a restructuring of your general life philosophy. The goal should be to have congruency among the basic assumptions upon which your philosophy is built.

CONCLUSION

Educators have been a pawn in the political arena for decades because they do not articulate a clear statement of what they do and why they do it. When attacked as being inept and accused of placing the nation at risk, they have not been in a position to retaliate with valid arguments and to define the debate in their own terms. This professional void can be rectified by educators becoming reflective practitioners. You can begin this process by identifying your teaching style and relating your actual classroom behaviors to your educa-

tional philosophy. With an awareness and consistency of these, not only will you be able to speak and act as a professional, but also you can expect better results from your students.

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APPENDIX B

Principles of Adult Learning Scale

DIRECTIONS

The following survey contains several things that a teacher of adults might do in a classroom. You may personally find some of them desirable and find others undesirable. For each item please respond to the way you most frequently practice the action described in the item. Your choices are Always, Almost Always, Often, Seldom, Almost Never, and Never. On your answer sheet, circle 0 if you always do the event; circle number 1 if you almost always do the event; circle number 2 if you often do the event; circle number 3 if you seldom do the event; circle number 4 if you almost never do the event; and circle number 5 if you never do the event. If the item *does not apply* to you, circle number 5 for never.

Always	Almost Always	Often	Seldom	Almost Never	Never
0	1	2	3	4	5
1. I allow students to participate in developing the criteria for evaluating their performance in class.					
2. I use disciplinary action when it is needed.					
3. I allow older students more time to complete assignments when they need it.					
4. I encourage students to adopt middle class values.					
5. I help students diagnose the gaps between their goals and their present level of performance.					

6. I provide knowledge rather than serve as a resource person.
7. I stick to the instructional objectives that I write at the beginning of a program.
8. I participate in the informal counseling of students.
9. I use lecturing as the best method for presenting my subject material to adult students.
10. I arrange the classroom so that it is easy for students to interact.
11. I determine the educational objectives for each of my students.
12. I plan units which differ as widely as possible from my students' socio-economic backgrounds.
13. I get a student to motivate himself/herself by confronting him/her in the presence of classmates during group discussions.
14. I plan learning episodes to take into account my students' prior experiences.
15. I allow students to participate in making decisions about the topics that will be covered in class.
16. I use one basic teaching method because I have found that most adults have a similar style of learning.
17. I use different techniques depending on the students being taught.
18. I encourage dialogue among my students.
19. I use written tests to assess the degree of academic growth rather than to indicate new directions for learning.
20. I utilize the many competencies that most adults already possess to achieve educational objectives.
21. I use what history has proven that adults need to learn as my chief criteria for planning learning episodes.
22. I accept errors as a natural part of the learning process.
23. I have individual conferences to help students identify their educational needs.

24. I let each student work at his/her own rate regardless of the amount of time it takes him/her to learn a new concept.
25. I help my students develop short-range as well as long-range objectives.
26. I maintain a well-disciplined classroom to reduce interferences to learning.
27. I avoid discussion of controversial subjects that involve value judgments.
28. I allow my students to take periodic breaks during class.
29. I use methods that foster quiet, productive desk work.
30. I use tests as my chief method of evaluating students.
31. I plan activities that will encourage each student's growth from dependence on others to greater independence.
32. I gear my instructional objectives to match the individual abilities and needs of the students.
33. I avoid issues that relate to the student's concept of himself/herself.
34. I encourage my students to ask questions about the nature of their society.
35. I allow a student's motives for participating in continuing education to be a major determinant in the planning of learning objectives.
36. I have my students identify their own problems that need to be solved.
37. I give all students in my class the same assignment on a given topic.
38. I use materials that were originally designed for students in elementary and secondary schools.
39. I organize adult learning episodes according to the problems that my students encounter in everyday life.

40. I measure a student's long-term educational growth by comparing his/her total achievement in class to his/her expected performance as measured by national norms from standardized tests.
41. I encourage competition among my students.
42. I use different materials with different students.
43. I help students relate new learning to their prior experiences.
44. I teach units about problems of everyday living.

SCORING THE PRINCIPLES OF ADULT LEARNING SCALE (PALS)

Positive Items

Items number 1, 3, 5, 8, 10, 14, 15, 17, 18, 20, 22, 23, 24, 25, 28, 31, 32, 34, 35, 36, 39, 42, 43, and 44 are positive items. For positive items, assign the following values: Always=5, Almost Always=4, Often=3, Seldom=2, Almost Never=1, and Never=0.

Negative Items

Items number 2, 4, 6, 7, 9, 11, 12, 13, 16, 19, 21, 26, 27, 29, 30, 33, 37, 38, 40, and 41 are negative items. For negative items, assign the following values: Always=0, Almost Always=1, Often=2, Seldom=3, Almost Never=4, and Never=5.

Missing Items

Omitted items are assigned a neutral value of 2.5.

Factors

Factor 1 Learner-Centered Activities

Factor 1 contains items number 2, 4, 11, 12, 13, 16, 19, 21, 29, 30, 38, and 40.

Factor 2 Personalizing Instruction

Factor 2 contains items 3, 9, 17, 24, 32, 35, 37, 41, and 42.

Identifying Your Teaching Style

Factor 3 Relating to Experience

Factor 3 contains items 14, 31, 34, 39, 43, and 44.

Factor 4 Assessing Student Needs

Factor 4 contains items 5, 8, 23, and 25.

Factor 5 Climate Building

Factor 5 contains items 18, 20, 22, and 28.

Factor 6 Participation in the Learning Process

Factor 6 contains items 1, 10, 15, and 36.

Factor 7 Flexibility for Personal Development

Factor 7 contains items 6, 7, 26, 27, and 33.

Computing Scores

An individual's total score on the instrument is calculated by summing the value of the responses to all items. Factor scores are calculated by summing the value of the responses for each item in the factor.

Factor Score Values

Factor	Mean	Standard Deviation
1	38	8.3
2	31	6.8
3	21	4.9
4	14	3.6
5	16	3.0
6	13	3.5
7	13	3.9

Note: Dr. Gary J. Conti hereby grants permission for practioners and researchers to reproduce and use the Principles of Adult Learning Scale in their work.

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