

Adult Literacy Models: Incorporating Creative and Critical Thinking Development, Emily Miller Payne, Barbara G. Lyman, Southwest Texas State University

Abstract. A creative and critical thinking development of adult basic learners is often set aside out of a sense of urgency that -the basics should come first. However, critical and creative thinking development can not only revitalize the adult education classroom, but it can draw on the creative strengths and world knowledge of adults without distracting from solid literacy instruction. This summary describes the use of popular models of critical thinking and creativity instruction and suggests ways that teachers can design activities and projects for adult students.

Adult education programs serve a diverse student population that attends class voluntarily and brings to the adult education classroom a wide variety of educational goals ranging from a desire to learn to read to children or grandchildren to earning a GED for entry into the employment market (Brookfield, 1987). Adult education teachers and researchers recognize that these students bring an impressive array of world experiences to the classroom and that teaching the seemingly disconnected skills and content would be more palatable if it were taught in the context of problems that adults face in everyday life (Shor, 1980). However, in the typical adult education classroom, the urgency to teach the basics tends to override teaching the more practically-grounded critical and creative thinking strategies in spite of their applicability and potential to revitalize the classroom.

Critical Thinking

For adult students, a classroom introduction to critical thinking strategies could be a confirming experience because they use many of these skills in their daily experiences. Critical thinking, in this context, is the goal-directed, and purposeful approach to solving problems. According to Brookfield (1987), critical thinking activities are those that are positive and productive and that vary according to the context. The activities may be emotive or rational and may occur as a result of positive or negative experiences. Successful critical thinkers must learn to identify and challenge assumptions, they must recognize that situational context is important, they must learn to explore alternative solutions, and they should ultimately begin to adopt a world-view of reflective skepticism.

Using the Brookfield critical thinking model as a guide, adult education teachers might begin by polling students about the issues or problems they confront daily; from that list of issues, teachers could create case studies to teach problem solving protocols. A case study can focus on the commonplace, such as how to feed a family of four nutritious meals for a week on \$100, or how to find out about and take actions to decrease local environmental hazards.

A useful protocol for use with case studies is the IDEAL Problem Solving Strategy (Bransford & Stein, 1993). IDEAL is an acronym for the following process: Identify the problem, Define the goals of problem solving, Explore strategies and new information that relate to the problem, Anticipate the positive and negative outcomes of different strategies, and Look back and learn from the experience. Another easy-to-use framework for critical thinking is Halpern's four-question model: What is the goal? What do I know and what do I need to find out? What skills do I need? How will I evaluate the effectiveness of the strategy? (1989). If case studies seem too complicated to begin with, the teacher may want to teach a critical thinking or problem solving strategy using sets of problems in other sources such as Halpern (1989), Thought and knowledge, Hayes (1989), The complete problem solver, and Whimby, Johnson, & Williams (1993), Blue print for educational change. Later, the teacher may choose to invest in writing case studies.

Creative Thinking

Many adult students protest that they have no gift for creativity, but that initial lack of self-confidence in their own creative talent may be the result of a narrow definition that limits creativity to writing novels, or painting landscapes, or composing musical scores. If we include such activities as making a new dress out of fabric that previously had been curtains or making an elegant meal on short notice from the ingredients currently in your refrigerator, we have broadened creativity to include many who never thought of themselves as creative or innovative.

Teaching students to be creative, and measuring the results of that instruction, need not be as complicated nor as abstract as it appears. Halpern (1989) offers a definition of creative thinking that also serves as guide for teaching and evaluating creativity in solving problems: The solution/product should be unusual, original, or unique; there should be an appropriate outcome or product; the problem should undergo a redefining; the process may use information that is seemingly irrelevant; the process may find as well as solve problems; the process may connect previously unconnected ideas; and creative outcomes may occur by accident when the problem solver is prepared. Notice how many of these guidelines bring to mind recognized acts of creativity: The discovery of penicillin, the invention of liquid paper and post-it notes, and the daily additions to discoveries in the high-tech world of computer design and manufacturing. When adult students protest that they could never be inventors or artists, they often are unaware that inventions and works of art seldom come as the result of a flash of insight, but rather are the result of hard work.

The first step in enhancing creativity is deciding what product or process to tackle. Students might

begin with a problem-finding strategy such as a bug list, in which students brainstorm a list of products and processes that inconvenience them. They might begin by thinking of solutions to similar problems that have already been addressed (e.g., magnets on electric can openers to keep the disconnected lid out of the just-opened can). If students need practice applying strategies on simulations, several good sources would be *A Whack on the Side of the Head: How to Unlock Your Mind for Innovation* (Von Oech, 1983) and *The Ideal Problem Solver: A Guide for Improving Thinking, Learning and Creativity*. (Bransford & Stein, 1993).

The potential for teaching adults to be critical and creative thinkers along with teaching literacy skills is great; instruction in critical thinking offers students life skills that go well beyond basic reading, and creative thinking strategies have the potential to enhance quality of life in an stressful world.

References

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