Critical reflection blends learning through experience with theoretical and technical learning to form new knowledge constructions and new behaviors or insights. Through the process of critical reflection, adults come to interpret and create new knowledge and actions from their experiences. It is generally agreed that critical reflection consists of a process that can be taught to adults. Brookfield identified the following processes as being central to learning how to be critically reflective: assumption analysis, contextual awareness, imaginative speculation, and reflective skepticism. Some educators consider critical reflection a learning strategy that can be taught with tools such as diaries, action learning groups, autobiographical stories, and sketching. However, other educators question the usefulness of classroom teaching in helping adults learn to engage in critical reflection. Wellington identified the following five orientations for differentiating levels of reflection: immediate, technical, deliberative, dialectic, and transpersonal. Although reflection should help learners make meaning out of content applied in a specific practice situation, critical reflection skills learned in the classroom may be different from the skills needed in the everyday world. However, critical reflection holds the promise of emancipatory learning that frees adults from the implicit assumptions constraining thought and action in the everyday world. (Contains 21 references.) (MN)
Teaching Critical Reflection
Myths and Realities No. 7

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The ability to reflect critically on one's experience, integrate knowledge gained from experience with knowledge possessed, and take action on insights is considered by some adult educators to be a distinguishing feature of the adult learner (Brookfield 1998; Ecclestone 1996; Mezirow 1991). Critical reflection is the process by which adults identify the assumptions governing their actions, locate the historical and cultural origins of the assumptions, question the meaning of the assumptions, and develop alternative ways of acting (Cranton 1996). Brookfield (1995) adds that part of the critical reflective process is to challenge the prevailing social, political, cultural, or professional ways of acting. Through the process of critical reflection, adults come to interpret and create new knowledge and actions from their ordinary and sometimes extraordinary experiences. Critical reflection blends learning through experience with theoretical and technical learning to form new knowledge constructions and new behaviors or insights.

Learning by critical reflection creates new understandings by making conscious the social, political, professional, economic, and ethical assumptions constraining or supporting one's action in a specific context (Ecclestone 1996; Mackintosh 1998). Critical reflection's appeal as an adult learning strategy lies in the claim of intellectual growth and improvement in one's ability to see the need for and effect personal and system change. Reflection can be a learning tool for directing and informing practice, choosing among alternatives in a practice setting, or transforming and reconstructing the social environment (Williamson 1997). Can critical reflection be taught in a classroom? Does the new knowledge created foster change? This Myths and Realities investigates the extent to which critical reflection can be taught to adult learners.

How Do Adults Learn to Be Critically Reflective?

Without agreement on what reflective practice is, it is difficult to decide on teaching-learning strategies. Reflective practice may be a developmental learning process (Williamson 1997), may have different levels of attainment (Wellington 1996), and may be affected by a learner's cognitive ability (James and Clarke 1994), willingness to engage in the process (Bright 1996; Haddock 1997), and orientation to change (Wellington 1996). However, there does seem to be some agreement that critical reflection consists of a process that can be taught to adults. Brookfield (1988) identified four processes central to learning how to be critically reflective: assumption analysis, contextual awareness, imaginative speculation, and reflective skepticism.

Assumption analysis describes the activity adults engage in to bring to awareness beliefs, values, cultural practices, and social structures regulating behavior and to assess their impact on daily activities. Assumptions may be paradigmatic, prescriptive, or causal (Brookfield 1995). Assumptions structure our way of seeing reality, govern our behavior, and describe how relationships should be ordered. Assumption analysis as a first step in the critical reflection process makes explicit our taken-for-granted notions of reality. Contextual awareness is achieved when adult learners come to realize that their assumptions are socially and personally created in a specific historical and cultural context. Imaginative speculation provides an opportunity for adults to challenge prevailing ways of knowing and acting by imagining alternative ways of thinking about phenomena (Cranton 1996). The outcome of assumption analysis, contextual awareness, and imaginative speculation is reflective skepticism—the questioning of any universal truth claims or unexamined patterns of interaction.

A similar process called expressive inquiry has been described by Willis (1999). Critical reflection involves three stages: dispositional, contextual, and experiential. The values, preferences, and characteristics of the adult influencing an action is termed dispositional reflection. Contextual reflection focuses on the cultural forces shaping an experience. Forces might include race, gender, ethnicity, institutional policies, personal expertise. Experiential reflection involves remembering the event as it occurred and the associated feelings and thoughts—a revisiting of the experience. The outcome of the process is to reveal and resolve contradictions between expectations and reality.

Can Critical Reflection Be Taught in the Classroom?

Critical reflection is viewed by some educators as a learning strategy that can be taught using such tools as diaries (Heath 1998; Orem 1997), action learning groups (Williamson 1997), autobiographical stories (Brookfield 1995), and sketching (Willis 1999). However, some educators question the usefulness of classroom teaching, citing lack of empirical data to support claims of individual and practice improvements. A weakness in the use of critical reflection is the lack of a consistent way to measure the depth and outcome of critical reflection. Kember et al. (1999) developed a scale to distinguish levels of reflection in a consistent manner. The scale classifies statements as habitual, thoughtful, or introspective (nonreflective) or as content, process, or premise reflection (reflective). Although the coding scheme had acceptable interrater reliability, applications of the code to determining the level of reflective thinking were not reported.

Another rubric for differentiating levels of reflection has also been designed by Wellington (1996). Five orientations were identified: immediate, technical, deliberative, dialectic, and transpersonal. Reflection can be a learning tool for directing practice, informing practice, choosing among alternatives in a practice situation, or transforming and reconstructing the practice environment. The issue here is that learners exist at each level. Reflections are bounded by the ability of learners to confront their individual beliefs about a situation. How effective are the tools that may be used to help learners confront their beliefs?

Of the various tools available to educators, diary keeping or journaling is a popular means of recording events and reactions to events (Heath 1998; Mackintosh 1998; Orem 1997; Williamson 1997). Diary writing does have serious limitations. Writers may suffer from selective recall of events and may be reluctant to express thoughts that others may read (Mackintosh 1998). Learners may be unable or unwilling to confront or seek disconfirming information about themselves or implicitly held knowledge. Bright (1996) suggests that to be able to write reflectively, learning to be reflective in one's thinking is a necessary pre requisite skill. Because it is the practitioner's understanding which is the window through which a situation is understood and interpreted, an essential feature of 'reflective practice' is the need for the practitioner to be aware of her own processes in the development and construction of this interpretation. In this sense, 'reflective practice' is reflective and involves much self-reflection on
her own practice” (p. 177). Resistance to going beyond technical
descriptions of experience as expressed in diaries may be due to lack
of writing skills, expressive skills, or the inability to confront com-
fortable assumptions (Heath 1996; Orem 1997; Wellinagton 1996).

Description of critical incidents has also been advocated as a tool
for teaching critical reflection. Hunt (1996) taught reflective prac-
tice processes by having learners select critical incidents arising from
the practice environment. Learners engage in a reflective practice
discussion group under the guidance of a tutor. The use of groups is
essential if implicit assumptions and practices are to become visible.
However, using reflection results in a journey for which neither the
instructor nor the learner can chart or predict the outcome. The
discussion group may provoke anxiety and inhibit learning for some.
Creating a safe and structured climate does seem to increase learner
willingsness to share (Haddock 1997). Although advocating the de-
velopment of reflective learning modules, Hunt does not provide
any data to suggest that learners grow in their ability to reflect and
act on newly formed knowledge constructions. Critical reflection
can result in ambiguous and unclear learning for some learners.

Graham’s (1995) action learning group used small group processes
to share experiences, personal insights, and ideas among practicing
nurses and midwives. The group followed a three-phase process:
preparatory, experiential, and processing. The action learning group
helped learners associate, integrate, validate, and appropriate the
new meanings produced. Professionals participating in the group
did develop new strategies for improving professional practice.
Future studies will investigate if transfer of learning to the practice
situation does occur.

Reflection should help learners make meaning out of content ap-
limed in a specific practice situation and better understand the com-
plexity of how one acts and might act in a future situation. How-
ever, in a study conducted by Lee and Sabatino (1998), reflection
skills used in the classroom did not correlate with performance on
field projects. There was no significant correlation between use of
guided reflection and the learners’ application of content. However,
attitudes toward guided reflection were positive. Learners indicated
that reflective practices help to connect prior experience to new
content. Mallik (1998) noted that the use of journaling and reflec-
tive discussion groups did not move novice practitioners to deep
levels of critical reflection. Novice practitioners stayed at the tech-
nical and practical levels of critical reflection. Guided reflection may
make an interesting classroom but it did not improve practice.

Critical reflection skills learned in the classroom may be different
from the skills needed in the everyday world (Ecclestone 1996).
Perhaps the value of classroom learning is to move learners from
e one orientation to another in a developmental sequence (Wellinagton
1996). Instructors must recognize the proficiency of each learner to
use reflective tools and their individual capacity for growth. Yet the
question of how to teach to different levels of critical reflection is
still in need of additional research. Is there any evidence to suggest
that teaching strategies employed in the classroom do promote crit-
ical reflection? The answer is unclear (Ecclestone 1996; Ogunna

Critical reflection holds out the promise of emancipatory learning,
learning that frees adults from the implicit assumptions constrain-
ing thought and action in the everyday world. Through critical ref-
lection, adult learners can act on the forces creating inequality in
professional practice and in the world (Imel 1999). At an individual
level, critical reflection brings about awareness of the need for
change. Unfortunately, the research does not indicate that critically
reflective learners become change agents. The use of critical reflec-
tion has had more success in the classroom than in the practice
world. How to bridge the transition from classroom to practice is
still a challenge for adult educators.

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