How Critical Reflection Triggers Transformative Learning

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To make meaning means to make sense of an experience; we make an interpretation of it. When we subsequently use this interpretation to guide decision making or action, then making meaning becomes learning. We learn differently when we are learning to perform than when we are learning to understand what is being communicated to us. Reflection enables us to cor-rect distortions in our beliefs and errors in problem solving. Critical reflection involves a critique of the presuppositions on which our beliefs have been built.

This chapter elaborates on these ideas to attempt to develop a theoretical foundation for explaining how transformations occur in adult learning. The remainder of this volume addresses the ways educators can foster such learning.

Learning may be defined as the process of making a new or revised interpretation of the meaning of an experience, which guides subsequent understanding, appreciation, and action. What we perceive and fail to perceive and what we think and fail to think are powerfully influenced by habits of expectation that constitute our frame of reference, that is, a set of assumptions that structure the way we interpret our experiences. It is not possible to understand the nature of adult learning or education without taking into account the cardinal role played by these habits in making meaning.

Structuring Meaning

It is helpful to differentiate two dimensions of making meaning. Meaning *schemes* are sets of related and habitual expectations governing if-then, cause-effect, and category relationships as well as event sequences. We expect food to satisfy our hunger; turning the knob and pushing on a door to open it. We expect that it will take less time to get somewhere if we run rather than walk; that the sun will rise in the east and set in the west. When we open the front door, we expect to see our front lawn, not a tidal wave or a charging rhino. Meaning schemes are habitual, implicit *rules* for interpreting.

Meaning perspectives are made up of higher-order schepropositions, beliefs, prototypes, theories, orientations, and evaluations, and what linguists call "networks of arguments." Lover-beloved, teacher-student, employerfamiliar employee. priest-parishoner, and other relationships are predicated on established meaning perspectives involving habitual expectations familiar to everyone. Meaning perspectives refer to the structure of assumptions within which new experience is assimilated and transformed by one's past experience during he process of interpretation. They involve the application of habits of expectation to objects or events to form an interpretation.

These habits of expectation are analyzed by the writers in other chapters of this book as personal constructs, perceptual filters, conceptual maps, metaphors, personal ideologies, repressed functions, and developmental stages. Learning styles such as "field dependent" and "field independent" are also habits of expectation that become meaning perspectives when used to interpret an event. All these habits of expectation and many other predispositions provide the presuppositions on which we make interpretations and take action.

Meaning perspectives are also the distinctive ways an individual interprets experience at what developmental psychologists describe as different stages of moral, ethical, and ego development and different stages of reflective judgment. Meaning perspectives involve criteria for making value judgments and

for belief systems. We are familiar with conservative; liberal, and radical viewpoints and believe we can differentiate an Irishman from a Frenchman or a painting that is ugly from tree that is beautiful. Most meaning perspectives are acquired through cultural assimilation, but others, like positivist, behaviorist, Freudian, or Marxist perspectives, may be intentionally learned. Others are stereotypes we have unintentionally learned regarding what it means to be a woman, a parent, a manager, a patriot, a member of a particular racial group, or an older person. In addition to such sociocultural concepts, meaning perspectives may also involve ways of understanding and using knowledge and ways of dealing with feelings about oneself.

The most familiar examples of a meaning perspective and of transformative learning come from the women's movement (see Chapter Three). Within a very few years, hundreds of thousands of women whose personal identity, self-concept, and values had been derived principally from prescribed social norms and from acting out sex-stereotypical roles came to challenge these assumptions and to redefine their lives in their own terms. The women's movement provided a support climate for this kind of personal reappraisal by publicizing the constraints on personal development, autonomy, and self-determination imposed by such stereotypes and by providing support groups and role models.

Perspectives provide *principles* for interpreting. They involve symbol systems that represent "ideal types," the qualities of which we project onto objects or events in our experience. What we then perceive is often seen as an instance of our symbolic categories. Both schemes and perspectives selectively order and delimit_what we learn. They define our "horizons of expectation," which, as Karl Popper emphasized, significantly affect the activities of perceiving, comprehending, and remembering meaning wit the context of communication (Berkson and Wettersten, 1984, p. 7).

Meaning perspectives are, for the most part, uncritically acquired in childhood through the process of socialization, often in the context of an emotionally charged relationship with parents, teachers, or other mentors. The more intense the emotional

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context of learning and the more it is reinforced, the more deeply embedded and intractable to change are the habits of expectation that constitute our meaning perspectives. Experience strengthens, extends, and refines our structures of meaning by reinforcing our expectations about how things are supposed to be.

Our habits of expectation are not merely taken-for-granted actions or reactions that tend to repeat themselves. They are dispositions and capabilities that make up our everyday involvement within situations that "make sense." John Dewey saw habit as a structure of experience that enables one to make sense of a situation and consciousness itself as a possibility occasioned by our acquired habits of involvement. "Phenomenologically, the meaningfulness of present experience is an activity of habit, a 'tension' between habitual grooves of sensitivity and the world, through which self and environment are simultaneously transformed" (Ostrow, 1987, p. 214-216). Believing, valuing, perceiving, thinking, and feeling are all affected by these patterns of sensibility and stylistic preference with which we interpret the meaning of objects and events.

To describe meaning schemes and perspectives as powered by habits of expectation that construe and hence structure meaning is not to suggest that they exist as structures of the brain or storage bins for memory. Nor does it imply that experience automatically follows the "habitual grooves" of sensitivity and thus can only confirm our assumptions. This confirmation often happens, but it happens only as the result of the dynamic interaction between habit and the event being interpreted. The process is often mediated by reflection.

Nonetheless, what we do and do not perceive, comprehend, and remember is profoundly influenced by our meaning schemes and perspectives. We trade off perception and cognition for relief from the anxiety generated when the experience does not comfortably fit these meaning structures (Goleman, 1985). When experience is too strange or threatening to the way we think or learn, we tend to block it out or resort to psychological defense mechanisms to provide a more compatible interpretation.

Reflection and Making Meaning

Much of what we learn involves making new interpretations that enable us to elaborate, further differentiate, and re-inforce our long-established frames of reference or to create new meaning schemes. Perhaps even more central to adult learning than elaborating established meaning schemes is the process of reflection bac on prior learning to determine whether what we have learned is justified under present circumstances. This is a crucial learning process egregiously ignored by learning theorists.

Reflection is generally used as a synonym for higher-order mental processes. Boud, Keogh, and Walker (1985, p. 3) refer to reflection as "a generic term for those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understandings and appreciation." By this definition, reflection would include making inferences, generaliza- tions, analogies, discriminations, and evaluations, as well as feeling, remembering, and solving problems. It also seems to refer to using beliefs to make an interpretation, to analyze, perform, discuss, or judge---however unaware one may be of doing so. Although such a broad definition faithfully reflects common usage, the term needs additional analysis to differentiate reflection from thinking or learning, of which it is a part.

For Dewey (1933, p. 9), reflection referred to "assessing the grounds [justification] of one's beliefs," the process of rationally examining the assumptions by which we have been justifying our convictions. The critical dimension in Dewey's definition is echoed in *Webster's International Dictionary* (1950) as the "mental consideration of some subject matter, idea or purpose, often with a view to understanding or accepting it, or seeing it in its right relations." Dewey's definition provides us with a useful point of departure for understanding some fundamental distinctions regard- ing adult learning.

Because we must accommodate to a life of continual and rapid change, most of what we learn is the result of our efforts to solve problems, from the infant's problem of how to get fed to the adult's problem of how to understand the meaning of life.

Dewey and William James helped us understand that the process by which we define and solve problems becomes the context for most learning. What is important here is to make explicit the differences involved in reflecting on the content, process, or premises of problem solving.

If reflection is understood as an assessment of how or why we have perceived, thought, felt, or acted, it must be differentiated from an assessment of how best to perform these functions when each phase of an action is guided by what we have learned before. Simply reflexively drawing on what one already knows in order to act is not the same thing as reflection. Instead, this is the way one often takes thoughtful action in playing chess or making an argument or otherwise using one's wits while actively engaged. All human action, other than that which is purely habitual or thoughtless, is thoughtful action, which involves consciously drawing on what one knows to guide one's action.

Reflective action, understood as action predicated on a critical assessment of assumptions, may also be an integral part of decision making. Thoughtful action is reflexive but is not the same thing as acting reflectively to critically examine the justification for one's beliefs. Reflection in thoughtful action involves a pause to reassess by asking, What am I doing wrong? The pause may be only a split second in the decision-making process. Reflection may thus be integral to deciding how best to perform or may involve an ex post facto reassessment. When applied to deciding how best to perform immediately, reflection becomes an integral element of thoughtful action. Consequently, although reflection and action are dialectic in their relationship, they should not be polarized as in Kolb (1984).

Ex post facto reflection, which looks back on prior learning, may focus on assumptions about the content of the problem, the process or procedures followed in problem solving, or the presupposition on the basis of which the problem has been posed. Reflection on presuppositions is what we mean by *critical reflection*. These distinctions are graphically depicted in Figure 1.1.

Edward Cell (1984) makes a helpful distinction between active and reflective interpretation. The former can be a creative process but one involving our prejudices, distortions, and pro-

Presuppositions (critical reflection)

Reflective Action

Thoughtful action with reflection

Ex post facto reflection

Process

Nonreflective Action

Habitual action without reflection

Figure 1.1. Reflection.

vincialisms. Reflective interpretation is the process of correcting distortions in our reasoning and attitudes. Active interpretation is what is involved in thoughtful action; reflective interpretation, in reflective action.

Instrumental Learning. When we engage in task-oriented problem solving-how to do something or how to perform---we are engaged in instrumental learning; reflection is significantly involved when we look back on content or procedural assumptions guiding the problem-solving process to reassess the efficacy of the strategies and tactics used. We look back to check on whether we have identified all the relevant options for action, correctly assessed the consequences of alternative hunches or hypotheses, controlled the right variables, used the best methods of problem solving and used them correctly and carefully, made inferences warranted from the evidence and as free from bias as possible, generalized from a dependably representative sample, and correctly interpreted the feedback on actions taken.

We may also look to make sure that our actions have been consistent with our values, to see how well we are doing in relation to our goals, whether our attitude has been objective and our interpretations of the results convincing. This is how we reflect on the process by which we have learned meaning through instrumental problem solving. *Metacognition is* the term psychol-ogists use to refer to this process of knowing about cognitive states and their operations. The function of metacognition is seen as that of informing and regulating cognitive routines and strategies.

Instrumental learning involves the process of learning to control and manipulate the environment or other people. Results can be empirically demonstrated. The criteria for judging the validity of our beliefs concerning prior instrumental learning reside in (1) an informed consensus regarding the logic of analysis and inference inherent in the paradigm of the problemsolving process we have used and (2) empirical evidence about whether our efforts have succeeded in solving the problem. We can measure changes resulting from our learning to solve problems in terms of productivity, performance, or behavior. The problem-solving process for instrumental learning is a familiar one. Essentially, it is the method of problem solving, canonized by the natural sciences, that we all use or misuse in learning how to do things.

Communicative Learning. Not all learning involves learn-ing to do. Of even greater significance to most adult learning is understanding the meaning of what others communicate concerning values, ideals, feelings, moral decisions, and such concepts as freedom, justice, love, labor, autonomy, commitment, and democracy. When what is asserted or implied pertains to these norm-governed concepts, judgments, propositions, beliefs, opinions, or feelings, then determining the conditions under which such an assertion is valid requires a two-dimensional assessment. This includes a critique of the assertion itself. It also requires a critique of the relevant social norms and of cultural codes that determine the allocation of influence and power over whose interpretations are acceptable.

Communicative learning focuses on achieving coherence rather than on exercising more effective control over the causeeffect relationship to improve performance, as in instrumental learning. The problem-solving process involved in instrumental learning is the hypothetico-deductive approach. In communicative learning, the approach is one in which the learner attempts to understand what it meant by another through speech, writing, drama, art, or dance. Communicative learning is less a matter of testing hypotheses than of searching, often intuitively, for themes and metaphors by which to fit the unfamiliar into a meaning perspective, so than an interpretation becomes possible.

In our encounters with the unfamiliar, we begin with par-tial insights to direct the way we collect additional data; com-pare incidents, key concepts, or words; and relate emergent patterns metaphorically to our meaning perspectives. When the properties of the event do not fit our existing schema, we create new meaning schemes to integrate them. Each item of relevant information becomes a building block of understanding, which is transformed by further insight. We continually move back and forth between the parts and the whole of that which we seek to understand and between the event and our habits of expec-tation, following the process described as the "hermeneutic cir-cle" (Bernstein, 1985, pp. 131-139). Over time, the resulting understanding can be further transformed as we come to discover its metaphoric significance in other experiential, theoretical, literary, or esthetic contexts.

Reflection in communicative learning is a critical assess-ment of this distinctive process of problem solving, checking to make sure that we have accurately identified the distinguishing patterns of similarity and have found metaphoric labels that give them coherence in relation to a meaning perspective. Interpreting the unfamiliar is one major way meaning is construed. Another has to do with establishing the validity of an expressed idea.

Validating Meaning

Because instrumental learning involves learning to control and manipulate the environment or other people, results are amenable to empirical demonstration. Validating a belief in the realm of communicative learning involves making a judgment regarding the situation and its circumstances in which what is

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asserted is justified. To understand the meaning of a sentence or any expressed idea, one must understand under what conditions it is true (in accord with what is) or valid (justifiable) (Habermas, 1984, p. 276). We can turn to an authority, tradition, or force to establish the validity of an assertion, or we can turn to a decision by rational discourse, that is, a consensus regarding its justification. In communicative learning there are no empirical tests of truth; we rely on consensual validation of what is asserted.

In everyday situations, we challenge the validity of what is being communicated when we have doubts about the truth, comprehensibility, appropriateness (in relation to social norms), or authenticity (in relation to feelings) of what is said or about the truthfulness of the speaker or writer. Further dialogue is interrupted until we can satisfy ourselves that the problematic assertion is justifiable. We engage in reflective learning through the kind of discourse in which we bracket our prior judgments, attempt to hold our biases in abeyance, and, through a critical review of the evidence and arguments, make a determination about the justifiability of the expressed idea whose meaning is contested. This very special form of discourse is also distin-guished by its objective, which is to arrive at an agreement about the justification of an expressed idea as an end in itself.

Because we are all trapped by our own meaning perspectives, we can never really make interpretations of our experience free of bias. Consequently, our greatest assurance of objectivity comes from exposing an expressed idea to rational and reflective discourse. Nonreflective learning is defined by Habermas (1976, p. 16) as learning that "takes place in action contexts in which implicitly raised theoretical and practical validity claims are naively taken for granted and accepted or rejected without discursive consideration."

To seek a consensus, we turn to those we feel are best informed, least biased, and most rational to critically assess the evidence and arguments and arrive consensually at the best judgment. As new evidence and new ways of seeing emerge, this provisional judgment about the validity of a disputed belief is subject to change. Because each situation in which an assertion

is true is significantly shaped by social norms and cultural codes, validity testing also implies a critical assessment of how appropriate they are at this time. As situations change, social norms change, and the validity of what is asserted is subject to change as well. The informed consensus we seek is provisional; it is the best we have at the moment. It may be changed with the addition of new evidence or new arguments based on a more inclusive paradigm or meaning perspective.

Ideally, the consensus would be such that any informed, objective, and rational person who examined the evidence andheard the arguments would agree, much as it is assumed in a court case that one juror may be replaced with antoher, but the jury's decision would be the same.

In reality, the consensus on which we depend to validate expressed ideas almost never approximates the ideal. We never have complete information, are seldom entirely free from external or psychic coercion of some sort, are not always open to

unfamiliar and divergent perspectives, may lack the ability to engage in rational and critically reflective argumentation, seldom insist that each participant have the freedom and equality to assume the same roles in the dialogue (to speak, challenge, cri-tique, defend), and only sometimes let our conclusions rest on the evidence and on the cogency of the arguments alone.

Nevertheless, Habermas argues that these standards are implicit in the very nature of human communication. One would not participate in a discourse without implicitly accepting the supposition that genuine consensus is possible and that it can be distinguished from false consensus (McCarthy, 1978, pp. 307-308). As such, these standards can serve as a philosophical foundation and as criteria for judging both education and the social conditions prerequisite to free and full participation in reflective discourse. No need is more fundamentally human than our need to understand the meaning of our experience. Free, full participation in critical and reflective discourse may be interepreted as a basic human right. This concept suggests an epistemological foundation for understanding such constructs as rationality, freedom, objectivity, adult development, democratic participation, social responsibility, self-directedness, and adult education.

Critical Reflection

Whereas reflection involves the assessment of the assumptions implicit in beliefs, including beliefs about how to solve problems, there is a special class of assumptions with which reflection has to deal that are quite different from these procedural considerations. While all reflection implies an element of critique, the term critical reflection will here be reserved to refer to challenging the validity of presuppositions in prior learning. (Although it would be more exact to speak of premise reflection, so many of us have used critical reflection to mean the same thing that it seems better to continue this practice.) Critical reflection addresses the question of the Justification for the very premises on which problems are posed or defined in the first place. We very commonly check our prior learning to confirm that we have correctly proceeded to solve problems, but becoming critically aware of our own presuppositions involves challenging our established and habitual patterns of expectation, the meaning perspectives with which we have made sense out of our encounters with the world, others, and ourselves. To question the validity of a longtaken-for-granted meaning perspective predicated on a presupposition about oneself can involve the negation of values that have been very close to the center of one's self-concept. An example is the time-honored definition of what it means to be a questioned through woman. which was consciousness raising of the women's movement. Challenges and negations of our conventional criteria of self-assessment are always fraught with threat and strong emotion. Transformation of perspective has cognitive, affective, and conative dimensions. Taking action on a new transformative insight can be blocked by external or internal constraints (or both), by situational and psychic factors, or simply by inadequate information or lack of skill to proceed.

We become critically reflective by challenging the established definition of a problem being addressed, perhaps by finding a new metaphor that reorients problem-solving efforts in a more effective way. This crucially important personal learning dynamic is analogous to the process of paradigm shift that Thomas Kuhn (1970) characterized as the way revolutions occur in science;

Which, after all, is only a more formal mode of inquiry for construing the meaning of experience. As we encounter new meaning perspectives that help us account for disturbing anomalies in the way we understand our reality, personal as well as scientific paradigm shifts can redirect the way we engage the world.

By far the most significant learning experiences in adulthood involve critical self-reflection---reassessing the way we have posed problems and reassessing our own orientation to perceiving, knowing, believing, feeling, and acting. Arlin (1975) has found problem posing to be the most significant characteristic of adult development beyond the acquisition of formal operations in adolescence.

Although reflection may be an integral part of making action decisions as well as an ex post facto critique of the process, critical reflection cannot become an integral element in the immediate action process. It requires a hiatus in which to reassess one's meaning perspectives and, if necessary, to transform them. Critical reflection is not concerned with the how or the how-to of action but with the why, the reasons for and consequences of what we do.

Perspective Transformation

Adulthood is the time for reassessing the assumptions of our formative years that have often resulted in distorted views of reality. Our meaning schemes may be transformed through reflection upon anomalies. For example, a housewife goes to secretarial school in the evening and finds to her amazement that the other women do not have to rush home to cook dinner for their husbands as she does. Perspective transformations may occur through an accretion of such transformed meaning schemes. As a result of the transformation of several specific meaning schemes connected with her role as the traditional housewife, she comes to question her own identity as predicated upon previously assumed sex stereotypes.

In addition, and more predictably, perspective transformation occurs in response to an externally imposed disorienting dilemma---a divorce, death of a loved one, change in job status,

retirement, or other. The distorting dilemma may be evoked by an eye-opening discussion, book, poem, or painting or by one's efforts to understand a different culture that challenges one's presuppositions. Anomalies and dilemmas of which old ways of knowing cannot make sense become catalysts or "trigger events" that precipitate critical reflection and transformations. Changing social norms can make it much easier to encounter, entertain, and sustain changes in alternative perspectives.

Perspective transformation may be individual, as in psychotherapy; group, as in Freire's (1970) learning circles or in "popular education" in Latin America; or collective, as in the civil rights, anti-Vietnam War, and women' movements. Perspective transformation is the process of becoming critically aware of how and why our presuppositions have come to constrain the way we perceive, understand, and feel about our world; of reformulating these assumptions to permit a more inclusive, discriminating, permeable, and integrative perspective; and of making decisions or otherwise acting understandings. More upon these new inclusive. discriminating, permeable, and integrative perspectives are superior perspectives that adults choose if they can because they are motivated to better understand the meaning of their experience. Meaning perspectives that permit us to deal with a broader range of experience, to be more discriminating, to be more open to other perspectives, and to better integrate our experiences are superior perspectives. There are three areas of common distortion in perspective.

Distortions in Meaning Perspective

Meaning perspectives are transformed through a critically reflective assessment of *epistemic*, *sociocultural*, and *psychic* distortions acquired through the process of introjection, the uncritical acceptance of another's values. While it is desirable for learners to understand how ideology in the wider sense affects distorted epistemic and psychic beliefs, for purposes of making educational interventions these perspectives need to be differentiated from distorted, normative social beliefs, here designated as ideological.

Epistemic Distortions. Epistemic distortions have to do with the nature and use of knowledge. The chapter in this volume by Kitchener and King elaborates on their extensive empirical investigation of reflective judgment, which has iden-tified the developmental stages by which we move away from the distorted presupposition that every problem has a correct solution if we could only find the right expert, and toward a provisional consensual judgment based upon critical discourse. Individuals at each stage have a distinctive meaning perspective about problem solving. It might be more accurate to refer to such earlier ways of knowing as less developed rather than distorted, although any way of construing meaning in adulthood other than one involving reflective judgment-- which is developmentally more inclusive, differentiating, permeable, and integrative-could be seen as a distortion of the ideal.

Another epistemic distortion is reification, seeing a phe-nomenon produced by social interaction as immutable, beyond human control, like the law, the government, atomic warfare, environmental destruction, homelessness, famine, or the mil-itary-industrial complex. A third distortion is using as prescriptive knowledge that is based on description; for example, using what psychologists describe as life stages standards for judging a particular individual's Yet another distortion is regarding an development. abstraction as though it were an existing object, objectifying it (Whitehead's "fallacy of misplaced concreteness"). Interpreting reality concretely when what is required is interpreting it abstractly is a familiar epistemic distortion. Still another is the early positivist supposition that only those propositions are meaningful that are empirically verifiable.

Sociocultural Distortions. Sociocultural distortions involve taking for granted belief systems that pertain to power and social relationships, especially those currently prevailing and legitimized and enforced by institutions. A common sociocultural distortion is mistaking self-fulfilling and selfvalidating beliefs for beliefs that are not self-fulfilling or selfvalidating. If we believe that members of a subgroup are lazy, unintelligent, and unreliable and treat them accordingly, they may become lazy,

unintelligent, and unreliable. We have created a self-fulfilling prophecy. When based on mistaken premises in the first place, such a belief becomes a distorted meaning perspective. Another distortion of this type is assuming that the particular interest of a subgroup is the general interest of the group as a whole (Geuss, 1981, p. 14). When people refer to ideology as a distorted belief system, they usually refer to what here is understood as socio-cultural distortion.

As critical social theorists have emphasized, ideology can become a form of false consciousness in that it supports, or legitimates dependency-producing social stab-ilizes. institutions, unjust social practices, and relations of exploitation, exclusion, and domination. It reflects the hegemony of the collective, mainstream meaning perspective and existing power relationships that actively support the status quo. Ideology is a form of prereflective consciousness, which does not question the validity of existing social norms and resists critique of presuppositions. Such social amnesia is manifested in every facet of our lives--- in the economic, political, social, health, religious, educational, occupational, and familial. Television has become a major force in perpetuating and extending the hegemony of mainstream ideology.

The work of Paulo Freire (1970) in traditional village cultures has demonstrated how an adult educator can precipitate as well as facilitate learning that is critically reflective of long-established and oppressive social norms.

Psychic Distortions. Psychological distortions have to do with presuppositions generating unwarranted anxiety that impedes taking action. Psychiatrist Roger Gould's "epigenetic" theory of adult development (1978, 1988) suggests that trau-matic events in childhood can result in parental prohibitions that though submerged from consciousness continue to inhibit adult action by generating anxiety feelings when there is a risk of breaching them. This dynamic results in a lost function--such as the ability to confront, to feel sexual, or take risks-that must be regained if one is to become a fully functioning adult.

Adulthood is a time of regaining such lost functions. The learner must be helped to identify both the particular action that he or she feels blocked about taking and the source and nature of stress in making a decision to act. The learner is assisted in identifying the source of this inhibition and differentiating between the anxiety that is a function of childhood trauma and the anxiety that is warranted by his or her immediate adult life situation. With guidance, the adult can learn to distinguish between past and present pressures and between irrational and rational feelings and to challenge distorting assumptions (such as "If I confront, I may lose all control and violently assault") that inhibit taking the needed action and regaining the lost function.

The psychoeducational process of helping adults learn overcome such ordinary existential psychological distortions can be facilitated by skilled adult counselors and educators as well as by therapists. It is crucially important that they do so, inasmuch as the most significant adult learning occurs in con-nection with life transitions. While psychotherapists make transference inferences in a treatment modality, educators do not---but they can provide skillful emotional support and collaborate as co-learners in an educational context. Recent advances in counseling technology greatly enhance their potential for providing this kind of help. For example, Roger Gould's therapeutic learning program in Chapter Seven represents extraordinary resource for counselors and educators working with adults who are having trouble dealing with such stressful existential life transitions as divorce, retirement, returning to school or the work force, or a change in job status. This interactive, computerized program of guided self-study provides the learner with the clinical insights and many of the benefits associated with short-term The counselor or educator provides psychotherapy. emotional support, helps the learner think through choices posed by the program, explains its theoretical context, provides supplementary information relevant to the life transition, makes referrals, and leads group discussion as required.

Summary

This chapter briefly adumbrates an emerging transormation theory of adult learning in which the construing of meaning is of central importance. Following Habermas (1984), I make a fundamental distinction between instrumental and communicative learning. I have identified the central function of reflection as that of validating what is known. Reflection, in the context of problem solving, commonly focuses on procedures or methods. It may also focus on premises. Reflection on premises involves a critical review of distorted presuppositions that may be epistemic, sociocultural, or psychic. Meaning schemes and perspectives that are not viable are transformed through reflection. Uncritically assimilated meaning perspectives, which determine what, how, and why we learn, may be transformed through critical reflection. *Reflection* on one's own premises can lead to transformative learning.

In communicative learning, meaning is validated through critical discourse. The nature of discourse suggests ideal conditions for participation in a consensual assessment of the justifica- tion for an expressed or implied idea when its validity is in doubt. These ideal conditions of human communication provide a firm philosophical foundation for adult education.

Transformative learning involves a particular function of reflection: reassessing the presuppositions on which our beliefs are based and acting on insights derived from the transformed meaning perspective that results from such reassessments. This learning may occur in the domains of either instrumental or communicative learning. It may involve correcting distorted assumptions---epistemic, sociocultural, or psychic---from prior learning. This introductory chapter constitutes the framework in adult learning theory for understanding the efforts of the other chapter authors, who suggest specific approaches to emancipatory adult education.

Emancipatory education is an organized effort to help the learner challenge presuppositions, explore alternative perspectives, transform old ways of understanding, and act on new perspectives. In the final chapter, I will discuss themes, issues,

and methods common to experienced educators who have attempted to encourage emancipatory education.

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