

9

Longitudinal data on young adults' learning and development integrate the multiple dimensions of development described throughout this volume. Chapter authors' recommendations are synthesized to guide faculty in understanding and using students' meaning-making to enhance learning.

Teaching to Promote Holistic Learning and Development

Marcia B. Baxter Magolda

The authors in this volume clarify that the learning expectations we have for college students require complex intrapersonal, interpersonal, and cognitive levels of development. The student stories in each chapter illustrate the more typical ways in which college students make meaning and their journeys toward the more complex ways of making meaning we hope they will achieve during college. Higher education has been clear about the desired destination of this journey, or the nature of Ignelzi's metaphorical farm, that we want students to inhabit; educators have been less clear about the farms on which students currently live and how to map the journey from one to the other. The intent of this volume is to bring students' farms to life for educators and to guide educators in offering students maps and company to reach new farms.

The first eight chapters explore various dimensions and facets of development in-depth and with particular groups of students to deepen understanding of the multiple ways in which college-age adults interpret their experience and thus how they learn. This chapter integrates these dimensions and facets of development to emphasize a holistic perspective of student development and learning. I draw on stories from my fourteen-year longitudinal study of young adults' meaning-making to form a holistic view of learning. I also synthesize the authors' recommendations for accessing students' meaning-making and creating inclusive, effective learning environments for all students.

A Holistic View of Learning and Development

Following young adults longitudinally through annual in-depth qualitative interviews (Baxter Magolda, 1992, 1999c) afforded me an opportunity to see the multiple dimensions and facets of development discussed in this volume integrated in each young adult's life. Because our interviews span from the first year of college to the participants' early thirties, the transition from meaning-making typical in college to more complex forms is evident in their stories.

Alice is a counselor in a social service agency. An interview she gave in her junior year reveals the cognitive, intrapersonal, and interpersonal meaning-making described as typical of many college students in the preceding chapters. Like most of her peers in the study, Alice was defined through what others expected of her. Her cognitive meaning-making is evident in this comment: "I've noticed that a lot of things professors say are opinion, and it's their own experience. It has to be because it's not real factual material. If it is a definite fact or statistic or a definition, they'll say, 'I think that's good in a lot of ways, though, because it makes me think, 'What have I ever done that fits into this?' If one made more sense to me personally, that's probably the way I would go with it." Alice ascertained that this change had to do with subject matter, saying, "In a calculus class it's not so much opinion oriented. It's like it's right or it's wrong; these are the facts." In her family studies classes, however, she reported that "there are no facts. You just go on theories and studies mixed in with them" (Baxter Magolda, 1992, p. 115).

Alice's thinking illustrates what I called *transitional knowing*, characterized by the assumption that truth exists in some areas (calculus, for example) whereas uncertainty reigns in others (say, family studies). Alice relies on her personal feelings to decide what to believe in the uncertain areas, much like Clinchy's subjectivists in Chapter Three and King's quasi-reflective thinkers in Chapter Two. Alice is just beginning to encounter the notion of thinking for herself; she does not yet have an internal sense of self to guide her choices. This is evident in her explanation of choices during college. For example, Alice described how she decided to join a sorority: "I rushed, and then I just ended up liking it. I'm pretty involved in it. There's no real explanation for why. That's just the way it happened." She seemed to make decisions about involvement in sorority activities versus her academic work in much the same way: "Monday night we ended up having a party and I should have stayed home and read. But I went anyway. There's a lot more to school than just getting your chapters read. It's really hard to strike a happy medium. I don't really know that I even have a happy medium of it." Like most of her peers in the study, Alice's decisions during college reflected her fusion with others' expectations of her, reflective of Kegan's third order of consciousness (1994; see also Chapter One). She seems unsure of what she wants and goes with the flow of what others around her are doing.

Alice did report feeling more open-minded as a junior than she had as a freshman. She explained that people she knew in her small town were

pretty much the same, saying, “There were only two Catholic families in my hometown. I just felt completely naive and stupid [about their faith]. I had to have my roommate explain to me what all these things mean. And with stuff like that, naturally you’re saying that if it’s not familiar, . . . it’s bad. Freshman year I probably even did because I was probably pretty sheltered. But now it’s just like whatever, your opinion. Just because people have a different opinion doesn’t mean that you have to disagree about a lot of things.” Alice articulates Ortiz’s link between cultural identity and worldview (see Chapter Seven) in her realization that what she has grown up with as familiar she saw as right. Alice is at the beginning of Ortiz’s concept of intercultural competence as she begins to recognize the validity of other perspectives. However, as a subjective, transitional, quasi-reflective thinker, she has no mechanism for analyzing these new perspectives. She has yet to explore her own cultural or racial identity in any depth, in part because she has not explored her own identity in general.

It was not until graduate school, which Alice started in her mid-twenties, that she began the transition to more complex cognitive, intrapersonal, and interpersonal ways of making meaning (Baxter Magolda, 1998). She reported the effect of taking a multicultural education class: “It’s made me real conscious of my own assumptions and my own frame of reference, realizing that it is my own frame of reference, but it doesn’t mean I have to be locked inside of it. I can’t get away from my own feelings and biases, but I can be aware of [them] and work with [them] and around [them].” This class offered Alice an encounter similar to the kind Howard-Hamilton (Chapter Five) and Ortiz (Chapter Seven) described as the impetus for racial and cultural identity development. Alice’s initial awareness of her whiteness began the process of her own cultural identity development. Her awareness of her own sense of self was also emerging, as she described her counseling work: “I try to sugar-coat things. And that’s something that I do need to look at because it’s not doing the clients any favors. They need the honest truth. And it’s my hang-up that’s sugar-coating it. I’m not doing it for their benefit; I’m doing it for mine. That’s been probably the most valuable thing with the hands-on stuff with clients is that I’m realizing what my own issues are.” Alice is starting to differentiate between what she does for her own needs and what she does for others, illustrative of the transition between Kegan’s third and fourth orders. She sees the need for making up her own mind or becoming a reflective thinker:

I’m finding that I’m really questioning things and issues. I’m really sorting stuff out for myself instead of just taking notes about everybody else’s opinion. Hands-on experience made me realize nobody else is in this room with me when I’m doing this counseling session. To be clear on these issues, I need to figure them out for myself. Not to say that I’m ever going to figure them out, but to know where I stand on them and to think them through. I feel like if I’m not sure where I stand or I’m not clear on what the issues are and what

the arguments are both ways and process that myself, then I don't see how I can be of any help at all to this client.

Alice realizes that she must be clear on issues herself in order to help her clients and that she must separate her issues from theirs. She is progressing toward an internal sense of self. She is also progressing toward Rhoads's caring self (see Chapter Four) in her concern for the well-being of her clients.

By her early thirties, Alice had learned how to process things herself and achieved an internal sense of self that guided her decisions about what to believe and how to conduct herself professionally and personally. Having experienced a change of heart that led her to change her work role to accommodate parenting her children, she commented: "It really wasn't a struggle. It was a matter of 'Wow, I never thought I'd feel this way.' I certainly respected people who did think this way, but I just didn't think I would. But it wasn't like I was trying to change my mind. It was 'Now I have these feelings, I know what they are; I trust that; now what do I do about it?'" (Baxter Magolda, 1999a, p. 640).

In describing how she figured out what to do about it, Alice exhibited the double vision of connection and separation Clinchy noted in Chapter Three as essential for complex knowing:

I think there has always been a rational component. But ultimately it has to feel right in the gut. My main approach as a counselor is a strong cognitive, rational piece to my therapy. I constantly tell clients just because we feel a certain way doesn't mean we have to act on it. There is a rational process that needs to be there—I didn't quit my job the first day I had this feeling! But I have always had access to that gut awareness and probably some of that is spiritual. My prayer life and spiritual life has always been there. That is very interrelated to that gut feeling—what is the right thing for me? I don't act immediately on this gut feeling, I sort through that with rational processes "Why do I feel this way?" and "What does it mean financially?" And "How can I prepare to do that in a way that is responsible to other people?" I have chosen to take on responsibility, and there are lots of people who trust the decisions I am going to make. Knowing that, respecting that, I'm not going to rush—there is going to be a transition period, room to explore how all this fits and how do we make this smooth. I guess the gut leads me and the rational thinking sorts out the details" (Baxter Magolda, 1999a, p. 640).

Alice's cognitive development, evident in her decision-making process, reflects Clinchy's constructed knower and King's reflective thinker. I called this way of knowing contextual because participants decided what to believe in context (Baxter Magolda, 1992). As King and Howard-Hamilton (1999) and Ortiz (Chapter Seven) noted, this complex level of reasoning is related to multicultural or intercultural competence. The ability to take perspectives outside one's own and the ability to reflect on one's own perspective critically

lead to respect and appreciation of other views, much as Alice respected people who valued motherhood over career aspirations even before she came to that perspective. She also gained appreciation for the varying cultural perspectives of her clients. This perspective taking is related to Rhoads's caring self in Alice's concern for others who would be affected by her decision and her responsibility toward their well-being in the transition.

Closely related to these complex levels of cognitive and intrapersonal development is Alice's interpersonal complexity, evident in this comment:

I'll be honest: one of the things that went through my mind was what will other people think about this decision? A lot of professional contacts I've made . . . see me as career oriented and competent, and I think those things are true and complementary, and I just wonder what their reactions will be. Will they be supportive? Will they understand? If they don't, it doesn't change my choice, but I've wondered. I'm not immune from that. It doesn't take priority over what is inside. I guess I don't need that acceptance or approval—[though] I'd like it—to know that I am doing the right thing.

Alice makes it clear that she would like approval from others but doesn't need it to know she is doing the right thing. The fact that what is inside takes priority reveals that Alice's internal sense of self has solidified to the point that she is no longer constructed by others' expectations—she has reached Kegan's fourth order. Yet she is still connected to other people, and her caring self ensures that she balances her needs with those of her family and coworkers.

Alice's journey from external to internal self-definition mirrors the journeys related in the first eight chapters despite variations in dynamics Alice did not experience (such as sexual orientation or African American racial status). However, as Evans pointed out in Chapter Eight, coming out as a gay, lesbian, or bisexual person requires affirming one's sense of self separate from what others expect—a characteristic of Kegan's fourth order, an internal sense of identity, and the ability to author one's own views. Similarly, Howard-Hamilton in Chapter Five and Fries-Britt in Chapter Six indicate that support from one's cultural peers (perhaps a third-order concept) gives one the strength to affirm one's racial identity regardless of racism in the environment. The complex stages of racial identity reflect the complex intrapersonal and interpersonal dimensions of Kegan's fourth order as well as the complex cognitive dimension evident in reflective or constructed thinking. Thus while gay, lesbian, or bisexual students and students of color have additional layers of identity development to address, the underlying journey remains one of moving from external to internal self-definition and authority.

Helping students along this difficult journey can help them address multiple dimensions of their development that mediate their ability to meet the learning expectations they face in college. Helping students map this journey may seem like a daunting task, particularly in light of Alice's arrival at complex functioning in her early thirties, a situation typical of most of

her peers. However, the chapter authors have provided multiple possibilities for understanding students' development and promoting their learning. It is to this task we turn next.

Accessing Students' Meaning-Making

Educators cannot possibly know the backgrounds, unique experiences, and developmental journeys of every student they encounter. Recognizing, however, that these backgrounds, unique experiences, and developmental journeys mediate learning necessitates finding ways to access students' meaning-making to promote learning more effectively. In Chapter Seven, Ortiz sketches the characteristics of intercultural competence, including the ability to see things from different perspectives, moving outside one's own frame of reference, respect of people's background, and an interest in learning more about people—their culture and history. As educators interact with increasingly diverse students, Ortiz's concept of intercultural competence becomes central to creating effective teaching and learning environments. If we are to understand our students, we need to visit their farms and express genuine interest in learning about their experiences. The recommendations in the first eight chapters regarding accessing students' meaning-making all center on listening carefully to how students make meaning of their experience.

Ignelzi demonstrated in Chapter One that young adults can articulate their expectations and needs in a supervisory context. From this observation, he argued that faculty could ask for and listen to students' expectations in the teacher-student relationship. Hearing students' views of the role of the teacher, the kind of support they hope to receive, and the type of guidance they need gives the faculty member clues to their meaning-making processes. Similarly, the questions in King's examples of varying levels of reflective thinking in Chapter Two are questions that can be integrated into class discussion. Hearing students' assumptions about the nature of knowledge and the justification of beliefs reveal their progress toward reflective thinking. Asking students to discuss their approach to controversial material would elicit the dynamics Clinchy outlined in Chapter Three regarding connection and separation, as well as various ways of knowing. My longitudinal participants readily described the role of instructors, peers, and themselves in the contexts in which they learned best (Baxter Magolda, 1992). Engaging students in these dialogues at the outset of a course as well as during a course as appropriate could help faculty sense how students are making meaning to understand how this will mediate learning in the course.

Authors of the chapters focused on identity development also advocate listening to students to understand the multiple layers of their identity development. Evans's emphasis in Chapter Eight on expressing one's role as an ally is crucial here. Her notion of an ally in the context of gay, lesbian, and bisexual students' experience is in fact important to all students. Often students sense that their personal struggles are irrelevant to educators or simply perceived as excuses for their difficulties in academic work. Thus

they hesitate to share their internal conflicts; this hesitation is heightened when they are unsure of an educator's stance on race or sexual orientation. Howard-Hamilton's example in Chapter Five of the white teacher's racial identity development shows how the teacher's perspective can affect students' willingness to share their thoughts. Fries-Britt's data in Chapter Six underscore the importance of faculty's welcoming students' concerns about race or gender as well as constructing relationships based on mutual respect. Expressing openness to learning about and respecting students' experiences can create opportunities to hear how their unique experiences affect their learning.

Rhoads's discussion of service learning in Chapter Four offers yet another avenue to access students' meaning-making. Direct experience coupled with reflection helped students develop a caring self. The notion of direct experience can be incorporated into classroom activities, accompanied by intentional opportunities for reflection that reveal students' meaning-making. Making reflection a part of the learning environment also conveys to students that educators are interested in how they make sense of their experience. This process welcomes students as they are and are becoming, similar to Ignelzi's recommendation that we simultaneously welcome and facilitate development. Such facilitation helps us create inclusive and effective learning environments.

Creating Inclusive and Effective Learning Environments

Inclusive and effective learning environments as defined in this volume are environments in which opportunities for complex cognitive, intrapersonal, and interpersonal development exist for all students. The multitude of recommendations in the first eight chapters can be organized into four main themes: viewing students as capable participants in the journey to self-authorship, providing directions and practice in acquiring internal authority, establishing communities of learners among peers, and supporting the struggle inherent in exchanging older, simpler perspectives for newer, more complex ones.

Viewing Students as Capable Participants in the Journey to Self-Authorship. This involves valuing and respecting students' experience and current development. This theme is evident in the authors' recommendations for accessing students' meaning-making, as already discussed. The recommendations highlight two primary arenas in which this respect is conveyed in the classroom. First, educators' attitude toward students must convey respect. King suggests that respecting and providing support for students' current meaning-making helps them take the risks required to move to more complex ways of making meaning. My study participants reported that they were able to move toward self-authorship when they were validated as capable of knowing (Baxter Magolda, 1992). Ignelzi explains that showing that "we understand how it is for them" creates the interpersonal connection needed by third-order students to feel supported. Rhoads's

notion of mutuality, or situating all parties as “givers” and “receivers,” is another way of conveying support to externally defined students. Finally, showing respect for students’ race, ethnicity, culture, and sexual orientation welcomes important aspects of their experience in the learning endeavor. Fries-Britt’s emphasis on affirmation of black students, Ortiz’s suggestions for including cultural issues in the dialogue, Howard-Hamilton’s encouragement of self-exploration, and Evans’s safe zone are all versions of this welcoming dynamic.

Second, respect for students’ experience is conveyed through the curriculum and course syllabus. Evans’s recommendation for a centralized curriculum in which issues of sexual orientation are openly addressed when appropriate in one example of a welcoming attitude in action. Howard-Hamilton’s explanation of the transformed course, in which traditional assumptions are questioned and transformed in light of multiple perspectives, is another example of welcoming diverse students’ experience by incorporating material relevant to race, ethnicity, and culture into the course of study. The theme of respecting students and their experience is also interwoven throughout the three remaining themes.

Providing Directions and Practice in Acquiring Internal Authority. Ignelzi advocates offering students good directions to the new farm and accompanying them on the journey there. His call for structured, supervised practice in generating one’s own ideas about course material is answered by numerous chapter authors’ recommendations addressing the nature of class activities, evaluation, and the role of the teacher. King offers a comprehensive view of classroom activities that center around teaching students strategies for gathering and evaluating data in order to make interpretive judgments. She advocates using controversial, ill-structured issues that explicitly contain uncertainty in judgment to help students explore lines of reasoning. Similarly, Howard-Hamilton advocates exercises in perspective taking. Ortiz recommends dialogue on complex topics to help students attend to multiple perspectives and expand their understanding. King also emphasizes opportunities for students to analyze others’ views and to defend their own. Rhoads’s emphasis on personalizing learning interactions followed by intentional reflection supports students’ opportunities to analyze their own and others’ views. Clinchy notes that inviting students to say what they really think and using their ideas as hypotheses for exploration helps them develop their thoughts. I found this to be true among my study participants as well as students in classes I observed (Baxter Magolda, 1999b). These approaches support Ortiz’s call for community building to allow risk taking and using collaborative and active learning methods.

These approaches focus on eliciting students’ thinking, engaging them in reflection and analysis, and guiding them in reorganizing their thinking in more complex ways. The same process can be implemented in evaluating students’ work. Ortiz advocates assignments that require complex thinking by integrating critical analysis of the subject matter and students’ experience, thus giving students experience in the kind of meaning-making

we hope they will achieve. Giving students frequent feedback on such work provides both cognitive and emotional support for their efforts, according to King. Clinchy and Fries-Britt emphasize affirmation of the student in concert with constructive criticism. Fries-Britt explains that affirming the positive aspects of students' work affirms their sense of self, making them more able to accept constructive criticism. Likewise, Clinchy advocates that helping students connect to their work via its positive characteristics affirms connection before taking a detached stance to critique one's ideas. She also notes that connected education requires a more personal, noncompetitive approach to evaluation to engender the students' investment in their work. These notions convey the balance of welcoming students as they are while inviting them to become something more.

Finally, the role the educator adopts can offer direction and good company for the journey to internal authority. Clinchy speaks most directly to the educator's role in modeling complex ways of making meaning. She advocates that educators share the process (rather than only the product) of their own thinking by thinking out loud and being willing to change their minds in classroom dialogue. Doing so reflects what Howard-Hamilton called collaboration, which helps students understand the creation of meaning. This role invites students to be partners in the learning process, just as Rhoads invited students to be partners in deciding the nature of service learning activities. This partnership is particularly important to students who have experienced marginalization, as illustrated in Fries-Britt's students' comments in Chapter Six that quality relationships with faculty enhanced their sense of intellectual capability. The process of mutually constructing meaning is also a key characteristic in helping students in various disciplines learn self-authorship (Baxter Magolda, 1992, 1999b) because they are guided in developing their own thinking by the educator's expertise.

Establishing Communities of Learners Among Peers. Despite the significance of the curriculum, educators' welcoming approach, and classroom formats that guide students effectively toward self-authorship, there is still a need for support among peers to learn effectively. Ignelzi notes that group work is essential to support third-order students who make meaning of their experience through those around them. The chapter authors show that communities of learners provide both the affirmation externally defined students need and the challenge to move them toward internal definition. Fries-Britt and Howard-Hamilton report that African American students flourished when they had strong peer support. Fries-Britt noted that students of color are often dispersed among groups to provide diversity in each group, often to their own detriment; she addressed the advantages of groups of students of color to provide affirmation. Evans's plans for achieving an environment of inclusiveness, not just by welcoming diversity but also by confronting insensitive remarks, also create an affirming peer community. King acknowledges the importance of peer communities in her recommendation that students be encouraged to practice their reasoning skills in student organizations and other settings to increase their confidence.

The authors also highlight the challenges peers offer each other. Ignelzi clarifies that any student group typically contains a range of meaning-making such that externally defined students are challenged by internally defined students. Clinchy suggests that students should have opportunities to get into the perspectives of their classmates and to think with them (connection) and against them (separation) to develop their own thoughts. Ortiz and Howard-Hamilton emphasize the value of multiple perspectives arising from group work. The processing of service learning experiences Rhoads advocates is another form of peers helping one another analyze their thoughts and develop perspectives. Organizing peer communities around the same mutuality and advancing the notion of partnership in the educator-student relationship create opportunities for risk taking, affirmation, challenge, and growth.

Supporting the Struggle Inherent in the Journey. Exchanging older, simpler perspectives for newer, more complex ones is not an easy process. William Perry (1970) likened it to the nostalgia of leaving one's current home, despite excitement about a new home. We do not easily let go of ways of understanding the world and ourselves that have been long in the making and that are more comfortable than newer ways that are not entirely clear to us yet. Moving from external definition means leaving the safety of having one's beliefs and identity defined by others to the responsibility of making those choices oneself. Remaking how one constructs knowledge, one's own identity, and one's relationships with others are all inherent in this journey. Thus Ignelzi's recommendation of standing by students during transitions is crucial. If we expect them to achieve the complex levels of meaning-making that advanced learning requires, we must acknowledge the struggle involved. Welcoming students' reflections during the journey conveys understanding and empathy for these important tasks.

Conclusion

The possible ways students make meaning sketched throughout this volume reveal how meaning-making in cognitive, intrapersonal, and interpersonal dimensions mediates learning. The authors' proposals for accessing their students' meaning-making and creating inclusive and effective learning environments demonstrate that teaching can simultaneously meet learning goals and promote self-authorship. The authors' insights expand on contemporary teaching approaches such as constructivist teaching (for example, Twomey Fosnot, 1996; von Glasersfeld, 1995), collaborative learning (Bruffee, 1993), caring education (Noddings, 1991), empowering education (Shor, 1992), feminist teaching (Maher and Tetreault, 1994), and culturally relevant pedagogy (Ladson-Billings, 1995) by emphasizing the developmental progression of students' meaning-making.

The holistic view of learning and development advanced here does, however, require new assumptions about knowledge, authority, learners, and teachers. Guiding students to author their own knowledge in the context of existing knowledge recognizes that knowledge is socially constructed by

knowledgeable peers. As a result, authority is transformed from providing knowledge to assisting in its construction. Assuming that students are in the process of learning to construct knowledge, teachers join them as partners in the knowledge construction process. It is in joining students as partners that educators gain access to their meaning-making and the opportunity to map the pathways to self-authorship from particular students' starting points on the journey.

References

- Baxter Magolda, M. B. *Knowing and Reasoning in College: Gender-Related Patterns in Students' Intellectual Development*. San Francisco: Jossey-Bass, 1992.
- Baxter Magolda, M. B. "Developing Self-Authorship in Graduate School." In M. A. Anderson (ed.), *The Experience of Being in Graduate School: An Exploration*. New Directions for Higher Education, no. 101. San Francisco: Jossey-Bass, 1998.
- Baxter Magolda, M. B. "Constructing Adult Identities." *Journal of College Student Development*, 1999a, 40, 629–644.
- Baxter Magolda, M. B. *Creating Contexts for Learning and Self-Authorship: Constructive-Developmental Pedagogy*. Nashville, Tenn.: Vanderbilt University Press, 1999b.
- Baxter Magolda, M. B. "The Evolution of Epistemology: Refining Contextual Knowing at Twentysomething." *Journal of College Student Development*, 1999c, 40, 333–344.
- Bruffee, K. A. *Collaborative Learning: Higher Education, Interdependence, and the Authority of Knowledge*. Baltimore: Johns Hopkins University Press, 1993.
- Kegan, R. *In over Our Heads: The Mental Demands of Modern Life*. Cambridge, Mass.: Harvard University Press, 1994.
- King, P. M., and Howard-Hamilton, M. F. "Becoming a Multiculturally Competent Student Affairs Professional." Final report submitted to the National Association of Student Personnel Administrators, 1999. Available from Patricia King, School of Leadership and Policy Studies, Bowling Green State University, Bowling Green, OH 43403.
- Ladson-Billings, G. "Toward a Theory of Culturally Relevant Pedagogy." *American Educational Research Journal*, 1995, 32, 465–491.
- Maher, F. A., and Tetreault, M. K. *The Feminist Classroom: An Inside Look at How Professors and Students Are Transforming Higher Education for a Diverse Society*. New York: Basic Books, 1994.
- Noddings, N. "Stories in Dialogue: Caring and Interpersonal Reasoning." In C. Witherell and N. Noddings (eds.), *Stories Lives Tell: Narrative and Dialogue in Education*. New York: Teachers College Press, 1991.
- Perry, W. G., Jr. *Forms of Intellectual and Ethical Development in the College Years: A Scheme*. Austin, Tex.: Holt, Rinehart and Winston, 1970.
- Shor, I. *Empowering Education: Critical Teaching for Social Change*. Chicago: University of Chicago Press, 1992.
- Twomey Fosnot, C. (ed.). *Constructivism: Theory, Perspectives, and Practice*. New York: Teachers College Press, 1996.
- von Glasersfeld, E. "A Constructivist Approach to Teaching." In L. P. Steffe and J. Gale (eds.), *Constructivism in Education*. Mahwah, N.J.: Erlbaum, 1995.

MARCIA B. BAXTER MAGOLDA is professor of educational leadership at Miami University, Oxford, Ohio.

