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Theory and research provide insight into the characteristics, needs, and teaching preferences of adult learners in the college classroom.

Adult Learners in the Classroom

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This chapter begins with an examination of adult learning theories. It follows with a brief overview of selected theories of adult development, including "traditional" theories that emphasize sequential and psychological development and alternative frameworks that are more concerned with the sociocultural context of development. Next I briefly review studies examining adults as learners in the college classroom. Finally, suggestions are offered for effectively aiding adult learners, whether in a college classroom or student service program.

Frameworks for Understanding Adult Learning

Knowledge of adult learning theory can provide a basis for effective practice. Presented here are several theoretical approaches to adult learning.

Andragogy. One of the most commonly applied frameworks of adult learning is andragogy, described as the art and science of helping adults learn (Knowles and Associates, 1984). Malcolm Knowles commonly is credited with bringing this term to the attention of American adult educators during the late 1960s and 1970s (Merriam, 2001). Knowles first proposed a set of four assumptions about adult learners and contrasted this theoretical framework with that of pedagogy, the art and science of teaching children (Knowles, 1980). Later, he and colleagues added a fifth assumption (Knowles and Associates, 1984).

Regarding the concept of the learner. The adult learner is responsible for making personal decisions in day-to-day life, in many cases decisions that also affect others. Similarly, adults are assumed to prefer self-direction in determining the goals and outcomes of their learning.

Regarding the role of the learners' experience. Adults bring a vast reservoir of experience to the learning situation that should be capitalized on. They also value learning through direct experience.

Regarding readiness to learn. Adults are presumed to become ready to learn when they experience a need to know or do something to perform more effectively.

Orientation to learning. Because adults typically enter a learning situation after they experience a need in their life, they are presumed to bring a task- or problem-centered orientation to learning. This is in contrast to the subject-centered approach associated with traditional, pedagogical approaches to education.

Regarding motivation to learn. The andragogical model presumes that although adults will respond to external motivators such as a job promotion, the most potent motivators are internal.

Knowles described the andragogical process as consisting of elements aimed at establishing a suitable physical and psychological climate for learning (mutual respect, collaborativeness, supportiveness, openness, and fun) and involving adult learners in mutual planning (Knowles and Associates, 1984). The learning contract was promoted as a tool for assisting adult learners to exercise self-direction through personally identifying goals, resources, implementations, and means of evaluating their learning (Knowles, 1975). Andragogy sustained considerable critique during the 1980s and 1990s; yet, scholars taking a retrospective look note its undeniable effect on adult education practice (Pratt, 1993; Merriam, 2001).

Self-Directed Learning. Even as self-direction in learning was emerging as one of the most challenged assumptions within andragogy, a distinct body of theory and research on self-directed learning (SDL) was evolving. Allen Tough (1971) generally is credited with providing the first comprehensive description of SDL and initiating a long-standing body of research on this topic. Although research on self-direction takes many paths, readers of this volume may be interested especially in the literature on selfdirection as a learner attribute. A significant proportion of the empirical research in this area has focused on a characteristic referred to as SDL readiness, most frequently measured with the Self-Directed Learning Readiness Scale (Guglielmino, 1997). Yet, it has been observed that self-directedness may be a situational variable rather than an enduring learner characteristic (Candy, 1991; Pratt, 1988). The research on SDL with the instructional environment suggests that although adults are likely to be interested in exercising some degree of autonomy in learning, faculty and staff who facilitate adult learning should expect diversity both among learners and across situations for the same individual and be prepared to make adjustments in expectations or level of support. Grow's description (1991) of the Staged Self-Directed Learning model offers some guidance in this regard for college instructors. In this model, Grow describes four stages of self-direction observed among college students and outlines possible roles for the teacher or facilitator based on each of the learner stages: coach, guide, facilitator, consultant.

Transformative Learning. For those who question whether either andragogy or SDL theory represents a learning theory that is uniquely adult, transformative learning theory, proposed and revised most prominently by Jack Mezirow (2000), offers an appealing alternative. This theory grew out of Mezirow's research with reentry women in higher education. He offers the following definition of transformative learning: "Transformative learning refers to the process by which we transform our taken-for-granted frames of reference (meaning perspectives, habits of mind, mind-sets) to make them more inclusive, discriminating, open, emotionally capable of change, and reflective so that they may generate beliefs and opinions that will prove more true or justified to guide action" (Mezirow, 2000, pp. 7–8).

Hence, adult learners who have viewed their college professor as the source of all legitimate knowledge may through transformational learning come to understand that they, too, are capable of constructing knowledge. Kegan (2000) contrasts transformative learning (changes in how we know) with informative learning (changes in what we know), adding that we all experience potentially important changes that do not bring about a fundamental shift in our frames of reference.

Perspective transformation often is described as being triggered by a significant life event, originally referred to by Mezirow as a disorienting dilemma. Subsequent research, however, has indicated that transformation also can occur in response to events as minor as a lecture that creates an opportunity for reflection and redirection, or it may occur when an accumulation of internal dilemmas creates a growing sense of disillusionment (Taylor, 2000). The decision to return to college itself may be associated with transformative learning in one of several ways. It may represent the culminating action phase described as one of the "steps" in transformative learning (Mezirow, 2000), or it may reflect just one element of what Clark (1993) describes as an integrating circumstance when persons consciously or unconsciously search for something that is missing in their life, or it may act as the primary stimulus for transformative learning. According to Mezirow, "Fostering these liberating conditions for making more autonomous and informed choices and developing a sense of self-empowerment is the cardinal goal of adult education" (2000, p. 26).

Frameworks for Understanding Adult Development

The audience for this volume is likely to be familiar with numerous theories of human development that encompass the adult portion of the life span, including stage theories such as those of Erikson (1959) and agephase theories such as those of Levinson (1986). Closely aligned with transformational learning theory is another set of theories readers may also

recognize. These theories of adult development are described by Kegan (2000) as constructive-developmental. According to Kegan (2000), the emphasis that distinguishes his work and that of other constructive-developmental psychologists (Baxter Magolda, 1992; Belenky, Clinchy, Goldberger, and Tarule, 1986; King and Kitchener, 1994; Perry, 1998) is their focus on the evolution of the forms of meaning construction and the ways in which adult learners become increasingly aware of themselves as knowledge constructors and problem solvers, even though the curriculum of life sometimes leaves us "in over our heads" (Kegan, 1994).

The constructive-developmental theories described by Kegan share with other stage theories an emphasis on progressive development toward more complex ways of understanding the self and the world. Other formulations of adult development are more concerned with how social and cultural contexts influence adult change and growth than with the attempt to find universal patterns of development. Some of these formulations question the premises of much research on adult development as too steeped in the realities of white, middle-class, Western men. This includes theorists investigating women's development who have moved away from an initial concern with modifying theories originally derived from observations of men (Gilligan, 1982; Josselson, 1987) toward the development of theories based in women's lives (Belenky, Clinchy, Goldberger, and Tarule, 1986; Peck, 1986). Others have pursued a better understanding of the effects of race and ethnicity on adult development, including those who examine the development of racial identity among minority and majority group members (Cross, 1995; Helms, 1994).

Yet another body of work on adult development eschews attempts to describe adult lives in terms of sequential or evolutionary processes; instead, it focuses on how adults respond to normative and non-normative life events and negotiate complex social roles (Neugarten, 1976; Schlossberg, 1984). These frameworks remind us to consider not only the orderly stages of intellectual, epistemological, or moral development that adults may exhibit as they traverse our campuses but also the sometimes chaotic and always complex interplay between students' personal development and the events, roles, and people in their lives.

Research on Adult Learners in the Classroom

Many studies have explored the characteristics of adult learners in the college classroom, providing substantial, though not unqualified, support for the assumptions linked to the theoretical frameworks above. Findings from these studies can be grouped into several key areas.

Adult Learners' Perceptions of Effective Teaching. Migletti and Strange (1998), studying 185 students in developmental education classes, found an age-teaching style interaction effect on course outcomes. Learner-centered instruction, as measured by Conti's Principles of Adult Learning

Scale (1979, 1985), was associated with a greater sense of satisfaction and accomplishment among the students older than twenty-five years. This style of instruction is characterized by an emphasis on learner-centered activities, personalized instruction, relating the course to student experience, assessing student needs, and maintaining flexibility for personal development.

Other studies substantiate adult preferences for features of learner-centered instruction as predicted by adult learning theory but also point to the desires of adult college students for instruction more typically considered teacher centered. Ross-Gordon (1991) investigated 181 adult undergraduate students' perceptions of effective teaching by inductively analyzing responses to open-ended survey questions about critical incidents illustrating best and worst classroom experiences. Several of the top ten characteristics of the incidents reflecting effective teaching would be predicted on the basis of adult learning theory (availability and helpfulness, concern and respect for students, encouraging discussion, flexibility), but several would not (clear presentations, well-organized lectures, and knowledgeable instructors).

Donaldson, Flannery, and Ross-Gordon (1993) compared results of a reanalysis of three qualitative studies of adult graduate and undergraduates with findings from a metanalytic study by Feldman (1988) of characteristics associated with effective teaching by a general undergraduate population. In addition to items that did not appear in Feldman's data (comfortable learning atmosphere, use of a variety of techniques, adaptation to diverse needs, and dedication to teaching), Donaldson and colleagues found greater emphasis in several areas: ability to motivate students, relevance of materials, clarity of presentation, knowledge of instructor, and encouragement of participation. Adult learning theory would not necessarily lead to the prediction of several of these areas of emphasis, especially on clarity of presentation, knowledge of the instructor, and dedication to teaching. But these results may be partially understood in light of adults' desires to economize their learning efforts because of the multiple roles they juggle. They also might be interpreted in light of more recent work emphasizing the struggles adults face as they attempt to bridge the gap between "common knowledge" (as acquired experientially in the everyday life-world and cultures of family, work, and community) and "college knowledge" (Graham, Donaldson, Kasworm, and Dirkx, 2000; Murphy and Fleming, 2000).

Another strand of research directly compares perceptions of college teaching held by faculty, adult learners, and traditional-aged students. McCollin (2000) surveyed eighty-four instructors and both traditional (n = 243) and nontraditional (n = 324) students at the College of the Bahamas using the Principles of Adult Learning Scale (PALS) to measure instructors' self-perceived teaching style and an adapted version (APALS) to measure student perceptions of the teaching styles exhibited by their instructors. Although instructors of nontraditional students scored closer to the mean

on the PALS than instructors of traditional students, their scores were still in the teacher-centered range whether rated by themselves or students, leading McCollin to speculate that dominant teacher-centered practices in higher education may have played a role. Faculty and students also differed in their perceptions on six of the seven scales of the PALS. These findings are echoed by Raven and Jimmerson (1992), who found agreement among faculty and traditional and nontraditional students that lectures were the most frequently used technique, whereas students and faculty disagreed on the degree to which faculty employed a variety of techniques (students reported less variety).

Characteristics of Adult Learners. Some have speculated that adults exhibit unique learning styles. Using Kolb's Adaptive Style Inventory (1988), Migletti and Strange (1998) failed to support this hypothesis in their study comparing learning style profiles of adult and traditional students enrolled in developmental education courses, although they did find an interaction effect of age and teaching style on adult learners' sense of accomplishment. Likewise, Raven and Jimmerson (1992) failed to find differences among faculty and traditional and adult student perceptions of students' learning-style preferences as measured on a common questionnaire developed for the study. Although these studies do not point to a uniquely adult learning style, the value of responsiveness to diverse learning styles among adults exhibited by individual adults was supported by a study of students between twenty-one and fifty years of age in a predominantly black community college. Mickler and Zippert (1987) found that adult students' performance on a College Level Examination program social studies test was enhanced when they were taught related content employing a mix of class members' preferred learning styles when compared with students taught in a lecture format.

Faculty studied by Raven and Jimmerson (1992) perceived nontraditional students as more goal oriented, responsible, and self-directed—all characteristics suggested by adult learning theory—but also perceived them as more competitive. Faculty and traditional and adult students studied by Lynch and Bishop-Clark (1994) agreed that older students are more assertive. Lynch and Bishop-Clark (1994) report perceptions that adults have a different relationship with faculty that is more like that of peers.

Yet, several studies also point to another side of adult students not emphasized in adult learning theory. Bishop-Clark and Lynch (1992), Lynch and Bishop-Clark (1994), MacDonald and Stratta (1998), and Ross-Gordon and Brown-Haywood (2000) all provide data pointing to an initial lack of confidence experienced by many adult students that is rooted in perceptions that they may not be as well prepared as fellow students who have not left the formal learning environment. Migletti and Strange (1998) speculate that this initial lack of confidence, especially among adult students placed in developmental math classes, may provide a partial explanation for the lack of difference between traditional and adult learners based on

measures of preferred learning style and classroom environment preferences obtained at the beginning of the semester, in contrast with ageteaching style effects on course satisfaction and sense of accomplishment using measures administered at the end of the semester.

Focus groups with adult undergraduates conducted by MacDonald and Stratta (1998) and interviews conducted by Ross-Gordon and Brown-Haywood (2000) suggest that initial anxiety about performance in the student role is likely to be a passing phenomenon as adults gain increased confidence through successful experiences following reentry. Migletti and Strange (1998) suggest that this phenomenon may call for different teaching styles at different points in a semester, especially for newly reentering or underprepared adult learners.

Concerns Adult Learners Bring to the Classroom. Numerous studies support the assumption that adult learners want content to be relevant to their lives and offer potential for immediate application (Bishop-Clark and Lynch, 1992; Donaldson, Flannery, and Ross-Gordon, 1993; Migletti and Strange, 1998; Ross-Gordon, 1991; Ross-Gordon and Brown-Haywood, 2000). But when it comes to additional concerns reported by adults, it becomes apparent that adult learners are not a monolithic entity. Studies focusing on racial and ethnic minority adults point to the importance of curriculum that is relevant to their cultural backgrounds (Ross-Gordon and Brown-Haywood, 2000). These studies also reveal the degree to which classroom incidents perpetuating racial oppression and a sense of being "other" can become a barrier to learning (Aiken, Cervero, and Johnson-Bailey, 2001; Johnson-Bailey, 1998; Ross-Gordon and Brown-Haywood, 2000). Other studies point to gender-based concerns, including female students' stronger concern with teacher-student interaction (Ross-Gordon, 1991) and flexibility of instructors in making adjustments based on adult student lives (Donaldson, Flannery, and Ross-Gordon, 1993).

Recommendations for Practice

Several recommendations for classroom practice with adult learners in higher education seem warranted as we reexamine the theoretical frameworks and areas of research discussed here.

Provide opportunities for adults to exercise self-direction in the identification of personal goals, selection of learning strategies, and modes of assessment. As suggested by Grow's stage model of self-directed teaching and learning (1991), this may need to occur incrementally with consideration of learners' background in the content, developmental stage, and their prior experience with exercising learner control in a formal learning environment.

Recognize and foster relationships between academic learning and learning in the larger world. One approach is through programs that grant college

credit for demonstration of learning equivalent to college courses. Another approach is through creating opportunities within the classroom for students to make linkages between course content and knowledge gained in the contexts of work, family, and community living.

Recognize that cognitive development continues well into adulthood (Kegan, 1994). Use activities that stimulate cognitive development and growth, challenging adults to grapple with the kind of ill-defined problems they encounter in everyday life (King and Kitchener, 1994).

Realize that many adults experience life-changing events immediately before or after enrolling in college. Provide the support they may need during these times of transition, whether through on-campus programs or referral to community-based counseling programs.

Design a curriculum that is inclusive with regard to students' cultural backgrounds, including those from marginalized groups.

Recognize that because adult students are immersed in numerous external cultures and may have limited time or need for traditional types of involvement in campus culture, the classroom typically serves as the focal point of the academic experience for adults. Maximize opportunities for relationship building with faculty and classroom peers through instructional activities and academic program-related activities scheduled around their on-campus time or mediated by technology.

Make use of course designs and instructional activities that balance adult students' often mixed preferences for learner-centered (flexible and responsive) and teacher-centered (structured) learning environments.

Although most adult students go on to achieve at levels equal to or greater than those of traditional-aged students, recognize that many return to college studies with trepidation about their abilities to be successful learners in the academic setting. This is especially, but not uniquely, the case for underprepared learners. Create opportunities for early success to generate confidence. Provide students with information about courses and workshops designed to help them enhance self-awareness as learners, improve academic learning strategies, and learn the norms of academic knowledge communities.

Be sensitive to individual differences. Adult students want professors who understand their special concerns and who can adapt to differences related to learning style, gender, and cultural and racial background while avoiding overgeneralizations and stereotypes.

References

Aiken, L. C., Cervero, R. M., and Johnson-Bailey, J. "Black Women in Nursing Education Completion Programs: Issues Affecting Participation." *Adult Education Quarterly*, 2001, 51(4), 306–321.

Baxter Magolda, M. Knowing and Reasoning in College: Gender-Related Patterns in Students' Intellectual Development. San Francisco: Jossey-Bass, 1992.

Belenky, M., Clinchy, B., Goldberger, N., and Tarule, J. Women's Ways of Knowing: The Development of Self, Voice and Mind. New York: Basic Books, 1986.

- Bishop-Clark, C., and Lynch, J. M. "The Mixed-Age College Classroom." *College Teaching*, 1992, 40(3), 114–117.
- Candy, P. C. Self-Direction for Lifelong Learning. San Francisco: Jossey-Bass, 1991.
- Clark, M. C. "Transformational Learning," In S. B. Merriam (ed.), *An Update on Learning Theory*. New Directions for Adult and Continuing Education, no. 57. San Francisco: Jossey-Bass, 1993, pp. 47–56.
- Conti, G. J. "Principles of Adult Learning Scale: An Instrument for Measuring Teacher Behavior Related to the Collaborative Teaching-Learning Mode." Doctoral dissertation, Northern Illinois University. Dissertation Abstracts International, 1979, 39, 7111A.
- Conti, G. J. "The Relationship Between Teaching Style and Adult Student Learning." *Adult Education Quarterly*, 1985, 35(4), 220–228.
- Cross, W. E. "The Psychology of Nigrescence: Revising the Cross Model." In J. G. Ponterotti, J. M. Casas, L. A. Suzuki, and C. M. Alexander (eds.), *Handbook of Multicultural Counseling*. Thousand Oaks, Calif.: Sage, 1995, pp. 93–122.
- Donaldson, J. F., Flannery, D., and Ross-Gordon, J. M. "A Triangulated Study Comparing Adult College Students' Perceptions of Effective Teaching with Those of Traditional Students." *Continuing Higher Education Review*, 1993, 57(3), 147–163.
- Erikson, E. H. Identity and the Life Cycle. New York: Norton, 1959.
- Feldman, K. A. "Effective College Teaching from the Students' and Faculties' View: Matched or Mismatched Priorities." *Research in Higher Education*, 1988, 28(4), 291–344.
- Gilligan, C. In a Different Voice: Psychological Theory and Women's Development. Cambridge, Mass.: Harvard University Press, 1982.
- Graham, S. W., Donaldson, J. F., Kasworm, C., and Dirkx, J. "The Experiences of Adult Undergraduate Students: What Shapes Their Learning?" Paper presented at the American Educational Research Association National Conference, New Orleans, Apr. 2000.
- Grow, G. "Teaching Learners to Be Self-Directed: A Stage Approach." *Adult Education Quarterly*, 1991, 41(3), 125–149.
- Guglielmino, L. M. "Reliability and Validity of the Self-Directed Learning Readiness Scale and Learning Preference Assessment (LPA)." In H. B. Long and others (eds.), *Expanding Horizons in Self-Directed Learning*. Norman: Public Managers Center, University of Oklahoma, 1997, pp. 209–222.
- Helms, J. E. "The Conceptualization of Ethnic Identity and Other 'Racial' Constructs." In E. J. Thickett, R. J. Watts, and D. Birman (eds.), *Human Diversity: Perspectives on People in Context*. San Francisco: Jossey-Bass, 1994, pp. 285–311.
- Johnson-Bailey, J. "Black Reentry Women in the Academy: Making a Way Out of No Way." *Initiatives*, 1998, 58(4), 37–48.
- Josselson, R. Finding Herself: Pathways to Identity Development in Women. San Francisco: Jossey-Bass, 1987.
- Kegan, R. *In Over Our Heads: The Mental Demands of Modern Life.* Cambridge, Mass.: Harvard University Press, 1994.
- Kegan, R. "What 'Form' Transforms?: A Constructive-Developmental Perspective on Transformational Learning." In J. Mezirow and Assoc. (eds.). *Learning as Transformation: Critical Perspectives on a Theory in Progress.* San Francisco: Jossey-Bass, 2000, pp. 35–69.
- King, P., and Kitchener, K. Developing Reflective Judgment. San Francisco: Jossey-Bass, 1994.
- Knowles, M. S. Self-Directed Learning: A Guide for Learners and Teachers. Chicago: Follett, 1975.
- Knowles, M. S. The Modern Practice of Adult Education: From Pedagogy to Andragogy. (2nd ed.) Chicago: Follett, 1980.
- Knowles, M. S., and Assoc. Andragogy in Action: Applying Modern Principles of Adult Learning. San Francisco: Jossey-Bass, 1984.

- Kolb, D. A. Experiential Learning Experiences as the Source of Learning and Development. Englewood Cliffs, N.J.: Prentice Hall, 1988.
- Levinson, D. J. "A Conception of Adult Development." *American Psychologist*, 1986, 41(1), 3–13.
- Lynch, J., and Bishop-Clark, C. "The Influence of Age in College Classrooms: Some New Evidence." *Community College Review*, 1994, 22(3), 3–12.
- MacDonald, C., and Stratta, E. "Academic Work, Gender, and Subjectivity: Mature Non-Standard Entrants in Higher Education." *Studies in the Education of Adults*, 1998, 30(1), 67–79.
- McCollin, E. "Faculty and Student Perceptions of Teaching Styles: Do Teaching Styles Differ for Traditional and Nontraditional Students?" Paper presented at the Annual Meeting of the Mid-South Educational Research Association, Bowling Green, Ky., Nov. 2000.
- Merriam, S. B. "Andragogy and Self-Directed Learning: Pillars of Adult Learning Theory." In S. Merriam (ed.), *The New Update on Adult Learning Theory*. New Directions for Adult and Continuing Education, no. 89. San Francisco: Jossey-Bass, 2001, pp. 3–13.
- Mezirow, J. M. "Learning to Think Like an Adult: Core Concepts of Transformation Theory." In J. M. Mezirow and Assoc. (eds.), *Learning as Transformation: Critical Perspectives on a Theory in Progress.* San Francisco: Jossey-Bass, 2000, pp. 3–33.
- Mickler, M. L., and Zippert, C. P. "Teaching Strategies Based on Learning Styles of Adult Students." *Community/Junior College Quarterly of Research and Practice*, 1987, 11(1), 33–37.
- Migletti, C. L., and Strange, C. C. "Learning Styles, Classroom Environment Preferences, Teaching Styles, and Remedial Course Outcomes for Underprepared Adults at a Two-Year College." *Community College Review*, 1998, 98(1), 1–19.
- Murphy, M., and Fleming, T. "Between Common and College Knowledge: Exploring the Boundaries Between Adult and Higher Education." *Studies in Continuing Education*, 2000, 22(1), 77–93.
- Neugarten, B. L. "Adaptation and the Life Cycle." *Counseling Psychologist*, 1976, 6(1), 16–20.
- Peck, T. A. "Women's Self-Definition in Adulthood: From a Different Model? *Psychology of Women Quarterly*, 1986, 10, 274–284.
- Perry, W. G. Forms of Intellectual and Ethical Development in the College Years: A Scheme. San Francisco: Jossey-Bass, 1998.
- Pratt, D. D. "Andragogy as a Relational Construct." *Adult Education Quarterly*, 1988, 38(3), 160–181.
- Pratt, D. D. "Andragogy After Twenty-Five Years." In S. B. Merriam (ed.), *Update on Adult Learning Theory*. New Directions for Adult and Continuing Education, no. 57. San Francisco: Jossey-Bass, 1993, pp. 15–23.
- Raven, M. F., and Jimmerson, R. M. "Perceptions of Nontraditional Students, Teaching and Learning Held by Faculty and Students. *Continuing Higher Education Review*, 1992, 56(3), 137–154.
- Ross-Gordon, J. M. "Critical Incidents in the College Classroom." *Continuing Higher Education Review*, 1991, 55(1/2), 14–29.
- Ross-Gordon, J., and Brown-Haywood, F. "Keys to College Success as Seen Through the Eyes of African American Adult Students." *Journal of Continuing Higher Education*, 2000, 48(3).
- Schlossberg, N. K. Counseling Adults in Transition. New York: Springer, 1984.
- Taylor, K. "Teaching with Developmental Intention." In J. Mezirow and Associates (eds.), *Learning as Transformation: Critical Perspectives on a Theory in Progress*. San Francisco: Jossey-Bass, 2000, pp. 151–180.
- Tough, A. *The Adult's Learning Projects: A Fresh Approach to Theory and Practices in Adult Learning.* Toronto: Ontario Institute for Studies in Education, 1971.
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