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SELF AND IDENTITY PROCESSES IN SCHOOL MOTIVATION, LEARNING, AND ACHIEVEMENT

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All day long I think about it, then at night I finally say it,
Who am I, and what am I supposed to be doing?
I have no idea . . .

—Rumi, 13th century CE, Turkey

The purpose of this chapter is to present ideas and research findings on self and identity processes that are relevant to the study of students' motivation, learning, and achievement in school. Towards the pragmatic end of initiating intellectual dialogue concerning self and identity processes in education, we pursue five basic aims. First, we discuss differing approaches to the study of *self* and *identity* in social science. Second, we clarify the meaning of the terms *self* and *identity* as used historically in the works of William James and Erik Erikson. Third, we update our understanding of these bodies of work in relation to developments in social-personality psychology and the learning, developmental, and brain-behavioral sciences. Fourth, we provide an integrative framework that may be useful to educational researchers who wish to

study self and identity processes in educational settings. Fifth, we discuss the implications of these first four aims for contemporary educational research and practice.

APPROACHING SELF AND IDENTITY IN EDUCATION

For over a century, there have been debates in the social sciences about how best to conceptualize the phenomena variably called *self* and *identity* (cf. Côté & Levine, 2002). Such debates continue. On the one hand, many contemporary psychologists continue in the tradition of William James (1890) by viewing self/identity in terms of (a) *psychological contents* such as self-categorizations, beliefs, and goals; (b) *psychological processes* associated with awareness such as self-appraisal, self-definition, and self-reflection; and (c) the personal project of self-development in which individuals construct a

¹On behalf of the authors, this chapter is dedicated to Richard E. Snow and Robbie Case—mentors and colleagues remembered in knowledge, friendship, and spirit.

representational self-system out of their unique history of social experiences in local and more distal social and physical worlds. Aspects of this *psychological conceptualization of self/identity* are found in many subdisciplines of psychology, including developmental, social-personality, educational, and cultural psychology. On the other hand, social scientists across various disciplines continue in the traditions of Baldwin (1895), Cooley (1902), and Mead (1934) by viewing self/identity in terms of (a) *social and cultural structures* that assign to individuals various consequential group labels (social categorizations), statuses, and roles; (b) *interpersonal processes* associated with the appraisals of, and social positioning by, other people; and (c) the sociocultural project of self-envelopment by which individuals, based on their array of group memberships, develop multiple *identities* through patterns of participation in shared activities. Aspects of these *social and cultural conceptualizations of self/identity* are found in sociology and sociological social psychology, cultural psychology, educational anthropology, and sociocultural theory.

These two general characterizations of *self* and *identity* research traditions are convenient introductory organizing devices because they give the appearance of relatively clear conceptual distinctions in approaches (e.g., the first is about the construction of the *psychological self*, the second is about the construction of *social identity*). The actual state of self/identity research, however, suggests otherwise with conceptions, definitions, and terms spilling over these neat characterizations into an oftentimes confusing body of scholarship. Given the diversity of scholarship in this area, the approach we adopt in this chapter is an eclectic one. We highlight selected ideas and research from both of these broadly defined traditions of scholarship on self and identity. For, in a basic sense, individuals are embedded across their lifespans in social structures, social groups, and shared systems of meaning, as suggested in *social and cultural conceptualizations of self/identity*. As such, individuals' selves/identities are continuously being shaped by social others and negotiated within sociocultural spaces and activities. At the same time, individuals experience the sociocultural conditions of their lives *through* their awareness and their psychological representations of those conditions as suggested in various *psychological conceptualizations of self/identity*. Thus, individuals are constantly, and sometimes creatively, constructing their views of self and world. These psychological dimensions of self/identity make possible *not freedom from external conditions*, as Victor Frankl (1962) put it, *but freedom in*

attitude towards conditions; not just *adaptation to cultural environments*, as Abraham Maslow (1968) put it, but *transcendence of these environments*. Any theory of self/identity needs to address itself to both enculturation and its prospects for social participation as well as individuals' awareness and representations, and their potentials for self-determination.

Education, in its optimal form, also addresses enculturation and self-determination. The education of young members of democratic societies is not only about socializing them in cultural ways of thinking and feeling about themselves as learners and citizens (what we call *me-self education*), nor is it only about scaffolding their development of knowledge and disciplined ways of knowing (i.e., subject-matter education). Education is also about assisting young people in becoming aware of and extricating themselves from habitual (automatic) ways of attending, perceiving, feeling, thinking, and doing by cultivating more *mindful* approaches to these basic self processes and ways of being in the world (what we call *I-self education*). Whereas the first two educational aims are essential for sociocultural participation, I-self education is a precondition for creativity, freedom of thought, and myriad forms of personal and social renewal.

SELF AND IDENTITY IN THE HISTORY OF PSYCHOLOGY

In this section, we trace the history of the self and identity concepts through the work of William James (1890) and Erik and Joan Erikson (1950).² We use these works to establish the historical grounds for the idea that *self* consists of multiple aspects—including the “*knower*” (I-self), the “*known*” (me-self), and individuals' phenomenological *sense of identity* at any given moment. Before elaborating on these views, we describe two fallacies that typify research on self and identity and that perpetuate terminological confusion and theoretical fragmentation.

Two Fallacies in Self and Identity Research

The *jingle fallacy* is defined as a situation where “two things that are quite different may be labeled equivalently, and thus the unwary may consider them interchangeable” (Block, 1995, p. 209, on Thorndike, 1904). Using the same word to describe two different things invites confusion. For example, some scholars use the term *identity* to refer to symbolic beliefs about oneself as represented

²See Friedman (1999) for a description of the mutual collaboration between Erik and Joan Erikson on the 1950 classic *Childhood and Society*. For ease of presentation, we continue to attribute this work to Erik Erikson, although the historical record shows it was a collaboration.

in memory (i.e., self-categorizations or self-concept), whereas others use it to denote the experience of oneself that fluctuates from moment-to-moment (i.e., phenomenological awareness). Given conceptual and operational definitions corresponding separately to self-representations (i.e., the me-self) and the phenomenological experience of those representations (i.e., I experiencing me), a jingle fallacy is perpetuated by using the bare term *identity* where referring to both of these distinct phenomena.

In contrast, the *jingle fallacy* is defined as a situation where two things that are the same, or almost the same, are labeled differently (Block, 1995, on Kelley, 1927). Using two different words to describe the same thing also invites confusion. For example, researchers commit a jangle fallacy where using the two terms *self* and *identity* to refer to a single phenomenon, such as self-concept (e.g., beliefs about being good at math). This particular jangle fallacy abides to the extent that we fail to specify the ways in which the terms *self* and *identity* denote distinct phenomena.

We do not intend to resolve in this chapter the many jingle and jangle fallacies that plague self and identity research. Although we introduce concepts and language that can be used for this purpose, we nevertheless continue to use the terms *self* and *identity* interchangeably throughout the chapter. Doing otherwise would be simple enough, but might also give an impression of false consensus concerning the distinct meaning of these terms and would be unlikely to contribute to any long-term solution to the problem. For example, we could use the term *identity* where referring to socially assigned group memberships or to the conscious experience of self-sameness, and use the term *self* where referring to relatively enduring beliefs, values, and identifications stored in long-term memory. Such decisions are arbitrary, however, given the different ways that different theorists now use these terms. Consequently, we would likely exacerbate the growing confusion surrounding these terms. Instead, we focus on some of the key biological, psychological, and social phenomena that these terms have been used to describe, and attempt to place these phenomena into an integrative framework that may be useful to researchers who study issues of school motivation, learning, and achievement.

James on Self and Identity

James (1890) developed a comprehensive view of self and related it to the notion of a *sense of personal identity* in ways that continue to inform psychology today (Markus, 1990). James described two fundamentally different as-

pects of *self*: the empirical "me-selves" described as that which is known about me, and the "I-self" (or "Thought"), described as the "knower of me." Summarizing his discussion of self, James (1890) made the following proposal: "Hereafter let us use the words 'me' and 'I' for the empirical person and the judging Thought" (p. 371).

James and the Me-Self. For James (1890), the "empirical me" consists of what is known about oneself. He described the content of me-selves in terms of material, social, and spiritual (i.e., psychological) characteristics. James' "material self" referred to the body and one's possessions; the "social self" to the recognition or condemnation that we receive from others; and the "spiritual self" as our "inner or subjective being, psychic faculties or dispositions, taken concretely" (p. 296). James' concept of me-selves corresponds to what contemporary psychologists refer to collectively as the *self-concept*, *self-theory*, or *self-schemas*. For instance, researchers continue to focus on the content of individuals' *psychological selves* in terms of their values, goals, and beliefs (Harter, 1999); on the content of their *social selves* in terms of central and salient group memberships, roles and reputations, and internalized images of self as seen through the eyes of significant social others (Ashmore, Deaux, & McLaughlin-Volpe, 2004; Stets & Burke, 2000); and on their *body selves* in terms of their perceived body image, physical appearance, romantic appeal, and athletic competence (Harter, 1999).

James and the I-self. After a lengthy review of various philosophical positions on the substantive nature of the I-self as *knower*, James (1890) concluded that "I" is synonymous with "Thought" and that "it is enough to know that it exists; and that in everyone, at an early age, the distinction between thought as such, and what it [Thought] is of or about, has become familiar to the mind" (pp. 296-297). He maintained that "the reality of such pulses of thought, with their function of knowing, [are] the ultimate kind of fact that the psychologist must admit to exist" (p. 338) and that "if the passing thought be the directly verifiable existent which no school has hitherto doubted it to be, then that thought is itself the thinker, and psychology need not look beyond" (p. 401). James relegated any further conclusions about the substantive nature of the I-self to either metaphysical speculation or future scientific discoveries, though he did go on to describe how the I-self or Thought is experienced within the stream of consciousness. Specifically, he described the I-self as "the present mental state [that] binds the individual past facts with each other and with itself" (p. 338). He maintained that "Thought is a perishing and not an immortal or incorruptible thing" (345) and that despite its moment-to-moment,

pulsating quality, the I-self fulfills several essential psychological functions for the individual. These included the "subjective synthesis" and the "appropriating and disowning" of experience. For James, the experience of particular me-selves was dependent on distinguishing what was me from what was not me; therefore, there must be an agent of the "appropriating and disowning. . . . It is the Thought to whom the various Constituents are known. That Thought is a vehicle of choice as well as of cognition" (p. 340). In short, James viewed the I-self as synonymous with *phenomenal awareness* and assigned to this awareness the capacity for self-regulatory and agentic functions.

James and Personal Identity. James went on to describe how it was possible to have a phenomenological experience of being the same person over time despite the fact that experience was constantly changing. He considered the conscious experience, or *sense of*, personal continuity and selfsameness over time within the context of his theory of the self and referred to it as the *sense of personal identity*. He argued that this *sense* arose from the relation between the I-self and me-self. Although the I-self functions of subjective synthesis, appropriation, and disowning were enough to signify the *facts* of one's existence (I am), they could not provide what James understood as the *sense of personal identity* without having as their "objects" the past and present me-selves that denoted *what I am* (and am not). In sum, James suggested that it is the subjective *relation* between I-as-subject and me-as-object that provides the basis for the phenomenological experience that we call the *sense of personal identity*.

Erikson on Psychosocial Identity

In contrast to James' focus on selfsameness, Erikson was more interested in the objective relationships between the person (ego) and their social and cultural environments (ethos), or what he termed *psychosocial identity* (Erikson, 1968). Erikson wanted to develop a conceptual language that would move beyond what he referred to as the "pseudo biology" typical of the traditional psychoanalytic perspective of his day and towards a view of human development *in cultural context*. He drew upon the concept of the "average expectable environment" to capture what he meant by the term *psychosocial*. In this view, humans are born "preadapted" to an average expectable environment and are dependent upon a continual series of these environments for healthy development.

Erikson (1970) depicted this persistent endeavor of social others to incorporate individuals into an "on-going cultural concern" in terms of an epigenetic series of stages

of psychosocial identity development, stages defined by particular life tasks, ideologies, and social contexts encountered across the life span. According to this view, promising or problematic forms of psychosocial identity development are a product of:

an intricate relation between inner (cognitive and emotional) development and a stimulating and encouraging environment [that] exists from the beginning of life, so that no stage and no crisis could be formulated without a characterization of the mutual fit of the individual's capacity to relate to an ever expanding life-space of people and institutions, on the one hand, and on the other, the readiness of people and institutions to make him [*sic*] part of an ongoing cultural concern. (Erikson, 1970, p. 754)

Erikson's epigenetic stage theory portrays development during childhood in terms of transactions between children and their environments, and the resultant favorable or unfavorable resolution of tasks associated with basic self needs. These needs include (a) relatedness in attachment relationships during infancy (trust vs. mistrust), (b) autonomy in the exploration of the environment and in the mastery of the body, moral rules, and social roles during early childhood (autonomy and initiative vs. shame, doubt, and guilt), and (c) competence in academic and social endeavors during middle and late childhood (industry vs. inferiority).

In childhood, the average expectable environment consists of predictable, warm, and consistent caregiving, moral socialization that is neither overly harsh nor overly lenient, peers who expand the child's social world through mutual and cooperative interpersonal relationships with equals, and teachers who afford all children the opportunity to develop their competence in a setting free of social prejudice. Concerning this last point, Erikson (1959) discussed the critical role played by children's experience of school and developing sense of competence for their emerging sense of belonging and participation in an ongoing cultural concern:

Since industry involves doing things beside and with others, a first sense of *division of labor* and *equality of opportunity* develops at this time. When a child begins to feel that it is the color of his [*sic*] skin, the background of his parents, or the cost of his clothes rather than his wish and his will to learn which will decide his social worth, lasting harm may ensue for the sense of identity. (p. 93)

After the triggering event of puberty, Erikson (1968) posited that relatedness, autonomy, and competence needs are renegotiated in terms of the increasingly diverse range of experiences and people that typify adolescents' social worlds. Specifically, earlier orientations toward interpersonal trust are renegotiated in terms of new friends,

romantic partners, role models, cultural ideals, and social institutions in which youth can have *faith*; earlier orientations toward personal autonomy are renegotiated in terms of self-images, activities, and ideologies to which youth can *freely chose to commit*; and earlier orientations toward competence and achievement are renegotiated in terms of social and occupational roles in which youth might expect to *excel*. Renegotiating these needs in culturally appropriate ways was viewed as the basis for developing a mature psychosocial identity.

Erikson and the I-Self. Erikson's focus on the *objective relationships* between the person and the environment, as opposed to the subjective relationship between I and me, brought needed attention to the cultural and intergenerational nature of psychosocial identity development. Nevertheless, Erikson also discussed the concept of the *I-self*, although, in contrast to James, he never provided an explicit definition. Erikson tended to think about the I-self in process terms, having referred to it as "an observing center of awareness and of volition" (1968, p. 135) and as "a center so numinous that it amounts to a sense of being alive" (1981/1996, p. 284).

JAMES AND ERIKSON IN MODERN TIMES

James' Me-Selves in Modern Perspective

Psychological research on self/identity, personality, and motivation took a profound turn in the 1970s when it began to explore the concept of mental representations and when it was considered

legitimate—in fact, necessary—to posit a separate level of analysis which can be called the "level of representation." When working at this level, a scientist traffics in such representational entities as symbols, rules, images—the stuff of representation which is found between input and output—and in addition, explores the ways in which these representational entities are joined, transformed or contrasted with one another. (Gardner, 1985, p. 38)

In a classic article, Markus (1977) proposed that self be viewed in representational terms: as "cognitive generalizations about the self, derived from past experience, that organize and guide the processing of self-related information contained in the individual's social experiences" (p. 64). Researchers interested in self and motivation began exploring how cognitive processes (e.g., activation) and representations (e.g., beliefs) serve basic motivational and self-regulatory functions such as directing attention to, and speeding the processing of,

particular features and domains of self-relevant experience, people, and situations. Eventually, the notion of self-representations provided a way of understanding how, despite limits on information-processing capacity, humans efficiently and often automatically motivate and regulate their experience and behavior (Bargh, 1999). It also provided a view of self (with its motivational and regulatory functions) that was consistent with James' (1890) description of the content-rich "empirical me-selves" and is the basis for what are today referred to as self-schemas, self-theories, self-concepts of ability, self-efficacy beliefs, possible selves, beliefs about intelligence, educational aspirations, school values, achievement goals, and so on.

Multiple Forms of Mental Representations. Conceptualizing the me-self (and "motivation") in terms of mental representations lead scholars interested in self/identity to encounter an issue that was debated at the outset of cognitive science: namely, what are

the best ways of conceptualizing mental representations. Some investigators favor the view that there is but a single form of representation (usually, one that features propositions or statements); some believe in at least two forms of mental representations—one more like a picture (or image); the other closer to propositions; still others believe that it is possible to posit multiple forms of mental representations and it is impossible to determine which is the correct one. (Gardner, 1985, p. 40)

The idea that humans have more than one way of constructing mental representations of their physical and social worlds is the subject of an increasing amount of research in the social sciences under the rubric of "dual processes."

The notion of dual processes in psychological functioning attracted much attention during the first 100 years or so of psychology. For example, Freud (1911/1953) postulated that we have both a "primary process" mode of functioning characterized by emotion, unconscious drives, and iconic imagery, and a "secondary process" mode characterized by reason, conscious thoughts, and symbolic language. The former system has been hypothesized to underlie relatively rapid and "hot" modes of information processing and behavioral regulation, whereas the latter system has been hypothesized to mediate slower and "cool" modes of processing and regulation (Goleman, 1995, 2003; Metcalfe & Mischel, 1999).

The idea of qualitatively different psychological systems attuned to different forms of meaning making and social interaction has received increasing research attention and support across many subdisciplines of psychology (Goleman, 1995; Greenwald & Banaji, 1995;

TABLE 18.1. Dual Psychological Systems Across the History and Disciplines of Psychology

Dual Systems	Source	Discipline
Impulsive—Voluntary	Wundt (1897)	Experimental
Primary—Secondary process	Freud (1953/1911)	Clinical
Holistic (eros)—Analytic (logos)	Jung (1923)	Clinical
Need—Quasi-need	Lewin (1935)	Personality
Inferred self—Self-in-awareness	Hilgard (1949)	Motivation
Spatial—Linear	Sperry (1961)	Neuroscience
Iconic—Symbolic	Bruner (1964)	Cognition
Implicit—Explicit	Reber (1967)	Learning
Appositional—Propositional	Bogen (1969)	Neuroscience
Intuitive—Reasoned	Kahneman & Tversky (1973)	Cognition
Automatic—Controlled	Shiffrin & Schneider (1977)	Cognition
Heuristic—Systematic	Chaiken (1980)	Social
Concrete—Abstract	Martindale (1981)	Cognition
Procedural—Declarative	Anderson (1982)	Learning
Slow to change—Quick to change	Conley (1984)	Personality
Syncretic—Analytic	Buck (1985)	Cognition
Operant—Respondent	McClelland (1985)	Motivation
Implicit—Explicit	Schacter (1987)	Memory
Direct perception—Re-cognition	Neisser (1988)	Perception
Implicit—Self-attributed	McClelland et al. (1989)	Motivation
Algorithmic—Rational	Anderson (1990)	Cognition
Experiential—Rational	Epstein (1990)	Personality
Unconscious—Preconscious	Lazarus (1991)	Clinical
Slow learning—Fast learning	J. McClelland, McNaughton, & O'Reilly (1995)	Neuroscience
Associative—Rule-based	Sloman (1996)	Cognition
Context—Text	Ornstein (1997)	Education
Fast processing—Slow processing	O'Reilly & Munakata (2000)	Neuroscience
Experiential—Verbal-symbolic	Schultheiss (2001)	Personality
Reflexive—Reflective	Lieberman et al. (2002)	Neuroscience

Metcalf & Mischel, 1999; Ornstein, 1997; Shiffrin & Schneider, 1977). In Table 18.1, we present a selection of concepts from investigators who have posited the existence of at least two different psychological systems that are relevant to research on self/identity: those related to perception (e.g., Bruner, 1964), emotion (e.g., Lazarus, 1991; Zajonc, 1980), social cognition (e.g., Chaiken, 1980; Kihlstrom, 1990); learning (e.g., Bruner, 1960; Reber, 1967); motivation (e.g., McClelland, 1985; Murray, 1938) personality (e.g., Allport, 1961; Epstein, 1990) and neuropsychology (e.g., Lieberman, Gaunt, Gilbert, & Trope, 2002; Sperry, 1961). The diversity of such "dual process" theories and research traditions indicate "not so much claims about how many processes there *are*, but claims about how many processes there *aren't*. And the claim is this: There aren't one" (Gilbert, 1999, p. 4).

The postulate of dual processes has important implications for the qualitatively different kinds of (me-) self-representations individuals construct from their social and physical experience. Early in life, infants relate to the world through attention, sensation, emotion, and motor acts that are nested within a network of close physical and social relationships (Meltzoff, 1999; Stern, 2000). Between the first and second years of life, children gradually

acquire the capacity to relate to self and world through language as well (Stern, 2000). Developmentally, these primary and secondary modes of knowing and social interaction are hypothesized to correspond to (at least) two different kinds of me-self representations: the iconic and the symbolic (Case, 1991).

Two Examples: Dual Systems Perspectives on the Me-Self and on Motivation

Epstein (1990) has provided theory and evidence regarding these two levels of the me-self—what he terms the "experiential" (i.e., iconic) and the "rational" (i.e., symbolic) self-systems (i.e., me-selves). In his view, both of these systems function to assimilate experience and maintain the organism's health, social relations, self-esteem, and pleasure-pain balance. The *experiential self-system* is a rapid-response, holistic, emotion-mediated information processing system that develops slowly (over the course of many directly experienced occasions) from the encoding of sensory, affective, and motor experience into representational images, feelings, and metaphors. Epistemically, this system is predicated on the notion that

“experiencing is believing.” Structurally, this system is hypothesized to be derived from emotionally significant experiences that are organized as “emotional complexes” (i.e., iconic schemas). Functionally, this system maintains the person’s health, well-being, and social relations by guiding behavior through use of these emotion complexes. For instance, the experiential self-system provides evaluative information in the form of “good and bad vibes” in instances of decision-making (cf. Kahneman, 2003) and “hot” emotional arousal in certain situations—an experience often described as suddenly being “seized by our emotions.” Epstein (1990) suggested that, phenomenologically, we experience self-regulation via the “experiential self-system” passively or preconsciously—its activation does not require our conscious attention (cf., Bargh, 1999).

Epstein (1990) described the *rational self-system* as a fast-learning, analytic, reason-mediated information-processing system that encodes experience in terms of verbal, mathematical, and other kinds of symbolic representations. Epistemically, this system is predicated on the notion that logic and evidence undergird belief. Structurally, this system is hypothesized to be differentiated into specific domains (e.g., school, sports, social) and dimensions (e.g., self-concepts of ability, values) as well as integrated into hierarchically organized *belief systems* (e.g., self-as-student-at-school). Functionally, this system guides behavior through such belief systems and direct, conscious (and relatively slow) appraisals of events prior to action (cf. Metcalfe & Mischel, 1999). Phenomenologically, the rational self-system is readily available to our awareness and thus is intimately known by people in the form of explicit beliefs about themselves and the world.

Epstein (1990) posited that integration between the two systems is necessary for overall effective functioning. Whereas the experiential self-system provides strong energy and a rapid, holistic approach to problem solving, the rational system provides strong measured appraisals and an analytic approach to problem solving. The experiential and rational systems interact in a number of ways. For example, the experiential system provides the rational system with evaluative “vibes” and feelings that can summate with beliefs in motivating courses of action. These systems can also provide conflictual inputs to behavior as in the common experience of feeling dissonance between what our “hearts” feel and what our “heads” think about a given decision, person, or situation (Epstein, 1990). Both the experiential and the rational self systems operate largely below the level of conscious awareness in shaping behavior because, according to Epstein, “that is the natural mode of operation of the human mind, as it is more efficient for behavior to be directed automatically

than to require conscious reflection” (p. 190; cf. Bargh, 1999).

Similarly, McClelland and his colleagues have described two different motivational systems in terms of “implicit motives” (i.e., iconic me-self) and “self-attributed motives” (i.e., symbolic me-self; McClelland, 1985; McClelland, Koestner, & Weinberger, 1989). Implicit motives (derived from natural incentives and emotions) and self-attributed motives (derived from social incentives and language) differ both *substantively* (in terms of psychological representation) and *functionally* (in terms of the ways they affect behavior). McClelland (1985) defined implicit motives as learned, affectively charged, anticipatory goal states (aroused by specific cues) whose functions are to attain pleasure or avoid pain. Implicit motives such as the need for achievement (*nAch*) are defined as situationally evaluative, affectively energizing, anticipatory schemas that function to motivate individuals to approach an end state that is rewarding or to avoid an end state that is punishing. In the case of *nAch*, that desired end state is the desire to do something better compared to a standard of excellence (McClelland, 1985). These motives are hypothesized to be relatively nonconscious, preverbal, and predictive of long-term behavioral trends, habits, and decisions.

In contrast, self-attributed motives are preconsciously, evaluative, and related most strongly to choices made within immediate contexts. In contemporary terms familiar to educational psychologists, self-attributed motives refer to constructs such as goals, values, and competence-related beliefs (Eccles, Wigfield, & Schiefele, 1998). McClelland (1985) posited that goals and values (symbols) often direct the affective energy of implicit motives (icons) toward responses in particular situations. Despite the evidence that shows distinct correlates of iconic and symbolic forms of motivation with, respectively, long-term behavioral *habits* over the life span and short-term behavioral *choices* in specific situations, McClelland et al. (1989) noted that both forms of motivation serve similar functions: the energization and direction of behavior.

McClelland (1985) reviewed a range of studies showing that symbolic motives (e.g., the goal of performing well on an achievement task) play their most obvious role in directing behavior where the affectively charged iconic motive (e.g., need for achievement) has been activated in the self-system. For example, students high in *nAch* performed better than those low in *nAch* only when these high levels of *nAch* were accompanied by high levels of a symbolic desire (i.e., a goal) to perform well. McClelland et al. (1989) extended these ideas by describing how the two motive systems interact differentially with distinct aspects of the environment. For example, *explicit* content-specific social expectations (e.g.,

to complete your homework) are more closely related to the activation of content-specific symbolic motives than to the activation of content-related iconic motives (e.g., the need for achievement). Alternatively, *implicit* task demands (e.g., difficulty level) are more likely to activate iconic rather than symbolic motives. For example, McClelland et al. described research showing that people who score high on *nACh* measures perform better at moderately challenging cognitive tasks (and often worse on easy tasks) than people who score low on *nACh* because, *implicitly*, "such tasks provide the maximum incentive of feeling good from doing something better" (p. 693).

In cases where both iconic and symbolic motives are activated by situational cues, McClelland et al. (1989) argued that these different kinds of motivation can *summate* to facilitate performance or *conflict* to undermine performance. For example, they described a study in which social interaction (i.e., talking to other people) was predicted best by including information about individuals' implicit (iconic) and self-attributed (symbolic) affiliative motivation. Specifically, those who were high on both forms of affiliative motivation were found to talk to other people the most. They also described conflict in these systems by showing how different motivational configurations can predict different forms of behavior expression. For example, people with strong iconic *and* symbolic affiliation motives were more often observed talking with other people, whereas those with strong iconic affiliation motives but weak symbolic affiliation motives were more often observed writing letters to other people.

In sum, the existence of "dual processes" in psychological functioning is related to the contemporary postulate of *at least* two kinds of representations in the construction of "empirical me-selves" across development: the iconic and the symbolic (Case, 1991). Thus, we define James' (1890) me-self in modern perspective, in part, in terms of these two levels of representation: the iconic (affective-experiential) and the symbolic (evaluative-rational) me-self systems. These two levels develop over time, are stored in long-term memory, and serve motivational and regulatory functions when activated by acts of volition or (automatically) by environmental stimuli (see later discussion).

James' I-Self in Modern Perspective

Based on developments in contemporary neuroscience and ancient insights into the nature of consciousness, we find it pragmatically useful and theoretically viable to define James' (1890) I-self as *awareness* and relate it to the concepts of *passive observation* and *willful attention*. We view this as consistent with Erikson's (1968) concep-

tualization of the "I" as "an observing center of awareness and of volition" (p. 135) and James' view of the I-self as the "vehicle of cognition" and as "pulses of thought, with their function of knowing" (p. 338).

Neuroscientists have described a mode of awareness that is present at or very near birth (e.g., Damasio, 1999). Damasio calls this "core consciousness." He describes it as a simple biological phenomena that is stable across the lifespan; independent of memory, reasoning, and language; and lasting only during the present moment (*here and now*). This mode of awareness can be described in terms of *alert* but *passive observation* and forms the ground of *conscious, subjective experience*. There is a growing body of research that distinguishes a second mode of awareness that can be described in terms of *agentive regulation of conscious experience through attention* (Lieberman et al., 2002; Shiffrin & Schneider, 1977). This second mode is characterized by the I-self functions described by James (1890) as appropriation, synthesis, and choice. Specifically, it is characterized by the capacity for the *willful direction of attention*. The willful and conscious shifting of attentional focus allows for the monitoring and discrimination, and therefore the "appropriation and disowning," of conscious experience. Another capacity of this second mode of awareness is the *willful sustaining of attention*. The willful and conscious maintenance of attentional focus on specific contents of experience allows for both discrimination and "subjective synthesis" of these contents. The directing and sustaining of attention also afford choice insofar as individuals can use their awareness to *volitionally* activate psychological resources, focus on particular aspects of the inner and external environments rather than others, and hold particular contents in working memory to accomplish specific ends (e.g., remaining aware of an intention until it comes to fruition in action).

Studies have documented that young children who can shift their attention away from negative sensory stimuli, concepts, and response tendencies (and sustain focus on more positive stimuli, concepts, and responses) also do better in school and enjoy better mental health across development compared to young children who do not manifest these potentials (Derryberry, 2002; Posner & Rothbart, 2000; Shoda, Mischel, & Peake, 1990). More generally, these modes of awareness are the foundation of all educational efforts, and in particular, self-regulated learning (Brown, 1997; Langer, 1989; Winne, 1996).

In sum, the I-self can be defined as a center of alert but passive observation and a vehicle for the willful directing and sustaining of attention. As such, it can be distinguished from the me-self and its automatic directing of attention through various processes (e.g., orienting reflex, sensory-affective-motor schemas; Bargh, 1999). The

I-self can be considered a master regulatory mechanism by which attentional, cognitive, and affective resources can be *consciously and willfully* deployed (Derryberry, 2002; Posner & Rothbart, 2000). Given developments in our scientific understanding of the I-self and its functions, we believe that ignoring the I-self in research on self/identity can lead to the commission of a jingle fallacy (i.e., where I-self functions are mistakenly attributed to me-self functions).

Moving the Legacy of James and Erikson Forward

In this section, we move the legacy of James and Erikson forward by using their work to clarify the widespread use of the terms *implicit* and *explicit* in contemporary self/identity research. The complex nature of the psychological and social phenomena to which these terms are assigned requires more precise terminology than is commonly used today. Consequently, we distinguish among and interrelate three ways of thinking about the concepts of implicit and explicit: the phenomenological (I-self), the representational (me-self), and the developmental.

Phenomenological Meaning. The terms *implicit* and *explicit* are most often used to indicate whether or not psychological contents or processes are *outside of* or *within* conscious awareness, respectively. This usage reflects Murray's (1938) *double-aspect hypothesis*: namely, that every conscious experience reflects some underlying psychological process but that "not every regnant process has a conscious correlate" (p. 49). For example, research on implicit perception, implicit memory, and implicit learning examines environmental stimuli that are processed by the brain and affect subsequent behavior in ways that do not involve conscious awareness (Kihlstrom, 1987). Perceptual and semantic priming studies, in which individuals are exposed to a perceptual or language stimulus below the threshold of their phenomenal awareness, have demonstrated that such "mere exposure" affects subsequent recall of the priming stimulus even though participants do not consciously remember learning it. This provides one way of understanding how students can learn from *tacit* (i.e., implicit) dimensions of classroom contexts. In contrast, perception, memory, and learning are considered *explicit* when there are relevant correlates of these processes within phenomenological awareness and behavior. For example, someone tells you a phone number, you consciously attend to the information by hearing and rehearsing the phone number, and you later recall and use the phone number. We urge readers to use the terms *implicit* and *explicit* only where referring to psychological contents and processes that are *noncon-*

scious or conscious, respectively. This understanding of the implicit–explicit distinction is consistent with our definition of the I-self as *awareness*.

Representational Meaning. The fact that psychological contents and processes exist whether or not we are aware of them tells us little about their substantive nature. For example, where researchers refer to attitudes, stereotypes, and cognitive abilities as being *implicit*, it is often unclear whether they mean something about the substantive nature of these contents or processes, how they were measured, or the extent to which they exist outside of phenomenal awareness (Fazio & Olsen, 2003). For example, some theorists refer to self-theories as *implicit* and mean only that these theories exist outside of awareness (Dweck, 1999). However, other theorists have used the term *implicit* where referring to the substantive nature of the constructs in question (e.g., "implicit motives;" McClelland et al., 1989).

As noted earlier, one of the dominant themes in the literature summarized in Table 18.1 is that self/identity can be characterized by at least two qualitatively distinct kinds of psychological representations (e.g., Bruner, 1964; Peirce, 1955). The first, which we refer to as *iconic*, can be described in terms of sensory-affective-motor schemas. A contemporary developmental postulate is that infants (perhaps even before birth) construct iconic representations from their rich web of sensory, affective, and motor experiences (Case, 1991; Meltzoff, 1999). The second, which we refer to as *symbolic*, can be described in terms of valenced (e.g., good–bad) beliefs and belief systems (e.g., expectations, attitudes, goals, and plans). Language is the prototypic example of such a symbolic system, and it obviously plays an enormous role in self-development (Harter, 1999; Stern, 2000). From this perspective, energy (e.g., affect, valence) and direction (e.g., content, structure) are fundamental properties of both iconic and symbolic (me-self) representations. We urge researchers to use terms other than *implicit* and *explicit* (e.g., *iconic* and *symbolic*) where referring to the *substantive* nature of representational contents and processes. Such distinctions allow for the possibility of discussing *iconic content* that operates *explicitly* (although this is relatively uncommon) and *symbolic content* that operates *implicitly* (which is common).

Developmental Meaning. Scholars who study motivation, self, and personality sometimes fuse these phenomenological and representational meanings together into a third meaning—that of *development*. For example, McClelland et al. (1989) posited that implicit (iconic) motives begin to develop during infancy, before language, and operate largely outside of awareness, whereas

self-attributed (symbolic) motives develop after the acquisition of language and are largely available to conscious awareness. This suggests a normative developmental progression of experience and behavior dominated by implicit iconic content and processes early in life (Case, 1991; Lewis & Brooks-Gunn, 1979); explicit, basic symbolic contents and processes during childhood (Case, 1991; Harter, 1999); self-reflective symbolic contents and processes during adolescence (Keating, 1990); and complex "reflective judgments" involving abstract symbolic systems in adulthood (Fischer & Bidell, 1998). This developmental progression depends in large measure on whether or not social environments scaffold the unfolding of these I-self potentials and the construction of these me-self contents (Keating, 1990). Thus, the *developmental meaning* of the implicit-explicit distinction refers to the intertwining of the contextualized *I* and *me* over time. In the next section, we draw these ideas together into a heuristic framework for studying self/identity processes in relation to school learning and achievement.

BASIC ASPECTS OF SELF IN CONTEXT (BASIC) MODEL

A holistic-interactionistic perspective on human development (Magnusson, 2003), applied to over a century of empirical research related to self/identity, draws attention to several key features of the person-in-context system (Peck, 2004, 2005). First are the contents and processes that have been described as identity, self, and personality and that implicate multiple levels of representation (contents) and dynamics (processes) within the person. Second are the contents and processes that have been described as context, culture, and geography and that implicate multiple levels of organization and dynamics within the environmental context. Third are the dynamic interrelations among the contents and processes that exist within and between these various personal (intraindividual) and contextual (interindividual) levels. These features can be summarized by a person-in-context model (see Fig. 18.1) that includes several "focal" levels within both the person and the context (Peck, 2004, 2005). We call this the Basic Aspects of Self in Context (BASIC) model. It highlights the extent to which understanding self/identity in relation to learning and achievement depends on research and theory related to multiple levels of representation (i.e., within the person) and organization (i.e., between whole individuals and various social contexts).

Research in psychology, biology, and neuroscience has revealed how the intraindividual aspects of self/identity

can be described in terms of the contents, structures, and functions of the brain, mind, and experience. From this perspective, self/identity is encoded in memory, activated (e.g., in awareness) when personally or contextually invoked, and enacted as verbal or nonverbal behavior. Research in psychology, sociology, anthropology, and education has revealed how the interindividual aspects of self/identity can be described in terms of social actors' group labels (e.g., American), roles (e.g., student), and statuses (e.g., poor), as well as by participation in cultural practices (in settings such as the family, classroom, or mall). From these perspectives, identities are afforded, assigned, and recognized by other people, places, and things in the environment. In the next sections, we describe each of the BASIC levels and the implications they have for understanding self and identity processes in school learning and achievement.

Basic Levels of Self (BLOS) Model

Educational research on school motivation at the intraindividual levels has focused heavily on how symbolic (me-self) representations such as competency beliefs, task values, achievement goals, and learning strategies relate to variations in school engagement and achievement (Eccles et al., 1998). Other work has taken a more "self-regulatory" perspective in terms of meta-cognitive and meta-motivational processes. These processes directly implicate the role of the I-self in relation to me-self contents, emotions, and so on (Pintrich, 2003; Winne, 1996). In general, motivation researchers treat basic forms of symbolic me-self representations as core directive constructs that shape students' actions in the classroom by addressing such questions as "Why do I want (or not want) to do this task?" (values), "What goal am I trying to accomplish by doing (or not doing) this task?" (goals), "Can I do this task?" (self-perceived competence and efficacy), and "How do I go about trying to accomplish this task?" (strategies; Eccles et al., 1998). This exclusive focus on symbolic representations has been repeatedly criticized for not addressing the issue of the energization of behavior. Needs have often been postulated as serving such energizing functions (Deci & Ryan, 1985; Thrash & Elliot, 2002). More recently, researchers have begun to study the relatively neglected topic of how different emotions energize (and eventuate from) learning episodes in school (see Schutz & Lanchart, 2002). This work on emotions is consistent with broader trends in research in developmental and social-personality psychology on self. For instance, the idea that the energy of moods and aroused emotions "color" iconic and symbolic self-representations that are constructed from social experience is at the

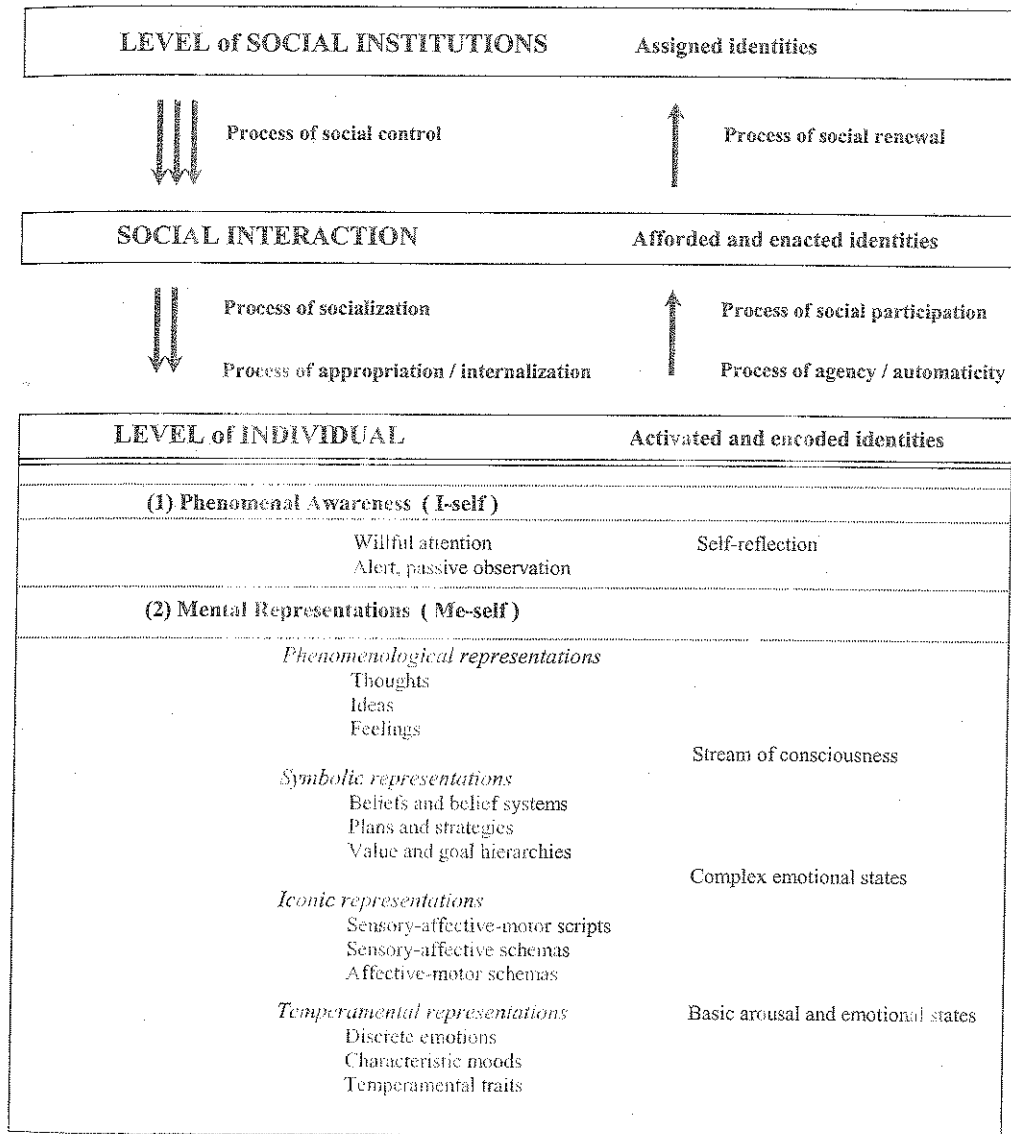


FIGURE 18.1. Basic aspects of self in context (BASIC) model.

heart of contemporary research in neo-Piagetian theory (Case, 1991; Harter, 1999), cognitive-experiential self theory (Epstein, 1990), cognitive-affective personality systems theory (Mischel & Shoda, 1995), and the theory of possible selves (Markus & Nurius, 1986). Thus, in the next sections, we highlight the relatively neglected topics of mood and emotion in relation to self and identity processes in school motivation, learning, and achievement.

BLOS Overview. We describe the intraindividual levels of representation (e.g., temperamental, iconic, symbolic, and phenomenological) that function to motivate (ener-

gize) and regulate (direct) learning and achievement behavior in school by reference to the Basic Levels of Self (BLOS) heuristic model (Fig. 18.1). This model assumes the foundational role of temperamental traits, moods, and emotions in shaping "higher order" levels of me-self representation from birth onward (Case, 1991; Damasio, 1999; Stern, 2000). This synchronic (single moment in time) simplification allows for clear explication of several qualitatively different kinds of encoded me-self representations that play critical roles in the diachronic (across time) whole-person processes that are called *sense of identity, cognition, emotion, and behavior*. The BLOS model also situates the me-self in specific relation to both the I-self

and the wider social and physical contexts in which individuals (as I/Me) function as unified wholes.

Temperamental Representation. Self/identity, as either phenomenological experience or representational content, depends heavily on evolutionary history (Buss, 2004), without which we would have no body or brain to provide the basis for the experiences or contents we call self/identity. The feature that most distinguishes temperamental from iconic, symbolic, and phenomenological representations is their species-typical content; that is, all members of the human species share the same basic anatomy (e.g., the central and peripheral nervous systems). These common elements include the inherited biopsychological mechanisms that provide our most basic arousal and response dispositions, including a set of core emotions and response tendencies first described by Darwin (Lazarus, 1991). Although these dispositions are well rooted in the biochemistry and physiology of the evolved brain and body, their manifestations (e.g., states of emotional arousal) vary across developmental time and place (e.g., due to variations in diet, exercise, cultural socialization factors, life events, and other self-representations; Kitayama & Markus, 1994; Lewis, 1998; Thayer, 1989).

Four key dimensions of temperament relevant to learning and achievement are activity level, reactivity, emotionality, and sociability (see Snow, Corno, & Jackson, 1996). Activity level refers to the intensity and speed of movement; reactivity refers to approach and avoidance response thresholds; emotionality refers to the quality, intensity, and frequency of emotional responses; and sociability refers to the preference for social interaction. These factors influence students' sensitivity to environmental stimulation and hence, their preference for particular kinds of teaching styles and learning tasks. For example, individuals with high activity and emotionality levels can become overstimulated during learning and need frequent breaks to allow "particular mental functions rest" (Snow et al., 1996, p. 256). Further, such individuals tend to prefer well-defined learning tasks that require algorithmic problem-solving strategies. In contrast, students who are less reactive and emotional seek out more novelty and complexity and prefer abstract tasks requiring heuristic problem-solving strategies.

Whereas moods reflect enduring baseline states of physiological arousal (which can be characterized by two independent dimensions: energetic-tired and tense-calm), emotions reflect transient states of arousal (Lazarus, 1991; Thayer, 1989). Theorists have proposed that all humans are born with a core set of basic emotions (e.g., anger, fear, love) that are responsive to particular classes of environmental opportunities and threats

(Ekman, 1992; see Table 18.2). Given this temperamental foundation, ongoing experience is always characterized by some blend of mood and emotion, and these arousal states provide the immediate intrapersonal context for most forms of learning (Damasio, 1999). In these terms, any internal representation of the external environment is at least partially colored by the quality of emotional arousal that was present during its formation.

Iconic Representation. Iconic representations have been described as sensory-affective and affective-motor schemas that become increasingly differentiated and integrated into higher order sensory-affective-motor scripts as a function of direct experience with the immediate environment (Case, 1991; Fischer & Bidell, 1998). Higher order sensory-affective-motor scripts have been conceptualized as motives (McClelland, 1985) and attachment styles (Bowlby, 1988; Case, 1995). Iconic representations, as schemas that have been "emotionally charged" with various blends of the core emotions, provide the basis for the gradual emergence of more complex states of emotional arousal (see Table 18.2).

Whereas the capacity for iconic representation is a species-typical characteristic, the content and structure of iconic representations vary considerably across individuals and developmental time based on experience. Although the iconic representational system as a whole is highly impressionable (i.e., with old and new content continuing to be elaborated), the domain-specific contents and structures encoded in this system (i.e., sensory-affective-motor schemas and scripts) are nevertheless relatively stable over time (Case, 1991, 1995; Rothbard & Shaver, 1994; Waters, Hamilton, & Weinfield, 2000). This has implications for school-aged learning and achievement as the iconic system, through repeated experiences early in development, settles into what appear to be relatively stable attachment styles and motive complexes that can promote or inhibit subsequent readiness and motivation to learn in school (McClelland, 1985). For example, two key features of iconic me-self development involve (a) physical and emotional bonding with caregivers and (b) the use of these bonds to support the exploration of novel features of the physical and social world (Case, 1995). The qualities of the schemas and scripts that result from these bonding experiences promote more or less security and trust, hence, more or less initiative and autonomy in exploration during the subsequent stage, with implications for competence development in the following stage (Erikson, 1950).

Symbolic Representation. In contrast to iconic representations, symbolic representations have been described as relatively enduring, valenced psychological structures

TABLE 18.2. A Descriptive Taxonomy of Positive and Negative Emotions

Types	Positive Emotions		Negative Emotions	
	(Approach)	Theme	(Avoidance)	Theme
Complex emotions				
Epistemic	Cognitive interest	Task relevance or challenge	Boredom	Lack of task relevance or challenge
Social	Belonging	Participation in social activity	Jealousy	Resenting third party for loss
	Empathy	Attunement to others' distress with goal of assistance	Envy	Wanting what someone else has
Self-conscious	Pride	Ego enhancement by taking credit for valued object or achievement	Shame	Ego depletion due to failure to live up to an ideal
	Hope	Yearning for better	Guilt	Transgression of moral imperative
Basic emotions				
Epistemic	Interest-surprise	Moderate novelty and deviations from expectancy	Fear	Imminent harm, large deviations from expectancy
	Excitement	Having impact	Disgust	Too close to or the taking in of unpleasant sensations, ideas, etc.
Social	Love	Participation in affection	Sadness	Irrevocable loss
	Joy-delight	Progress toward goals	Anger	Harm to me and mine
	Comfort-relief	Distress gone away	Distress	Lack of consistency with expectation

consisting of declarative (e.g., beliefs about things) and procedural (e.g., beliefs about how to do things) knowledge (primarily verbal in nature) that becomes increasingly differentiated into dimensions and domains and integrated into higher order belief systems as a function of both direct and vicarious experience over time (e.g., Damon & Hart, 1988; Harter, 1999). For example, beliefs in the existence of a thing become connected to beliefs about the attributes of that thing (Fishbein & Raven, 1962), which, together, form increasingly complex belief systems (Rokeach, 1968) such as values (i.e., beliefs about the goodness of things), goals (e.g., beliefs about desired end states), and plans (e.g., beliefs about the sequence of subgoals necessary to achieve desired end states). These beliefs, along with all of the previously discussed self/identity contents and processes, serve to energize and direct behavior.

Similar to iconic representations, the capacity to form symbolic representations is a species-typical characteristic; however, the content and structure of symbolic belief systems is even more variable across individuals and developmental time than iconic representations.

This relative plasticity allows for high degrees of flexibility in adapting to environmental conditions (e.g., allowing humans to quickly learn complex information and do so without having to rely on trial and error), yet beliefs also tend to be relatively stable over development time. Beliefs also differ from temperamental and iconic representations in that their content is more accessible to awareness. As a result of this accessibility, individuals can more easily describe this content verbally; hence, there is a massive body of empirical research documenting the content, structure, and functions of individuals' symbolic representations. For example, expectancy-value and goal theories have been used extensively by educational researchers to understand the beliefs students have about their current state (e.g., self-concept of ability), future state (e.g., educational goals), and learning environments (e.g., instructional style preferences) as well as how these beliefs relate to achievement behavior (Eccles et al., 1998). Finally, the symbolic me-self system also appears to provide a necessary but not sufficient condition (without the I) for experiencing the *self* as an object of awareness (Lewis & Brooks-Gunn, 1979).

For example, activating some of our relatively detailed symbolic knowledge about the self and the world can produce a complex phenomenological *stream of consciousness* reflecting, for example, me-in-relation-to-my-past-and-future. This phenomenological stream of conscious contents, in turn, can be used for a wide variety of self-regulatory purposes (e.g., making choices about goals or behavior).

The ability to represent the *self* as an object of awareness has implications for the continuing enrichment of emotional arousal states in the form of complex emotions (Harter, 1999). These higher order states of arousal represent a blending of core emotions with increasingly sophisticated iconic and symbolic representations of self and others. For instance, complex self-conscious emotions such as pride or shame are predicated on a linguistic I-self (i.e., symbolic self-awareness) that allows the causes of actions to be explicitly attributed to one's self (e.g., Lewis, 1998). As shown in Table 18.2, complex emotions that develop over time include those associated with anticipatory hopes for success and fears of failure; feelings of pride in a job well done when behaviors meet personal or social standards or feelings of shame and guilt when they do not; feelings of empathy and belonging; and so on. These complex emotions "color" (i.e., *affectively valence*) individuals' emerging beliefs about their goodness or badness and their behavioral competence or incompetence in various life domains. Thus, from about 18 months onward, affectively valenced symbolic representations are (a) coupled to prior iconic representations associated with relational security, mastery, and exploration, (b) form an important basis for subsequent symbolic representations associated with moral, school, and peer competence, and thus (c) play a fundamental role in energizing and directing moral, social, and achievement-related behavior outside and within schools.

Whereas many educational psychologists study the self-representations of students who are motivated to learn, it is students who display negative moods and emotions in the classroom who occupy the greatest amount of teachers' time and contribute to teachers' feelings of burden and lack of teaching efficacy (Bandura, 1993; Roeser & Midgley, 1997). The "reasons" for withdrawn, resistant, or aggressive behaviors in classrooms are not simply beliefs and schemas related to academic and peer incompetence (though these are important) but basic and complex negative emotions (e.g., anger, shame, guilt) and enduring negative moods (e.g., depression; Roeser, Eccles, & Strobel, 1998). Similarly, the complex emotions of boredom and interest, not only students' beliefs regarding the *utility* and *importance* of learning tasks, are key "reasons" for variations in their engagement in class-

room learning activities (Eccles, 1983). A complete understanding of self/identity processes in education necessarily includes how various emotions and moods (as much as competence- and task-related beliefs and goals), energize and direct behavior in learning settings (Becker & Luthar, 2002; Snow et al., 1996).

Phenomenological Representation. *Phenomenological representation* refers to all of the currently activated contents and processes, characteristic of the other levels just described coming together in the stream of consciousness. Phenomenological representation has been the object of empirical investigation since the advent of Wundt's 1879 experimental psychology laboratory. James' (1890) *Principles* and subsequent "radical empiricism" built nicely on this work by describing in detail the kinds of psychological contents that fill the "stream of consciousness" and the functions of the I-self within this stream. For example, regardless of the complexity of the information represented, this content is experienced holistically, at each moment, as a single *object of awareness*.

Although phenomenological representations arise from the contents of the other levels, they are not isomorphic with this information. Rather, they exist only as long as they remain activated in what has been described as "working memory." For example, conscious thoughts about our self/identity are constructed (implicitly and explicitly) from temperamental, iconic, and symbolic content (and their associated moods and emotions) and can be described in terms of the *subjective relationship* between the observing I-self and these activated contents. It is from the vantage point of the phenomenal center of awareness that the mechanistic automaticity of these other subsystems can, potentially, be volitionally regulated. Individuals can work from the phenomenal center with the contents of their conscious experience and thereby regulate behavioral choices, reorganize contents of the symbolic me-self, and regulate emotions, moods, and cognitive resources.

Basic Levels of School Context (BLOSC) Model

Just as the accumulated body of research and theory associated with the *psychological conceptualization of self/identity* implicates the basic levels of self presented in the BLOS framework, a body of research and theory associated with the *social and cultural dimensions of human development* implicates some basic levels of context (Peck, 2004, 2005). These levels are conceived of as a series of proximal and progressively more distal levels of sociocultural organization that inform and regulate

individuals' development from birth to old age. These levels include families, peer groups, schools, neighborhoods, communities and broader cultural institutions, ideologies, and societal structures (Bronfenbrenner, 1993; Erikson, 1950; Sameroff, 1983). The sociocultural structures and processes that characterize these levels of context influence individuals' self/identity development by (a) assigning to individuals various consequential group labels, statuses, roles, and related opportunities; (b) providing appraisals and feedback that position individuals into particular kinds of selves/identities; and (c) affording or constraining pathways to competence, autonomous functioning, and social belonging and thereby patterns of participation and associated selves/identities. We focus here on how Basic Levels of School Contexts (BLOSC) can influence young people's self/identity development in relation to school learning and achievement.

The BLOSC model is a description of a set of concentric contexts that radiate inward from the macro-levels of society and culture, in which *schools* as institutions are embedded, to the micro-level of *classrooms*, in which teachers and students interact (Cole, 1996). These two levels correspond to those described in the BASIC model in Fig. 18.1: the level of social institutions (e.g., the macro-level) and the level of social interaction (e.g., the micro-level).

Macro Levels: Schools as Social Institutions and Organizations. Schools are social institutions that exist within broader contextual, cultural, and societal structures. At the local level, these include neighborhoods, communities, and school districts—with their particular characteristics (e.g., social class), values, resources, and administrative procedures. At more distal levels, schools and their local contexts exist within state governance structures, cultural ideologies, and the problems and promises of the wider society (e.g., poverty, cultural diversity). These broad sociocultural structures and processes influence students indirectly through micro-settings such as the classroom. Schools also exist as social organizations that provide an administrative context and organizational culture (Sarason, 1990) within which the social-interactional spaces of the school (e.g., classrooms) are embedded. At the level of the school, administrative and organizational structures and processes relevant to social interactions in classrooms include the characteristics of school leaders and teaching staffs; the grade span, school size and sector; the school culture; and the school's level of resources and infrastructure. In general, organizational structures and processes have direct influences on teachers (and their teaching practices) and indirect influences on students' self/identity in classrooms through teachers and their pedagogical practice (see later discus-

sion). A significant body of research exists on how school-level factors directly and indirectly influence teachers and students, respectively (Lee, Bryk & Smith, 1993; Talbert & McLaughlin, 1999).

Micro Levels: Classrooms as Spaces of Social Interaction. Classrooms and various noninstructional places such as the playground represent basic micro-settings in schools within which individuals act and interact (Bronfenbrenner, 1993). Studies at these micro-levels focus on teacher and peer characteristics (e.g., social class, race/ethnicity), and relationships and discourse patterns among and between teachers and students; teaching practices (e.g., mode of instruction, grouping arrangements, discipline style); academic tasks, resources, and artifacts (e.g., curriculum, availability of books, displays of student work), climate (e.g., norms, rules, roles, and goals), and the nature of the physical room (e.g., noise level). Noninstructional spaces such as bathrooms, hallways, lunch rooms, stages, sports fields, and geographical areas around the school are also important micro-settings that can influence dimensions of students' self/identity in school (Astor, Meyer, & Behre, 1999; Nasir, 2000).

The processes by which school micro-settings influence students' self/identity development are described in similar ways by theorists with differing perspectives (e.g., Bronfenbrenner, 1993; Erikson, 1950; Rogoff, 2003; Ryan & Deci, 2000; Vygotsky, 1978; Wenger, 1998). Social environments such as classrooms are catalysts for self/identity development insofar as these settings invite, permit, or inhibit movement from more peripheral to more central forms of participation in activities and responsibilities over time. The different forms of participation that contexts afford to different individuals provide the *stuff* (i.e., the experiences) from which they encode and elaborate their situation-specific self-representations and emotional experiences (e.g., competence-as-student, felt belonging in school, educational aspirations).

Bronfenbrenner (1993) differentiated "constructive" from "destructive" environments according to their developmental consequences. Constructive environments are characterized by people, practices, tasks, and resources that foster individuals' sense of safety and belonging, encourage their autonomous (but safe) exploration of the environment, scaffold their competence development, and invite them into increasingly more central forms of participation. Such environments foster the construction, elaboration, and internalization of positive context-related self-representations and values (Ryan & Deci, 2000). Destructive environments undermine individuals' sense of belonging and safety, overly restrict their autonomous exploration, forestall their competence development, and inhibit more central forms of participation.

Such environments foster the construction, elaboration, and internalization of apathetic, resistant, or oppositional context-related self-representations and values.

Examples of Macro and Micro-Level Influences on Students' Self/Identity

The Student Role. One example of how macro- and micro-level processes can combine to influence young people's school-related selves/identities concerns the nature of the student role as defined and communicated in American schools. American cultural ideologies in which competition, individualism, and success and failure are focal concerns (Spindler & Spindler, 1985); school policies and practices that promote competition and relative ability as the purpose of learning (Maehr & Midgley, 1996); and school-organizational structures that assign students to age-graded classrooms all combine to shape teachers' affordances of particular kinds of competence-related role identities in the classroom. Role identities can be defined as the meanings and expectations imparted to individuals by others who "position" them within a set of shared social roles and "counter-roles" (Stryker, 1980). Role identities promote forms of "interconnected uniqueness" in which one's statuses vis-à-vis others are salient (Stets & Burke, 2000). Higgins and Parsons-Eccles (1983) have described the student role in American schools as

a task-oriented role in which performance is systematically evaluated with regard to pre-set performance standards of excellence, normative progress, and acceptable style. As such, students will vary in their status within that role depending on their performance. Further, segregating the children into grades based primarily on age, as is done in most North American schools, focuses attention of both the teacher and the students on these status variations, making competition and social comparison probable events. (p. 21)

Based on this (tacit) definition of the student role at the macro-levels, teachers often create affordances and communicate expectations to students in the classroom (micro-level) that position them into these particular role identities—that of the successful student or that of a school failure (Goldman & McDermott, 1987). That students internalize these messages about their relative success or failure in school and encode such experiences into their me-selves is the inescapable conclusion of over 30 years of work in educational psychology (Covington, 2000). Creating classroom and school cultures that re-frame student role identities in terms of cooperation, multiple intelligences, effort, and improvement toward attaining standards rather than in terms of competition and relative ability has been an important approach of

school reform movements whose aim is to achieve equity and excellence in learning outcomes (e.g., Brown, 1997; Maehr & Midgley, 1996).

Tacit definitions of the student role and academic success in American schools and classrooms can engender challenges not only for students who are not "the best" but also for students who belong to nonmainstream ethnic and cultural groups whose values, linguistic styles, and modes of behavior may not conform to those inherent in the institutionally-defined student role (Ogbu, 1995). The student role can be said to reflect what Markus and her colleagues have called an independent cultural frame / construal of self in which assertiveness, autonomy, competitiveness and personal distinction are defining features (Adams & Markus, 2004; Markus & Kitayama, 1991). Thus, individuals from cultures characterized by more interdependent cultural frames / construals of self in which modesty, conformity to in-group behavior, cooperation, and social harmony are defining features may have more difficulty navigating the pathways to success as instantiated in the student role in American schools (Davidson & Phelan, 1999).

Resources and Qualified Teachers. A second example of how macro- and micro-level structures and processes in school can affect young peoples' school-related selves/identities can be seen in the complex chains of relationships between community/school resources, the characteristics of teaching staffs and student populations, and classroom teaching practices. Low-income schools have disproportionately low numbers of well-qualified teachers compared to affluent schools often because school leaders do not have the resources to attract and hire qualified teachers (Evans, 2004). In addition to lower qualifications in their content areas, teachers in low-income schools are more likely to exercise strong control over students and limit their use of constructivist teaching practices in part because they believe poor children lack the inner control necessary to play a responsible role in their own learning (Solomon, Battistich, & Hom, 1996). Furthermore, because a substantial minority of low-income students often arrive to school with social-emotional and behavioral problems that compromise their readiness to learn (Adelman & Taylor, 1998), their teachers are more likely to experience feelings of burden in relation to their students' emotional needs (Roeser & Midgley, 1997); to feel a need to distance themselves from their students emotionally (Solomon et al., 1996); and to see themselves as less efficacious as a teacher (Bandura, 1993). These environments are not conducive to the success of teachers or their students. Given the lack of opportunities for student initiative, for competence development in terms of good teaching, and for

belonging in terms of supportive classroom relationships, an alarmingly high percentage of students in such schools develop and internalize an image of themselves as failures and drop-out of school (Fine, 1991).

Beyond the Classroom. Other studies have documented how young people who are not very successful in school can nonetheless acquire complex knowledge and skills that engender competence, belonging, and participation in prosocial activities outside of the classroom (Nasir, 2000) and outside of school altogether (McLaughlin, Irby, & Langman, 1994; Rose, 2004). This work not only reveals how schools can operate as destructive settings for certain students, but also gives indications of what more motivating activity structures might look like. For example, in settings such as sports, work, and community-based organizations, structured apprenticeships and rewarding collaborative relationships afford young people experiences of competence, belonging, and productive forms of participation. Such experiences provide young people the opportunity to elaborate existing and construct new me-self representations that are positive (Lave & Wenger, 1991; Nasir & Saxe, 2003).

Summary of the BASIC Model

The BASIC model describes multiple levels within the person (BLOS) and the social and physical environments surrounding schools (BLOSC) that are the bases for understanding self/identity-in-context. The BASIC model highlights how self/identity is defined differently by researchers working from different disciplinary perspectives. There are fundamental and oft-neglected distinctions between definitions of self/identity as (a) individuals' iconic, symbolic, and phenomenological representations of phenomena such as social group memberships and roles (e.g., Case, 1991); (b) the negotiation of social and physical affordances through behavioral enactments (e.g., Moje, 2004) and patterns of participation (e.g., Lave & Wenger, 1991); or (c) social categories, statuses, or roles assigned to individuals by macro-level social structures and institutions (e.g., Stryker, 1980). No one type of self/identity definition is more accurate or appropriate than the others; each refers to a distinct part of the multilevel BASIC system. Unfortunately, researchers from diverse disciplinary perspectives have been using both the same words to describe different parts (a jingle fallacy) and different words to describe the same parts (a jangle fallacy) of this BASIC system. Although we have made no serious attempt here to resolve this terminological confusion, we have outlined several conceptual frameworks that can be put to work towards this end. In

the final two sections, we describe the implications of the BASIC, BLOS, and BLOSC heuristic models for educational research and practice.

IMPLICATIONS FOR EDUCATIONAL RESEARCH

Early Attachment Relations and Readiness to Learn in School

The BASIC perspective provides a means of understanding how early parent-child relationships, their representation as relational *schemas* within the iconic system, and related dimensions of I-self functioning can influence a child's "readiness to learn." For instance, Sroufe, Fox, and Pancake (1983) reported that children who were classified as having avoidant and resistant attachment relationships with parents were subsequently found to be highly dependent on preschool teachers for physical contact, guidance, discipline, and security. In contrast, children classified as securely attached were less dependent on teachers and sought interpersonal attention in age-appropriate and positive ways. The authors concluded that the roots of overdependence in preschool lie in the quality of the early infant-caregiver relationship.

Teo, Carlson, Mathieu, Egeland, and Sroufe (1996) found that the quality of children's attachments with primary caregivers and movement toward autonomous self-regulation during the first 3 years of life correlated positively with the quality of their social competence (as rated by teachers) and their standardized test achievement in reading and math during the 1st, 3rd, 6th, and 11th grades. Using this same sample, Jimerson, Egeland, Sroufe and Carlson (2000) showed that these same factors were related to reduced rates of school dropout over a decade later. They concluded that the quality of children's psychosocial development prior to school entry was a major factor in predicting academic success.

Similar to these studies, research on maltreated children (i.e., those who have been physically or sexually abused and/or neglected) has revealed the importance of parenting styles and early attachment relationships for self-development and subsequent school adaptation and achievement (see Cicchetti, Toth, & Hennessey, 1993; Harter, 1999). Maltreated children tend to have parents who are authoritarian (Baumrind, 1968). Such parents hold high expectations for their children without providing them with the requisite level of autonomy support and unconditional love that scaffolds the child's ability to meet parental expectations. The probable consequences of this parenting style are that infants and toddlers learn that they cannot rely on their caregivers to provide the necessary social support and emotional heightening and dampening

necessary to build self-confidence and cope with anxiety during early exploratory behaviors (Case, 1995). These "style" factors alone can promote insecure attachment styles and a lack of initiative that can subsequently develop into a child's "insecure readiness to learn" during pre- and primary school (Cicchetti et al., 1993). The addition of physical abuse and neglect eventuates in maltreated children being (a) overly concerned with relational security and threats to their physical well-being and (b) fearful of exploration and mastery at home and then in school. Physically abused children, for instance, tend to show aggressive classroom behavior and are retained and referred to special education at rates higher than other children. Sexually abused children tend to show social isolation or "clinginess," marked by passivity or anxiety, and an inability to internalize rules of conduct at school. Neglected children tend to show the poorest performance on cognitive tests and the highest rates of retention and special education referrals. Characteristic emotions and behaviors of these children include high levels of anxiety and inattention, clinginess, a general lack of empathy in social relationships at school, and a lack of initiative in approaching schoolwork (Erickson, Egeland, & Pianta, 1989).

The implication of these studies is that the early and ongoing quality of parent-child relationships are carried into elementary school learning situations via children's relational schemas, exploration-related schemas (e.g., felt competence, mastery orientations), and collaborative problem-solving skills developed within these relationships (Erikson, 1950; Sroufe, 1996). Under average-expectable conditions, parents provide opportunities conducive to infants' development of secure attachments and the construction of relational self-schemas imbued with a sense of love. Secure attachment schemas and the ongoing presence of a supportive caregiver during early exploratory behavior provides the young child with both psychological (secure attachment schema) and social (actual parental support) buffers against the inevitable fears that occur during exploration. The result is the construction of iconic schemas associated with interest in the world, the felt experience that exploration and mastery have social worth, and competence in mastering physical and social tasks (Case, 1991; Deci & Ryan, 1985; Erikson, 1950). In contrast, in childrearing situations of abuse and neglect, the relational supports for security and exploratory behavior are absent interpersonally and psychologically. In such situations, the child is more likely to develop relational schemas imbued with emotions of anger, sadness, and distress. In these ways, ongoing relational difficulties, maladaptive self-schemas, and an (I-self) attentional focus on threats all serve to inhibit exploratory behavior and the development of initiative (Erickson

et al., 1989; Sroufe et al., 1983; Harter, 1999). Ongoing abuse and neglect can lead to emerging symbolic beliefs of "moral badness" in the next stage (Harter, 1999), and all of these factors together provide the basis for subsequent forms of academic helplessness, social difficulties, and emotional-behavioral problems during the elementary school period (Roeser & Eccles, 2000). Of course, the possibility of resilience among maltreated children (e.g., in terms of academic readiness and success) is important to acknowledge given the importance of *discontinuities*, as well as *continuities*, in development (Kagan, 1996).

The Study of Educational Resilience

Thus, another research topic worthy of more attention is that of *educational resilience* and the self and social contextual factors that promote it. We define *educational resilience* as *better than expected* classroom participation and learning, school achievement, and educational attainments across development among children and adolescents who, based on their pattern of psychological and social risk conditions, are more likely to disengage from, fail at, and/or drop out of school before graduation. The focus of resilience research is on documenting the psychological, family, school, peer, and neighborhood factors that (a) compensate or buffer vulnerable (risk-exposed) children and adolescents from academic failure and (b) promote the academic success of these individuals despite the odds. Factors that forecast difficulties and failure in school include (a) a psychological profile marked by frequent and severe feelings of anxiety, depression, fear, or anger (Kessler, Foster, Saunders & Stang, 1995); (b) a life situation marked by the *presence* of multiple physical, psychosocial, and socioeconomic risk factors including parental abuse and neglect (Evans, 2004); and (c) a life situation marked by the *absence* of average expectable opportunities for cultivating mastery motivation, social and problem-solving skills, and well-being (Roeser & Peck, 2003; Sameroff, Seifer, & Bartko, 1997).

Although it is often true that as risk loads increase, young people's ability to extend themselves in learning activities in school is diminished with predictable declines in their achievement and increases in their absences and acts of misconduct (Gutman, Sameroff, & Eccles, 2003); it is not always true. As just one example, using pattern-centered prodigal analyses, Roeser and Peck (2003) examined unexpected processes of academic resilience (defined as enrollment in college after completion of high school) among young people who in early and middle adolescence faced significant psychological and environmental risks in their families and schools. They found that participation in positive extracurricular activities was a

key factor associated with vulnerable youths' manifestation of academic resilience despite an otherwise pervasive portrait of psychological and contextual risks. These findings and others highlight how academic resilience can emerge from nonschool environments (McLaughlin et al., 1994).

The study of educational resilience is of particular relevance in relation to *specific* groups of academically successful ethnic minority students (e.g., African-, Mexican-, and Native Americans; Ogbu, 1995) and immigrant students (e.g., those from Mexico and Central America; Portes & Rumbaut, 2001) who face an accumulation of risk conditions that members of the majority culture and members of other ethnic minority and immigrant groups do not. These include impoverished living conditions, failing schools, exposure to violence and racial prejudice, a scarcity of high-achieving adult role models in their community and group, and the task of managing ethnic identities in mainstream institutions such as school (Graham, Taylor, & Hudley, 1998; Ogbu, 1995; Spencer & Markstrom-Adams, 1990). Perhaps the most pernicious risk factor facing members of these ethnic groups (and others) in relation to their educational prospects is their experience of racial discrimination and the impugning of their intellectual capacity to be successful in school (Steele, 1997). For example, Wong, Eccles, and Sameroff (2003) found that perceived discrimination perpetrated by teachers, school staff, and classmates at middle school was associated with declines in African-American adolescents' academic self-concept and grades and increases in their psychological distress across middle school. Other studies have corroborated the negative correlation of perceived discrimination and the mental health of immigrant high school students (Portes and Rumbaut, 2001) and Puerto Rican middle school students (Szalacha et al., 2003). It is the stressful and often emotionally distressing consequences of dealing with discriminatory experiences within and beyond the school context that makes the study of academic success among members of these groups the study of *educational resilience*.

From a BASIC perspective, we hypothesize that positive social relationships and opportunities to learn in just one consequential life context are able to buffer or compensate for other risk conditions by providing an "average expectable environment" that meets basic self needs for competence, autonomy, and social relationships (Ryan & Deci, 2000). These environments may promote the construction of positive relational and mastery-related self-schemas that counterbalance other negative self-schemas or ascribed identities. For example, African-American adolescents whose parents cultivate their sense of ethnic group membership and teach them strategies for dealing with racial discrimination are more resilient emotionally

when exposed to racism than youth who lack these family supports (Eccles, 2004; Wong et al., 2003). Such studies of academic resilience (and the self and social processes that underlie and promote it) represent an important direction for future research, especially with regard to those ethnic minority youth who experience multiple life stressors yet nonetheless succeed in school.

Patterns of School Motivation and Educational Lifepaths

Elsewhere we have discussed the utility of a holistic, person-in-context view of learning, achievement, and educational attainments across development (Roeser & Galloway, 2002; Roeser & Peck, 2003). Such a perspective is predicated on the capacity for self-organization, defined here in relation to two organizing principles of the self (Case, 1991; Deci & Ryan, 1985; Fischer & Bidell, 1998). These include differentiation, in which novel experiences result in the construction of iconic and symbolic representations that are used to guide behavior, and integration, in which such representations are hierarchically organized into more complex, unified forms. These self-organizing tendencies form a theoretical justification for holistic, pattern-centered approaches to studying self/identity processes in education. Specifically, they highlight a need to examine how variations in learning and achievement are associated with differing organized patterns of psychological contents and processes that get activated in particular kinds of achievement situations for different individuals (Snow et al., 1996).

Tracing the educational consequences of such situated *patterns* of self/identity processes in school achievement across time results in the study of *educational lifepaths*. A basic assumption behind this approach is that, for any particular educational outcome, there exists a diverse yet finite set of patterns of self/identity contents and processes that lead to that outcome—a concept called *equifinality* (to the same outcome, many paths). A second assumption is that, for any particular self/identity content or process among a population of individuals within an achievement situation, there exists a diverse yet finite set of other self/identity contents and processes that interact with the first and thereby condition its relation to educational outcomes. This concept is called *multifinality* (from the same starting point, many outcomes; Richters, 1998).

The existence of equifinality in relation to patterns of school motivation and achievement has been demonstrated in a series of studies by Dweck (1999) and others (Haydel & Roeser, 2002; Roeser, Strobel, & Quihuis, 2002). Two different profiles of motivational goals and beliefs associated with positive engagement

and achievement among students in elementary, middle, and high school classrooms have been identified. The first is the *ego-oriented pattern of motivation*. This pattern characterizes children who orient towards performance goals in achievement situations, have high self-confidence in their academic ability, and believe that their intelligence is fixed.³ The second is the *mastery-oriented pattern*, which characterizes children who orient towards mastery goals and view their intelligence as malleable.

Two patterns have also been identified in relation to poor academic persistence and achievement—each associated with the *helpless pattern* (Dweck, 1986). The helpless pattern characterizes children who orient towards performance goals in achievement situations, have low perceived self-confidence in their academic ability, and believe that their intelligence is fixed. Two variations of the “helpless” pattern have been documented among elementary and middle school students (Roeser, Strobel, et al., 2002). Some students manifest a form of academic helplessness coupled with internalizing distress in the form of sadness, anxiety, and withdrawn classroom behavior; others manifest a form of academic helplessness coupled with externalizing distress in the form of anger, aggression, and disruptive classroom behavior. Collectively, these studies illustrate the concept of equifinality by documenting two patterns associated with positive school achievement, and two patterns associated with poor achievement. These two sets of patterns can be viewed as variations on what Erikson (1950) called *industry* and *inferiority*, and they probabilistically forecast groups of students moving along educational lifepaths towards high school graduation and school withdrawal prior to graduation, respectively (Ollendick, Greene, Weist, & Oswald, 1990).

The concept of *multifinality* was exemplified in a recent debate among goal theorists concerning the adaptive versus maladaptive educational consequences of students’ pursuit of performance approach goals (in which the focus is on demonstrating superior ability relative to others; Harackiewicz et al., 2002; Midgley, Kaplan, & Middleton 2001). From a pattern-centered perspective, understanding the adaptive versus maladaptive nature of performance-approach goals necessitates attention to the conditionalities between individuals’ pursuit of such goals and (a) their developmental stage and social statuses, (b) the patterning of these goals with other iconic and symbolic representations within the person,

and (c) the demands and affordances of the person’s learning environment.

For example, evidence suggests that for early adolescents who are in a stage of heightened self-consciousness (Midgley, 1993), and for those who are members of ethnic or racial groups that are targeted by stereotypes of intellectual inferiority (Aronson & Steele, 2004), the pursuit of performance goals may not be adaptive in terms of performance. By making relative ability salient to the individual, such goal pursuits can activate anxiety, debilitating self-beliefs, and/or concerns about stereotype confirmation that impair performance (Aronson & Steele, 2004; Roeser & Rodriguez, 2004). Age and race/ethnicity condition the relation of performance-approach goals to academic performance. Second, as research on academic helplessness shows, performance-approach goals are not adaptive if the individuals pursuing them also have low confidence in their ability and a belief that their intelligence is fixed (Dweck, 1986) or if their pursuit of such goals is based upon the iconic motive called fear of failure (Elliot, 1997). Finally, it appears that for (a) primary and secondary students with high confidence in their abilities (Dweck, 1999; Haydel & Roeser, 2002; Roeser, Stroebel, et al., 2002); (b) secondary school students who pursue both performance approach and mastery goals simultaneously (Pintrich, 2000); (c) college students with a strong iconic need for achievement (Elliot & Thrash, 2001); and (d) college students who are attending selective universities in which the learning environment presses for relative ability and social comparison (Harackiewicz et al., 2002), the pursuit of such goals is in fact associated with better achievement. These examples illustrate the phenomenon of multifinality: From a single starting variable (e.g., performance goals), diverse educational outcomes can result depending upon the patterning of that variable with other self representations and dimensions of the social context.

Advancing research on the diversity of motivational patterns associated with promising and problematic educational lifepaths among different students in different kinds of learning environments seems particularly important at this juncture in history. The school-aged population (ages 5–18 years) in the United States consists of about 54 million individuals and is as large and ethnically diverse as it has ever been. As of 2002, approximately 40 percent of the entire school-aged population were members of an ethnic group other than European-American (U.S. Department of Education, 2002), and about 20 percent were “New Americans”

³Although many goal theorists now differentiate the pursuit of performance approach and avoidance goals, there are critiques of this differentiation (see Roeser, 2004). Furthermore, the studies by Roeser and colleagues referenced here show that middle and high school students characterized by either an ego-oriented or helpless pattern, more so than those characterized by a mastery-oriented pattern, tend to report orienting toward both performance approach and avoidance goals as Dweck (1986) originally proposed.

growing up in immigrant families (Suarez-Orozco & Saurez-Orozco, 2001).

Thus, another application of the concept of equifinality relates to the diverse kinds of self-processes that do and do not motivate achievement among members of different cultural and ethnic groups (Maehr & Braskamp, 1986). Research has begun to document, for example, how students from immigrant backgrounds are sometimes motivated by obligations to parents to do well in school given their parents' sacrifices in emigrating to the United States (Fuligni & Tseng, 1999; Roeser & Rodriguez, 2004). Instrumental goals such as getting into a good college, getting a good job, and avoiding poverty may also be differentially important for motivating achievement among students from immigrant/nonimmigrant and poor/wealthy backgrounds (Roeser & Rodriguez, 2004).

A second application of the patterns and pathways concepts relates to how members of immigrant and ethnic minority groups manage their ethnic identities in relation to schooling and achievement. Beginning in adolescence, ethnic minority youth often have to find ways to navigate between different social worlds because their ethnic-based identities at home and with friends are in some ways different from their mainstream identities in institutions such as school (Davidson & Phelan, 1999; Tatum, 1997). Several authors have described the different ways that youth do this as well as the kinds of identity conflicts that can complicate such efforts, perhaps especially for males (Cross, 1991; Fordham, 1988; Fordham & Ogbu, 1986; Graham et al., 1998; Lafromboise, Coleman, & Gerton, 1993; Nasir & Saxe, 2003; Phinney & Devich-Navarro, 1997). Specifically, individuals can (a) reject or deemphasize their ethnicity/culture and assimilate to the mainstream culture (assimilation or racelessness); (b) reject or deemphasize mainstream culture and identify with their own ethnicity/culture (separation or opposition); (c) reject both (marginalization or alienation); or (d) develop a bicultural outlook in which both ethnic-cultural and mainstream identities are part of their overall self (biculturalism or code switching). Some research has documented positive educational and mental health outcomes among those adopting a bicultural approach and the significant risks associated with marginalization (Phinney & Devich-Navarro, 1997), whereas evidence regarding the opposition status remains controversial (see Portes & Rumbaut, 2001; Wigfield, Eccles, Schiefele, Roeser, & Davis-Kean, in press).

From a BASIC perspective, both the increasing diversity of the school-aged population and an understanding of the role of organization in human learning and development highlight the need for complementing variable-centered approaches to studying self and identity processes in learning and achievement with pattern-centered

approaches. Such methods are useful for addressing issues of equifinality and multifinality in relation to educational lifepaths. Pattern-centered methodologies are also useful if scholars wish to move beyond group comparisons based on social categories that are assumed to be static features of individuals over time (e.g., race) toward group comparisons based on theoretically derived self/identity contents and processes that are relevant to achievement in particular kinds of contexts. Ascribed demographic characteristics of individuals can then be examined in relation to the composition of process-measure derived subgroups (e.g., Roeser & Peck, 2003).

Hierarchical Models of Achievement Motivation

Elliot and his colleagues have integrated "classic" models of achievement motivation—in which the need for achievement and fear of failure were of focal concern (Atkinson, 1957; McClelland, 1985; Murray, 1938)—with "contemporary" goal theory approaches to motivation, in which symbolic achievement-related goals (e.g., mastery, demonstration of superior competence, and avoidance of demonstrating inferior competence) are of central concern (Elliot, 1997; Elliot & Church, 1997). According to Elliot & Thrash (2001), "achievement goals are viewed as the concrete aims through which individuals pursue their more abstract desires, concerns, needs, and motives (i.e., reasons)" (p. 147). They proposed a variety of needs as providing the energy for the pursuit of such goals, including the need for achievement and the fear of failure, self-esteem and self-validation needs, and the need for affiliation and the fear of rejection. Consistent with McClelland's (1985) theory, they argued that intrapsychic or environmental stimuli activate "underlying reasons" (i.e., iconic motives) that then activate goals that direct this energy toward particular behaviors. Although viewed as independent constructs, Elliot and Thrash (2001) nonetheless see needs and goals as integrated into what they call "goal complexes" that regulate achievement behavior.

From a BASIC perspective, the dual motivational (me-self) systems these authors implicate suggest that a "goal complex" is a configuration of domain-relevant (e.g., social, achievement-related) iconic and symbolic content that serves motivational and regulatory functions (Thrash & Elliot, 2001). There is no absolute separation of the energizing and directive functions between *needs* and *goals*, across levels, however. Iconic content, as Elliot and Church (1997) note, energize goal pursuits *and* provide broad direction to behavior. These energizing and directive tendencies are rooted in the basic emotions that give iconic motives their "charge" (McClelland, 1985).

Similarly, goals not only direct iconic content toward specific ends, but they are represented psychologically in cognitive-affective patterns related to certain contexts and experiences (e.g., Ford, 1992; Mischel & Shoda, 1995). One view of such patterns is that they have energy derived from complex emotions (e.g., valences) that also energize behavior independent of, and sometimes in direct conflict with, that of motives (see Nucci, 2001). For example, consider a prototypic moral situation where an aroused basic motive to approach a desired end (e.g., take the tasty candy) is overridden by an aroused social value to approach a different desired end (e.g., be an honest person).

Elliot and colleagues have demonstrated that the differentiation of these two motivational systems allows researchers to address complex motivational dynamics. For example, Thrash & Elliot (2002) examined the multi-method correlations of (a) self-attributed (survey-based) measures of *nAch* and fear of failure; (b) TAT (projective) measures of *nAch* and fear of failure; and (c) self-reported achievement goals. The two methods of assessing these constructs yielded moderate, positive correlations for both *nAch* ($r = 0.22$) and fear of failure ($r = 0.29$), comporting with the results of two meta-analyses (Spangler, 1992). Furthermore, replicating an earlier study (Elliot & McGregor, 1999), they found that students' pursuit of performance-approach goals was positively associated with the survey and TAT measures of *nAch* and fear of failure their pursuit of mastery goals was positively associated with survey and TAT measures of *nAch*, and their pursuit of performance-avoidance goals was positively associated with the survey and TAT measures of fear of failure. These findings, generated with variable-centered analyses, indicate summative iconic and symbolic forms of motivation and reflect "average" motivational dynamics across all individuals in their sample.

Future studies could complement these analyses with pattern-centered analyses aimed at distinguishing individuals who show different goal complexes (e.g., Thrash & Elliot, 2002). For instance, in the findings discussed earlier, pattern-centered analyses could be used to differentiate two different subgroups of performance-oriented individuals—those who try to outperform others in the college classroom because of fears of failure and those who pursue such goals out of a need for achievement. Both patterns may be associated with the same level of achievement, but the first one seems more fragile and perhaps reflects a hypercompetitive style that has hidden mental health costs, whereas the latter seems more like a healthy form of competitive striving (see Roeser, 2004). More importantly, pattern-centered analyses could also reveal "off-diagonal" individuals—those whose goal complexes are simply not captured by the average statis-

tical trends. What might be learned, for example, from individuals who are characterized by a goal complex in which strong iconic fears of failure are coupled with the pursuit of mastery goals in the classroom? The study of such off-diagonal cases is at the heart of studies of resilience in education and human development more generally.

The hierarchical model of motivation is one of the few contemporary research traditions that is actively addressing education-relevant constructs across the levels described in the BASIC framework. This model not only provides a way of modeling motivational dynamics of the person but of the person-in-context. For instance, consider that we know that (a) activated (iconic) fear of failure predicts the pursuit of (symbolic) performance-avoidance goals (Elliot, 1997); (b) performance-avoidance goals in turn are associated with the avoidance of help seeking, especially in classrooms where students perceive the teacher as nonsupportive (e.g., Ryan, Pintrich, & Midgley, 2001); and (c) such goals are also associated with self-handicapping strategies as a means of protecting self-worth against failure, especially in classrooms that students perceive as emphasizing social comparison and competition (e.g., Urda, Midgley, & Anderman, 1998). These findings, in the aggregate, provide insight into levers for change at the classroom level of analysis. Specifically, they suggest that by increasing social support and deemphasizing competition in classrooms, educators may be able to reduce motivational problems associated with fears of failure (Midgley, 1993).

Stereotype Threat

Whereas hierarchical models of motivation have generally focused on summative motivational dynamics, conflictual motivational dynamics, as in the case of stereotype threat, are also important to understand (Aronson & Steele, 2005; Steele, 1997). Stereotype threat effects refer to performance decrements in particular achievement situations among academically committed students who are members of groups that are targeted with stereotypes of intellectual inferiority. These effects involve tacit features of achievement situations (e.g., those where race is made salient and/or those that emphasize relative ability/social comparison) that *implicitly* (below the level of phenomenal awareness) activate certain psychological contents and processes that lead to performance decrements. Such contents include physiological arousal (e.g., nonverbal anxiety), symbolic representations (e.g., of stereotypes, group membership identities, and of oneself confirming a negative self-relevant stereotype), and iconic representations (e.g., fears of failure).

The fact that certain achievement situations activate not only relevant aptitude resources for individuals who are the targets of competence-related stereotypes but additional self contents may produce a "cognitive load" that leads to performance decrements ("cognitive load explanation"). From a BASIC perspective, however, it is the fact that the activated self-contents across levels represent conflicting motivational energies for the individual under a threat condition that is most significant. On the one hand, there is activated approach motivation associated with the individuals' conscious (explicit) symbolic goal to do well and the related affective valence of this goal. On the other hand, there is the activated avoidance motivation associated with their nonconscious (implicit) temperamental (physiological stress), iconic (fear of failure), and symbolic representations (i.e., about confirming a negative stereotype, with the affective valence of these beliefs). Unlike the summative motivational dynamics described earlier, these activated contents motivate in opposite (conflicted) ways and thereby reduce the total resources available for learning ("motivational conflict explanation"). Finally, activated me-self contents with conflicting valences can be distracting and undermine performance if these contents alternate in I-self awareness ("divided attention explanation"). Intervention research has shown that (a) inculcating a belief in the malleability of intelligence and (b) raising individuals' awareness about the existence of stereotype threat reduces such effects (Aronson & Steele, 2004). From a BASIC perspective, these interventions work because they address the underlying self-conflict by (a) providing individuals with new me-self content that can be activated in relevant achievement situations and thereby produce summative rather than conflictual motivational inputs, and (b) raising this conflict to the level of I-self awareness such that individuals can recognize and choicefully cope with it (see later discussion).

In sum, we view research that addresses the dynamic relations between iconic and symbolic me-self contents, and between implicit and explicit forms of symbolic representation *in context* as an exciting new area of research. We believe this work can reveal how motivational dynamics within and across different levels of self summate, conflict, or operate independently. In our view, this work will prove most fruitful if it attends to how different configurations of self-processes relate to the educational outcomes of particular students (e.g., helpless or mastery-oriented), in particular settings (elementary, secondary, postsecondary), with respect to particular kinds of outcomes (e.g., choice, performance, mental health) using both variable and pattern-centered analytic approaches (see Roeser & Peck, 2003).

The "Problem" of Student Motivation to Learn: Dewey's "Three Evils"

The BASIC framework also provides a unique perspective on the educational "problem" of motivating students to learn in school—one that is commensurate with Dewey's (1902) classic essay, *The Child and the Curriculum*, in which he addressed this and related educational problems. Dewey advocated a view of pedagogy that synthesized two apparently contradictory views of education. The first view placed the curriculum, decided on by adults, at the center of pedagogy and efforts to motivate students (a curriculum-centered view). The second placed children and their developmental interests at the center (a child-centered view). Dewey exhorted educators to locate what they were trying to teach within the capacities, interests, and everyday experiences of students at different ages (Phillips, 1998). He called this pedagogical process by which teachers brought the *logical* ordering of the subject matters (e.g., science, history) into the *psychological* world of the developing child as the *psychologizing of the curriculum* and viewed this as the solution to the *problem* of students' motivation to learn in school.

Unfortunately, Dewey (1902) did not see educators psychologizing the curriculum in his time, creating what he described as the "three evils of modern schooling." The first evil was the failure of educators to teach the curriculum in a way that took into account children's emotional and relational experiences of self and world: "In the first place, the lack of any organic connection with what the child has already seen and felt and loved makes the material purely formal and symbolic" (p. 24). This eventuated in a second evil—the undermining of students' intrinsic motivation to learn in school:

The second evil in this external presentation is lack of motivation. . . . When the subject-matter has been psychologized, that is, viewed as an outgrowth of present tendencies and activities (of the child), it is easy to locate in the present some obstacle, intellectual, practical, or ethical, which can be handled more adequately if the truth in question be mastered. This need supplies motive for the learning. An end which is the child's own carries him [*sic*] on to possess the means of its accomplishment. But when material is directly supplied in the form of a lesson to be learned as a lesson, the connecting links of need and aim are conspicuous for their absence. (p. 25)

The inevitable outcome of educators' failure to psychologize the curriculum and thereby cultivate students' intrinsic motivation to learn was a resort to the use of external pressures and rewards to supply the need and aim (e.g., the extrinsic motivation) for learning: "The externally

presented material, conceived and generated in standpoints and attitudes remote from the child, and developed in motives alien to him [*sic*], has no such place of its own [in the life of the child]. Hence the recourse to adventitious leverage to push it in, to factitious drill to drive it in, to artificial bribe to lure it in" (p. 27).

Research on students' school motivation, and on the motivational practices used by elementary and secondary school teachers, provides evidence that these "evils" are still present today. Cross-sectional and longitudinal studies in Europe and the United States have documented linear declines from elementary through high school in school-aged students' intrinsic motivation to learn (conceived of variously as curiosity, preference for challenge, independent attempts at mastery, goal of mastery, and interest or valuing of specific subject matter; see Eccles et al., 1998). Coupled with these declines, there is a general increase in students' orientations toward extrinsic goals (e.g., getting good grades and trying to outperforming others) as they progress through school (Anderman & Anderman, 1999).

Such changes in students' school motivation over time are related to changes in context factors (Wigfield et al., in press). Declines in intrinsic motivation to learn, for instance, are associated with a lack of curricular meaningfulness and declining social-emotional bonds between teachers and students as students grow older and move into bigger schools (Eccles & Roeser, 1999). At the same time, shifts toward more extrinsic motivational orientations are paralleled by educators' increasing use of extrinsic motivational strategies as students progress from elementary to secondary school (Roeser, Marachi, & Gehlbach, 2002).

From a BASIC perspective, and consistent with Dewey's analysis, it appears that schools continue to create the problem of student motivation. They do this by failing to provide students with opportunities for challenging and authentic work and close relationships with teachers that would engage students' iconic motives for learning. Failing to do this, educators resort to motivational practices that stress symbolic grades and outperforming others, despite the fact that such practices can provide only weak (extrinsic) symbolic motives "alien to the child" for learning. Research on best practices in education, however, shows that this need not be the case. In schools that provide opportunities for students and teachers to get to know one another, and for students to cooperate with each other around projects that connect their learning to meaningful life issues, intrinsic motivation and learning are enhanced for students of all races and socioeconomic classes (NRC, 2000; Slavin & Fashola, 1998). Furthermore, affordances for multicultural curricula, flexible approaches to students' use of different languages and di-

alects, and supportive teacher-student relationships appear to be particularly important for enhancing the intrinsic motivation, felt belonging, learning, and achievement of immigrant and ethnic minority group members (especially those who come from groups targeted with stereotypes of intellectual inferiority; Lee, 1995; Lucas, Henze, & Donato, 1990; Martin, 2000).

IMPLICATIONS FOR EDUCATIONAL PRACTICE

Interventions Along the Educational Life Course

Normative life changes, particularly school transitions, are associated with changes in young people's self-representations and feelings of self-worth. This is due, in part, to changes in the nature of the academic and social environment and related changes in the roles and responsibilities that young people encounter as they make these transitions (cf. Eccles & Roeser, 1999). Transition programs assist students' self-development and related motivation to learn by helping them (re)achieve a sense of trust, initiative, and competence in their new school environments. These factors, in turn, make it possible for them to meet new demands and successfully adopt new social roles. Such programs are especially important for students who are immigrants or who are vulnerable to educational failure due to poverty or other adverse life conditions (Jason, Danner, & Kurasaki, 1993; Olsen, 1997; Slavin & Fashola, 1998).

Restoring Relationships to the Heart of Learning

The power of good relationships for enhancing students' motivation, learning, and well-being seems hard to overestimate (e.g., Becker & Luthar, 2002). Supportive relationships between teachers and students are the crucible in which values, information, and feedback are transmitted and, thereby, the internalization of healthy images of self and principled forms of knowledge are facilitated. Many of the most important innovations in educational practices today have emphasized the importance of relationships for reinvigorating education and reengaging disenfranchised students (Brown, 1997; Commission for At-Risk Children, 2003; Slavin & Fashola, 1998). This consensus makes sense given our explication of self/identity processes in this chapter. A sense of belonging and membership in a learning community is an important precursor to extending oneself in learning, perhaps especially for young people who must traverse significant ethnic and racial, socioeconomic, and sociolinguistic borders to feel fully part of a school in which middle-class, majority

cultural norms often predominate (Becker & Luthar, 2002; Davidson & Phelan, 1999; Lucas et al., 1990).

Factors that enable schools to become caring communities in which students experience a sense of belonging include the creation of smaller organizational units within large schools (e.g., schools-within-schools) and increases in the personalization of instruction through various means (e.g., use of homerooms, advisory periods, team-teaching; Midgley, 1993). Equally important are practices that directly engage students in cooperative and community-building activities at school. These include the use of cooperative learning techniques in classrooms, classroom management strategies that rely on student participation in norm setting and decision making, teaching of conflict resolution skills, and curricula that focus students on themes of care. Research and intervention studies have shown that such practices foster a "community of care" that positively influences students' self-understanding, beliefs and feelings, and in-school behavior (Greenberg, Kusche, Cook, & Quamma, 1995; Schaps, 2003).

The Enlightened Educator

Another implication for educational practice that arises from the BLOS framework is that the truly enlightened educator is one who relates to students by being wholly present in the classroom and by giving of himself or herself to students in appropriate, respectful, and mutually uplifting ways. Such healthy and appropriate extensions of self occur in relation to the teachers' body (nonverbal gestures and physical presence), heart (emotions), and mind (speech, thought, and awareness). Furthermore, because role modeling is one of the most powerful ways in which human beings learn, educators' ability to be authentic in their roles as teachers can have deep and often implicit influences on students' self development. How can educators use their power as role models to positively influence students' self development?

We believe that the most basic answer to this question lies in educators' efforts to continue to develop themselves as whole, healthy, and knowledgeable people. We should strive to stay or become healthy in body, mind, and spirit. Good diet, adequate sleep and exercise, and good personal hygiene are the kinds of basic habits children need to develop to avoid a life of health difficulties. Educators (and adults in general) can cultivate these habits in the young by examining and working with their own health-related behaviors. Educators can also role model what it means to live a moral life through their speech, principled forms of classroom management, and a demon-

strated commitment to social causes. For instance, teachers can role model a willingness to discuss and critically examine what are often painful and silenced issues around oppression and prejudice (Tatum, 1997). Educators can also practice "mindful and life-long learning" by being inquisitive in their classroom about many topics, including "youth culture" and students' lives outside of school. Finally, educators can explore the benefits of exercise, being in nature, hatha yoga (postures), meditation, and other free-time activities that reduce stress and tension (Benson, 1983). By practicing healthy habits and a commitment to compassionate and just causes, by being a lifelong learner, and by managing stress effectively, educators can offer young people values and behaviors for imitation that support their healthy self-development and social responsibility. As the saying goes, values are more "caught" by example than "taught" by direct instruction.

I-Self and Me-Self Education

We see education as not only about socializing young people in cultural ways of thinking and feeling about themselves as learners and members of society (me-self education), nor only about scaffolding their development of disciplined ways of knowing (subject-matter education), but also as a process that can assist them in moving from habitual (automatic) ways of attending, perceiving, feeling, thinking, and doing toward more *mindful* approaches to these basic self-related and learning processes (i.e., I-self education). Because the processes of cultivating healthy self-beliefs and relationships with others (me-self education) and becoming more disciplined in thought in relation to the subject matters (subject-matter education) require a degree of self-awareness, all me-self and subject-matter education occur in the context of I-self education.

In relation to what we are calling me-self education, educational psychological research has consistently demonstrated how teachers can reengage or more strategically engage students in the process of learning in school by offering them particular motivational and self-regulatory tools (Pintrich, 2003). Through direct instruction and role modeling, teachers can assist students in learning how to (a) take up goals associated with mastery and self-improvement, (b) break down tasks into proximal sub-goals, (c) attribute difficulties to effort and inadequate problem-solving strategies, (d) seek help when needed, and (e) employ various learning strategies. The most effective way that educators can cultivate students' willingness to take up such motivational and strategic tools is by building good relationships with them. Relationships foster the internalization of psychological resources by

engaging positive emotions and activating what is called a “broaden and build” orientation (Fredrickson, 2001).

In relation to the I-self, educators can assist their students in participating more mindfully in their lives and in their school learning by helping them to develop their capacities to direct and sustain their attention in ways that yield tangible benefits (see Langer, 1989). For instance, teachers can provide students with experiences that demonstrate to them that “the ability to focus awareness volitionally sets the stage for the use of our talents” (Tart, 1986, p. 12). Here we highlight four things teachers can do in this regard with their students.

Insightful Awareness. One way that educators can work with their students with respect to their awareness concerns granting them insight into psychological beliefs that are debilitating in learning situations. For instance, both anxiety intervention and attributional training programs have demonstrated how assisting individuals to become aware of, and then willfully replace, debilitating self-beliefs can help them to boost their performance. During the first stage, this involves helping students to become aware of ego-focused, self-deprecating thoughts and maladaptive attributional processes in the face of difficulties during learning (“I will never be able to do this right. I will always be dumb”). In the second stage, it involves providing students with new task-relevant, problem-focused thoughts and attributions (“Let me see what the task requires me to do—maybe I wasn’t able to solve the problem because I don’t have an effective problem-solving strategy”) that they can invoke in the face of challenges during learning. In this way, educators can assist students in lowering their achievement-related “worries” and improving their learning and performance (e.g., Meichenbaum & Butler, 1980). Cultivating students’ insight with respect to their naïve subject-matter theories is another application of this idea (NRC, 2000). Cultivating insightful awareness is closely related to cultivating choiceful awareness.

Choiceful Awareness. Choiceful awareness (in terms of shifting and sustaining the focus of attention) represents the underlying basis for what Kelly (1955) referred to as *constructive alternativism*. This refers to our capacity to change our personal experience of our selves and the world by choosing what to believe or what beliefs to activate in regard to a particular setting or life situation. The practice of constructive alternativism relies on the effortful control of attention. In part, effortful attention refers to our ability to shift attention away from threatening stimulus cues and debilitating habitual thoughts as well as our ability to inhibit dominant response tendencies that may engender short-term gains and long-term costs

(Derryberry, 2002). These manifestations of effortful control set the stage for individuals’ abilities to exercise choiceful awareness with respect to volitional focus on specific stimulus cues and volitional activation of particular beliefs and response sets.

Some of the most impressive evidence for the benefits derived from the use of these capacities has been generated by over three decades of research associated with Mischel’s “delay of gratification” paradigm (e.g., Metcalfe & Mischel, 1999). In this work, children’s ability to shift attention away from desired objects and sustain focus on less interesting objects (e.g., in order to gain larger rewards) is generally associated with less impulsivity and negative affect. Over time, this type of self-regulatory competence translates into both social (e.g., better stress management) and academic (e.g., higher SAT scores) competencies. Teaching students how to work with their attention in this regard requires patience and personalization, things that, unfortunately, are often not supported in the current environments of teaching. Nonetheless, teachers can begin to cultivate choiceful awareness in their students by teaching them this simple lesson derived from the experience of a Jewish psychiatrist who survived the Nazi death camps: Although we do not always or even often have freedom over our external conditions, we do have freedom over what we attend to and our attitude towards these external conditions (Frankl, 1962).

Mindfulness. In contrast to helping students gain insight into how they habitually think or feel around learning (insightful awareness), or helping them to realize that they have a choice over what kinds of beliefs, feelings, stimuli and so forth that they attend to (choiceful awareness), teachers can also instruct their students in *mindfulness*—the process of becoming more fully aware of what *is* rather than what one wishes, judges, or automatically assumes *is*. Mindful learning, in essence, requires individuals (including both teachers and their students) to willfully extricate their awareness from previously developed and automatically activated habits, emotional patterns, beliefs, and knowledge such that they can perceive, feel, and think *freshly*. This is what it means to “raise one’s awareness”—to step over habitual ways of perceiving, feeling, and thinking and gain new insights into self, others, and life from the vantage point of the observing I. In essence, the representational me-self contents of our minds both assist and constrain us. Throughout this chapter we have discussed how they assist us, but it would be an incomplete story if we did not also mention how they also constrain us. They do this insofar as they cause us to enter unique moments of learning, loving, and living with old concepts that may inhibit inquisitiveness and openness to new experiences. We are constantly,

as Freud noted, *making the present past* through our representational mental constructs. To accomplish mindfulness education with students, teachers might simply draw students' attention to the definition of mindfulness offered by Langer (1989) and use it as a metacognitive tool before, during, and after lessons. She described mindful learning as (a) continually creating new categories of experience as one progressively masters new tasks, skills, and domains of knowing; (b) being open to new information and experience; (c) being open to perspectives other than one's own; and (d) exercising choiceful attention to the process rather than the outcome of learning. Teachers can simply ask their students to try these *habits of mind* during classroom learning activities and thereby cultivate the *habit of mindfulness*.

One-Pointed Attention. One final aspect of I-self education we want to highlight concerns whether or not educators can assist students in developing their ability to sustain their attention over longer and longer periods of time. The cross-situational value of cultivating this potential of the I-self, if it were possible, would be enormous given the fact that almost everything worthwhile in life requires devoted and one-pointed attention for sustained periods of time. As James (1890) wrote of such a capacity, "The faculty of voluntarily bringing back a wandering attention, over and over again, is the very root of judgment, character, and will. . . . An education which should improve this faculty would be *the education par excellence*. But it is easier to define this ideal than to give practical directions for bringing it about" (p. 424).

This situation is now changing. The traditions of India and their instantiation in classical Brahmanical and Buddhist modes of contemplative education have always had the training of one-pointed attention in young people as a central aim (Mookerji, 1947; Scharfe, 2002). Modern neuroscience has now documented how contemplative-educational practices that train attention can positively influence individuals' psychological well-being (Goleman, 2003; Lutz, Greischar, Rawlings, Ricard, & Davidson, 2004). Studies are also beginning to examine how attentional training can enhance concentration and cognitive performance among children with attention-deficit disorder (see Posner & Rothbart, 2000). How can educators cultivate one-pointed awareness in students in school settings? This remains an open question. Practices such as physical martial arts, various forms of hatha yoga (e.g., body postures), mental memorization, and meditation are the traditional means of cultivating one-pointed awareness. More than 15 centuries of educational practice in India suggest the viability of such practices with young people in this regard, but the effects of using such practices in nonsectarian ways with students in modern public

school settings awaits both practical innovations and their scientific validation.

CONCLUSION

The purpose of this chapter was to present ideas and research findings on self and identity processes that are relevant to the study of students' motivation, learning, and achievement in school. The concepts of *self* and *identity* have a long history in psychology and other branches of the social sciences, and interest in these topics is growing rapidly. As a colleague once quipped, "Identity is a disease in the social sciences, and it seems to be spreading."

We began with some overarching themes in self and identity research, including two broad characterizations of scholarship in these areas. The first was a psychological conceptualization of self/identity, and the second a more sociocultural one. We then presented the twin problems of the jingle and jangle fallacies in the rather voluminous body of scholarship on *self* and *identity*. Next, we traced the *self* and *identity* concepts through the work of James and Erikson and updated their concepts in relation to new developments in the social-personality, learning, developmental, and brain-behavioral sciences. In these sections of the chapter, we attempted to bring some coherence to the widespread use of the implicit-explicit distinction in psychological research by differentiating the phenomenological (I-self), representational (me-self), and developmental meanings of these terms as used in the literature today. We believe that greater attention needs to be paid to self-processes associated with school motivation, learning, and achievement that exist below the threshold of phenomenal awareness (e.g., those that are implicit), and that the time is right for exploring in greater depth the I-self and its master functions: the shifting and focusing of attention. Further, we discussed how the study of various kinds of self-representations that function to motivate and regulate school learning and achievement, particularly those that are iconic and symbolic in nature, were both an historical and exciting new direction in educational and social-personality research.

The BASIC model of self-in-context was presented and used to organize the various scholarly traditions that study self and identity processes in education today at the level of the individual, the level of social interaction, and the level of social institutions. Within this context, we presented the BLOS model, in which we posited that self consists of various levels of representation, including the temperamental, iconic, symbolic, and phenomenological. We proposed that each set of these contents provides both energy and direction to behavior. In doing so, we explicitly suggested that *motivation* (i.e., the energization of

behavior) is a key *function* of self at each of these levels and their associated contents. Similarly, we suggested that *regulation* (i.e., the direction of behavior) is also a key *function* of self at all of these levels and ranges from reactive and relatively automatic forms at the me-self levels to volitional and effortful forms at the I-self level. We also highlighted the importance of bringing emotions and mood back into the motivational picture in educational psychology.

Next, we expanded our outlook and presented the BLOSC model, in which we described the macro- and micro-levels of school environments that affect students' self/identity development. Because of space limitations, we were only able to make suggestive remarks about how structures, processes, people, practices, activities, and things at each of these levels affect students' self/identity. We highlighted the notions of constructive and destructive environments and discussed how constructive environments are those that invite young people into increasingly central forms of participation in their learning communities at school.

Finally, we applied these "BASIC" concepts to contemporary areas of educational research and related areas of educational practice. Specifically, we discussed the relation between early childrearing, self-development, and children's *readiness to learn in school*, and emphasized the importance of iconic relational schemas for healthy self-development as students move into and through different schools. We examined the issue of *educational resilience* among those who face significant barriers

that threaten educational attainments and described how extra-school contexts can promote such resilience. We proposed that focusing on patterns of self/identity processes and educational lifepaths (using pattern-centered methods and holistic-interactionist views of learning and human development) represents a fruitful direction for future scholarship, especially given the increasing ethnic and cultural diversity of the school population. We extended the BASIC framework to discuss current research on hierarchical models of motivation, stereotype threat, and the problem of declining intrinsic motivation to learn among students as they progress in school. Because of space limitations, we were unable to provide a nuanced developmental and social-contextual view of self and identity processes in school settings during and across particular stages in the lifespan. Nonetheless, we covered much ground. We hope to have stimulated thought and contemplation among researchers interested in issues of self and identity processes in education.

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