

Achieving Motivation: Guiding Edward's Journey to Literacy

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ABSTRACT

This article is a retrospective account of a teacher working with a child learning to read and write in Reading Recovery. Looking back provides further opportunity for analysis and recognition of changes or important moments in time with an awareness that may not typically occur in the throes of working with a challenging, at-risk child. This account builds upon observational records, a case study, and examples of the child's work, intersecting with a theoretical view that focuses on the complex relationship of emotions, motivation, and cognition in learning, providing insights into ways a teacher may scaffold for changes in motivational and cognitive processing.

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Susan: “What’s the next word you need to write?”

Edward: “I don’t know how to write it!”

Susan: “Say it slowly. What can you hear?”

Edward: “But I don’t know that word!”

Little black dots scattered across the page as Edward rapidly tapped the pen on the paper.

Susan: “Edward, you try it. Say it slowly. That will help you write the word.”

When Edward still said nothing, I slowly said the word. He then responded with the first letter.

Susan: “Good! What else do you hear?”

A long black line snaked its way across the page as Edward lightly trailed the pen across the paper. He looked at me sideways to see how I would react. I took the pen from his hand and again prompted him to say the word slowly.

Variations on this scene played out more times than I would like to admit in my work with Edward. As he became more resistant, I would become anxious, wondering what he might do next. Would he get so frustrated that he would bite me, as he had his classroom teacher? My thoughts would become confused and disorganized in trying to focus on my teaching goals while attempting to keep him on task, not to mention how frustrated I was with my ineffectiveness. I felt so incapable that I wanted to quit! I soon became aware of how anxiety and frustration affected my teaching, but it took longer for me to realize that these feelings were also present in Edward. He too felt anxious and incapable—and he too wanted to quit!

The complexity of cognitive, motivational, and emotional factors that influenced Edward’s behavior also influenced mine—and made it more difficult for me to make on-the-spot decisions and to teach with the clarity of thought and observation that was required. However, working with Edward each day challenged me to reflect more intensely, to think and teach differently, to put aside my own familiar patterns of responding, and to stay more attuned to Edward’s ways of responding. I have reflected on how my work with this child influenced my own emotions, motivation, and cognition. It would be difficult to capture the complexity of this teaching-learning interaction without such consideration.

Unfortunately, my initial perspective was much more simplistic. I felt he was just unwilling to try. When I encouraged him to make attempts, he diverted his attention (and mine) by focusing on some other object, topic, or event (such as the black marks on the paper). As his emotional levels became elevated, so did the level of avoidance and anger. As I observed these cycles occur, I came to realize that each instantiation of such an event further bound

these negative emotions and learning together, reinforcing the likelihood that the most inappropriate responses would bring about the desired effect—avoidance. He would not have to display his perceived inabilities or failure.

Avoidance, at any cost, became the motivating force. The note that I jotted down when I first began to work with him—“I need to avoid giving him the opportunity to say, ‘I don’t know’”—was much more revealing than I initially recognized. My work with Edward became the impetus for my thinking more deeply about the functioning of the brain; the relationship of emotion, motivation, and cognition; and most importantly, about the view that children come to school with different ways of knowing and responding (Clay, 1998). These reflections became the driving forces behind my renewed interest in theories of motivation.

In the last decade, there has been increasing awareness of the importance of motivation in relation to literacy, but theory and research in motivation has had fewer connections to the study of emotions and emotional development. For children such as Edward, and arguably for all learners, a knowledge base that combines these two areas may contribute to increasing understandings of teaching and learning. In the first section of this article, I provide a brief explanation of the role of emotions in learning. The second section provides an overview of the theoretical constructs of achievement motivation and attribution theory and their relationship to emotions and cognition, followed by a discussion of the stance toward learning characterized as learned helplessness. In counterpoint to the discussion of learned helplessness, the relationship of motivation and self-regulation will be addressed. Throughout, I will provide vignettes of my work with Edward, describing how these theoretical constructs relate to work we do with at-risk learners. Edward’s story serves as one exemplar of the complexity of emotions, motivation, and cognition and provides insights into the ways that interactions and scaffolding within literacy events influence changes in motivational and cognitive processing.

THE ROLES OF EMOTION AND MOTIVATION IN LEARNING

Since the 18th century, psychologists have recognized a division of the mind as having three parts: cognition (or thought), affect (including emotion), and motivation (Salovey & Sluyter, 1997). Yet, of these three, cognition alone has received primary attention in theory and research related to learning, and as a result, “we’ve never incorporated emotion comfortably into the curriculum and classroom” (Sylwester, 1995, p. 72). The relationship of cognition and affect has been an important area of study in psychology for more than 15 years (Salovey & Sluyter, 1997), but until recently there was little connection between the two in education.

While affect or motivation was included in a few models of reading

processes, their role in reading achievement and reading behavior has received little attention “beyond appearing as a ‘box’ in the figure depicting the model” (Athey, 1985, p. 527). When Wigfield and Asher (1984) provided a review of achievement motivation theories in the first edition of the *Handbook of Reading Research*, they noted the few early studies relating reading and motivation. Only since the early 1990s has there been sustained research in motivation (Guthrie & Wigfield, 2000), primarily through the work of researchers at the National Reading Research Center who have developed a body of research relating reading, motivation, and engagement. Still, for the most part, the role of emotions is seldom incorporated into the discussion. This is beginning to change. Cross-pollination of theory and research—particularly in fields such as neuroscience, psychology, and education—has begun to offer new insights into the relationship of cognition, emotion, and motivation, which in turn can inform reading research and instruction. In this paper, I present an example of the complex nature of emotion, motivation, and cognition in early literacy learning through the story of Edward’s literacy journey.

The Role of Emotion

Lyons (1999) provided an explanation of the neurophysiological and cognitive relationships of emotions to learning. Understanding the interrelatedness of emotions, motivation, and cognition serves to clarify their role in learning. While the workings of the brain are not the focus for this article, some key points will highlight the relationships that exist among emotions, motivation, and cognition.

Emotional Development

It is important to consider that biologically, some aspects of emotional development precede cognitive development. Research in neurobiology indicates that the emotional (limbic) system develops prior to brain networks devoted to cognition, for example, the neocortex (Greenberg & Snell, 1997; see also Davidson, 1984). The frontal lobe serves as the command center of the brain and plays an important role in mediating and regulating emotions and behavior from infancy through each stage of development. More specifically, the frontal lobe is responsible for acts related to programming, regulation, and verification, actions that are coordinated with the help of speech (Luria, 1973). Throughout childhood, interconnections increase and become differentiated between the limbic system and the neocortex, which makes language possible, allowing for both emotional experiences to be processed and linked with other areas of the brain and for “qualitative changes in emotional development” (Greenberg & Snell, 1997, p. 107).

Greenberg and Snell (1997) posit that “neural templates are being laid down for the management of emotion through connections formed as a result of critical learning experiences during childhood” (p. 108). From a neurological perspective, the frontal lobe works in conjunction with the reticular activating system (RAS), which is located in the upper portion of the brain stem. The RAS’s role is to direct consciousness and attention. Working in conjunction with the frontal lobes and the limbic system, which regulates emotions, it provides a mechanism for selecting and directing attention, as well as feedback mechanisms to monitor behavior. Thus, as Greenspan (1997) explains, “each sensation, as it is registered...gives rise to an affect or emotion” (p. 18). He provides an example: A mother’s laugh has not only particular auditory or sensory signals but emotional ones as well, and these responses are coded together in the brain. They might be coded as sounds-laughter and humor-fun with mom. “It is this *dual coding* of experience that is the key to understanding how emotions organize intellectual capacities and indeed create the sense of self” (p. 18).

Yet, every sensation does not produce the same response in individuals. Any parent who has nurtured more than one child can attest to Greenspan’s (1997) assertion that there are “inborn differences in sensory makeup” (p. 19) that produce different emotional responses in different human beings. This distinctive emotional and sensory makeup accounts for unique individuals or learners, with the dual coding providing a cross-referencing of memories, experiences, and feelings, resulting in a sort of mental cataloguing of related sensory input (Greenspan, 1997). Thus, emotion and cognition function as partners in the mind (LeDoux, 1996). In support of cognition, emotion’s most critical role is to “create, organize, and orchestrate many of the mind’s most important functions” (Greenspan, 1997, p. 7). Emotion affects cognitive mental functions such as memory, attention, and perception (Lane, Nadel, Allen, & Kaszniak, 2000). Greenberg and Snell (1997) more strongly stress the role of emotion. They assert that “emotion...drives attention, which drives learning and memory” (p.103). Rather than a “dichotomy” (Greenspan, 1997) of mind and body, these researchers suggest there is a complex and integrated body-mind (brain) system with our emotions “as the glue that bonds the body/brain integration” (Sylwester, 1995, p. 73). In Edward’s case, it seemed that the glue that began to bind his thoughts and feelings together was very negatively charged, fueling his anxiety, embarrassment, and eventual distrust of peers and adults in the school setting, resulting in unacceptable behaviors.

Edward’s Cognitive and Emotional Development

For some children the partnership of emotion and cognition can serve as an impetus to propel learning, but in body-mind systems gone awry, behaviors that result may not be compatible with factors that ensure learning. As early as

first grade, some children do not see themselves as capable learners. Edward was one of those children.

When I think of Edward, the word fragile comes to mind. He, as well as his world, seemed fragile. He was small for a first grader. He seemed lost in the shoes that were too big and that he could never keep tied. His voice was even fragile—babyish, shaky, and high pitched. In the beginning, his voice often faltered. His language sometimes came in phrases that did not make sense, and sometimes he could not get out the words. The harder he tried, the more he repeated words or phrases, stuttering and stammering, and sometimes he just gave up, not expressing his ideas.

According to Greenspan (1997), capacities for learning language require an emotional base. Without mastery of

the capacity for reciprocal emotional and social signaling, [language ability may develop in a] fragmented manner.... Words lack meaning, pronouns are confused, and scraps of rote learning dominate... speech. Social interests remain focused on [the child's] body or inanimate objects. (p. 32)

When I first began to work with Edward, he hardly spoke. If I asked a question or did anything that seemed to make him feel uncomfortable, he sometimes made repetitive movements with his hands, or he rocked in his chair. If he had a marker in his hand, he would make random marks on the page. Sometimes he would grab objects from my desk or knock things over. I wondered if he was trying to distract me or shut me out and remove himself from the current situation. Throughout the time I worked with him, this type of responding escalated based on what I came to infer as a heightened stress level.

Here again is an example of how the body and mind are mutually influential. In response to certain kinds of stress, the body creates the hormone cortisol. Chronic stress is associated with high levels of this hormone. "In humans and animals alike, these hormones abound when we find ourselves in situations where other individuals or events control us and we feel helpless" (Caine & Caine, 1991, p. 66). Consequently, our capacity to think, solve problems, and make connections is impeded because of the "inseparability of body, emotion, and intellect" (p. 66). *Downshifting* (Hart, 1983) is the brain's response to negative stress or distress. In Hart's theory, the brain actually shifts from operation within the region of the neocortex to the more automatic limbic system and the triune brain's reptilian complex. This conceptualization of the brain comes from MacLean, the former head of the Laboratory of Brain Evolution and Behavior at the National Institute of Mental Health, and provides a model of how the brain evolved (see Wellman, in Costa & Garmston, 1997). This model suggests that the reticular activation system, referred to earlier, is located at the bottom

of the reptilian complex. It is the receptor of information and attention. The cerebellum, which receives sensory input from muscle receptors and sense organs, integrates information and coordinates skilled movement. Actions such as movement and speaking are controlled as the cerebellum receives commands from the cerebral cortex. If downshifting has occurred, there is a shift of operation from the newer, more rational neocortex down to the reptilian brain. It is here that autoreflex systems are controlled, governing several basic body systems as well as inner drives, such as our sense of territorial boundaries and our fight, flight, or freeze instincts (see Caine & Caine, 1991; Wellman in Costa & Garmston, 1997).

Edward's responses seemed to be representative of this model of brain functioning, and as I became more understanding of the underlying reasons for these responses, I attempted to adjust my teaching based on signs of this downshifting. It became clear that for Edward, the neural linkage of negative emotional responses to school was strong. His emotions were driving his attention, and when presented with academic tasks, particularly literacy activities, his behavior seemed to represent fight or flight instincts. When initial responses of avoidance or distraction failed, he sometimes resorted to physical acts of resistance such as kicking me under the table. My only consolation was that these problems were much less severe in the tutoring context than in his classroom, where he was often relegated to time-out, sent to an in-school suspension classroom, and on a few occasions, suspended. His parents were deeply concerned about his difficulties but expressed confusion, frustration, and even anger in response to Edward's behavior and their inability to help him function appropriately and successfully at home and school.

I could understand and relate to their frustration. When I began to work with Edward in Reading Recovery, he had completed one year of schooling. He was characterized as bright by the professionals working with him; yet, based on scores from *An Observation Survey of Early Literacy Achievement* (Clay, 1993a) and his teacher's referral, Edward was one of the lowest first graders in a multi-age classroom of kindergartners and first graders. Edward was also characterized by his teacher as being extremely difficult.

When I observed him within his classroom, during center times, he frequently chose non-literacy tasks such as playing with blocks or working at the sand table. I would watch him, almost in parallel play, doing what classmates were doing, but not interacting. Perhaps he had come to realize that inevitably, contact with peers seemed to cause difficulty and result in his being sent to time-out or more serious punishment. Prior to kindergarten, he had had limited interactions with other children or adults beyond his parents and grandparents. Unaccustomed to schooling, Edward lacked the social skills many of the children displayed, and his interests were not typical of most children. One day while he was discussing an anatomy book from home, detailing particular parts

of the body and how they functioned, it became clear that he lacked a common register of language and had different interests than most kindergartners and first graders. When Edward was a part of whole class literacy activities, as children sat around the teacher, he always sat on the outer perimeters of the circle, near the back. He seemed uninterested in much of the first-grade curriculum and appeared frustrated that he could not quickly master the beginning literacy tasks so that he could more independently engage in reading texts that really interested him.

What was occurring within Edward over and over again was the dual coding of responses (Greenspan, 1997), connecting a variety of negative sensory input with literacy tasks. Environmental influences, through his interactions with teachers and parents, however unintentional, negatively affected the way that he viewed learning to read and write, as well as his view of himself as a learner. His early associations with learning to read resulted in difficulty or lack of interest. In turn, these negative events were registered with corresponding emotions, organizing and influencing his cognition, creating a poor sense of self and making it difficult to attend—he lacked the motivation to learn.

The Role of Motivation

Motivation has an important, multidimensional role in the complex and integrated mind-body system. It modulates and influences behavior and, in turn, learning, in complex and varied ways. Once thought to be centered around drives, current theorists recognize that goals, beliefs, self-efficacy, values, and social comparisons are all factors related to motivation.

Achievement Motivation

Achievement motivation refers to a willingness to achieve competency through effortful activity (Elliot & Church, 1997). While there are many different views of achievement motivation, attribution theory, self-efficacy theory, self-worth theory, and expectancy-value theory, all focus on perceptions that influence a learner's achievement-oriented behavior (see for example, Atkinson, 1957; Bandura, 1986; Covington, 1992; Eccles et al., 1983; Nicholls, 1984; Schunk 1984; Weiner, 1992). In order to understand what factors influence a child's willingness to learn and achieve competence, the child's own perceptions of his or her abilities and achievements must be considered. Achievement motivation theory focuses on the relationship of motivation to learning and hypothesizes that the causes that are attributed to success or failure influence future achievement-oriented behavior (Covington & Omelich, 1979), such as willingness to demonstrate effort (Weiner, 1992).

The notion of perception is critical in understanding this theory; each

learner's own "interpretation of reality" (Blumenfeld, Pintrich, Meece, & Wessels, 1982, p. 402) must be considered in regard to success or failure, for it is perceptions that mediate achievement behavior (Blumenfeld et al., 1982). Perceptions affect each person's reactions or motives to succeed and to avoid failure, thus impacting achievement-oriented behavior (Weiner, 1992). Whatever a person attributes success or failure to is key.

Attribution theory, primarily based on Heider's (1958) seminal work, was developed to explain people's perceptions and causal beliefs. Attributions, or the causes that an individual perceives as affecting success or failure, are primary motivational factors (Heider, 1958). While not intended as all-inclusive, early achievement motivation research proposed four primary factors that explained learner's attributions for success or failure: ability, effort, task difficulty, and luck (see Weiner, 1979). More recent research has suggested overlapping dimensions of causality: locus, stability, and controllability (Weiner & Graham, 1984). For example, luck is external to the individual (locus), unstable, and uncontrollable. In contrast, effort is internal to the individual, not stable (i.e., an individual does not necessarily apply the same degree of effort at all times), and controllable (see Weiner, 1979, 1986).

In differentiating causality as internal or external (Weiner, 1979, 1986), the constructs of *contingency* (Peterson, Maier, & Seligman, 1993) and *locus of control* (Rotter, 1966) are important to consider. Contingency refers to the relationship between actions and outcomes. "The most important contingency here is uncontrollability: a random relationship between an individual's actions and outcomes. The opposite contingency, controllability, obviously occurs when the individual's actions reliably produce outcomes" (Peterson et al., 1993, p. 8). The notion of random outcomes (signifying uncontrollability) as contrasted with reliable outcomes (controllability) is linked to the locus of control: a cause can be perceived as an outcome of a person's actions (internal) or from some other factor such as luck (external). Perception of the cause—the way a person explains the contingency—influences cognition. According to Peterson and his colleagues, several steps are involved. First, the person must perceive the contingency. "His perception of it may be accurate, or he may see it as something it was not. So, for example, a controllable event may be perceived as uncontrollable, or vice versa" (p. 8). Next, an explanation for the failure, such as bad luck or stupidity, is formed. The result is that the person uses this perception and explanation "to form an expectation about the future. If he experiences a failure that he believes was caused by his own stupidity, then he will expect to fail again when he finds himself in situations requiring intelligence" (Peterson et al., 1993, p. 8). Thus, whether accurate or not, a learner's repeated perceptions of either incapability or lack of success, or both, may begin a cycle of future expectations of failure.

A number of studies have identified the types of attributions that learners

use to explain success or failure along with their relationship to external or internal controllability. While the “number of perceived causes is virtually infinite” (Weiner & Graham, 1984, p. 168), researchers have identified study participants’ most common attributions, or causes, for success or failure: intelligence, ability, memory, effort, work and study habits, mood, prior experience, interest, task difficulty, luck, attitude, and ability to concentrate or attend. (For further discussion of these attributions, see Weiner & Graham, 1984; Weiner, 1986. For examples of free-response investigations, see Anderson, 1983; Burger, Cooper, & Good, 1982; Elig & Frieze, 1979; Frieze & Snyder, 1980.) Often success or failure is attributed to effort and ability, which is usually considered internal, within the control of the individual.

Such factors are related to ability beliefs (Wigfield, 1997)—a learner’s perceived competency in a particular area (see Frieze & Snyder, 1980; Nicholls, 1984; Stipek & MacIver, 1989). While viewed as controllable, factors such as the nature of the task or task difficulty, directions, and instruction are not within the control of the learner. Other factors such as luck, illness, teacher bias, or negativity are external and are viewed as more likely to be unstable and uncontrollable, although they are within the teacher’s control. According to Minton (1979 in Blumenfeld et al., 1982), factors that elementary-age students used to judge ability included speed of work completion, effort, and teacher evaluation and satisfaction.

A study that has particular significance in explaining young children’s attributions and sources of control is Stipek’s (1981) research with kindergartners and first graders. In this study, high effort was linked with high ability. The quality of efforts was not taken into account. These young students believed that if learners worked hard and finished their work, they were capable. In other words, they tended not to make differentiations between ability, effort, and outcome (Nicholls, 1978) in terms of task difficulty or quality of performance (Blumenfeld et al., 1982). Moreover, for these young children, ability was judged as dependent on effort, and effort was often equated with good conduct. Therefore, conduct became a factor when explaining outcome (Blumenfeld et al., 1982).

An individual’s beliefs about his or her capabilities to learn or behave in a particular way has been termed *self-efficacy* (see Bandura, 1986, 1997; Schunk, 1990). As discussed previously, beliefs, perceptions, and behaviors are linked and influenced by environmental or contextual factors. The influence of home and school factors on self-efficacy has been noted by researchers (see Dweck & Bempechat, 1983; Johnston & Winograd, 1985; Pressley et al., 1995), so teachers’ and parents’ attributions and their views of intelligence and abilities send strong messages to learners. Research shows self-efficacy to be a good predictor of motivation, affecting behaviors such as task choice, effort, perseverance, and achievement and other self-regulatory behaviors (See Schunk, 1990, 1996;

Bandura, 1986). However, the learner must believe that it is possible to improve and further develop abilities. “Students who feel efficacious about reading or writing well are apt to concentrate on the task, use proper procedures, manage time effectively, seek assistance as necessary, monitor performance, and adjust strategies as needed” (Schunk & Zimmerman, 1997, p. 37). Moreover, if a learner feels in control of his learning, he can usually overcome temporary setbacks or difficulties. In fact, students who have strong self-efficacy in the face of fears or doubts about performance may increase effort and attempt to be even more strategic as compared to learners who are overconfident and may actually decrease their efforts (Salomon, 1984).

Edward’s Motivation

The linkage of ability, effort, and conduct in a young learner’s perceptions may help to explain Edward’s dilemma. In the classroom, Edward seemed to have no confidence in his ability to perform literacy tasks, and his teachers were dissatisfied with his unwillingness to attempt or demonstrate effort. His behavior suggested that he did not see himself as capable of success—that he viewed success as outside of his control. His teachers had become concerned about his unpredictable behavior, and at the onset of a problem, he was isolated. If good conduct was in fact an attribution that he connected with success (Stipek, 1981), he must have perceived himself as a terrible failure. Furthermore, if ability was perceived as dependent on effort, he and his peers may have felt that he demonstrated low capability. When I began to work with Edward in late September, it appeared that many outside forces influenced him to respond in increasingly unproductive ways, either passively or aggressively, depending on how out of control he felt. In response, I felt dismay at seeing him spend so much time outside the learning environment. Clearly, school personnel attributed the causes of his academic and behavioral difficulties to problems within the child rather than the instructional environment.

Ability, effort, and outcome are not necessarily distinguishable in children’s perceptions. They do not engage in the “ego-protective strategy of attributing failure to external causes” as much as adults do (Wigfield, 1988, p. 79). Therefore, factors such as poor instruction, teacher bias, or negativity have the potential to seriously impact self-efficacy and be even more devastating for learners who fail.

Students like Edward, who are most at risk, may not be able to reliably gauge their own progress and may look to teachers or parents to provide feedback on performance (Schunk & Zimmerman, 1997). What happens when the feedback the child is given is primarily negative or responses to the child’s difficulties are punitive? School personnel seemed to feel that Edward was incapable of behaving and learning. The anxiety of his parents was palpable, and they

expressed their frustrations in trying to cope with Edward and the school's response toward him. They felt they had no control over Edward or what was happening in school. As a person placed for training (as a Reading Recovery university trainer) within the school rather than working as a district employee, I had good rapport with the parents and faculty, but little power (i.e., control) to influence decisions about Edward. Thus, all of us, along with Edward, were experiencing feelings of low self-efficacy. In cases such as Edward's, the emotional and motivational ramifications, and the resulting impact on literacy learning, are quite serious.

INFLUENCES ON LEARNING TO READ: THE INTERCONNECTEDNESS OF EMOTION, MOTIVATION, AND COGNITION

In the early grades, one of the most emphasized and valued abilities that young learners develop is reading. Yet, until recently, there has been limited information about motivation in reading, particularly in regard to the early stages of reading acquisition (see Baker, Afflerbach, & Reinking, 1996; Guthrie & Wigfield, 2000; Wigfield, 1997). Guthrie and Wigfield (2000) define reading motivation as "*the individual's personal goals, values, and beliefs with regard to the topics, processes, and outcomes of reading*" (p. 405). This definition emphasizes how motivation affects cognition or the strategic processes a learner invokes or chooses not to invoke. In this section, the link between emotion, motivation, and cognition, particularly beliefs about self and ability, will be further clarified in relation to learning to read. Implicit in motivation is the idea of setting goals and taking action, which is oppositional to behaviors represented in learned helplessness (Seligman & Maier, 1967). The construct of learned helplessness will be juxtaposed with its antithesis, the active and self-regulated learner.

Learned Helplessness or Active Engagement

Reading ability is a strong determinant of school success and children's perceptions of their skills in other areas. As students progress through the grades, their actual ability becomes intertwined with their attitudes and beliefs regarding success or failure. In other words, it becomes increasingly more difficult to divorce skill and will (Paris & Cross, 1983; Paris, Lipson, & Wixson, 1983/1994). Learning involves both skill (ability) and will (the desire, effort, and persistence to perform cognitive tasks), so the role that motivation and attributions play in relation to skill and will are quite critical to learning.

Strategies are employed to achieve goals. If a goal is deemed unreachable or if a learner does not feel in control of the learning process, then the learner sees no reason to make the necessary effort to use a strategy. Furthermore, if there has been a prolonged series of unsuccessful events, the learner is caught in a

cycle of failure, finding it less stressful for poor outcomes to be attributed to lack of effort. For whatever reason, learners with these attributions may become inactive or act in a *passive failure* mode (Johnston & Winograd, 1985). This inactivity is often the result of an individual's perceptions, with a view toward unstable and uncontrollable outcomes. Past outcomes can only be reliable predictors of future outcomes if they are caused by stable factors (Abramson, Garber, & Seligman, 1980). For example, if an individual perceives ability as a stable trait and has not performed well in the past, he has no reason to believe that this will change. Also, if an individual believes that he is not in control of his own learning, as when attributing outcomes to luck or teacher control, the motivation for attempting or persevering with difficult tasks may not be present. Characteristically, these individuals adopt an attitude of "expected failure [and] lack the perseverance [to complete tasks; often they] give up before they begin a task" (Mark, 1983, p. 1). These individuals have been labeled learned helpless (Seligman & Maier, 1967).

For over three decades, Seligman and his colleagues (see for example, Abramson et al., 1980; Abramson, Seligman, & Teasdale, 1978; Peterson et al., 1993; Seligman & Maier, 1967; Seligman et al., 1984), and shortly afterward, Dweck with her colleagues (see for example, Diener & Dweck, 1978, 1980; Dweck, 1975, 1983, 1998), have studied the phenomenon of learned helplessness. In spite of strong performances on previous tasks, students characterized as learned helpless expressed a lack of belief in their ability with ascriptions such as "I never did have a good memory" or "I'm not smart enough." (Diener & Dweck, 1978, p. 458). Attempts at other kinds of strategies or increased or sustained effort were not present in their actions. Their behavior contrasts the group of students who were characterized as mastery oriented. These learners might also be described as active and engaged. Such students increased their efforts when difficulties occurred or attempted to find other methods of problem solving. These non-helpless students were characterized as *consistently persisting* until they accomplished a task. Examples of their comments included "I need to concentrate" or "I should slow down and try to figure this out" (Diener & Dweck, 1978, p. 459). In fact, the researchers noted that oftentimes, these mastery-oriented learners did not even make attributions when faced with difficulties. Instead, they focused on self-monitoring with verbalizations such as those just mentioned (Diener & Dweck, 1978).

During the months that I worked with Edward in Reading Recovery, I also worked with Molly, an average student from Edward's classroom. (These case studies were a part of my training in Reading Recovery.) Molly viewed herself as a successful reader and learner. She confidently initiated conversations about herself, her environment, and her learning. She exhibited confidence and enthusiasm during all literacy tasks. From our first interactions, Molly demonstrated a willingness to be an active participant in her own learning. She

expressed her ideas, took over new learning quickly, and worked independently whenever possible. Molly resembled mastery-oriented learners, a descriptor coined by Diener and Dweck (1978). Unlike Edward, she maintained a consistently positive view of her abilities. Based on her own statements, she liked school, worked hard, and was a “good reader” and a “pretty good” writer. She indicated many times that she was “really good at lots of things in school.” In fact, her view of herself and her ability seemed to be higher than her teacher characterized. This may explain how she maintained her self-confidence even though her teacher viewed her rate of progress as slowing since the beginning of the year.

As pointed out earlier, young children do not make distinctions between effort, ability, and outcome; rather, they consider children who try harder as smarter than those who make less effort (Nicholls, 1978). In addition, students typically equate success with factors such as speed, how quickly work was completed; effort, how hard one tried; and teacher evaluation, how pleased and well-behaved one is from the teacher’s viewpoint (Minton, 1979, in Blumenfeld et al., 1982). Therefore, it is not surprising that within his classroom, Edward was having little success in the view of his peers and teachers. According to his teacher, Edward appealed to her constantly for help and did very few tasks without constant supervision. In her opinion, Edward was incapable of independent functioning, either socially or academically. He spent much of his time isolated from his peers and from the work of the classroom.

Edward puzzled me. Even when I joked or teased him, or praised him for effort, success, or good behavior, I noted how bright yet unresponsive and passive he was. In early research, clinical psychologists were intrigued because learned helplessness looked so much like depression. Observing them in the lab, Seligman (1995) characterized helpless animals and people as “passive, slow, sad” (p. 3). Even now, reading this, I recall Edward’s shuffling feet, his slouched shoulders, his unresponsive face, and I hear his stammering voice.

My hypotheses for the causes of Edward’s behavior and responses are tentative, but I suggest that Edward felt he had little control within his environment, and because of his fairly isolated early childhood experiences, he had had little guidance in sorting out appropriate ways of responding and interacting. Often his response was to isolate himself and attempt no interaction. The difficulties that he had had in school further exacerbated his difficulties and subsequent withdrawal, whether imposed by him or others. When he was placed in situations requiring interactions, he lacked the social skills to respond appropriately, so his passive responses of “I can’t” or “I don’t know” or his aggressive responses resulted in time-outs or in-school suspensions, reinforcing the view (from himself and others) that isolation or passivity was the answer. Edward preferred to withdraw but responded with aggression when his peers or teachers (including me) insisted on his participation. His response further reinforced the need for

withdrawal, in this case, physical withdrawal from the environment.

Edward had been unable to figure out how to control his environment, so inevitably, he found ways to escape. From his point of view, those inappropriate responses may have signified glimmers of hope that he could still attempt some type of action or control, albeit inappropriate.

Connecting Emotions, Motivation, and Cognition

What influences these two stances (active versus passive) toward learning? What do researchers theorize is taking place in the mind? In relation to motivation, the result of procedural knowledge (how to behave or do something) is represented by products—the results of goal attainment. To explain how an active or passive stance occurs, Winne and Marx (1989) hypothesize that cognitive processing principles also serve to explain motivational processing: “Motivational content is coded in the same form as other information—namely, as primitive concepts, propositions, and schemata” (p. 244). These primitive motivational concepts are emotions (Weiner, 1986, 1992) and account directly for individuals’ affect: “The etymology of ‘emotion’ reaches into the Latin *ex* (from) and *movere* (to move), combining in *exmovere* (to move away). Hence, emotions are the source of ‘motive force’” (Winne & Marx, 1989, p. 245), and it is emotions that move students to take action or to become passive. Experiences, instruction, and participation in learning bring about the linking of motivational concepts and information that are stored in working memory. Motivational constructs or propositions are the results of this “emotion-information processing connection” (p. 245). These propositions (i.e., constructs, schemata) connect motivational content (emotions, attributions, and expectancies for success or failure) with cognitive operations, thus impacting an individual’s willingness to demonstrate effort and establish future goals (Winne & Marx, 1989).

The result of Winne and Marx’s hypotheses parallels Greenspan’s (1997) explanation of the dual coding of emotions and cognition. When procedures are maintained that allow the learner to control the task and move toward goal attainment, there is the stimulation of positive motivational content or affect (feelings of success). This motivational content (i.e., emotions) is stored. Thus, positive feelings such as pride, happiness, and a sense of well-being and control are maintained in working memory. If however, as students work through a task, monitor their progress, and deem the product to be insufficient or deficient, “negative motivational content can be stimulated” (Winne & Marx, 1989, p. 247). With repeated occurrences, “emotional states of anxiety and helplessness are established” (p. 247) with the script or representative schema for behavior characterized by a state of learned helplessness.

The behavior most representative of learned helplessness is passivity. When individuals perceive an inevitable lack of control, they fail to initiate and moni-

tor their actions. What may help to decrease learned helplessness is to somehow replace the script for passive responses with active procedures. An essential question, however, is how this script might be replaced. Corno and Rohrkemper (1985) suggest that the process of self-regulated learning might be a tool “through which students gain academic competence as well as a strong sense of personal responsibility” (p. 60). They define self-regulated learning “as the highest form of cognitive engagement a student can use to learn in classrooms” (p. 60). But what serves as a catalyst for this transformation? For children such as Edward, it is unlikely that the script will be replaced and self-regulation will occur without intervention and strong support from others.

THE DEVELOPMENT OF A SELF-REGULATED LEARNER

Social mediation is an area that has just begun to receive attention in research on motivation. In the development of motivation, recent studies have focused on the role of others such as peers, parents, and teachers (see Baker et al., 1996; Gambrell & Morrow, 1996; Oldfather, 1992, 1994; Sonnenschein, Brody, & Munsterman, 1996). In my work with Edward, the script of passivity was transformed by the cognitive and emotional changes that occurred through social mediation. As mentioned previously, the learning context can potentially enhance or deter motivation. Gambrell and Morrow (1996) suggest three dimensions of learning that intersected with my role as mediator in Edward’s literacy journey: challenge, collaboration, and choice. While there are additional factors that contributed to changes in motivational and strategic processes, these interrelated factors promoted positive responses to learning and enabled Edward to take control of his learning process, shifting from a stance of passivity and helplessness to an active, self-regulated learner.

Challenge

In the previous section, an explanation was provided for the connection of motivational content (i.e., emotions and expectancies for success or failure) with cognitive operations. Feelings of success occur when learners feel in control of tasks and are moving toward goals. Therefore, decisions about whether to be effortful and strategic are related to task demands (Anderson & Armbruster, 1984).

Learners of any age are more likely to take active control of their own cognitive endeavors when they are faced with tasks of intermediate difficulty (since if the task is too easy, they need not bother; if the task is too hard, they may give up). (Baker & Brown, 1984, p. 354)

What keeps the learner active is this just-right level of challenge. For stu-

dents who have taken a passive stance toward learning, the role of responsive meaning maker comes less easily, and the child must be shown and guided in ways that will promote the “active construction of a network of strategies” (Clay, 1991a, p. 327). Demonstrating, guiding, and adjusting the level of challenges are all component parts of the teacher’s role in scaffolding within Reading Recovery lessons.

Yet, the management of challenge was the most difficult dimension in my attempts to support Edward’s motivation. In fact, early on, I contributed to Edward’s feelings of anxiousness and poor self-perception. While one of the lowest students in first grade, Edward’s entry scores on the *Observation Survey of Early Literacy Achievement* (Clay, 1993a) were much higher than the other three children I tutored. All his stanines were above 1, except for text reading and hearing sounds in words; letter identification and the word test were the highest at stanine 4. I was seduced by his test scores into developing preconceived ideas about what he should be able to do. I made assumptions based on his scores rather than being guided by my observations and Edward’s responding. As later lessons would indicate, Edward had a foundation of literacy knowledge to build on, and he could learn quickly, but he did not know this. In his view, reading was about knowing words, and he did not know enough of them. Early on, both of us would become frustrated as he competently read and then gave up when he made an error. With one error, the task had become too hard! It took too many days for me to finally realize that I had to eliminate this unproductive response and ensure that he perceived himself as successful.

To improve my work with Edward, I regularly reviewed records and notes from previous sessions. As I began to look back at the first sessions during Roaming Around the Known, I noted some points that I had previously taken for granted. The primary reason for using the first two weeks of the child’s tutoring program to Roam Around the Known is that “it requires the teacher to stop teaching from her preconceived ideas. She has to work from the child’s responses” (Clay, 1993b, p.13). Working within this framework, I had collaborated with Edward on each task. As I reread my notes, I recognized that I had set him up for success. In hindsight, I also realized that having choices gave him a sense of control. During Roaming Around the Known sessions, he chose the books that he wanted to reread. I encouraged him to choose the topics for the books I would make and to dictate some of the stories. At first, because the language was more complex in the dictated texts, I read the books with him to ensure that he would feel competent. In the more patterned published texts, I supported his recall of the events as well as the language pattern before he started reading with statements such as, “Here’s the book where the cat sat on the mat, and then those other animals sat on the mat...”

Such scaffolding, with the level of challenge gauged for Edward alone, positively influenced the ways he responded. In fact, new behaviors and responses

emerged. For example, it was clear that rapport had developed and things were changing when Edward, typically unresponsive, offered an unsolicited comment: "They're doing show and tell in my class today. I could bring in a lizard, if I had a lizard." My response that we could make a book about that resulted in his idea for a story that was written with my assistance: "I like (both of which Edward wrote) Lizard (he wrote the *L*). I want A Lizards." He wrote the *i*, *w*, *a*, *l*, and *s*. Clay states that "the struggling reader has stopped using many strategies because he could not make them work [but when supported in] using the things he can do you will find that he begins to try again some of those discarded strategies" (Clay, 1993b, p. 14). Clearly, under the right conditions, there was already much that Edward knew and could draw upon, but at times he needed me to be the "rememberer" and "the organizer," assisting him in linking his existing but unrecognized knowledge to new learning. Thus, Edward's knowledge and his oral language became the tools that we used as I worked alongside him.

Unfortunately, after less than two weeks, the momentum was interrupted when Edward was suspended. Looking back, I now recognize that this suspension eroded the rapport that had been established. Upon his return, Edward was even more apprehensive about interacting, but I did not let that concern hinder me from pushing my agenda forward. We had to make up for lost time! Not surprisingly, the result was a lack of cooperation and collaboration across many lessons.

Edward's accelerated progress during Roaming Around the Known sessions had heightened my awareness of his vast background knowledge and sophisticated interests along with his capacity to learn. Yet, in the first weeks of lessons, I found myself constantly struggling with Edward as if we were in a tug-of-war while I attempted to reconcile his passive behaviors with the knowledge he held. Finally, I realized that I had taken away much of the collaboration and the choices that were hallmarks of our work together during Roaming Around the Known sessions. With this recognition, the successful interactions of Roaming Around the Known served as a compass to help me "find points of contact in... [Edward's] prior learning," to situate learning within the things that Edward *could* do (Clay, 1998, p. 3).

Such endeavors paid off in several unexpected ways. Very slowly, I began to see Edward increase his willingness to take risks. Short and Burke (1991) suggest that a primary factor related to risk taking is operating within what is known.

Exploration of new ideas always operates on the edge of the known. Just past the boundaries of our currently comfortable beliefs is an area where we have some expectations but few certainties... Our learning needs to both connect with and go beyond what is already known to us. (p. 18)

But moving too far away from the known can hamper learning because it results in a

loss of context within which to organize and interpret... We cannot find the connections between the new findings and what we already know... The new insights remain floating out there somewhere, unconnected and therefore difficult to learn and easy to forget. (p. 18)

Yet, when guided by a more knowledgeable other, the learner can be supported in taking risks and can develop new learning in the area known as the zone of proximal development (Vygotsky, 1978).

Collaboration

By working in the realm of the known, keeping new learning at the right level of challenge, and using my language to guide Edward's behavior, I served as the connector, the organizer, and the rememberer. Even for a time, my language, or words, served as a mechanism of self-control, gradually guiding Edward in changing ineffective patterns of responding. Initially, because of negative emotions and the limited self-efficacy that colored his responses, Edward was quite skeptical of my words, particularly the praise and encouragement.

For example, as I listened to him read the text *Catch That Frog*, I was pleased by his good approximation (i.e., *after* and then *across* were substituted for the word *around*). Edward then monitored his error. Realizing he was not right but not knowing how to fix it, Edward reacted with frustration. However, at the end of the book, my response served to adjust strategic as well as motivational processes to encourage further risk taking and to show him I valued his processing. I said, "That was some good work! When you tried this, you were thinking about what made sense, sounded right, and looked right at the beginning of this word. Then, you did something else that was great! You kept working! And you noticed that something still didn't look right, but you weren't sure how to fix it. Next time, when you give it another try—read it again and use the beginning and other parts of the word, like the end, to help you figure it out. Let's try that again and I'll help you."

Of course, this did not bring about an immediate change in behavior and self-perception; but after many instantiations, there was a gradual shift in motivational and cognitive processing enabling Edward to regulate his behavior more independently. Greenspan (1997) points out that "when adults help children master a skill in steps that match their own strengths and tendencies, youngsters experience the exhilaration of doing something well that is intrinsic in the human nervous system" (p. 223). Such powerful feelings influence the motivational processes that encourage a learner to continue to endeavor. When learners learn, when they take control, "they go on to extend their own learn-

ing. Even at a low level of simple performance, a sense of control and a sense of being effective will generate attention, interest, and motivation” (Clay, 1998, p. 4). This was the key for Edward. He was learning so much, and yet he seemed unaware of his knowledge. My job was to help him discover it!

In the earlier example of Edward’s reading of *Catch That Frog*, my teaching focused on what was appropriate and most productive for this child. In Edward’s case, he almost always knew when he was not right and deeply felt the impact, although he was also afraid to try to fix it for fear of being wrong again. In discussing learned helpless children, Dweck (1975) offers this advice:

An instructional program for children who have difficulty dealing with failure would do well not to skirt the issue by trying to ensure success or by glossing over failure. Instead, it should include procedures for dealing with this problem directly. This is not to suggest that failure should be included in great amounts or that failure per se is desirable, but rather, that errors should be capitalized upon as vehicles for teaching the child how to handle failure. (p. 684)

Edward’s frustration began with noting the error because he was unsure of how to fix it. By praising his efforts and then saying, “Next time, give it another try. Read it again and use the beginning and end of the word to help you figure it out,” I valued the work he had done while providing additional choices or options for how he might respond. In other words, my scaffolding provided reinforcement for Edward’s self-monitoring, perhaps the most important foundational behavior for other self-regulatory processes (Zimmerman, 1998), allowing me to then support Edward in developing additional ways of problem-solving text difficulties. Gradually, through demonstration, working with him, and eventually prompting him to work independently, I helped Edward become, and perceive himself as an engaged, active problem-solver.

Initially, this engagement occurred only during reading. Edward resisted my encouragement during writing. Perhaps the nature of the process contributed to his discomfort. During writing, the child’s processing is slowed down, and the links that are made in relation to sounds and letters are more easily discerned (Clay, 1982; DeFord, 1994), but so are the errors! To Edward, it was too risky to make such attempts. In reading, errors did not seem quite so glaring, but marks on the paper produced evidence of things that Edward did not know—that he was not able to control confidently. With time, I came to recognize that I was expecting him to take on too much of the task too soon, and I began to increase my support and decrease the number of sounds that I expected him to hear and record. I also realized that by insisting that Edward take on so much of the task so quickly, I had contributed to his feelings of a lack of control and capability.

Choice

The opportunity to make choices gives learners a sense of control (Gambrell & Morrow, 1996). In retrospect, I have greater awareness of the potential and necessity of choice in Edward's learning. Earlier, I discussed how choices were provided and supported in reading and writing selections, but Edward's strategic decision making, his choices regarding how to respond, were even more important. In reading, my language or prompts provided Edward with strategic options or choices. Unfortunately, in our early lessons I did not make these choices as clear in writing—that he had control over what he chose to write and how he might use the Elkonin boxes as a scaffold.

ALTERING EDWARD'S PATH OF PROGRESS

Clay and Cazden (1990) have suggested that the Reading Recovery program serves as a scaffold. My understanding of this became much clearer because of Edward. For him, the lesson framework provided support in two ways. First, the framework gave him a sense of control. The components were something that he could predict, and thereby control. Edward came to understand and anticipate what would happen next, which seemed to have a calming effect—"Now we're going to make some words" or "Now we get to read the new book." He came to realize that there was variability through the freedom of choice and decision making within each component, but always, certain aspects were known. Again, working within the known promoted a sense of control, which promoted risk taking.

The second way in which the lesson provides a scaffold relates to the recursive nature of learning established through this framework. Each experience within each day's lesson provides opportunities for increased fluency and flexibility with things that are known. For example, rereading his favorite books with increasing fluency gave Edward a heightened sense of control and capability. Over time, this provided momentum, and he eventually began to show willingness to take risks in writing, which came later in the lesson. The first instance of this occurred when I encouraged him to read his story he had written the day before: "Lucy is my dog. Lucy is brown and black and white." Edward and I began to talk about Lucy and his two cats, which ultimately resulted in his decision to write more about Lucy and to add something about one of the cats: "Lucy is small. Lucy can chase the cat." I wrote *Lucy* and waited. He then quickly wrote *is*. When I encouraged him to say *small* slowly, the Elkonin boxes provided the structure for him to confidently push the counters into the boxes, hearing and recording the *s* and *l* in *small*, supported by the Elkonin boxes. He also was able to correctly write *can*, he heard the *s* at the end of *chase*, and then he wrote *the* and *cat*. The conversation, based on Edward's

interests and supported by his knowledge, provided choices for his writing. The conversation and the Elkonin boxes provided ways for Edward to become increasingly independent in guiding his learning. As his teacher, I monitored and regulated my own behavior in order to offer appropriate levels of support and expectation, empowering him to work at a level of just-right challenge without calling up the scripts for passivity. Our work together and Edward's new ways of responding provides an illustration of Clay's (1998) words:

Learner-centered instruction is...starting where the learner already is and helping that learner to move toward a new degree of control over novel tasks, teaching so that learners are successful and are able to say, "I am in control of this." From there they go on to extend their own learning (pp. 3-4).

For Edward, his script of passivity was replaced as he gained competence and a sense of self-efficacy.

One memorable event gave me hope that Edward's self-perceptions were changing. As I walked down the hall, I saw Edward sitting outside the art room in time-out. This scene had played out many times in the past. Typically when I would speak, he would not, or he would mumble hello if I waited for his response. But this day it was different! For the first time, he called to me before I even approached him. "Hi, Susan. When are you going to pick me up today? I brought my books back..." These and many more words came pouring out of him, quickly and excitedly, before I had even said a word. I talked with him for a few moments, and as I walked away, I was struck by how his words had come spilling out, as if they had been bottled up and were suddenly freed. Clearly, Edward had much to share, and he seemed to know it.

Placement in Reading Recovery halted an unproductive literacy path for Edward. His lack of progress and his patterns of responding represented a path towards learned helplessness (Seligman & Maier, 1967) or passive failure (Johnston & Winograd, 1985). Clay (1991b) states that "it stands to reason that if children have difficulties and if we take...all who are low achievers, they are likely to have different problems, one from another" (p. 63). For a child such as Edward, instruction that was individually designed to meet his needs and to capitalize on his strengths empowered him to progress.

As I learned to work with Edward each day in Reading Recovery, I became increasingly aware of the dimensions of challenge, collaboration, and choice. By working within Edward's zone of proximal development (Vygotsky, 1978), he was provided with just enough challenge, enabling him to learn, resulting in "self-perceived competence" (Gambrell & Morrow, 1996, p. 11). Within each of the components, he was given choices, promoting "self-perceived control" (p. 11). Our collaboration grew and became more productive because of careful observations, decision making, and scaffolding based on Edward's strengths and

attention to the next few things he needed to learn—first through my guidance, and gradually through expectations that he would take control of tasks. Such “collaboration facilitates goal attainment and increases task engagement” (Gambrell & Morrow, p. 11). These factors of self-perceived competence and control, goal attainment, and engagement all relate to learners’ self-efficacy and motivations and are critical considerations in relation to self-regulation. In these learning contexts, demonstrations and carefully designed experiences help students to understand that “competent functioning is often a result of using appropriate strategies rather than superior innate ability or just trying hard” (Pressley et al., 1995, p. 9). As success occurs, learners are motivated to continue to make efforts toward competency. Self-regulated learning occurs through this “fusion of *skill* and *will*” (Garcia, 1995, p. 29).

By the end of our time together, Edward was reading at a level typical of the end of the year in first grade, rather than the middle of the year when his time in Reading Recovery ended. He had surpassed most of the average students in his class, including Molly. The work that Edward and I did across many months is one representation of the dynamic role of emotions, motivation, and cognition, and it provides insights into the ways interactions and scaffolding influence changes in motivational and cognitive processing. Hopefully, throughout all teachers’ careers, there will be children who force them to put aside ways of teaching and responding that have become almost automatic, forcing them to examine their beliefs and their teaching with fresh eyes. Edward did this for me. My interactions with Edward reminded me of a quote that I had forgotten but eventually came to know again. Pearson (1996) reminds us that we must expect every child to achieve and acknowledge what they bring to the context:

A teacher’s job...is always to bridge from the known to the new. There really is no other choice. Children are who they are. They know what they know. They bring what they bring. Our job is not to wish that students knew more or knew differently. Our job is to turn students’ knowledge and the diversity of knowledge we encounter into a curricular strength rather than an instructional inconvenience. We can do that only if we hold high expectations for all students, convey great respect for the knowledge and culture they bring to the classroom, and offer lots of support in helping them achieve those expectations (p. 272).

AUTHOR BIOGRAPHY

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