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Engagement and Motivation in Reading

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Within a given school at a given time, some students are intent on reading and writing to understand. They focus on text meaning and avoid distractions. These engaged readers exchange ideas and interpretations of text with peers. Their devotion to reading spans across time, transfers to a variety of genre, and culminates in valued learning outcomes. In contrast, disengaged readers are inactive and inert. They tend to avoid reading and minimize effort. Rarely do they enjoy reading during free time or become absorbed in literature. In this chapter, we discuss work on engaged reading and its consequences, with a particular focus on how children's motivation contributes to engagement. We also discuss how various instructional processes can facilitate reading engagement and motivation.

Researchers have referred to different aspects of engaged reading. In her work on literacy, Au (1997) referred to children's ownership as their sense of self-confidence and command of reading and writing. These are related to engagement. Oldfather and Dahl (1994) and Turner (1995) portrayed students' intrinsic motivation, referring to their enjoyment in reading for its own sake, which is essential to engaged reading. Likewise, Csikszentmihalyi (1991) described engaged reading as a state of total absorption or "flow." Quite often, researchers describe learners as "engaged" based on their on-task behavior, which is also relevant (Berliner & Biddle, 1995; Tobin, 1984).

The viewpoints just discussed focused on certain motivational aspects of engagement. Other authors provide more comprehensive views. Cambourne (1995) referred to engagement in literacy as a merger of multiple qualities. He argued that engagement entails holding a purpose, seeking to understand, believing in one's own capability, and taking responsibility for learning. Guthrie, McGough, Bennett, and Rice (1996) described engaged readers as motivated to read for a variety of personal goals, strategic in using multiple approaches to comprehend, knowledgeable in their construction of new understanding from text, and socially interactive in their approach to literacy.

Despite their wide range of terminology, these investigators concur that readers are decision makers whose affects as well as their language and cognition play a role in

their reading practices. A point of agreement among the diverse depictions of engaged reading is that the reader has wants and intentions that enable reading processes to occur. That is, a person reads a word or comprehends a text not only because she can do it, but because she is motivated to do it.

As Guthrie et al. (1996) noted, engaged reading is strategic and conceptual as well as motivated and intentional. The cognitive side of engagement emphasizes that effective readers are deliberately making choices within a context and selecting strategies for comprehending text content. For example, Almasi, McKeown, and Beck (1996) illustrated that engaged readers seek conceptual understanding. They question the author and each other in dialogue, collectively constructing a meaning that incorporates information from multiple perspectives of different readers. In these efforts to gain conceptual understanding, engaged readers are strategic. As Duffy et al. (1987) and Pressley, Schuder, Bergman, and El-Dinary (1992) found, readers decide when and how to apply their strategies conditionally (Paris, Wasik, & Turner, 1991). Such strategic reading results in conceptual understanding (Beck, McKeown, Worthy, Sandora, & Kucan, 1996) and advanced knowledge acquisition (Alexander, Jetton, & Kulikowich, 1996). This new knowledge may be used in more extended inquiry into broader literary themes (Harste, 1994) or science topics (Roth & Bowen, 1995). As Guthrie, Van Meter, Hancock, McCann, Anderson, and Alao (1998) suggested, "engagement in reading refers to the motivated use of strategies to gain conceptual knowledge during reading" (p. 261). In addition, within many classrooms, engaged readers are interacting with peers socially to construct meanings of literary works (Almasi, 1995) and participate in communities of discourse as a natural part of schooling (Gee & Green, 1998). Although the cognitive and social dimensions of engaged reading are distinguishable from the motivational dimension, engagement cannot occur without all three. We therefore propose that engaged readers in the classroom or elsewhere coordinate their strategies and knowledge (cognition) within a community of literacy (social) in order to fulfill their personal goals, desires, and intentions (motivation).

ENGAGED READING IS RELATED TO ACHIEVEMENT

Engaged reading is strongly associated with reading achievement. Students who read actively and frequently improve their comprehension of text as a consequence (Cipielewski & Stanovich, 1992). However, it is also likely that students who are capable of understanding a wide range of texts choose to read independently for their own enjoyment. This connection between engagement and achievement, measured as the ability to understand narrative and expository text, was shown in a national sample of students (Campbell, Voelkl, & Donahue, 1997). At all three ages studied (9, 13, and 17 years), the more highly engaged readers showed higher achievement than the less engaged readers. The cross age comparisons were remarkable. The 13-year-old students with higher reading engagement were higher in achievement than the 17-year-old students who were less reading engaged. In other words, middle school students who were engaged in reading achieved as highly as students who were less engaged in reading but had 4 more years of schooling. As students become engaged readers, they provide themselves with self-generated learning opportunities that are equivalent to several years of education.

Engagement in reading may substantially compensate for low family income and educational background. In the same national data, engaged readers from low income/education families were higher in achievement than less engaged readers from high income/education backgrounds. Of course, the highest achievement in text comprehension was found among students who were both more engaged and enjoyed a family background with economic and educational opportunity. Further, although girls exceed boys in overall reading achievement, boys who were more engaged in

reading had substantially higher text comprehension than girls who were less engaged readers (Guthrie & Schafer, 1998). In sum, engaged readers can overcome obstacles to achievement, and they become agents of their own reading growth.

The pattern of engagement and achievement in the previous paragraph is consistent with the Matthew effect, in which the high achievers improve more rapidly than low achievers over time in school (Stanovich, 1986). As relatively good readers tend to read more, they increase their competence, which increases their reading ability. We suggest that motivation mediates this Matthew effect. That is, increasing competence is motivating, and increasing motivation leads to more reading (Guthrie, Wigfield, Metsala, & Cox, 1999). Motivation is the link between frequent reading and reading achievement. This link sustains the upward (and downward) spiral of achievement (Guthrie, Wigfield et al., 1999). In this perspective, motivation is the foundational process for reading engagement and is a major contributor, when things go awry, to disengagement from reading. Consequently, the remainder of this chapter addresses motivation for reading.

MOTIVATION, RELATED CONSTRUCTS, AND HISTORICAL PERSPECTIVE

Current motivation theorists focus on individuals' goals, values, and beliefs (Deci & Ryan, 1992; Eccles, Wigfield, & Schiefele, 1998; Schunk & Zimmerman, 1997; Wigfield, 1997). Consistent with these theories, we suggest that reading motivation is the individual's personal goals, values, and beliefs with regard to the topics, processes, and outcomes of reading. Under this rubric, we include motivational goals, intrinsic motivation, extrinsic motivation, self-efficacy, and social motivation, which we discuss more fully later. These aspects of motivation are distinct from several affective and belief attributes of students studied by reading researchers. First, motivation is distinct from attitude (McKenna, Kear, & Ellsworth, 1995), which refers to liking for a task. For instance, students may report high self-efficacy without liking to read, as witnessed by students who reported that they are good at doing it, but do not like to read (Oldfather & McLaughlin, 1993). Motivation is also distinct from interest. In the research literature, interest is usually associated with a topic, such as outer space, dinosaurs, or Civil War history (Alexander et al., 1996; Schiefele, 1996; Schraw, 1997). In comparison, motivational attributes are more general. The intrinsically motivated reader is disposed to read a wide range of topics and genres. Third, readers' beliefs may also be distinguished from their motivation. Schraw and Bruning (1999) showed that readers with transactional beliefs expect that their construction of meaning is related to their own knowledge, interests, and experiences as well as the information in a text. Although these beliefs are correlated with intrinsic motivation (e.g., learning goals), these beliefs are distinct from the motivations themselves (Schraw & Bruning, 1999). Thus, the motivation constructs we are discussing can be distinguished from other affectively oriented constructs in the reading literature.

From a historical perspective, our framework on reading motivation can be related to Deweyan principles of inquiry. Dewey's emphasis on active inquiry is highly compatible with our engagement orientation (see Mosenthal, 1999). In Dewey's view the learner is problem centered, being guided and motivated by a question or interest of personal significance. Collective thinking about a given topic in history or science is provoked by doubt, which leads to new learning and reflection. Dewey assumed that authentic learning depended on intrinsic motivation, self-efficacy, and socially constructed meaning, although he did not use this language or collect any data to investigate his assumptions. William S. Gray (Gray & Monroe, 1929) investigated reading motivation more directly than Dewey. He explored the reading interests and purposes



of adult readers in many walks of life. Through extensive interviewing, he described a spectrum of reading purposes, concluding that the wider the range and the higher the intensity of these reading purposes, the more dedicated was the individual to societal causes and self-improvement.

Reading motivation has received some attention from current reading researchers. Wigfield and Asher (1984) contributed a chapter on motivation to the first edition of this Handbook. They reviewed research on theories of achievement motivation and the development of attitudes and interest in reading, and noted that these areas were disparate. They called for an integration of these research areas, so that models of reading motivation could be formulated. Athey (1985) and Matthewson (1991) presented theoretical frameworks for studying affective variables related to reading, and discussed how these variables have motivational properties. Until the 1990s, sustained research on reading motivation has been relatively rare. However, in 1992 the National Reading Research Center (NRRC) was funded partly to investigate engagement and motivation. Investigators attempted to build an initial bridge between reading as a language and cognitive endeavor and reading as a motivated act expressive of personal values and beliefs (Guthrie & Alvermann, 1999). We turn next to a review of research on reading motivation.

THE NATURE OF READING MOTIVATION

In discussing motivation we begin with the point that motivation is crucial for the activation of behavior, and then discuss current views on the multifaceted nature of motivation in general and reading motivation in particular. We then discuss how motivation guides cognitive activity, and consider how children's motivation changes across the school years.

Motivation as Activating

Motivation is crucial to engagement because motivation is what activates behavior. A less motivated reader spends less time reading, exerts lower cognitive effort, and is less dedicated to full comprehension than a more highly motivated reader. The ways in which theorists have conceptualized this activation have changed over the years, however. In early conceptualizations, motivation was characterized as a unidimensional quality of which more is better and less is worse for learning and performing school tasks (see Weiner, 1992). In this view, motivation is a temporary, task-specific source of energy for cognitive and language activity, including reading. However, in the past 30 years, researchers have discovered that motivation is multifaceted. In this view, all aspects of motivation are activating, but within an individual some aspects of motivation will be stronger than others.

Motivation as Multifaceted

To investigate a diverse array of motivations for reading, but not knowing which particular forms would emerge, we conducted interviews and focus groups with elementary school students (Guthrie, Van Meter et al., 1996). We drew on these interviews and on current motivation theory to form questionnaires assessing goals for reading, intrinsic motivation and extrinsic reading motivation, self-efficacy, and social motivation. Subsequent work showed that these aspects of motivation appeared in different age groups and populations (Baker & Wigfield, in press; Wigfield & Guthrie, 1997). We next define these aspects more fully.

Goals for reading concern the purposes individuals have for engaging in activities such as reading (Ames, 1992; Blumenfeld, 1992). In the motivation literature, researchers have focused primarily on two broad goal orientations individuals have for learning. Individuals with a learning goal orientation seek to improve their skills and accept new challenges in activities such as reading (Ames, 1992; Ames & Archer, 1988; Dweck & Leggett, 1988; Nicholls, 1979; Nicholls, Cheung, Lauer, & Patashnick, 1989). Some researchers use the phrase mastery orientation almost synonymously with learning goal orientation. Both phrases refer to student dedication to content understanding and learning flexible skills, not to a behaviorist mastery learning paradigm.

Individuals with a performance or ego orientation attempt to outperform others and maximize favorable evaluations of their ability (see Thorkildsen & Nicholls, 1998, for further discussion of these goal orientations, and Skaalvik, 1997, for discussion of two kinds of performance goal orientations). Each goal orientation has implications for motivation, and most motivation researchers believe that the learning goal orientation is more likely to foster long-term engagement and learning (see Ames, 1992; Maehr & Midgley, 1996). Thus, engaged readers likely will have a learning orientation toward reading, seeking to improve their knowledge and conceptual understanding as they read.

Intrinsic reading motivation refers to an individual's enjoyment of reading activities that are performed for their own sake (Deci, 1992) and pursued during free time (Morrow, 1996). Intrinsic motivation is also characterized by a disposition to perform the activities (Ryan, Connell, & Grolnick, 1992). Deci (1992) suggested that intrinsically motivated activity has an *experiential* component, which consists of excitement, interest, and enjoyment in participating in an activity. Further, intrinsic motivation has a *dispositional* component, which refers to the "desire to interact with those activities" (p. 49). Intrinsic motivation refers to the dual qualities of enjoyment or interest in performing an activity, such as reading, and the disposition or intention to participate in the activity when it is appropriate.

Wigfield and Guthrie (1997) distinguished different aspects of intrinsic motivation for reading, including curiosity, involvement, and preference for challenge. Curiosity is the child's participation in activities that fulfill a desire to learn and understand the world around them. Involvement refers to the child's enjoyment of immersion or absorption in a text. This is often referred to as "getting lost in a book." Preference for challenge is the desire to figure out complicated literature or understand complex ideas in text. These motivational facets are independent. A child may be relatively high on one (e.g., involvement) and low on another (e.g., preference for challenge), although these aspects of motivation often cluster together (Baker & Wigfield, in press; Wigfield & Guthrie, 1997).

Extrinsic motivation for reading is the desire to receive external recognition, rewards, or incentives (Deci, Vallerand, Pelletier, & Ryan, 1991). Incentive programs that provide pizza or school recognition for book reading rely on and probably strengthen extrinsic motivation. Extrinsic motivation is not simply the opposite of intrinsic motivation. In fact, they are moderately and positively correlated (Miller & Meece, 1997; Wigfield & Guthrie, 1997). Both predict children's reading amount and frequency. However, extrinsic motivation is usually associated with the use of surface strategies for reading and the desire to complete a task rather than to understand or enjoy a text or a task (Meece & Miller, 1999). Further, extrinsic motivation can produce self-terminating behavior. When children win the incentive (e.g., the pizza) their reading often ceases. Extrinsic incentives often lead students increasingly to become dependent on rewards and recognition to energize their reading (Barrett & Boggiano, 1988).

Self-efficacy is another aspect of motivation. Bandura (1986, 1997) defined self-efficacy as "people's judgments of their capabilities to organize and execute

courses of action required to attain designated types of performances" (1986, p. 391). Applying this concept to reading, Schunk and Rice (1993) showed that providing clear goals for reading tasks and feedback on progress toward success increased self-efficacy and strategies for text comprehension. Schunk and Zimmerman (1997) reviewed research showing that students with high self-efficacy see difficult reading tasks as challenging and work diligently to master them, using their cognitive strategies productively.

Social motivation for reading relates to children's interpersonal and community activities. Children who like to share books with peers (Morrow, 1996) and participate responsibly in a community of learners by completing needed tasks are likely to be intrinsically motivated readers (Wentzel & Wigfield, 1998). Social motivation leads to increased amount of reading (Guthrie, Schafer, Wang, & Afflerbach, 1995) and high achievement in reading (Wentzel, 1996).

Motivation Guides Cognition and Language Use

Students with high intrinsic motivation, a learning goal orientation, and high self-efficacy are relatively active readers and high achievers (Guthrie, Wigfield et al., 1999). Why should this be? It is likely that motivational processes are the foundation for coordinating cognitive goals and strategies in reading. For example, if a person is intrinsically motivated to read and believes she is a capable reader, the person will persist in reading difficult texts and exert effort in resolving conflicts and integrating text with prior knowledge. However, if a text is not fulfilling intrinsic motivational goals, such as involvement, the person will terminate or minimize the cognitive activity of reading that material. A learner with high involvement motivation will seek books known to provide that satisfaction. The cognitive abilities needed to find books, avoid distraction while reading, and assimilate new ideas are activated if the text is fulfilling goals of involvement. This is consistent with both a cognitive science of reading (Lorch & van den Broek, 1997) and a situated account of the acquisition of expertise (Greeno et al., 1998), as well as the development of intrinsic motivation (Deci, 1992). In sum, becoming an excellent, active reader involves attunement of motivational processes with cognitive and language processes in reading.

Reading Motivation Shifts Over Time

Researchers studying the development of children's motivation have found that motivation changes in important ways across the middle childhood and early adolescent years (see Eccles et al., 1998, for detailed discussion). In brief, children's competence beliefs, values, and intrinsic motivation for learning tend to decline across the elementary school years, although the pattern of this change varies some across different activity areas. Children's extrinsic motivation tends to increase, as does their focus on performance goals. Children's competence and efficacy beliefs become more closely tied to indicators of their performance. Although this brief summary portrays a pattern of change for the population, individual children may vary. Some show overall increases in their motivation, whereas others show overall declines (Harter, Whitesell, & Kowalski, 1992).

Changes in children's motivation have been explained in two main ways. One explanation focuses on children's increasing capacity to understand their own performance. Children become much more sophisticated at processing the evaluative feedback they receive. For some children this leads to a growing realization that they are not as capable as other children, thereby reducing their motivation. A second explanation focuses on how instructional practices may contribute to a decline in some children's motivation. Practices that focus on social comparison between children,

with too much competition between them, can lead to declines in competence beliefs, learning goals, and intrinsic motivation. Simultaneously, these practices tend to increase extrinsic motivation and performance goals (see Eccles et al., 1998; Wigfield, Eccles, & Pintrich, 1996). Instructional practices facilitating self-efficacy, intrinsic motivation, and learning goals are discussed later.

Do the declines in general motivation occur for reading motivation? Several researchers have observed decreases in different aspects of motivation for reading. Wigfield et al. (1997) reported that children's competence beliefs and interest in reading declined across the elementary school years, they also found that the decline in reading interest was greatest across Grades 1 to 4. Meece and Miller (1999) found decreases in learning goals and increases in performance goals for reading and writing in Grades 3–5. In a national study of how much elementary school-aged children liked recreational and school reading, McKenna et al. (1995) found that children's liking of both kinds of reading was higher among younger than older children.

Further declines in interest and competence beliefs regarding reading occur in children's transition to junior high school (Wigfield, Eccles, MacIver, Reuman, & Midgley, 1991). Oldfather and colleagues (Oldfather & Dahl, 1994; Oldfather & McLaughlin, 1993) found that students' intrinsic motivation to read declined as they went into junior high school. They attributed the change in motivation to changes in classroom conditions. Children in their study moved from a self-contained, responsive classroom that honored students' voices and had no grades, to a teacher-centered environment in which students had fewer opportunities for self-expression and little opportunity for negotiating with teachers about their learning.

Other researchers have found fewer age differences in reading motivation. Gottfried (1990) did not find age differences in 7- to 9-year-old children's intrinsic motivation for reading. Wigfield and Guthrie (1997) and Baker and Wigfield (in press) found relatively few differences in the different aspects of children's reading motivation for fourth-through sixth-grade students. The somewhat conflicting results may be due to the different ages of children in these studies. The largest decreases in intrinsic reading motivation seem to occur at two points: during the early to middle elementary school years, and then into middle or junior high school. Observed differences also may be tied to differences in instructional practices in reading. Some instructional practices foster motivation and others do not; we discuss this issue next.

INSTRUCTIONAL PROCESSES INFLUENCE READING MOTIVATION

Instructional processes and context surround the engagement processes and reading outcomes. We depict these processes in a circle at the outside of Fig. 24.1. These instructional processes have been shown through empirical and theoretical arguments to impact engagement processes and learning outcomes (see Guthrie & Alao, 1997; Guthrie, Cox, Anderson, Harris, Mazonni, & Rach, 1998). They include learning and knowledge goals, real-world interactions, autonomy support, interesting texts, strategy instruction, praise and rewards, evaluation, teacher involvement, and coherence of instructional processes.

Learning and Knowledge Goals

These goals refer to core learning goals that are co-developed by the teacher and the students in conjunction with external requirements from the school. These goals are tied to the learning and performance goal orientations discussed earlier. Roeser, Midgley, and Urdan (1996) showed that teachers' learning-goal orientation in the

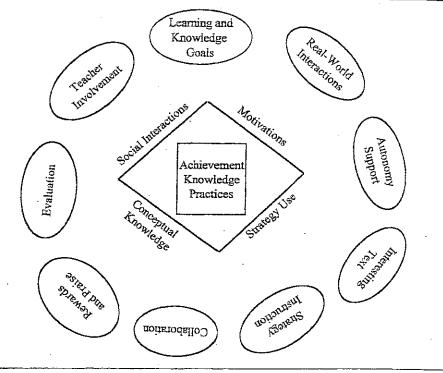


FIG. 24.1. Engagement model of reading development.

classroom contributed to their students' self-efficacy. When students believed that teachers thought that understanding the work was more important than just getting right answers, students were likely to believe in their capacity to do the hardest work. Students who were learning-goal oriented (e.g., dedicated to understanding content, using strategies effectively, and linking their new knowledge to previous experiences) were likely to be more highly engaged than other students. In contrast, when students' goals are dominated by the performance orientation of seeking to outperform others or demonstrate their competence or a procedural emphasis (e.g., completing a complex series of steps correctly (Meece, Blumenfeld, & Hoyle, 1988), they will be less engaged in learning.

Real-World Interactions

These interactions refer to connections between the academic curriculum and the personal experiences of the learners. Real-world interactions are enjoyable, immediately interesting activities that can provide motivation for reading and learning from text (Brophy, 1998; Csikszentmihalyi, 1991). If students are learning from text as they role-play in an historical drama, they are demonstrating that this merger can occur. An intrinsically motivating activity can induce reading, and reading can be optimized in an intrinsically motivating scenario. Zahorik (1996) found that both elementary and secondary teachers frequently reported that they attempt to motivate students with "hands-on" activities, such as using manipulatives in mathematics, participating in simulations and drama, or growing seedlings in science. Confirming and extending this line of inquiry, Hootstein (1995) interviewed eighth-grade teachers about the strategies they use to motivate students to learn U.S. history. Teachers emphasized the following: (a) having students role play historical text characters, (b) organizing projects that result in the creation of products, (c) relating history to current events or to stu-

dents' lives, (d) showing historical videos and films, and (e) providing small-scale, hands-on experiences such as inspecting historical artifacts. All these activities were perceived by the teachers as immediately enjoyable to learners and could be used to initiate historical understanding. Teachers believe that reading motivation can be increased when texts and books are connected to stimulating activities (Nolen & Nichols, 1994), related to learning events (Guthrie, Alao, & Rinehart, 1997), or connected to personally significant projects (McCombs & Whistler, 1997). Teachers who report using variety, diversity, and high-interest tasks are providing intrinsically motivating, learning activities (Pressley, Rankin, & Yokoi, 1996; Stipek, 1996).

Real-world experiences are intrinsically motivating. They are designed to, and usually do, evoke keen attention and a sense of wonder. For example, when elementary students see a native North American in original dress in a social studies unit or observe a monarch butterfly hatch in a life science activity, they are excited and brimming with questions. Ross (1988) confirmed these effects in an extensive meta-analysis of literature. He found that "hands-on" science activities aroused attention, questions, and active learning. Guthrie, Van Meter et al. (1998) found that reading instruction embedded within an intrinsically motivating, "hands-on" science curriculum increased reading comprehension, strategy use, and problem solving in Grade 3 and 5 students. Confirming this, Romance and Vitale (1992) reported the results of an integrated curriculum that combined reading and "hands-on" activities in science. In a quasi-experimental comparison, students in the integrated curriculum scored higher on measures of reading achievement and science knowledge than students in a traditional form of instruction. To explain these effects, Anderson (1998) reasoned that hands-on science activities would motivate students to read deeply and thus increase their conceptual learning from text. She found that students who read texts in association with hands-on activities (live crabs and turtles in the classroom) had higher comprehension and conceptual knowledge gain than students who read the same texts without the intrinsically motivating context. Further, a year-long intervention study showed that reading engagement initially learned with intrinsically motivating activities in one knowledge domain transferred flexibly to a new knowledge domain (Guthrie, Anderson, Alao, & Rinehart, 1999).

Autonomy Support

Autonomy support is the teacher's guidance in making choices among meaningful alternatives relevant to the knowledge and learning goals. Studies confirm the conventional wisdom that choice is motivating. Providing choices is a prominent practice among reading teachers (Baumann, Hoffman, Moon, & Duffy-Hexter, 1998). Researchers studying elementary school teachers' beliefs about motivation in general (Nolen & Nichols, 1994) and reading specifically (Sweet, Guthrie, & Ng, 1998) have found that teachers believe that children need choice to develop independence. Turner (1995) found that teachers who develop reputations as highly motivating often provide a myriad of choices during a lesson. Teachers often promote student choice by giving them input into which books will be read, whether students will participate in reading aloud or silently, and what sequence of activities will be undertaken (Pressley et al., 1996). Choice is motivating because it affords student control. Children seek to be in command of their environment, rather than being manipulated by powerful others. This need for self-direction can be met in reading instruction through well-designed choices.

Evidence for the benefits of autonomy support on intrinsic motivation has been shown in many investigations (Cordova & Lepper, 1996; Deci et al., 1991). For example, Deci, Schwartz, Sheinman, and Ryan (1981) reported that teachers who enabled students to make choices about their learning and participation in instructional deci-

sions created a classroom environment in which students were intrinsically motivated to learn the content and contributed actively to classroom activities. Specific to reading, Grolnick and Ryan (1987) showed that an autonomy-supportive context increased motivation and comprehension in reading. Students who read social studies texts to answer their own personally formulated questions showed higher comprehension than groups of students who were instructed to memorize the content or to read without direction. Legitimating the students' questions as purposes for reading increased student control and autonomy in the text reading situation. A recent study with college students in which limited text choice is provided in a single task showed no effects of choice on cognitive engagement (Schraw, Flowerday, & Reisetter, 1998). It is likely that increased engagement requires a sustained experience of autonomy support over a series of many activities and extended time.

Autonomy support and student motivation appear to be reciprocal. As students perceive that teachers respect them enough to provide genuine choices, students increase their effort and commitment to learning. When teachers see that students are taking responsibility for their learning, initiating productive reading activities, and gaining self-confidence, teachers reward students with increased responsibility and opportunity for self-directed learning. This synergism evolves during the course of the year (Skinner & Belmont, 1993). Occasionally, conflicts occur between the motivational orientation of some students and the classroom motivational emphasis. For example, extrinsically motivated students are not initially comfortable in a classroom in which learning goal orientation is dominant. These students need teacher support for becoming self-directed learners (Lehtinen, Vauras, Salonen, Olkinuora, & Kinnunen, 1995). In other words, the flow of motivational influence is from student to teacher as well as from teacher to student (Skinner & Belmont, 1993).

Teachers' beliefs about effective strategies for motivating students are remarkably consistent with self-determination theory of motivational development (Deci & Ryan, 1992). Self-determination theory describes the development of intrinsic motivation in terms of environmental support for the individual's needs for autonomy, relatedness, and competence (Deci & Ryan, 1985). Need for autonomy is met through support for self-directed learning. Need for relatedness is addressed in collaborative classroom activities. Need for self-perceived competence is partially fulfilled in evaluation that supports progress toward goals and reward for effort in learning. When these needs are fulfilled, students become intrinsically motivated and gain cognitive expertise in reading. Consistent with this framework, teachers provide choice (autonomy support), social interaction (relatedness support), and activity connections (competence support) to students who they think need motivational development. Simultaneously, teachers often permit intrinsically motivated students to direct their own reading and learning (Sweet et al., 1998).

Interesting Texts for Instruction

Many teachers, parents, and administrators expect that students are motivated by interesting texts. The logic is that students will devote effort, attention, and persistence to reading about topics that they find enjoyable or intriguing. Here the phrase interesting iexts refers to single-authored works in which the text matches the topic interest and cognitive competency of the reader. If a book is personally significant and easy to comprehend, it is likely to be rated as interesting (Schraw, Bruning, & Svoboda, 1995). One benefit is that students spend more time reading personally interesting texts than uninteresting texts (McLoyd, 1979). Another benefit is that students learn relatively more content from interesting texts even after accounting for their relatively high prior knowledge for the content of these texts (Schiefele, 1996). Providing an abundance of high-interest texts in the classroom enables teachers to adapt their reading instruction

to the preexisting motivations of students. Such adaptation may explain the relatively high association between the size of a classroom library and student reading achievement, which has been documented across multiple nations (Elley, 1992).

Providing interesting texts for instruction can adapt the instructional materials to students' preexisting preferences for content or genre, although administrative forces often oppose it (Allington & Guice, 1997). Once given interesting texts, students need ample time to read (Morrow, 1996). A profusion of trade books in a classroom has little benefit on motivation or achievement unless it is accompanied by sufficient time designated for text interaction (Elley, 1992). Using interesting texts, furthermore, is compatible with focused instruction on word recognition and word fluency development (Cunningham & Stanovich, 1997), provided the texts are matched to student reading level. Although the number of interesting books in classrooms often is not very substantial, students in book-rich classrooms fare well. Au and Asam (1996) reported that student ownership of literacy, which is closely linked to intrinsic motivation or reading, was increased in the KEEP program, in which a diversity of books was provided. In her integrated reading and writing program, Morrow (1992) found that students who read interesting texts in a physically appealing classroom corner increased their frequency and time spent reading in free-time activities.

Strategy Instruction

Strategy instruction consists of teachers' direct instruction, scaffolding, and guided practice in learning from text. Development of intrinsic motivation is strongly dependnt on students' competence (Deci et al., 1991). If students are able to complete the reading tasks in their classroom, and are aware of their abilities and limitations, they will be more motivated than if they are less capable or less aware (J. Harter, 1982; S. Harter, 1981). Consequently, strategy instruction in reading, in forms that are either direct or implicit, is likely to be empowering and motivating. Strategies for reading and writing are difficult to learn and use. Many investigators report that strategies require long-term teaching (Gaskins & Elliot, 1991), and once learned, strategies may not be frequently used (Brown, 1992). Consequently, students must be intentional (Bereiter & Scardamalia, 1989), wanting to learn the content for which the strategies will be useful. In reading, intrinsic motivations are vital to strategy learning. Guthrie, Van Meter, et al. (1996) found that all students (100%) who increased in intrinsic motivation during a year increased in reading strategy use. However, only 50% of the students who were stable or declined in intrinsic motivation increased in reading strategy use. Possession of strategies and the motivation for using them are likely to be mutually enhancing.

Strategies that are likely to increase self-efficacy in elementary and middle school students include using prior knowledge (Anderson & Pearson, 1984), searching for information (Guthrie, McGough et al., 1996), comprehending informational text (Dole, Duffy, Roehler & Pearson, 1991), interpreting literary text (Graesser, Singer, & Trabasso, 1994), and self-monitoring (Baker & Brown, 1984; Zimmerman, 1989). Coaching students in these strategies may include appraising students' strategy knowledge level, and providing modeling, small group discussion, peer modeling, and individual feedback on progress. Initial evidence suggests that such reading strategy instruction increases reading self-efficacy (Schunk & Zimmerman, 1997).

Collaboration

Collaboration is the social discourse among students in a learning community that enles them to see perspectives and to socially construct knowledge from text. Many eachers use collaboration to activate and maintain intrinsic motivation. Teachers believe that social collaboration in the classroom will increase interest in the content of learning (Hootstein, 1995; Zahorik, 1996) and maintain active learning over an extended period of time (Nolen & Nichols, 1994). Teachers also believe that collaboration enables students to be disposed to read more independently in the future (Morrow, 1996).

Students' intrinsic motivation for reading and learning is closely connected to their feeling of social support in the classroom. When students have a caring teacher and a sense of belonging in the classroom (Wentzel, 1997), they are likely to be motivated for reading. Among students from sixth to eighth grade, intrinsic reading motivation and reading self-efficacy were highly correlated with students' adoption of prosocial goals. Prosocial students volunteer to help classmates who need assistance and are responsible in fulfilling social norms in their teams or classrooms (Wentzel, 1996). These findings are consistent with qualitative inquiries. Oldfather and Dahl (1994) showed that students who felt that they were recognized, accepted, and affirmed as individuals in the classroom social structure were motivated to read, write, and express themselves forthrightly. Despite these highly provocative patterns of association for motivation and perceived social support, intervention studies comparing more and less socially supportive contexts that permit an inference of causality for the effects of collaboration on motivation are relatively rare. This is an important area for research.

Praise and Rewards

Perhaps the most pervasive strategy for encouraging effort and attention is providing praise and rewards. Effective teachers can be seen to provide informative compliments that make learners feel a sense of accomplishment and pride in work. Brophy (1981) reviewed the literature on the effects of praise. Effective praise is given contingently on effort and achievement, specifies the particulars of the accomplishment, shows spontaneity, orients students toward better appreciation of their own work, attributes success to effort, and fosters appreciation of task relevant strategies. Włodkowski (1985) suggested that praise should be "3S–3P" which stands for praise that is sincere, specific, sufficient, and properly given for praiseworthy success in the manner preferred by the learner.

Teachers' attempts at effective praise are not always successful. If students interpret praise to be manipulative, their motivation may decline because they feel they are being treated as objects (Flink, Boggiano, Main, Barrett, & Katz, 1992). However, when praise is sincerely given and interpreted as recognition of achievement, it can increase students' self-perceived competence and motivation. Beginning teachers are especially inclined to emphasize praise and punishment as their primary motivational strategies. Newby (1991) found that first-year teachers used praise and punishment more than 75% of the time as their motivational strategy. Considerable experience and professional development are needed to learn to merge other principles of motivational support with reward and praise.

Abundant evidence supports the proposition that giving rewards and positive incentives for book reading increases the time and effort in book reading activities. Further, reading incentive programs are quite common in elementary schools (Gambrell & Marniak, 1997). As young children (K–2) acquire competence in reading, they experience an increase in self-efficacy for reading (Chapman & Tunmer, 1997; Gaa, 1973), that spurs future achievement. Teachers of primary students can foster self-efficacy by helping students set goals, see their progress, and become aware of their growing competence (Baker, in press).

Giving rewards, such as praise, points in a contest, gold stars, or self-selected books, is relatively simple. Should not this solve the problem of reading motivation? Unfortunately not, because rewards and incentives have a paradoxical effect. Rewards can increase short-term attention on specific activities, but students who experience an

environment in which extrinsic rewards are dominant will become increasingly extrinsically motivated and focused on performance goals (Flink et al., 1992). Such students become more committed to high grades, correct answers, and task completion (Anderman & Young, 1994), and less dedicated to comprehending content, gaining valuable reading skills, or enjoying reading and learning content (Maehr & Midgley, 1996).

There are several consequences of a strong extrinsic orientation and focus on performance goals. Students with performance goals frequently rely on memorizing, guessing, and other surface learning strategies for reading. They attempt to avoid challenging tasks and give up easily when frustrated. These students are not cognitively engaged in reading and frequently adopt work-avoidant goals, attempting to meet their performance goals with minimal effort (Meece & Holt, 1993). Thus, these patterns of motivation activate behavior that do not promote long-term engagement, and ultimately can undermine the life of a literate, learning community.

Evaluation

Classroom instruction that fosters motivation, strategic development, knowledge gains, and social growth can be undermined by evaluation that contradicts these instructional purposes. Evaluation activities can be placed on a continuum from (a) highly objective and standardized (examples are standardized tests), to (b) highly student-centered and personalized (such as portfolios). Those toward the standardized end are easy to administer, score, and report to administrators, but they fail to reflect student ownership, motivation, and reading practices. Those toward the personalized end of the continuum will more readily support student motivation, but are more difficult to administer and report. A combination is likely to be optimal for the administrative school needs and the educational needs of students, although there is precious little research evidence available to document this sensible approach.

Several classroom characteristics are necessary for student-centered evaluation. Teachers must provide ample time for students to think, plan, write, and revise (Oldfather & McLaughlin, 1993). Writing activities that invite a wide range of alternative genres and topics are more motivating than activities that are highly defined and constrained (Turner, 1995), but they are more time-consuming. However, if students are empowered to be self-expressive, they will develop the view that all knowledge is contextual, experience themselves as creators of knowledge, and value both subjective and objective strategies for knowing (Belenky, Clinchy, Goldberger, & Tarule, 1986; McCombs & Whistler, 1997).

Teachers who are known to be able to spark and sustain their students' attention and interest in reading often report that they evaluate effort and progress rather than absolute skill or comparative advantage (Stipek, 1996). These teachers encourage students to believe that effort will yield success and enjoyment (Nolen & Nichols, 1994). The use of classroom portfolios (Au & Asam, 1996) or project-based exhibits from extended projects (Afflerbach, 1996) provides a structure and materials base for evaluating students via their progress in a meaningful activity. Such evaluation provides feedback on progress, which increases self-efficacy (Schunk & Zimmerman, 1997) and affords students opportunities for establishing a belief in their own competence, which is necessary for intrinsic motivation (Deci et al., 1991).

Teacher Involvement

This represents the teacher's knowledge of individual learners, caring about their progress, and pedagogical understanding of how to foster their active participation. Ellen Skinner and her colleagues investigated the roles of teacher involvement on en-

gagement (Skinner, Wellborn, & Connell, 1990). The involved teacher knows about the students' personal interests, cares about each student's learning, and holds realistic but positive goals for their effort and learning. Skinner and Belmont (1993) found that when students perceived teachers to be involved (i.e., interested in their progress) and autonomy supportive (i.e., providing students some control of learning), students were engaged in the classroom (e.g., participating in class discussions, actively learning, and appearing happy). Highly engaged students were relatively high achievers as indicated by school grades and achievement test scores across all school subjects, including reading, math, and science. Noteworthy was the finding that teacher involvement did not directly influence outcomes, but involvement had a significant benefit on engagement, which then appeared to lead to positive student outcomes. Skinner and Belmont (1993) showed in addition that the influences were reciprocal. Student engagement impacted teacher involvement as much as teacher involvement influenced student engagement.

Coherence of Instructional Processes

We have discussed each of the instructional processes in isolation. There can be important connections across them, and we use the term *coherence* to refer to these interconnections. For example, when real-world interactions are closely aligned with interesting texts, coherence is increased. When students' engagement in reading is being enhanced by coordination among instructional processes, coherence in the classroom is occurring at a high level. When strategy instruction is linked to central knowledge goals, collaboration is forged with autonomy support, and teacher involvement is evident in evaluation, then coherence among the instructional processes is present (see Guthrie & Cox, 1998, for teaching guidelines). In addition to fusing the pedagogical approaches, coherent instruction links reading, writing, and rich knowledge domains. In coherent instruction, student engagement is increased (Guthrie, Van Meter, et al., 1998), conceptual learning from text is facilitated (Anderson, 1998), reading achievement is fostered (Romance & Vitale, 1992), and reading within content areas can be sustained (Gaskins et al., 1994; Santa, 1997). However, full investigations of the complex interactions among these instructional practices have been rare.

HOW READING ENGAGEMENT MEDIATES THE EFFECTS OF CLASSROOM CONTEXT ON STUDENT OUTCOMES

We have reviewed here research showing that characteristics of the classroom influence reading engagement and motivation. We also reviewed work showing that student engagement yields positive reading achievement outcomes and desirable reading practices, such as electing to read frequently and sharing books in a literate community. Ellen Skinner and her colleagues (Deci et al., 1991; Skinner et al., 1990) initially proposed this link between engagement and outcomes. Their model, which also examined context effects, had a profound impact on subsequent thinking and research. In the mid 1990s, several investigators synthesized research and proposed related models in which effects of classroom context on students outcomes are mediated by engagement (Pintrich, Marx, & Boyle, 1993; Pintrich & Schrauben, 1992). That is, classroom context does not directly affect student outcomes. Rather, the effects of the classroom context depend on the level of student engagement. This mediated engagement model offers a useful heuristic for understanding the relationships of context, engagement, and outcomes in reading.

Our conceptualization of the mediated engagement model specific to reading is graphically presented in Fig. 24.1. In this model we include the different constructs and



instructional processes contained in the research and theory reviewed in this chapter. At the center of the figure is a diamond referring to engagement processes of the reader. One facet of the diamond represents motivation, which includes the multifaceted aspects of motivation we have discussed: goals, intrinsic and extrinsic motivation, self-efficacy, and social motivation. These motivational aspects of the reader propel students to choose to read and use cognitive strategies to comprehend. The strategy facet of the diamond refers to students' multiple cognitive processes of comprehending, self-monitoring, and constructing their understanding and beliefs during reading. The conceptual knowledge facet of the diamond refers to the research base showing that reading is knowledge-driven. That reading is a social endeavor is represented by the social interaction facet of the diamond. This includes collaborative practices in a community and the social goals of helping other students or cooperating with a teacher.

At the center of the figure is a square containing achievement, knowledge, and reading practices. Achievement may be represented by standardized test scores, teacher assigned grades, or performance assessments of literacy. Knowledge acquisition may be indicated through portfolios or standardized measurements. Reading practices may be reflected in amount of independent reading, composite indicators of engagement in reading, or beliefs and preferences about reading. Although we believe that engagement in reading increases the occurrence of reading outcomes (e.g., achievement, knowledge, and practices), we also expect that the relationships are reciprocal.

Desired outcomes of teaching, such as text comprehension ability, knowledge acquisition from text, and sustainable reading practices, do not result automatically in response to instruction. These outcomes rely on engagement as a mediating process. When engagement is sustained, outcomes will be positive. Instructional processes as presented in the previous section, then, impact outcomes indirectly by building and sustaining engagement in reading. Engagement in this depiction is a *mediator* for instructional processes. Engagement is the avenue through which instruction impacts outcomes. Students grow in achievement, knowledge, and practices as a result of their increasing engagement. And students' growing engagement flows from their continual experience of the instructional processes presented here. Engaged reading and learning take time. They do not immediately arise in a limited task or situation. Sustained experience and perception of motivation-enhancing contexts are necessary for reader engagement.

NOW AND FUTURE RESEARCH

At least four major aspects of reading engagement and motivation call for deeper inquiry. First, we need richer characterizations of engaged and motivated readers. Extended interviews, observational studies, or longitudinal case studies would complement the existing literature. These studies are especially needed in young readers from age 3 to 8 years. Second, we need contextualized observations or measures that would be most responsive to classroom, environmental, or interpersonal events, although such contextualization may have the cost of being less predictive of engagement in different settings or future times. Third, we need empirical investigations of the emerging reading engagement model shown in Fig. 24.1. We expect that every individual link in the outer ring in Fig. 24.1 could have an interactive relationship with each other link. Measuring each of the constructs shown in Fig. 24.1 and then modeling their relationships using structural equation modeling would be one promising approach. Fourth, we should use multiple methodologies to understand and portray schools that are winning the battle against disengagement from reading. The complexities of a school-wide inquiry into reading engagement call for qualitative methods such as case studies with interviewing, observing, and

videotaping. We recommend coordinating qualitative approaches with quantitative studies that examine the relations among multiple variables with such statistical techniques as structural equation modeling, or hierarchical linear modeling. To portray school effects fully, statistical methods can complement the rich descriptions that flow from qualitative inquiries.

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