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MOTIVATING STRUGGLING READERS IN MIDDLE SCHOOL THROUGH AN ENGAGEMENT MODEL OF CLASSROOM PRACTICE

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Many struggling readers in middle school are disengaged from reading. In addition to low achievement, these students can have low motivation for reading. Many factors contribute to disengagement in middle school. Reading instruction is often disconnected from content, making reading tedious. Textbooks are formidable, and students are expected to respond to text with formal criticism or outlining rather than personal reactions. Middle school often shows an increase teacher control and a curtailment of student freedom, as compared to elementary school. Finally, students are too often removed from the social support of teachers and are expected to compete rather than cooperate with each other in reading. To provide support for engaged reading, middle school teachers can use six classroom practices: they can (1) construct rich knowledge goals as the basis of reading instruction, (2) use real-world interactions to connect reading to student experiences, (3) afford students an abundance of interesting books and materials, (4) provide some choice among material to read, (5) give direct instruction for important reading strategies, and (6) encourage collaboration in many aspects of learning. Using these practices creates a context for engagement in literacy learning.

This article is addressed to teachers who aspire to help struggling readers in the middle school. We first address the question, "Who are the struggling readers?" It is well known that the definition of a problem will influence the nature and quality of our solution to a problem. We discuss the motivational and other aspects of struggling readers. Second, we discuss classroom practices that are barriers to struggling readers in many middle schools. Third, we present motivation theory as a basis of our proposed engagement model of classroom practice. Finally, we propose six aspects of teaching and classroom context that represent our model of engagement in literacy for teachers.

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STRUGGLING READERS: MEANINGS AND MISCONCEPTIONS

Traditionally, the struggling reader has been viewed as a low achiever. This student is seen as lacking cognitive competencies, which may include reading comprehension, study skills, word recognition, and reading fluency. Indeed, these cognitive characteristics have been the defining attributes of the struggling reader (e.g., Vacca & Vacca, 1999). However, we believe that the notion of the struggling reader must be expanded to recognize that this individual is disengaged from literacy (Moje, Young, Readence, & Moore, 2000).

Struggling readers tend to be notably unmotivated. They are especially likely to have low confidence in their reading, which is termed *self-efficacy* in the research literature (Wigfield, Eccles, & Rodriguez, 1998). These students are likely to lack confidence in their ability to read or even to improve their reading skill. In addition to a lack of belief in their reading capability, struggling readers in middle school are more likely to be extrinsically motivated than intrinsically motivated. These students report that their incentive for reading consists of grades and meeting teachers' requirements. They are unlikely to read for their own enjoyment, seek satisfaction of their curiosity through books, or enjoy the challenge of a complex plot or intricate knowledge in books.

Struggling middle school students are also likely to demonstrate self-handicapping strategies. These struggling students often procrastinate and deliberately avoid putting forth effort by not studying. By avoiding academic tasks, they can protect their self-image: if they achieve poorly, they can attribute their low grades to a lack of effort or time spent with their friends outside of school rather than their lack of intelligence, intellectual ability, or worth as individuals (Midgley & Urdan, 1995). These self-handicappers are concerned about how they are viewed by others, but they do not try to change their status through increasing their literacy skill related to school tasks.

Many middle school students who are low achievers in reading feel socially marginalized (Anderman, 1999). Lower achievers in middle school are likely to feel disrespected and uncomfortable in school, and they do not enjoy a sense of belonging. These struggling students are less eager to form positive relationships in school and are less concerned with close friendships and peer acceptance than higher achieving students (Anderman, 1999). All of these qualities of struggling readers point to disengagement.

In addition to lower cognitive competence, struggling readers are lower in intrinsic motivation and self-efficacy for reading. Feeling socially marginalized, they tend to not seek peer relationships in school. As several investigators have shown (see Guthrie & Wigfield, 2000, for a review), these qualities of cognitive competence, motivation, and social interaction are dynamically interrelated. This mixture of qualities is referred to as *engagement*; students who are low in these qualities are disengaged from literacy. Our definition of struggling readers is those who are disengaged from reading activities that are related to schooling.

Engagement in reading and engagement in other subjects, such as mathematics, may be different. For example, middle school students may be motivated in a subject, such as mathematics or social studies, but not in English (Wolters & Pintrich, 1998). Further, a student may be engaged in doing labs in science, but not reading about science. In other words, engagements in the academic subjects in middle school are relatively independent. This implies that disengagement from reading cannot be explained as an aversion to school in general or generalized as a "poor attitude."

MOTIVATION FOR SCHOOL READING

There is a widely reported trend that middle school students are less intrinsically motivated for reading than elementary students. Early documentation of this trend was provided by Gottfried (1985), who showed that as students moved from Grade 4 to Grade 7, their intrinsic motivation for reading declined. In this study, intrinsic reading motivation referred to students reading out of curiosity and to pursue their interests, expressing a preference for challenging texts that help them think and learn, and demonstrating a disposition to read independently for understanding, as well as for completing assignments and fulfilling teachers' expectations. It is noteworthy that while intrinsic motivation for reading decreased significantly, intrinsic motivation for social studies increased significantly with advancing grade levels from four to seven.

At the same time that intrinsic motivation decreases as students make the transition from elementary to middle school, extrinsic motivation for reading increases. In middle school, students are more oriented to grades, competition, and their own competence than elementary students. These processes are stronger for lower achievers. That is, students who are struggling lose their intrinsic motivation for reading more rapidly than students who believe they are competent readers (Harter, Whitesell, & Kowalski, 1992). Conversely, students who believe they are competent in school reading as they enter middle school are likely to show less of a decline in intrinsic motivation. Although all students lose some motivation as they enter middle school, competent readers maintain a balance of intrinsic and extrinsic motivation, whereas less competent readers show

a precipitous drop in intrinsic motivation and become oriented only to extrinsic factors such as grades and recognition.

To investigate the decline in reading motivation from elementary to middle school, we compared all Grade 3, 5, and 8 students in the state of Maryland. A student questionnaire was administered by teachers from the same schools but different classrooms of the students at the same time as the statewide assessment, under the auspices of the Maryland State Department of Education. Many of the items are presented in Table 1. Students reacted to statements such as "I like to read about social studies topics" by rating the statement as "A lot," "Sometimes," "Almost

TABLE 1 Students' Engaged Reading and Perceptions of Instruction Across Grades 3, 5, and 8

Clusters of Student Questionnaire Items	Grade 3	Grade 5	Grade 8
Engaged Reading			
l like to read social studies topics.	74.6	67.5	57.9
In social studies, we discuss topics that I like to go home and read about.	59.9 27.0 76.5	55.7 42.4 64.5	44.2 64.5 36.5
I think reading is boring.			
I enjoy spending time reading interesting things in math.			
My teacher helps me to appreciate the different ways that authors write.	75.3	73.7	63.7
We do projects where I have to read many different materials.	85.1	84.0	82.8
Autonomy Support			
My teacher wants me to express my own opinions about what I read in social studies.	84.5	81.0	75.5
My teacher encourages me to learn new things about science by reading books.	82.8	77.8	63.3
My teacher encourages me to read science books that are hard to understand.	35.1	32.9	28.7
My teacher lets me decide what science topics I should read and write about.	57.3	49.0	42.4
In my science work, my teacher lets me read what I'm interested in.	52.1	44.1	34.7
In math, my teacher thinks it's important for me to work on my own.	93.0	89.2	85.6
Reading Instruction in the Content Areas			
My teacher encourages me to find the main idea when I read about social studies topics.	86.2	84.5	73.5
My teacher wants me to ask myself questions when I read about social studies topics.	77.9	78.0	64.5

TABLE 1 (Continued)

Clusters of Student Questionnaire Items	Grade 3	Grade 5	Grade 8
I am taught how to write good sentences in social studies and to punctuate them correctly.	88.7	80.9	58.7
My teacher expects me to use what I already know to understand what I read about science topics.	89.1	88.6	94.2
In science, my teacher helps me to find the main idea and supporting detail in what I read.	80.0	75.6	61.4
My teacher teaches me how to plan and organize my writing for science reports.	77.2	78.5	68.4
In math, my teacher asks questions that make me want to read and learn.	80.2	73.3	46.9
My teacher tells me to re-read when I don't understand something in the math book.	90.2	89.8	79.3
Interesting texts			
My teacher teaches me how to write poems, letters, stories, and reports.	90.1	91.3	86.4
My teacher helps me to enjoy books, such as mysteries or adventures.	81.8	79.2	63.1
My teachers helps me to read poems, stories, and information from many different books.	76.5	73.8	64.2
My teacher asks me to read different kinds of material to do independent research about social studies topics.	88.3	83.3	76.5
My teacher helps me to appreciate the different ways that authors write.	75.3	73.7	63.7
We do projects where I have to read many different materials.	85.1	84.0	82.8

Note: Each percent is the sum of the percentages of students who responded "a lot" or "sometimes" to each question.

never," or "Never." In Grade 5, students were generally positive on all items (see Table 1). For example, a majority of fifth graders (56%) replied "A lot" or "Sometimes" to the statement "In social studies, we discuss topics that I like to go home and read about." However, in Grade 8, the majority of responses was negative. Only 44% agreed with the statement. Further, only 27% of third graders agreed with the statement "I think reading is boring," whereas 65% of Grade 8 students agreed with it. It is evident that the middle school students were much more disengaged from reading than elementary students. We agree with Wixson and Lipson (1991) that students' reading difficulties are motivational as well as cognitive. This view is consistent with the engagement perspective on middle school reading.

CONTEXT SENSITIVITY OF MIDDLE SCHOOL READERS

There are many differences between middle schools and elementary schools. In a review of these differences, Eccles et al. (1993) noted multiple contrasts. As they observed,

middle schools are typically larger, less personal, and more formal than elementary schools. Middle grade teachers are often subject-matter specialists and typically instruct a much larger number of students than do elementary teachers in self-contained classrooms, making it less likely that they will come to know students well, to believe students are trustworthy, and to grant them autonomy. Indeed, middle grade teachers may believe it is difficult to affect the achievement of a large number of students, especially since they see them for a relatively small proportion of the school day, making it difficult to sustain feelings of efficacy....Middle grade school classrooms, as compared to elementary school classrooms, are characterized by greater emphasis on teacher control and discipline; a less personal and positive teacher/student relationship; and few opportunities for student decision making, choice, and selfmanagement. Second, a shift to traditional middle grade schools is associated with an increase in practices such as whole class task organization and public evaluation of the correctness of work. There are also increases in betweenclassroom ability grouping.... In traditional middle grade schools, teachers often believe it is time to get serious about instruction and performance evaluation. (pp. 558–559)

In addition to these differences between elementary and middle schools, motivation theorists have emphasized task goals versus performance goals in the classroom (Wigfield, Eccles, & Rodriguez, 1998). Teachers who emphasize task goals place a high premium on students' understanding and learning. These teachers encourage students to make mistakes, as long as they are learning, and to take risks in order to understand more deeply. When students perceive that teachers are emphasizing involvement in learning tasks and understanding the content, the students adopt this task orientation. They acquire a disposition to gain command of the content and expertise in the skills of the subject taught by that teacher. This task orientation increases students' sense of academic self-efficacy. In other words, students who acquire personal task goals and become interested in learning new things gain confidence in their ability to succeed and learn.

In contrast, other teachers emphasize performance goals, such as test scores, grades, and comparisons between students. Students who perceive that performance goals are prevalent and important to the teacher react by adopting performance goals. These students attempt to show the teacher that they are smarter than other students, try to out-perform classmates on tests, and worry about lack of success in grades. At the same time, these

students are fearful of making mistakes, nervous about performing in front of others, and easily embarrassed in their attempts to read (Roeser, Midgley, & Urdan, 1996). These findings are confirmed by the demonstration that students who move into a middle school that is emphasizing task involvement and understanding are likely to maintain their intrinsic motivation for learning developed in elementary school, whereas students who move into a performance-focused school show negative shifts in motivation (Anderman, Maehr, & Midgley, 1999). The general trend of decreasing motivation can be slightly reversed with strong learning goals in middle school.

It should be noted that all students in all classrooms do not necessarily decline in motivation. Intrinsic motivation for learning declines primarily as a function of the classroom emphasis on performance orientation and grades. However, students will be intrinsically motivated for reading and learning in school when teachers demonstrate their commitment to students' comprehension rather than extrinsic factors such as their test scores. When teachers recognize that mistakes may reflect efforts to learn rather than student displays of inferiority, and when teachers reward effort as highly as academic accuracy, students respond with enhancements of engagement in the classroom (Anderman & Anderman, 1999). In conclusion, motivational decline is not innate or inevitable; it is a response to the shifting context of middle school (Wigfield, Eccles, MacIver, Reuman, & Midgley, 1991).

Case studies of young adolescent readers reveal additional dimensions of students' context sensitivity in reading. Ivey (1999a) portrayed the reading of three adolescents over five months. While one student was classified as a struggling reader and the others were not, all of the students were motivated and competent in certain circumstances. When the struggling reader had a text that was appropriately matched to his ability and personal interest his persistence, investment, and use of cognitive skills were remarkable. When the alleged high-achieving student was confronted with extremely difficult or personally irrelevant reading material, she displayed the weak cognitive strategies and low motivational attributes of a disengaged learner. Ivey concluded that engagement in literacy was an outcome of the person—situation relationship. It was the students' purposes, the materials they read, and their linkage of materials to personal circumstances that determined their engagement.

TYPICAL MIDDLE SCHOOL READING PRACTICES

Although struggling middle school readers tend to be disengaged from literacy, these adolescent readers are highly sensitive to context. Given

the right situation, with an attractive text and peer or teacher support, students who are otherwise considered struggling can be seen to read attentively and skillfully. Because context is crucial to adolescent literacy, it is vital to examine the context of middle school students' reading activities. As students make the transition from elementary to middle school, there are usually abrupt shifts in their school reading experience. These changes tend to fall along six dimensions: (1) detachment of reading instruction from content, (2) formidable texts and textbook structures, (3) formal, non-personal response expectations, (4) diminished student choice, (5) isolation of students from teachers, and (6) minimal linkage of real-world interaction with reading. We next consider each of these dimensions.

Detachment of Reading Instruction from Content

Middle school teachers identify with their content domain of science, math, history, or English. Their widespread belief is that reading has been taught and learned in the elementary grades. Consequently, for many students whose strategies are limited, middle school reading expectations are daunting. In the absence of explicit instruction, many middle school struggling readers cannot learn the comprehension strategies needed for their content learning. As a result, struggling readers quickly perceive their lack of competence in middle school reading tasks. As Ryan and Deci (2000) have shown, students need support and belief in their competence in order to gain motivation and desire to put forth effort in reading and school learning. Consequently, the detachment of reading instruction from content in middle school is a clear contributor to the disengagement of students from books and necessary literacy practices.

As previously discussed, we investigated the typical middle school reading practices as experienced by students. We gave a questionnaire to all Grade 3, 5, and 8 students in the state of Maryland. As shown in the category under "reading instruction in the content areas" in Table 1, there were decreases in all these practices from Grade 5 to Grade 8. For example, students read the statement, "My teacher wants me to ask myself questions when I read about social studies topics." Whereas 78% in Grade 5 answered, "A lot" or "Sometimes" to this statement, only 65% in Grade 8 gave those ratings. From Grade 5 to Grade 8, there was a decrease of 13% in the students who reported instruction in self-questioning when reading social studies topics. Within the content domains of science, math, and social studies, there were substantial decreases in integrated reading instruction. This was not an isolated practice; it occurred for both genders, all ethnic groups, and all income levels for all fifth and eighth graders in the state of Maryland in 1999. These findings confirm that the detachment of

reading instruction from content is perceived by students in a wide range of classroom settings.

Formidable Texts and Textbook Structures

Middle school texts are more complex than elementary school texts. As content complexity increases, textual complexity accelerates rapidly. For example, the following is a typical school history passage.

Whatever the cause, a downward spiral begins when there is reduced investment in new equipment. This creates a drop in demand for supplying industries who cut back their labor force. The loss of incomes means there is less money to be spent. The drop in demand further reduces confidence and thus investment. (Unsworth, 1999, p. 517)

In the second sentence, "This" refers to "reduced investment in new equipment" from the first sentence. This process of nominalization enables the writer to succinctly present complex ideas. However, the reading comprehension strategies needed to understand this text are relatively complex. Further, in the last sentence, the phrase "The drop in demand" must be understood as equivalent to "less money to be spent" from the prior sentence. This inference is not easy for struggling students, and the process of inferring is not automatic for disengaged learners. Further, the phrase "drop in demand" in sentence four refers to consumer demand, whereas "drop in demand" in sentence two refers to retailer demand. This is a complex discrimination, and a barrier to comprehension. Despite the fact that these texts are forbidding to struggling readers, middle school students are rarely provided a diversity of materials that might enable them to learn content through texts matched to their reading ability.

The increased formality of texts in middle school is accompanied by a decrease in access to a variety of different kinds of materials. These changes were observed in our survey of all Grade 5 and Grade 8 Maryland students. As indicated in Table 1 in the section on "Interesting texts," there were decreases in how often students stated "My teacher helps me to read poems, stories, and information from many different books" and "My teacher asks me to read different kinds of materials to do independent research about social studies topics." Thus, the texts in middle school are more formidable than texts in elementary school, and students are given less support in coping with them.

Formal, Non-personal Response Expectations

In most middle school content areas, students are expected to read a textbook and answer relatively high-level questions on its substance.

For the top half of the ability distribution, this is feasible. However, for struggling readers in the bottom fifth of the distribution, the reading comprehension and writing strategies needed for such formalized textbooks are not developed. One approach is simply to use trade books rather than large, formidable textbooks. However, Hynd and her colleagues reported that simply giving multiple texts to high school students in history is ineffective (Hynd, 1999; Stahl, Hynd, Montgomery, & McClain, 1997). They proposed that students be given time to learn background knowledge, be provided opportunities to discuss different viewpoints of the same text, be allowed to read different accounts of the same historical events, and be taught how to write about history. Although students need opportunities to react to their written materials and discuss it with peers, the whole-class organization of many middle school classrooms and the emphasis on content in a subject matter can lead to the disengagement of struggling readers (Eccles et al., 1993).

Diminished Student Choice

Middle school classrooms tend to be teacher-directed and teacher-led rather than student-centered. Due to departmentalization, the large number of students in classes, and accountability for teaching content, the reduction of student choice is understandable. However, struggling readers are disengaged by this practice. It is known that many middle school teachers are highly directive (Alvermann & Moore, 1991). However, struggling readers need choice to support their engagement with literacy activities (Ryan & Deci, 2000). A fundamental principle in the development of motivation and reading engagement is support for students' autonomy and decision making. Supporting students' autonomy refers to enabling students to have some control over important aspects of their learning. This does not imply giving students complete freedom. However, typical middle school reading practices tend to minimize choice.

In a survey of all Maryland Grade 5 and Grade 8 students, we found a loss of choice in middle school reading practices (see Table 1 section on autonomy support). For example, middle school students were less likely than elementary school students to agree that "My teacher wants me to express my own opinions about what I read in social studies." Likewise, relatively few middle school students affirmed that "My teacher lets me decide what science topics I should read and write about." It was rare for a student to affirm that "In my science work, my teacher lets me read what I'm interested in." For all of these items in the autonomy-support category, decreases from elementary school to middle school were observed. Consequently, although adolescent students are seeking

independence, opportunity for decision making, control of their learning activities, and independent thinking, these processes are curtailed by typical middle school reading practices. Thus, struggling students are likely to be disengaged.

Isolation of Students from Teachers

Middle school teachers have the responsibility to teach a large number of students, often in the hundreds. Consequently, their information about students' backgrounds, needs, history, interests, and personalities is necessarily limited. In other words, students are little known by teachers. In this context, struggling readers often feel that they do not "belong in the school" or that the teachers are not "caring" (Anderman, 1999). If students are to believe that reading is a valuable activity and a useful competence, they need to perceive this belief in adults or significant others who they trust. Middle school reading practices that isolate students reduce the likelihood that struggling readers will believe reading is valued by adults or other adolescents who are personally significant to them. Yet, it is exactly this social embrace within a literacy community that the struggling student needs most desperately (Ryan & Deci, 2000).

Estrangement of Reading from Real-world Interactions

It is widely known that middle school content instruction is often textbook-centered. The specific topics of the subject matter are defined by the textbook, and the sequence of encountering those topics is predetermined by textbook authors. Further, because contents are departmentalized, there is insufficient time, scheduling flexibility, interdisciplinary connections to include field trips, visitors to the classroom, and long-term projects in the curriculum. With the content being highly abstract and the presentation in textbooks being highly formalized. student experience with the subject matter is depersonalized. Consequently, middle school students, especially struggling readers, do not perceive the classroom to be personally relevant or connected to their needs (McCombs & Pope, 1994). Real-world interactions may include such reading activities as discussing books, magazines, or song lyrics in the popular culture (Alvermann & Hagood, 2000), encouraging students to base their writing on personal experiences, and facilitating handson activities or historical re-enactments in classrooms (Zahorik, 1996). Although a high percentage of teachers report using real-world interaction on certain occasions in order to engage students in learning (Zahorik, 1996), it is rare that real-world interactions are closely connected to reading instruction.

ENGAGEMENT MODEL OF INSTRUCTION: A MOTIVATIONAL RATIONALE

As we noted previously, struggling readers in middle school are often disengaged from the literacy of school. Not only do they lack cognitive skills for reading, but they are disaffected with school reading. They are at best passive and may actively avoid reading. Consequently, a primary challenge is to re-engage students. Students' reading motivation must be redeveloped to make possible the long process of acquiring cognitive skills for reading comprehension. We propose that there are two pathways to the development of reading motivation. The first consists of connecting current intrinsic motivation to reading. The second consists of building stronger intrinsic motivation for reading.

The first pathway seeks to connect an intrinsically motivating activity to reading and generalize the motivation to new texts. Here is an example of how an intrinsically motivated behavior can be generalized through a process of successive expansion to new topics and new texts. Imagine a student who is excited by a live snake placed in a terrarium on a classroom table. Students confronted by such a tangible, real-world object will respond by being attentive, fascinated, and actively questioning. This student possesses a desire, interest, or motivation to learn more information about this particular object or event. When the student's curiosities about this poisonous snake can be satisfied partially through reading activities, the motivation will be transferred to the reading behavior. Materials that foster learning about poisonous snakes will become as interesting as the snake itself. Further, a related topic of predators, such as hawks, and accompanying texts on this topic (hawks) will acquire the motivational states that were originally elicited by the snake. When students have experienced a gradual expansion of topic, content, and text over a time period of four weeks or more, they become authentically motivated to read in a domain as broadly construed as science (Guthrie, 1999). In addition, the process of reading to learn about one topic transfers to other topics because students have acquired related reading skills and strategies. This has been demonstrated in a year-long study of integrated teaching to foster reading and motivation in later elementary students (Guthrie, Anderson, Alao & Rinehart, 1999). In this scenario, students' engagement is broadened to books that were originally too difficult to read or not interesting to read. In other words, students have expanded their reading engagement.

A second pathway to the development of reading motivation is based on the self-determination theory of Ryan and Deci (2000). In this theory, students acquire the motivations of adults through internalization. Internalization is the process of taking a value or a goal from a significant other into oneself. Among both children and adolescents, individuals who are unmotivated to read do not value reading, do not believe in its importance, or do not personally identify themselves as readers. However, when a significant other such as a teacher, sibling, or peer communicates the importance of reading, the individual may identify with these beliefs. The learner may not necessarily enjoy reading, nor does the learner read for the sake of reading. Yet the learner is willing to spend time and energy in reading activities because he believes they are important to his future success. At a more highly developed level of internalization, he has acquired personal reasons for reading that may include grades or learning in a content that he believes is important. The learner has integrated reading into his definition of who he is. This learner will use strategies, put forth effort, and show persistence based on his own initiative. Although he may not find reading inherently rewarding and enjoyable, this student reads because he believes it is valuable and necessary.

The most highly internalized level of motivational development is intrinsic motivation. At this point, the reader will engage in literacy activities for their own sake, irrespective of whether they provide a reward or benefit. Reading occurs for interest and enjoyment even if there is no external pay-off. This pathway of motivational development depends on a social milieu of supportive participants in a literacy community that enables the reader to acquire skills and motivations similar to significant others who are engaged in literacy. These two pathways to motivational development can both be supported through the instructional practices presented next.

ENGAGEMENT MODEL OF INSTRUCTION: SIX PRACTICES FOR MIDDLE SCHOOL

In previous portions of this article, we have suggested that middle school students are extremely sensitive to context. Although their general motivation for and skills in reading may be low, their motivation for reading a particular text may be moderate or even high. In addition, we have seen from the motivation theories that context influences students' engagement with reading. The important question is "What kinds of contexts can be created in classrooms to foster middle school students' development of reading engagement?" This engagement cannot be short term, lasting only a day or week, but must endure for many weeks and months in order to assure the acquisition of cognitive strategies that have not been learned in several years of previous schooling. There are six characteristics of a classroom environment that foster engagement and aid in the achievement of reading competence: (1) knowledge goals, (2) real-world interactions, (3) an abundance of interesting texts, (4) support for student choice and

self-determination, (5) direct strategy instruction, and (6) collaboration support. These characteristics or practices provide the framework for an engagement model of instruction for middle school reading, as shown in Table 2. Each practice is briefly discussed in turn.

Knowledge Goals

The practice of using knowledge goals refers to constructing teaching objectives that emphasize understanding and communication about a specific topic within a knowledge domain. It may seem paradoxical that content goals should be predominant in a reading instruction program. However, having skills as the main goal is not a way to optimize engagement. A substantial amount of research on engagement shows that classroom goals that emphasize students' understanding of meaningful materials are essential to motivation and cognitive strategy learning. The strategies necessary for effective reading such as self-questioning, using background knowledge, comprehension monitoring, searching for information, and synthesizing

TABLE 2 Engagement Model of Instruction for Middle School Reading

Instructional Practices	Examples Teaching/Learning Activities		
Knowledge goals	Teaching with thematic units; Student questions as learning goals; Big ideas and supporting concepts; Staying conceptoriented in reading.		
Real-world interactions	Hands-on activities; Inquiry science connections to reading; Historical enactments as basis of reading and writing instruction; Selecting personally relevant texts.		
Interesting texts	Using trade books for reading instruction; Linking trade books and multimedia; Merging texts, illustrations, and animations in learning; Connecting themes from popular genre and classical literature; Using cultural responsive texts addressing adolescent characters, issues, and social crises; Diversity of text difficulty in the classroom.		
Autonomy support	Student choices of specific texts for learning about a required topic; Student input into instructional decisions or tasks; Student construction of rubrics for evaluation of work.		
Strategy instruction	Direct modeling, scaffolding, and guided practice for reading comprehension strategies such as: questioning, searching summarizing, using graphic organizers, comprehension monitoring, and critical evaluation.		
Collaboration support	Teams work toward attaining multifaceted conceptual goals; Positive interdependence (students need each other to reach shared goal); Use individual expertise to learn and share with group; Build norms for interaction and evaluate these regularly; Require full participation in teams.		

multiple texts (Wood, Willoughby, & Woloshyn, 1995) are learned as tools for content knowledge acquisition. They are means to the end of understanding. If these means become ends in themselves, students acquire a performance orientation that undermines their long-term effort and engagement in literacy. Therefore, the goals of an instructional environment for struggling readers should begin with significant content objectives and also include critically important cognitive strategies for reading.

It is clearly important to integrate reading instruction into the content domain of subject matter, a practice that generally decreases from elementary to middle school. Our survey showed that teachers were less likely to provide strategy instruction for self-questioning in middle school than elementary school. For example, the proportion of students who perceive that "My teacher wants me to ask myself questions when I read about social studies topics" decreased from 78% (Grade 5) to 65% (Grade 8). A similar percentage of students decreased in their view that "My teacher encourages me to explain my math work in writing." In other words, literacy instruction is more disconnected from subject matter teaching in middle school than elementary school.

Real-world Interactions

Having identified content goals, effective teachers initiate learning activities with real-world interactions. This instructional practice refers to providing opportunities for students to have sensory interactions (e.g., seeing, hearing, feeling, or smelling) with tangible objects or events as they appear or could appear in a natural environment. In science, real-world interactions consist of hands-on activities such as observing fiddler crabs or conducting experiments with turtles. In history, real-world interactions consist of re-enacting a historical event and, less optimally, viewing a video of the event. The prominence of real-world interactions as an instructional technique was illustrated by Zahorik (1996) in a survey of teachers. He found that the teachers' preferred action for engaging students was hands-on activities. Zahorik (1996) reported that in middle schools:

teachers used the term *hands-on activities* to refer to a range of activities in which the student is an active participant rather than a passive listener. The term includes the use of manipulatives such as pattern blocks in mathematics, playing games of all kinds, participating in simulations, role playing and drama, engaging in projects such as growing seedlings in science or making television commercials in Spanish, and solving problems or puzzles such as determining the sugar content of chewing gum. (p. 555)

In a study of middle school history teachers, Hootstein (1995) interviewed teachers to identify their strategies for motivating students to learn

history. The largest group (83%) stated that they "have students role play characters in simulations." Teachers reported that they "organize projects that result in the creation of products" and "invite guest speakers from the community." These strategies did not include the usual patterns of social studies instruction that emphasize textbook-based, large-group, teacher-controlled recitation and lecture. Finally, in a survey of teacher beliefs on student motivation, Nolen and Nicholls (1994) found that teachers frequently suggested "stimulating tasks" as the preferred strategy for increasing the motivation of disaffected students.

Real-world interaction is a desirable starting point because it is intrinsically motivating. However, it is crucial to link texts to the real-world interactions. For example, Herrmann (1995) recommended a middleschool integrated reading instruction program with texts embedded in real-world interactions. Herrmann reported a teaching unit in which students were taught reading and writing through a thematic unit on hurricanes. The teacher of the unit said that shortly after a hurricane occurred, she brought in several newspaper clippings about the storm that the students read and discussed. These discussions got the students interested in the relief effort. Students were concerned because so many people were homeless and not receiving help. The teacher then planned an 8-week unit on hurricanes, weather, and earth science integrating reading, writing, and math. The teacher and students identified texts and reading skills they needed to work on their project. These included letter writing, word recognition strategies for reading technical material, using the card catalog, understanding expository text structure, and writing reports with complete sentences. The texts and reading skills were contextualized. Text and skills were embedded within the learning goals developed from the realworld interaction with the hurricane. Essential to the effectiveness of realworld interaction for aiding struggling readers is the link to texts and reading skills.

An Abundance of Interesting Texts

The practice of using interesting texts refers to teaching from an ample supply of books, materials, and technology that are relevant to the learning and knowledge goals. An abundance of texts within the classroom and student linkages to community resources outside of the classroom, such as libraries and the Internet, are known to directly facilitate motivation and reading achievement (Guthrie, Schafer, Von Secker, & Alban, 2000). However, as students move into middle school, they perceive a decrease in the opportunities to read a diversity of texts as part of instruction. For example, our survey showed a reduction in the number of teachers from grade 5 to 8 who use a variety of texts for English and reading instruction (see Table 1).

If reading skills are taught in the context of real-world interactions and goals that emphasize new contents and ideas, diverse books and materials play a valuable role. Within this framework, texts have a role as references, resources, and tools for learning. Indeed, to re-engage students who are struggling with reading, a wide range of texts should focus on content that deals with real-life problems. Diversity of text now extends to technology (Bean, Bean, & Bean, 1999). With the Internet and multimedia, electronic texts abound. Because these are easily linked real-world experiences and interests, electronic texts are promising ingredients in a program for struggling readers.

The writing skills of planning, outlining, drafting, spelling, punctuating, proofreading, and revising are valuable parts of an instructional package for struggling readers. However, they need not be taught as isolated skills. Writing diverse texts such as comic books, advertisements, and sporting reports can be the vehicles for learning writing skills (Turner, 1997). Although textbooks tend to dominate middle school classrooms (Alvermann & Moore, 1991), there is a strong trend toward incorporating popular culture into teaching. Students can read and write scripts for T.V. sitcoms, lyrics for popular music, and articles on fashion from magazines of personal significance. The materials, however, must be linked to the knowledge goals, and the difficulty of the reading tasks must be aligned with students' reading levels. The interesting texts cannot stand alone. They must be integrated into the content goals and selected to teach the key cognitive skills needed by the struggling learners.

Autonomy Support

Providing autonomy support refers to enabling students to experience an authentic sense of control and decision making regarding their reading activities. Teachers frequently report the value of giving students choice in the classroom. In a survey of teachers, Zahorik (1996) found that a highly effective technique that teachers used to motivate learners in elementary, middle, and secondary schools was to develop ownership of the classroom events through involvement in planning units and choosing tasks. Including students in deciding which topics to explore, which texts to read, the sequence of texts, and the particular skills to emphasize is empowering. Under these conditions, students can exercise limited choice, which enables them to be partially in control of their learning. Confirming this, in a survey of teachers' beliefs about increasing motivation in disaffected students, teachers reported that giving choice is a strong motivational technique (Nolen & Nicholls, 1994). Teachers advised that it is possible to: (1) negotiate what seems a fair amount of work on assignments, (2) allow students a bit of choice in the order in which they do their work, and

(3) give students some say in how they write up their work. However, in our survey, students reported less autonomy in grade 8 than grade 5. For instance, student perceptions that "In my science work, my teacher lets me read about what I'm interested in" and "My teacher wants me to express my own opinions about what I read in social studies" declined. In other words, different forms of autonomy-support decrease when students enter middle school.

This principle of autonomy support applies to all learners. For example, struggling inner-city African-American middle school students showed significant increases in engagement in school learning when they were provided with responsibility and choice in their learning activities (Teel, Debruin-Parecki, & Covington, 1998). Finally, qualitative studies of struggling middle school readers revealed that although students rarely choose school texts when they are given the option, they frequently read magazines or other texts to follow their personal interests out of school (Alvermann & Hagood, 2000). Given the opportunity to read text they have selected, even struggling readers will show effort and persistence in using and learning the skills that will enable them to become more proficient. For example, teaching from materials such as an article from Jet magazine or a chapter in a book such as Henry and the Mudgein Green Time will enable students to engage in word study, develop fluency of word recognition, and read with expression. Further, comprehension lessons that emphasize getting the main idea and making inferences can be taught with familiar, appealing materials. Teaching with materials selected by students has been described as engaging and enabling (Roe, 1997).

Strategy Instruction

Struggling readers deserve to be provided direct strategy instruction. As their years of failure testify, these students have been unable to invent the complex reading strategies typical of expert readers at their age level. We propose that direct strategy instruction should be contextualized. It should be provided within the frame of the conditions previously discussed, including learning goals, real-world interaction, interesting texts, and autonomy support. When prior conditions have been set, direct interaction is effective and enabling.

Direct strategy instruction typically includes the processes of modeling, scaffolding, guided practice with feedback, and independent reading to gain fluency in the strategy (Wood et al., 1995). Modeling is often provided by the teacher, who shows students a demonstration of his or her own use of a key strategy such as gaining the main idea or forming an inference between two sentences in a paragraph. This modeling can be accomplished within the rubric of a knowledge goal formulated for a unit, using a text that

the students have selected or participated in selecting, and directed to a skill that is judged by both the teacher and the student to be important. Modeling can be continued by students in the class. Teacher scaffolding consists of coaching students in the same strategy as they attempt to perform it with other portions of the same magazine article or book chapter. Guided practice occurs as students select other materials from a limited set of options for practice and application. Extended independent opportunity for fluency is provided by expecting students to perform the strategy frequently within days and weeks following the initial lessons and requesting them to display their use of the strategy on appropriate occasions. As students learn the strategies, they gain the confidence in their own capabilities. They increase their view of themselves as competent in reading. Engagement is fueled by the self-perception of ability to perform meaningful reading tasks. Consequently, strategy instruction fulfills the motivational need for self-perceived competence (Ryan & Deci, 2000) as well as the cognitive need for possessing skills that are central to text comprehension. Because it requires a lot of time and effort from the student, it is valuable to contextualize direct strategy instruction within the knowledge goals, real-world interaction, and autonomy support that are motivating conditions.

Collaboration Support

We refer to collabortion as students interacting with each other to learn. This may occur in pairs, small teams, or larger groups. Collaboration may include cooperative learning, which consists of group goals, individual accountability, and team competitions (Slavin, 1996). However, collaboration is broader than the traditional definition of cooperative learning. When students feel a sense of belonging in the classroom or the school, their reading engagement may be increased (Anderman, 1999). Likewise, middle school teachers reported that "group tasks" are an action that will make classroom work interesting. Teachers recommended that "it is advisable to permit students to share their ideas and experiences through dialogue. reporting, debating, and displaying their work" (Zahorik, 1996, p. 555). In a survey by Nolen and Nicholls (1994), teachers proposed that a strategy for increasing motivation of disaffected students is to "sit them with someone who will help them learn," "put them in cooperative learning groups," and "have them choose a project to do with another student" (p. 61). In her conclusions from an in-depth case study of struggling middle school readers, Ivey (1999b) stated that students need opportunities to share reading experiences with classmates and others. Further benefits of collaboration for motivation in secondary students have been documented empirically in quantitative studies (Nichols & Miller, 1994).

Uniqueness of the Engagement Model of Teaching

The engagement model of instruction for middle school reading contains the six features presented in the preceding paragraphs: (1) learning and knowledge goals, (2) real-world interactions, (3) interesting texts, (4) autonomy support, (5) strategy instruction, and (6) collaborative support. The uniqueness of this model is that these all operate together dynamically. These individual components have each been promoted by different investigators and teachers. Learning goals have been advocated by motivation theorists, real-world interactions are highly recommended by experienced teachers, interesting texts are promoted by qualitative researchers who emphasize the role of popular culture in adolescent literacy, autonomy support is proposed by both researchers and teachers, instruction for cognitive strategies in reading is a centerpiece of the direct instruction model in reading (King, 1995), and the value of collaborative support is a staple of teachers' beliefs (Sweet, Guthrie, & Ng, 1998).

What is unique to this model is that we believe these six features should be fused. Each of these features is a valuable contributor, but none is adequate itself to increase the engagement of struggling readers. Struggling readers need both motivational and cognitive support. The motivational support is increased with real-world interaction, interesting texts, autonomy support, and collaboration. However, these qualities of instruction will not assure gains in cognitive competence. Cognitive competence is increased by direct strategy instruction for substantial amounts of time. There is evidence that cognitive strategy instruction is ineffective in isolation from a rich content domain (Guthrie, Schafer, Vonsecker, & Alban, 2000), though strategy teaching is powerful when it is embedded within the prior conditions.

One framework that is highly related to the engagement framework was proposed by Moje, Young, Readence, and Moore (2000). They recommended that educators need to "reshape secondary classrooms to offer literacies that connect to students' lives and reposition marginalized youth in classroom and schools" (p. 405). These authors suggested that

interdisciplinary project-based pedagogies are another way to support the literacy learning of marginalized students. Projects engage young people in group-based inquiry about questions or problems of interest to them. Typical features of project-based curricula include: (a) driving questions that encompass worthwhile or meaningful content anchored in real-world problems, (b) investigations and artifact creation that allow students to learn concepts, apply information, and represent knowledge, (c) collaboration among students, teachers, and others in the community, and (d) use of technologies' tools. (p. 405)

This recommendation has the merits of including learning goals (the driving question), real-world interaction (the real-world problem), interesting texts, and collaboration. What we propose adding to this frame is direct strategy instruction in reading. This strategy instruction may also include strategies for searching in Internet, hypertext, CD-ROM, or multimedia environments currently available electronically. Strategies may also be taught for integrating information and composing written reports or multimedia presentations. In the case of all these strategies, direct instruction is valuable to students and is engaging when it is contextualized within the other conditions. As mentioned previously, disengagement is a cognitive as well as a motivational and social challenge. Disengaged students lack the specific comprehension skills needed for effective school reading, and they must be supported with direct instruction. The proposed engagement model of middle school practice for struggling and marginalized readers expands on existing frameworks based on social and motivational analysis of learners, such as the proposal by Moje et al. (2000). Further, the engagement framework incorporates explicit support for cognitive strategy growth within a framework of the personal and social needs of learners.

TWO EXAMPLES OF TEACHING PRACTICES FOSTERING ENGAGEMENT

The six features of the engagement model of classroom practice may be best understood through examples. By observing individual classrooms, one can appreciate the different ways each feature can be applied. Although all these features have been shown to support reading engagement, how they are applied in the classroom will differ depending on the teacher and context. Following are two examples of teaching practices that foster engagement in reading. Although neither shows all six features, several of the features are evident.

In the first example, Ash (1992) described her literature class. It is an alternative classroom for students who were held back in elementary school for at least two years. The students were considered at risk for dropping out of high school. With 18 students, ages fifteen to seventeen, her main goal was to get the students engaged in reading. Previously, these students had negative experiences with reading and were uninvolved in writing. One of Ash's main concerns was how to introduce a longer work of fiction to enable these students to get through the rest of the book. She decided that "taking the students directly into the text itself" should keep their interest (p. 61).

First, Ash chose a book she thought would be interesting. She selected Sounder (Armstrong, 1969) because this award-winning novel has vivid

detail. With the students seated around her in a circle, she held a paper-back copy and read the opening sentence. "The tall man stood at the edge of the porch." Ash read it three times. She then asked each student to write down five questions about the sentence. They wrote questions such as: (1) how old is the man, (2) how tall is he, (3) what is the man's race, (4) what is he looking at, and (5) how long has he been standing? Voluntarily they shared their questions.

To answer the student-generated questions, the teacher and students read the first paragraph aloud together, beginning with "The roof sagged from the two rough posts which held it, almost closing the gap between his head and the rafters." Discussing it at length, they answered some questions and created more. Students who assumed they were "no good" at reading were raising intelligent questions and actively engaging in reading.

Why was this motivating? Many teachers ask students to read an opening page, or even a whole chapter. However, for struggling readers, these tasks will be formidable and frustrating. They will decrease students' motivation to read the whole book. In contrast, all students could listen to a sentence and write questions about it. Consequently, the text became accessible. When it is easier to comprehend, the book had a chance of becoming interesting. These students began to believe they could read. They gained self-efficacy. Secondly, the teacher gave an opened-ended request for questions. There was no one right answer. Students were able to use their own prior knowledge about the situation in the book in order to create questions that were interesting to them. While reading the rest of the book, students looked for answers to their own questions, which gave them a personal purpose to read.

Another prominent feature of this classroom that fostered reading motivation was student choice. During class, students read both common and self-selected readings. For example, during the poetry unit, students were able to select their own poetry from many books the teacher had collected. Not only could they choose what poems to read, they created their own "agendas" for reading by forming their own questions to answer. Finally, students were given a choice of who they wanted to work with during the project and how they wanted to present what they had learned.

Collaboration among the students and the teacher was also encouraged. Ash let the students work in small groups, in pairs, or alone, depending on what they preferred. During class discussion, students were often encouraged to comment on their classmates' response, add their ideas to the discussion, and question others in the class. Ash mentioned that the best discussion questions came from student-generated questions that were formed during class discussion. By relating the questions they had

while reading, the students helped each other understand the content of the book to a fuller extent.

During class discussion, many reading strategies were taught. For example, forming predictions of a literacy piece after the students only heard the first line or two comprised a large amount of class time. Although the reading strategies of prediction, questioning, and rereading were first introduced and supported by Ash during class, by spring she noticed that the students were able to use these reading strategies on their own. Another strategy taught during class discussion was imagery. One way Ash helped the students to imagine what was happening in the text was to use playacting. Ash stated that during class they would often be "mimicking the voices and gestures of characters as we imagined hearing and seeing them" (p. 64). Another way she taught imagery is through drawing characters of landscapes from the book. In summary, many of the six features of engaged reading were present in this classroom instruction. For instance, there was plenty of student choice, collaboration, direct strategy instruction, and interesting texts.

The second example of a classroom that promotes literacy engagement comes from Loranger (1999). In this article, Loranger relates observations she made in a sixth grade science class in Massachusetts. In the school, all content teachers were given the responsibility for instructing their students in content area literacy. In one science class, John, the sixth grade science teacher, instructed students on both science and science content reading. In his class, students were given ten to fifteen minutes of silent reading each day. During this time, each student kept track of how much he or she read in reading logs and took notes of what he or she read in reading journals.

John taught many reading strategies to help the students comprehend what they read in science books and from the Internet. For instance, John taught a reading strategy named HEART (How much I already know, Establishing a purpose, Asking questions, Recording answers, and Testing myself). HEART incorporated many reading strategies into one useful system to help students learn and remember information as they read.

Often, John used real world interactions to motivate the students to use reading comprehension strategies. For example, when John taught the concepts of compare and contrast, he had his students start with comparing and contrasting objects they were familiar with, such as the class pets. One student commented, "I liked doing this because it was fun looking at the iguana and hamster, then comparing and contrasting them" (p. 241). When learning about ecosystems, he had the students compare and contrast a field and a forest near the school.

John stated that he felt that science can "help students make connections with life experiences" (p. 240). Students see that what they are

learning in the classroom will not be used only in the classroom. Their knowledge can be applied to everyday life as well. These connections help students read more effectively. In many science classrooms, students do a hands-on science project, such as watching a chemical reaction or observing an animal. Afterwards the teachers may explain what they had observed and provide additional information. Into this scenario, John introduced reading strategy instruction. He required his students to read about each scientific observation. By witnessing a "hands-on" science event, students were motivated to read about the event and were more likely to comprehend what they were reading. John stated, "Students today are much better served by gaining the skills needed to access information" rather than the "traditional methods of memorizing a series of facts" (p. 240).

John also helped students make connections with life experiences through the use of role-playing. Students took on roles such as politicians, surfers, and resort owners. While keeping in mind the perspective of the person whose role they were playing, the students were expected to form an argument stating their viewpoint on a controversial issue. A student noted that she found this activity to be fun because she "felt like an important adult" (p. 241).

John gave students choice on how they presented what they learned in their reading. Each student was required to share a book that they read. John gave the students six different ways to do their presentations. For instance, he gave the option to "make a soundtrack for the book by recording parts of at least three songs that related to your book" or "Make a poster advertising the book, including at least three important details from the book" (p. 240). In summary, John used many of the six features of the engaged model of instruction, including giving student choice, making connections with the real world, and direct strategy instruction. Overall, John's class seemed very motivated to learn both science concepts and science literacy.

Both Ash (1992) and Loranger (1999) reported middle school teaching that included some, but not all, of the recommended features in the engagement model. Though the teaching in these articles was likely to increase students' engagement in reading, it was not optimal. We suggest that including a few features is beneficial, but providing all of them is most valuable to students. The features are not "all or none," but the best student learning occurs when they are all imported into the classroom and coordinated.

CLOSING COMMENTS

Middle school is an age of transition. Students have emerged from an elementary school environment that is relatively child-centered, with a single

teacher who can adapt reading to their needs and abilities. In middle school, students are expected to learn complex content, with little help in reading the difficult texts. Students experience fewer choices and more isolation. They may feel they do not belong and are not competent to learn. Students may not see school as related to their personal lives. The pervasiveness of these barriers and the growing disengagement of students are approaching crisis proportions. If students are to navigate the transition into middle school, high school, and the workplace, they need undiluted dedication to their engagement in reading. Using the engagement model of instruction is one strong framework for teachers. Teachers who initiate and sustain this framework can help students gain skills and believe in themselves as readers. This newfound identity can help students to enter rather than exit the literate community.

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