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Motivating Students With Learning Disabilities to Read

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Abstract

Students may lack the motivation to read for many reasons, including inadequate access to interesting texts, limited encouragement to read for pleasure from adults, instructional practices that do not foster engagement in learning, or a history of reading failure. This article focuses on students with reading disabilities who may have a long-standing dislike of reading born of repeated negative experiences with learning to read. Motivating these students to read for pleasure may seem like an unattainable goal. However, past difficulties in reading do not necessarily mean that children will dislike reading forever. In conjunction with appropriate academic interventions, student interest in reading might be improved by motivational interventions aligned with a theoretical framework discussed in this article: (a) choosing interesting texts to read, (b) stimulating knowledge-based interest, and (c) enhancing task-based interest.

Keywords

motivation intervention, students with learning disabilities, middle-school reading, situational interest

Jeff, a student with dyslexia, used to love to be read to when he was a preschooler, and he easily understood the children's books his parents read to him. Now a sixth-grader, he says he'd "rather eat dir," than read for enjoyment. His parents mention that he hates homework involving independent reading, and often the homework does not get done. In school, he never chooses reading as a free-time activity. Although he can frequently be heard laughing and joking with friends in the hallway, when the bell rings, Jeff trudges into class, expecting to fail. In his English class, when the teacher asks the class to open to page 12 of "A Wrinkle in Time," Jeff hopes he won't be called on to read aloud. As he tries to become invisible, Jeff closes his eyes and listens intensely to the other students as they read, wondering why the words seem to fall out of their mouths effortlessly. When Jeff is called to read, the painful process begins again, as it has for as long as he can remember, as he stumbles over words and struggles to decode them. After exhausting himself to read just one sentence, Jeff begins coughing, a favorite avoidance strategy he has used for years with great success and begs his teacher to get a drink. When he returns, the class has moved on, and Jeff is relieved he is not called on to read aloud again that day. (*See Note 1*).

Introduction

The student described in the preceding scenario is all too familiar to many middle-grade teachers. Often, even typical readers who enjoyed reading for pleasure in the primary grades, see their enthusiasm for reading evaporate as they enter middle school. Students with a disability that affects reading may be even more likely to dislike reading, and even less likely to choose reading as a free-time activity. For struggling adolescent readers, lack of motivation to read is especially concerning because it may contribute further to their reading problems and limit the benefits they receive from interventions. On the positive side, a poor reader who is motivated to read for enjoyment will receive increased practice and exposure to literacy, which may enhance the benefits of school-based interventions. Encouraging students of all ages to read for pleasure is not

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a substitute for good intervention in school, but independent pleasure reading can be a significant addition to effective interventions.

Students struggle in reading for numerous reasons, but especially in the middle grades, many poor readers are like Jeff, they struggle with decoding words. When decoding is difficult, even students with strong verbal abilities may lose comprehension when reading, which will likely affect their enjoyment of reading. For students like Jeff, whose difficulties involve a disability that directly hampers reading comprehension, a loss of motivation to read may be more evident as they grow older and the comprehension demands of books at their grade level increase. In life, few people enjoy doing things that feel difficult and burdensome. So, for all struggling adolescent readers, their difficulties may have a direct negative impact on motivation.

Mol and Bus (2011) found that independent pleasure reading is especially crucial for low-achieving children. However, finding appropriate books for struggling readers can be challenging. Students may not have easy access to books at their reading levels or on topics of interest to them. To benefit from attempts to stimulate their independent reading, these students may require more scaffolding and help from adults than do other children (J. S. Kim & White, 2008). Motivating these students to read for pleasure may seem like an unattainable goal. However, students' interest in reading might be improved by motivational strategies involving topic, knowledge-based, and task-based situational interest.

Strategies to Arouse Situational Interest

Interest as a motivational construct refers to the engagement of certain objects or ideas over time that "signifies the processes by which the underlying needs or desires of learners are energized" (Murphy & Alexander, 2000, p. 28). Situational interest, as a type of interest in reading, is the short-lived interest generated by the specific features of objects within an immediate situation or context; for example, a student chooses to read a book because the topic seems interesting.

Hidi and Renninger (2006) described a model of interest development that includes situational interest. Situational interest usually develops based on some personal relevance. For example, Jeff has always had a keen interest in mountain-climbing, so Jeff's teacher (Mrs. Darby) recommends that Jeff read a book based on that interest. Maintained situational interest is sustained through personal involvement in a task over time (Hidi & Renninger, 2006). For instance, Mrs. Darby might use project-based learning to maintain Jeff's situational interest in reading a book about Mount Everest to solve authentic problems in mountain-climbing, such as researching the history of attempts to climb the mountain. Situational interest involves early phases of interest development that support the later development of sustained, long-term interest in reading. Therefore, teachers must consider and value-stimulating situational interest in the first place for struggling adolescent readers and students with learning disabilities who have experienced low reading motivation over time.

Previous research has demonstrated that several factors, such as topic interest, knowledge interest, and task interest, may contribute to students' situational interest (Ainley et al., 2002; Rotgans & Schmidt, 2017). This article, in alignment with previous research, introduces specific strategies to arouse students' situational interest from the perspectives of topic, knowledge-based, and task-based interest.

Topic Interest: Choosing Interesting Texts

Topic interest refers to students' immediate response toward text titles and related expectations of the text content (Ainley et al., 2002). Choosing interesting texts for children to read is critical (Renninger & Hidi, 2015). Students make decisions to continue or quit reading as soon as they encounter the text title. For example, if the topic is interesting, it would appeal to students immediately to read the content. Ainley et al. (2002) found that topic interest was strongly related to students' positive affect and persistence in reading. Levels of arousal triggered by text titles were mainly related to students' immediate reactions and expectations toward the topic and content. For example, higher interest texts with themes related to bullying and friendship might motivate many middle-school students to read. Teachers who want to engage students in reading could consider the following set of principles that should be addressed in topic interest.

Principle 1: Model decision making. When choosing potentially interesting topics, teachers first model how to make decisions in the choice process. For instance, teachers could model the choice process based on individual students' interests and their reading levels. After finding an appropriate book, teachers could model the way to set realistic reading goals on a daily basis as well as monitor the reading process periodically by filling out a reading log to monitor and record student reading progress. The process of providing choices permits students to share their thoughts through dialogue with the teacher, as well as to have some input into the curriculum plan.

Principle 2: Consider and teach text structure. In choosing books to read, it is important to consider appropriate text structures (see Adolescent Literacy, http://www.adlit.org). Previous research studies (Logtenberg et al., 2011)

indicated that teachers' choices of text type can have a significant effect on arousing students' situational interest and the number of generated questions. Compared to other text structures, narrative texts (i.e., characterized by a vivid description of story details) and problematizing texts (i.e., characterized by arguments or controversial points of view) were more likely to engage middle-school students' situational interest (Logtenberg et al., 2011). These text structures could work as a facilitator to arouse students' background knowledge and make the text more vivid and appealing for students to read. For struggling adolescent readers, preparing for the knowledge of text structures is critical. Therefore, teachers might consider introducing the organization of different types of text structures ahead of time. For example, students might learn to find critical components in reading narrative texts (i.e., characters, plots, climax, problem, solutions, and settings); and students might learn to locate key terms in reading problematizing texts (e.g., comparing and contrasting).

Principle 3: Consider text coherence. Text coherence also facilitates reading comprehension and engagement (McNamara et al., 2017). Text coherence refers to the embedded organization of the text and the extent to which it facilitates comprehension (Allen et al., 2016; McNamara & Kintsch, 1996). For example, a highly coherent text on the American Civil War might (a) provide explicit definitions of important vocabulary words such as *secession* and *emancipation*; (b) have clear subheadings that outline key points; (c) make use of helpful figures like a timeline; and (d) provide regular summaries of key points, using signal words or phrases such as "in summary, to sum up, or overall." For students who are struggling with reading comprehension, it is especially important to choose books that are clearly written and structured in a way that helps the reader comprehend, such as well-structured books that explain unfamiliar vocabulary and are relatively easy to understand.

Principle 4: Choose texts at the right level of difficulty. To diminish students' reading difficulties and engage them with interesting topics, books must be at the right level of difficulty for the individual student. For students who are struggling with decoding and fluency, particularly those at very low levels of decoding (e.g., first grade), some decodable books and books with phonetically controlled text and high-frequency sight words may be necessary. These books should match the specific decoding skills that a student has mastered (e.g., one-syllable short vowel words and words with silent e). Students should be able to decode these texts with at least 95% accuracy to practice decoding and reading fluency (Stahl & Heubach, 2005). Other struggling readers, such as Jeff, may be functioning well below grade placement in decoding, but still decode well enough to read high-interest trade books. These are books on topics of interest to older students but written at an easier level (e.g., third or fourth grade for a sixth grader such as Jeff). For all struggling readers, it is important to use books at students' instructional levels, levels at which they can read with about 95% word reading accuracy and at least 80% comprehension accuracy. Reading A to *Z* (https://www.readinga-z.com), as an example of online resources, provides books along with comprehension questions based on students' instructional levels.

Principle 5: Align text options with background knowledge. Texts aligned with student background knowledge, including prior knowledge and vocabulary, can foster better text understanding and motivation. For instance, students might be more comfortable choosing the text "The Industrial Revolution," if they know how an assembly line works and if the appropriate vocabulary and concepts have been introduced earlier. It is important to note that texts should also be aligned with students' cultural backgrounds, such as providing culturally relevant texts for students from diverse cultures to read (Christ & Sharma, 2018). These texts can tap into students' background knowledge, beliefs, and experiences in ways that may enhance both reading comprehension and motivation to read (McCullough, 2013). For example, when reading "The Industrial Revolution," teachers could consider text options and instructional aids that reflect students' cultures and identity (e.g., a timeline of the industrial revolution from different countries), which might help students better connect with the text and increase their reading motivation. Table 1 provides a checklist that embeds examples and prompting questions to arouse students' topic interest, organized around the five principles discussed previously.

Activating Background Knowledge

Knowledge-based interest refers to knowledge from previous experience that students might already have before reading (Ainley et al., 2002). Research suggests that prior knowledge is critical in shaping student interest (Kokotsaki et al., 2016). Struggling adolescent readers are likely to have fragmented prior knowledge when first reading a new text. As students become more familiar with the topic, the knowledge related to this topic becomes both broader and more in-depth (Rotgans & Schmidt, 2017). At this stage, topic interest would be enhanced, that is, students choose similar topics to read as they develop prior knowledge; on the contrary, situational interest would be maintained (Flowerday & Shell, 2015; Tobias, 1994).

Educators can help build prior knowledge by engaging students in the learning process through a variety of hands-on activities to arouse situational interest and curiosity in reading. Doing so enables students to draw upon their own experiences to deepen their understanding of the concepts

Table 1. Topic Interest Checklist.

Principles	Examples	Prompting Questions for Teacher
Choose different genres	Mrs. Darby provides choices of different genres (fiction and nonfiction books) and models how to choose a book based on Jeff's reading level	• Did you offer meaningful choices with various genres? • Did you model how to make good text choices?
Choose appropriate text structures	Mrs. Darby teaches signal words for each text structure, such as the words for cause-effect (e.g., "'the reason why, because, as a result") and summarization (e.g., "in sum, to sum up")	• Did you teach important signal words? • Did you teach relevant features of text structure (e.g., characters, settings, and plots for narratives)?
Choose texts with high coherence ("consider-ate" texts)	Mrs. Darby works with Jeff to choose some high-interest, instructional level books to read that include clear subheadings and explanations of new vocabulary	• Did you introduce key vocabulary before reading? • Did you briefly discuss text features? • Did you introduce headings/subheadings?
Choose text at students' reading level	Mrs. Darby monitors Jeff's reading to ensure that he can decode his chosen text with at least 95% reading accuracy and at least 80% comprehension accuracy	• Did you provide books at the students' instructional level? • Did you preteach vocabulary? • Did you consider online resources?
Choose text based on student background knowledge	Mrs. Darby first identifies Jeff's interest in mountain-climbing and introduces any other relevant prior knowledge needed for Jeff to comprehend a text	• Did you choose texts for which the student has strong prior knowledge? • Did you provide culturally relevant texts for students to read?

and related knowledge to support both their decoding and comprehension of a text. Hands-on activities, as described in Zahorik (1996), refer to "a range of activities to engage students as active learners rather than passive learners" (p.6).

One way for teachers to incorporate hands-on activities is through project-based learning. Project-based learning is a student-centered intervention that involves authentic, real-world interaction based on active student collaboration in student-generated projects (Bender, 2012; Thomas, 2000). In project-based learning, students have the opportunity to select classmates for a project, engage in authentic, highly interesting topics with group members, and choose appropriate resources to solve problems and to build their background knowledge in reading. Therefore, project-based learning stimulates students' situational interests and motivates them to a great degree in pursuit of a solution. Project-based learning typically includes the following steps for teachers to take.

1. Initiate an "entry-level event" project that arouses students' interest and activates students' prior knowledge (Larmer & Mergendoller, 2010).
2. Stimulate students' curiosity about the topic, such as initiating a discussion using a set of guiding questions. Suppose a middle-school teacher is trying to engage struggling readers in reading a text entitled "Medicine: Past and Present." Before reading, students are encouraged to search for resources about medical history with guiding questions (e.g., Who was an important physician in the early history of medicine? What is a history of medicine timeline? And where did some of the earliest medications come from?).
3. Follow with searching for resources, gathering information to answer questions, and expanding knowledge of the guiding questions. To make the project achievable, it is critical to locate a reliable database, practice searching key terms, and gather and interpret results in an appropriate way.
4. Scaffold instruction (Bell, 2010). Teachers are encouraged to preteach vocabulary and decoding skills to alleviate reading difficulties, model the searching process, monitor student progress, and provide corrective and elaborative feedback. For example, for a student with decoding difficulties such as Jeff, teachers could preteach some generalizations for dividing long words and specific root words that are repeatedly used in particular topics.
5. Encourage students to demonstrate their learning in different ways (Bell, 2010). Involve reading and writing in authentic projects and look for opportunities to incorporate choices for students to share information with their peers (e.g., create a timeline, graphic organizers, knowledge maps, and pictures).
6. Present final results to an audience in a variety of formats, such as PowerPoints, graphic organizers, videos, oral presentations, and posters (Larmer & Mergendoller, 2010).
7. Consider the use of technology resources for project-based learning. Resources such as BIE (http://www.bie.org/project_search) and Global School Net (http://www.globalschoolnet.org) are websites that teachers could consider to gather some project ideas in reading and provide a network for project-driven collaboration. A project-based-learning cue card, as

depicted in Figure 1, provides an additional prompt to arouse students' knowledge-based interest.

Hands-on activities to build students' background knowledge often include direct involvement in the learning process (Fisher et al., 2012; Prokop & Fančovičová, 2017). Direct involvement, such as field trips and video watching, provides opportunities for students to activate prior knowledge by experiencing related topics outside of classrooms. For example, students could visit an assembly line in a factory and watch movies about how an assembly line works prior to reading a text such as "The Industrial Revolution." The KWL (i.e., what we Know, Want to know, did we Learn) strategy that incorporates the past experience of learners with what they know and what they want to know during the learning process. Think, write, pair, share is another strategy that enhances situational interest (Amelia, 2016). Learners think and write down their thoughts about a topic, then share and compare their opinions with classmates (Clapper, 2014).

Building student prior knowledge through hands-on activities may enable students to draw upon their own experiences to deepen their understanding of the content being presented, with better text comprehension as a result. In addition, hands-on activities may engage insightful cognitive processing and arouse more imagery. When designing hands-on activities for reading, it is important to note that the hands-on activities should establish students' interest as well as tie into learning objectives and curriculum content that leads to the acquisition of valuable learning.

Technology-Based Instruction

Task-based interest refers to the interest that is generated from using aids such as manipulatives or technology (Schraw & Lehman, 2001). Enhancing task-based interest, which helps students with disabilities overcome learned helplessness, has been found to have a direct impact on students' situational interest and beliefs in their ability to succeed in reading (Rotgans & Schmidt, 2011). In developing the motivation to read, students with learning disabilities might benefit particularly from computerized or technology-based reading instruction because technology can help them compensate for weaknesses associated with their disabilities (Cuevas et al., 2012).

Computer-assisted instruction (CAI), as an example (e.g., Computer-Assisted Collaborative Strategic Reading [CACSR]), is a possible way to assist students' comprehension skills and enhance students' task-based interest (M. K. Kim et al., 2017). Using CACSR (A. H. Kim et al., 2006) provides an interactive learning environment for students with learning disabilities. In CACSR, students receive computer-driven supports for the comprehension of selected texts from learning logs (e.g., a visual representation that records student learning progress), "clunk expert" (e.g., determine unknown concepts or vocabulary and use strategies such as prefixes or suffixes to identify the meaning), dictionary, and a quick review.

What are your learning objectives?	
What is your "entry-level" Project?	
Guiding Questions:	
Gather information to answer questions:	☐ Find reliable resources ☐ Use key words to search ☐ Gather information ☐ Interpret results ☐ Don't forget to ask for help!
What did you find? Share your learning within your group:	☐ timeline, graphic organizer, pictures, ☐ maps, knowledge trees ☐ website, readings ☐ videos
Prepare to present your findings with your audience:	☐ PowerPoints ☐ Posters ☐ Videos ☐ Graphic Organizers ☐ Writing

Figure 1. Project-based learning cue card.

Hypertext, audiobooks, and text-to-speech, which entails texts read-aloud online with modeling, can promote decoding and reading fluency (Salmerón et al., 2017). Text-to-speech, as an example of resources available to classroom teachers, helps students with learning disabilities to alleviate decoding difficulties by providing technology support and reading aloud online text with appropriate rate and prosody. With the assistance of text-to-speech accommodations, students listen to the read-aloud and can comprehend the text without having to put effort into decoding.

Knowing about CAI and the technology that is available to students can help teachers enhance their content instruction when delivering the lesson, as well as improve student engagement and motivation. Given limited school budgets, it is important to consider some free technology options that are available for classroom teachers to implement online, such as Nature Reader (https://www.naturalreaders.com), TTSREADER (https://ttsreader.com), and Read Works (https://www.readworks.org). Other technology is not free but still worth consideration, such as Ghotit Real Writer & Reader (https://www.ghotit.com) and Read and Write (https://www.texthelp.com/en-us/products/read-write/). Figure 2 provides additional technology to enhance student task-based interest.

When implementing technology-based instruction, it is important to note that some students with disabilities might lack necessary computer skills, such as typing, word processing, saving files, and online searching skills. Teachers may need to develop students' fundamental computer skills

Name	Description	Comprehension	Vocabulary	Background Knowledge	Text Structure	Word Recognition	Writing	Potential Usefulness in Enhancing Motivation
Ghotit Real Writer & Reader (https://www.ghotit.com)	This tool offers online training and practices of reading and writing for students with dyslexia and dysgraphia.					X	X	• Facilitate project-based learning (KBI). • Enable students to write about a project (KBI).
Read Works (https://www.readworks.org)	This online reading site offers free curriculum and resources to empower reading instruction.	X						• Provide a range of possible topics for students to read about (TI).
Readtopia (https://learningtools.donjohnston.com/product/readtopia/)	This is an online reading curriculum involving authentic literature and hands-on learning.	X	X	X	X	X		• Develop students' skills in phonics, vocabulary, and comprehension (TI & KBI).
Text-to-Speech (https://ttsreader.com)	This tool reads the text aloud with modeling.					X		• Enable students with limited decoding skills to enhance comprehension-TI.
Read &Write (https://www.texthelp.com/en-us/products/read-write/)	This is a literacy device to support students with disabilities in reading, writing, and spelling.	X	X	X		X	X	• Provide students with background knowledge and vocabulary instruction (TI & KBI).

Figure 2. Examples of strategies for task-based interest: matrix for technology-based instruction.
Note. KBI = knowledge-based interest; TI = topic interest.

Teacher: Ms. Darby	Learner's name: Jeff
Goal: Increase Jeff's overall motivation to read.	
Objective(s): • Increase Jeff's choice of reading as a free-time activity in school from 0 times per week to 3 times per week.	
Materials needed: • Books on mountain-climbing that are at Jeff's reading level • Project-based learning cue card • Technology resources	
Strategies for increasing Jeff's interest: • The teacher seeks coherent texts about mountain-climbing and provides instruction on text structure as needed. (***Topic Interest***) • The teacher chooses texts for Jeff to read at his instructional level, at least 95% accuracy in decoding and 80% accuracy in reading comprehension. (***Topic Interest***) • The teacher finds ways to use Jeff's interest in mountain-climbing as a way to facilitate participation in project-based learning in his general education classes. For example, if students in Jeff's social studies class are doing projects involving the study of various countries in Africa, Jeff might contribute research on the tallest mountain in Africa, Kilimanjaro in Tanzania. (***Knowledge-based Interest***) • Technology resources (e.g., Read & Write) are used to help Jeff with the reading and writing demands of his research, and the project-based cue card helps him with organizing and completing his part of the project. (***Task-based Interest***) • The teacher helps Jeff use technology resources that enable him to explore new topics (besides mountain-climbing) that might be of interest to him. Technology resources include online videos and programs that will read text aloud for Jeff. (***Task-based Interest***)	

Figure 3. Reading motivation intervention plan.
Note. The plan should be implemented over a period of time (e.g., several weeks) in conjunction with Jeff's reading intervention and revised depending on Jeff's needs.

as well as offer additional technical support to better prepare students for the instruction. Also, in technology-based instruction, providing corrective, elaborative, and immediate feedback is crucial to make the instruction smooth and successful. In addition, frequent progress monitoring is suggested to ensure students' progress is monitored, and the efficiency of reading instruction is evaluated and adjusted based on students' responses. Figure 3 represents an example of a motivation intervention plan to enhance student situational interest in reading.

Conclusion

This article described situational interest that can be valuable in engaging students with learning disabilities and other struggling adolescent readers in reading. By implementing motivational interventions created in alignment with research-based literacy interventions and interest theory, difficulties in motivating struggling adolescent readers may be decreased, and the quality and impact of reading instruction improved (Guthrie et al., 2006). Motivational strategies involving topic, knowledge-based, and task-based situational interest can be a valuable supplement to reading instruction. Through these strategies, educators can help students who have previously experienced long-term reading failure begin to experience not only academic success but also reading enjoyment.

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