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From Spark to Fire: Can Situational Reading Interest Lead to Long-term Reading Motivation?

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Abstract

The processes of change in children's reading motivation have not been widely studied. We investigated whether situated interest for a specific book may lead to longer-term intrinsic motivation for general reading. Two schools with 120 grade 3 students filled out reading logs identifying their reasons for reading their favorite books twice. In addition, students completed general motivation and comprehension measures as a pre-assessment and as a post-assessment. Students who increased in their level of situated interest in an information book over time increased in their general reading motivation from September to December. Also, students who decreased in their level of situated extrinsic motivation for reading a narrative book decreased in general extrinsic motivation. It appeared that children's changes in situated motivation predicted their changes in general reading motivation, within an instructional context that supports engagement and motivation in reading.

From Spark to Fire:

Can Situational Reading Interest Lead to Long-term Reading Motivation?

It is well established that reading motivation is substantially correlated with important cognitive outcomes such as reading achievement and amount of reading. Several investigations show that intrinsic reading motivation is more highly associated with reading comprehension than extrinsic motivation for reading among elementary school children (Baker & Wigfield, 1999; Cox & Guthrie, 2001; Guthrie, Wigfield, Metsala, & Cox, 1999; Wang & Guthrie, 2004; Wigfield & Guthrie, 1997). In these studies, intrinsic motivation referred to students' curiosity about new books and topics, immersion in reading for long periods of time, and preference for longer challenging texts. In contrast, extrinsic motivation referred to grades or competition as reasons for reading. For both aspects of motivation, students completed questionnaires. Intrinsic motivation correlated with their reading comprehension as measured by standardized reading comprehension tests. In these studies, this association was retained even when the contribution of past achievement, cognitive strategies, or parental SES was statistically controlled. In addition, intrinsic reading motivation was correlated with students' amount and breadth of reading activities. For instance, in a reanalysis of NAEP data, it was found that children's reading motivation was the strongest predictor of their subsequent reading comprehension in 10th grade after controlling for reading achievement in 8th grade (Guthrie et al., 1999).

A number of factors influence the intrinsic motivation of students in the elementary grades. Recent investigations suggest that some students are attracted to non-fiction books, whereas others are more attracted to fiction. Several observers reported that young males, especially, seek nonfiction books for their connection to their interests and accessibility (Dreher, 2003). Personal relationships with teachers or tutors who encourage reading books and

effectively scaffold reading processes may also increase interest and intrinsic motivation in reading (Worthy, Patterson, Salas, Prater, & Turner, 2002). Furthermore, children reported in interviews that their interest in book reading was influenced by their mothers, teachers, accessibility to books, and their own identity as readers (Edmunds & Bauserman, 2006).

In view of the importance of motivation, we need to develop stronger instructional contexts for motivational development. However, designing optimal motivation support is not easy, and depends partly on an understanding of how motivation develops. If we know what changes take place in children during the acquisition of reading motivation, teachers can more effectively create contexts conducive to motivational development. We do have a beginning. A variety of motivational activities that may occur in school or at home will foster children's motivation for reading. A meta-analysis (Guthrie & Humenick, 2004) reported experimental evidence that several classroom practices lead to improvements in reading motivation. These classroom practices include (a) providing choices of books or tasks during reading instruction, (b) affording students' opportunities for collaboration with classmates in reading activities, (c) providing interesting texts for instructional activities, and (d) providing hands-on activities or real-world interactions connected to specific book-reading activities (Guthrie, Wigfield, & Perencevich, 2004).

We need, however, to understand more about how students change as they grow in reading motivation. This question asks about the nature of the shifting affects as students become intrinsically motivated readers. Certainly students who are intrinsically motivated to read, and who read widely with positive affects for a variety of books, arrive at this state gradually. They are not born intrinsically motivated to read. And students are not transformed instantly into avid

readers by one catalytic experience. They almost certainly change slowly over time, but the question arises, “How does this change occur?”

One suggestion made by Hidi & Harackiewicz (2000), is that students first experience situational interest, and such interest is slowly followed by growth in intrinsic motivation. In this perspective, students first experience delight in a particular book that is highly specific. The delight may be limited to a single book, read with a certain person, on a given day, in a brief reading event. In this light, situational interest is defined as a temporary state that is produced by environmental conditions, rather than by well-developed internal needs (Alexander, Kulikowich, & Jetton, 1994; Renninger & Hidi, 2002; Schiefele, 1999). When students are captivated by a particular text, in a specific situation, with a host of environmental supports, they are enjoying a moment of situational interest.

Under the right classroom conditions, however, this situational interest may be re-experienced for another book in a series, or an alternative text on a slightly different topic. If the situational experience is accompanied by enjoyment, delight, and learning, the opportunity for developing long-term motivation may occur. Several investigators have distinguished between circumstances that succeed in “catching” students’ interests and those that succeed in “holding” students’ interests (Hidi & Harackiewicz, 2000; Mitchell, 1993). They suggest that factors influencing these two types of interest can be distinguished, although empirical studies have not been conducted on this point. We wanted to observe whether this linkage of situated interest and longer term motivation occurred, and whether coordinated changes in them appeared over time.

In this study, we investigated the extent to which students’ situational interest in reading may lead to long-term intrinsic reading motivation. This issue required us to investigate students’ changes across time in these forms of motivation. That is, we studied whether *increases* in

situational motivation will lead to *increases* in generalized intrinsic motivation for reading. In addition, we investigated how the situational interest and intrinsic reading motivations are related for information books and narrative books independently, because we expected that motivations for reading these genres may not be highly correlated (Guthrie et al., 2005).

The classroom context of this study was Concept-Oriented Reading Instruction (CORI), which merges reading strategy instruction and a set of motivational practices designed to enhance children's intrinsic motivation (Guthrie et al., 2004). In this instruction, students explore ecological issues and concepts in science such as the survival of birds or aquatic life (Barbosa & Alexander, 2004). Observational activities and investigations provide students hands-on interaction with the topic of ecology as a way to generate interest. To build on the situational interest emerging from these hands-on activities, students are provided with an abundance of interesting texts for comprehension instruction (Davis & Tonks, 2004). Many of the texts are trade books possessing the features of table of contents, index, illustrations, headings, and a coherent array of subsections. Students choose from these books the texts that are most relevant for answering their particular, self-generated questions and the issues they want to learn about. They also share and discuss the books with class members to build conceptual knowledge (Davis & Tonks, 2004). Simultaneously, students read chapter books, legends, and poetry on conceptually related topics in equal abundance and for equal amounts of time as they read information books. Thus, the classroom context affords students the opportunity to have situational interest in narrative and information books, and to develop long-term reading motivation as well as reading comprehension.

The research questions guiding this investigation were as follows:

1. How interested are children in information and narrative books provided in an elementary school program designed to foster reading motivation and comprehension?
2. What are children's reasons for reading their favorite book, and are these reasons more intrinsic or extrinsic?
3. How do children's situational interests in different books and their general intrinsic and extrinsic motivations for reading these books change over time (during the course of the program)?
4. How do situational reading interests relate to measures of reading comprehension?

Method

Participants

The study's participants were third grade students (N=120) from 7 classrooms in 2 mid-Atlantic state schools who took part in the CORI reading instruction program, with permission from their parents. We first report data on these participants' overall interest in the books they were reading for CORI. The subsequent analyses reported focus on two subsets of students. One group of students indicated that their favorite book was an information book at either the first administration (n = 25) or the second administration (n = 33) of the Reading Interest Log (described below), including students who picked information books as their favorite in both administrations (n = 8). A second group of students indicated that their favorite book was a narrative book at the first administration (n = 56) or the second administration (n = 29), including students who picked narratives at both administrations (n = 14).

Instructional Context

CORI program. Student participants were taking part in a 12-week Concept-Oriented Reading Instruction (CORI) program taught for 90 minutes daily that instructed on multiple

reading strategies while supporting motivational processes. Within CORI, students' motivation and engagement were explicitly supported through the five instructional practices described above: (1) using content goals for reading instruction; (2) affording choices and control to students; (3) providing hands-on activities; (4) using interesting texts for instruction, and (5) organizing collaboration for learning from text.

In addition, explicit strategy instruction was provided for the following reading comprehension strategies: (a) activating background knowledge; (b) questioning; (c) searching for information; (d) summarizing; (e) organizing graphically, and (f) structuring story. Each strategy was taught for one week, in the order presented previously, in the first 6 weeks of the intervention, and the strategies were systematically integrated with each other in the following 6 weeks. This sequence enabled students to gain command of the individual strategies, as well as to fuse them in complex comprehension activities in the classroom. Throughout, the strategies were modeled by the teacher, and scaffolded according to students' needs, with guided practice provided. This frame is similar to the recommendations and practices for multiple strategy instruction, as described in the National Reading Panel Report (2000).

In CORI, science inquiry was integrated with reading, which has been shown to increase both reading and science comprehension (Romance & Vitale, 1992). The focus of the CORI science unit was ecology, with a theme of "Survival of Life on Land and Water". This theme was taught in two related 6-week units; one unit focused on life on land, and one focused on life on water. Within each 6-week unit, students studied core ecological concepts. In the 6-week terrestrial unit, students participated in a habitat walk, specimen collection, feeder observations, feather experiments, and owl pellet dissection. In the 6-week aquatic unit, students studied life in aquatic environments with a pond observation, and an experiment with aquatic insects. Activities

such as comparing and contrasting the students' habitat walk in the schoolyard to the child's walk with her grandfather in *Owl Moon* (Yolen, 1987) integrated science with reading.

CORI books. In CORI, narrative and information trade books were provided for the two 6-week instructional phases. In each phase, four class sets of books (one book for each student) were used. Class sets consisted of two information books, one literary chapter book, and one narrative reading book. In addition, six team sets (one book for each team of four students) were used. Team sets included three information books, two literary stories/chapter books, and one narrative reading book. As noted above, project staff assembled a menu of books that had interesting content, diverse levels of difficulty, and text features helpful for strategy instruction (see Davis & Tonks, 2004). Teachers selected team sets from this menu of books. At least 25 individual copies of books on the conceptual theme were provided to enable students to complete their projects. Supplementing this minimum, teachers obtained library books and school resources. Students were expected to read at least 16 books in the 12-week unit.

Measures and Procedures

Reading interest log. Students completed the Reading Interest Log (RIL) to assess their interest in various books they read in class and their particular intrinsic and extrinsic reasons for reading these texts, and to assess change in both level of interest in different books and students' reasons for reading the books. The RIL was administered during the Week 2 (Administration 1) and the Week 7 (Administration 2) of the program. A copy of the RIL is included in the Appendix.

At each administration of the RIL, teachers presented students with five books of different types used the preceding week during reading instruction. The books included both information and narrative texts from the set of books used in CORI for that week, and sometimes

included poetry books as well. The students first were asked to indicate which books they read, and then rate how interesting each of the books they read was on a 5-point Likert scale. After rating the five books, they were asked to indicate the book that was the most interesting to them by circling it.

Students then were given a list of 12 possible reasons for why they read the book they rated as most interesting. These reasons were developed by the researchers to reflect the constructs of intrinsic and extrinsic motivation, and the reasons that students might be likely to report for reading in a school context. Six reasons were intended to reflect the construct of intrinsic motivation (e.g., I was interested in what the book was about; I got to choose to read it), and six reasons reflected the construct of extrinsic motivation (e.g., I wanted to get the best grade in reading; To get a sticker, award, or extra points for reading it). The intrinsic and extrinsic motivations are noted on the copy of the RIL in the Appendix. From the 12 reasons, students were asked to check the five most important reasons why they read the book they found most interesting.

From these “reasons for reading” three items were selected to represent intrinsic motivation and three items were selected to represent extrinsic motivation for the data analyses. For both intrinsic and extrinsic motivation, we used items that represented students’ goals, affects or self-initiated behaviors. For the intrinsic construct, we used the following: (a) I wanted to talk with friends about it; (b) I got to choose to read it; and (c) I was interested in what it was about. For the extrinsic construct, we used the following: (a) I wanted to get the best grade; (b) Because it made my teacher happy; and (c) To get a sticker, award or points. The other “reasons for reading” represented teacher requests or program requirements, which were credible to students filling out the reading log, but were not as fully representative of the theoretical

constructs. These other reasons represent constraints of instruction in which students have minimal choice or latitude to display their individual motivations. The items are shown in Tables 1 and 2.

Motivation for Reading Questionnaire (MRQ). Children completed an abbreviated version of the MRQ in early September before the 12-week CORI program began, and in December after it was over. The MRQ (Wigfield & Guthrie, 1997) is a self-report questionnaire designed to assess different aspects of children's motivation to read, including intrinsic motivation (defined in terms of curiosity, involvement, and preference for challenge), and extrinsic motivation (reading to get recognition, to compete with others). The version of the MRQ given in this study was a shorter version of the original MRQ that assessed intrinsic and extrinsic motivation to read, with 4-point Likert scales. There were 29 items on this scale, where nine items measured intrinsic reading motivation and 11 measured extrinsic reading motivation; remaining items measured reading efficacy and strategy use. Because the focus of this paper was on intrinsic and extrinsic motivation, we focus on those items. The intrinsic items assessed the constructs of curiosity, challenge, and involvement. The extrinsic items assessed the constructs of recognition in reading and competition in reading. Composites for each of these constructs were created by summing the students' responses on the intrinsic items to form the intrinsic composite and summing the extrinsic items for the extrinsic composite. Scores could range from 9 - 36 for the intrinsic composite and 11 - 44 for the extrinsic composite. These composites had internal consistencies, with the following Cronbach's alphas: .77 for the intrinsic composite in the September administration; .81 for the extrinsic composite in the September administration; .80 for the intrinsic composite in December; .84 for the extrinsic composite in December.

Reading comprehension. Children's reading comprehension was measured using the Gates-MacGinitie Reading Comprehension test, administered in December of the school year. We obtained standard scale scores and grade equivalent scores from this test. A measure of passage comprehension was administered as a pretest and posttest. The passage comprehension measure required students to read a randomly assigned 500-word passage in three alternative forms (bat, bear, or shark), followed by a knowledge structure task that students completed on a computer that asked students to rate the relatedness of key words. Scores range from -1.0 - 1.0, and represent similarity to expert comprehension of the text. Cronbach alpha was .87, and correlation with the Gates-MacGinitie was $r(54) = .44$, $p < .01$ for students in this study.

Results

Children's Reasons for Selecting Books

Examination of the book variety teachers offered students to rate at each administration revealed that students had sufficient opportunity to choose different types of books including information books. In the first administration, all seven teachers provided at least one narrative (story or chapter) book, and at least one information book. One teacher provided at least one poetry book for students' use when completing the Log. In Administration 2, all seven teachers again provided at least one narrative and at least one information book. Five teachers (71%) also provided at least one poetry book. In addition to rating their interest in the books, children were asked if they had actually read the book; 99% of the children said they had, so their ratings of their interest is based in their own reading of the book. At both times of measurement children rated the books as interesting to them; the overall mean summed across the books at each time of measurement was 3.70 ($SD = .82$) for Administration 1 and 3.60 ($SD = .82$) for Administration 2,

on the 5-point scale. Some variability in the ratings indicates that children reacted differently to the books.

With respect to favorite books, 25 students (17 boys and 8 girls) chose an information book as the book they were most interested in at Administration 1 and 33 students (22 boys and 11 girls) chose an information book at Administration 2. Eight students picked information books as their favorite at both administrations. For the narrative books, at Administration 1, 56 students (25 boys and 31 girls) chose a narrative book as the one they were most interested in, and 29 (13 boys and 16 girls) picked a narrative book at Administration 2. Fourteen students picked narrative books as their favorite at both administrations. A notable pattern occurred with book preference and gender. For children picking narrative books as their favorite, 55% were female and 45% were male. In contrast, for children picking information books as their favorite, only 32% were female and 68% were male.

Children's reasons for reading the books they selected are shown in Table 3. Because they were asked to circle a favorite book, it is reasonable that the most frequently selected reason was "personal interest". Also, because these were schoolbooks not children's own books, there were teacher requests and whole class requirements to be met that became reasons for reading. The more intrinsic motivations of choosing books and interacting socially about books began rather low, and then increased as the program progressed.

In subsequent analyses, we focus on the groups of children choosing these two genres of books, for two main reasons. First, most children in the sample chose one or the other of these kinds of books as the type that was most interesting to them. Second, these two kinds of books often are distinguished in the literature as having different properties and characteristics.

Therefore, we were interested in exploring children's reasons for reading these particular genres of books.

Change in Situated Intrinsic and Extrinsic Motivation for Reading the Favorite Book

For students who chose information books as their favorite, we analyzed whether their situated intrinsic motivation changed from Administration 1 to Administration 2. See Table 4 for means and standard deviations of situated motivation. We conducted an analysis of variance with time as the independent variable and situated intrinsic motivation scores as the dependent variable. The main effect was significant, $F(1, 56) = 8.51, p < .01$, showing that situated intrinsic motivation increased significantly from time 1 ($M = 4.16$) to time 2 ($M = 4.76$). This increase in intrinsic motivation reflects more students citing intrinsic reasons for reading such as a desire to discuss it with friends or that they were motivated by choice about which book to read (see Table 1). We also conducted analysis of variance with time as the independent variable and extrinsic situated motivation scores as the dependent variable. However, there was no significant effect for time from time 1 ($M = 4.20$) to time 2 ($M = 4.24$) on situated extrinsic motivation.

For students who chose narrative books as their favorite, we analyzed whether their situated intrinsic motivation changed from Administration 1 to Administration 2. We conducted an analysis of variance with time as the independent variable and situated intrinsic motivation as the dependent variable. The main effect was not statistically significant, showing that situated intrinsic motivation did not change significantly from time 1 ($M = 4.32$) to time 2 ($M = 4.07$) for children with narrative books as favorites. We also conducted analysis of variance with time as the independent variable and situated extrinsic motivation as the dependent variable. The main effect was statistically significant $F(1, 81) = 4.53, p < .05$, showing that situated extrinsic motivation decreased significantly from time 1 ($M = 4.16$) to time 2 ($M = 3.75$). This decrease in

extrinsic motivation reflects a change in the students' reasons for reading narrative books, mainly a decrease in students reading solely to get a high grade (see Table 2).

Change in General Intrinsic and Extrinsic Motivation for the Information and Narrative Book Groups

As a way to look at how situational interest may relate to children's general intrinsic motivation to read, we looked at change over time in children's intrinsic motivation (measured by student self-reported responses to the MRQ) for the group choosing information books as their favorite books, and for the group choosing narrative books as their favorite. We used *t*-tests to analyze change in mean levels of intrinsic motivation. For children choosing information books as their favorite books at Administration 1, intrinsic motivation increased from September ($M = 29.06$) to December ($M = 32.18$); $t(16) = 2.32, p < .05$. See Figure 1. Similar analyses were performed for children choosing narrative books as their favorite books at Administration 1. There were no significant differences in these analyses, indicating that the narrative group's intrinsic reading motivation did not change.

For comparative purposes we also examined change in children's self-rated extrinsic motivation from September to December for each of the two groups. For the group choosing information books as their favorite at Administration 1, there was no significant change in extrinsic motivation from September to December. The groups choosing narrative books as their favorite at Administration 1 declined in extrinsic motivation from September to December. The mean at September was 35.70 and the mean at December was 33.50, $t(41) = 2.41, p < .05$. See Figure 2. These trends are shown in Table 5, illustrating the association between changes in situated motivation and changes in longer-term general motivation.

Differences Between the Two Groups in Reading Comprehension

We assessed group differences in reading comprehension, as measured by the Gates-MacGinitie Reading Comprehension test, for the groups rating information and narrative books as their favorite at Administration 1. Students selecting a narrative book as most interesting had Gates-MacGinitie Extended Scale Scores (ESS) ($M = 478.74$) and Grade Equivalent ($M = 4.45$) scores that were not significantly different from those of students selecting an information book as most interesting ($M = 476.13$ and $M = 4.26$). On the measure of passage comprehension, the total group made statistically significant progress from a pretest of $M = .29$ to a posttest of $M = .37$, $t(51) = 2.09$, $p < .05$. The two groups (information book favorite versus narrative book favorite) were not significantly different at posttest.

Discussion

Several basic findings appeared in this investigation of children's records of their favorite types of books and their reasons for reading their favorite books. First, children who chose information books as their favorite initially gave reasons that reflected both intrinsic motivational reasons (I was interested in what [this book] was about) and extrinsic reasons (I wanted to get a good grade [for reading this book]). After approximately 5 weeks, students who named information books as their favorite were more likely to give intrinsic reasons for choosing a specific information book, but were as likely to give extrinsic reasons for their selection of a specific information book as they had previously. It appeared that the situational motivations for choosing information books became more intrinsic over this time period.

Second, children who chose narrative books as their favorite in the initial selection reported both intrinsic motivational reasons (I was interested in what [this book] was about) and extrinsic reasons (I wanted to get a good grade [for reading this book]). However, after 5 weeks

these extrinsic motivational reasons for choosing a narrative book reduced in frequency. Students who initially preferred narrative became less extrinsic in their reasons for choosing a specific book.

Third, and perhaps most important, these changes in situated motivations (e.g., reasons for choosing a specific favorite book), were linked to students' changes in their general motivations. These general motivations were shown in a broad questionnaire with inclusive statements, such as "I read books that interest me" (intrinsic) and "I read to get the best grade" (extrinsic). Students who chose information books initially became more intrinsic in their situational motivation, and for them, general intrinsic motivation increased. In addition, students who chose narrative books initially became less extrinsic in their situational motivation, and for this group, general extrinsic motivation decreased.

Our explanation for these motivational changes is based on self-determination theory (Ryan & Deci, 2000). These children were in a CORI classroom in which they learned about the conceptual theme of animals and their survival. As they gained knowledge on this topic, their sense of competence to choose, read and learn from information books on this topic increased. During instruction, students self-selected information books successfully and talked about them in collaborative groups. Thus, students who initially chose information books as their favorite became increasingly competent, autonomous, and related, e.g., self-determining, in their information book reading from the first to the last interview. In addition, students who choose narrative (fiction) books as their favorite became less extrinsic, e.g., oriented to grades or competition. This was likely due to the emphasis on understanding the conceptual theme, and writing extensively about it rather than rewards such as test scores or grades. Thus, the relatively extrinsic students also became more self-determining from the first to last interview.

It appeared that students' shifts in situational motivation (becoming more intrinsic or less extrinsic) were accompanied by shifts in the same direction for general motivation. This is important because situational motivation (e.g., liking a specific book at a specific time) by definition is transitory, illusive and context-bound. It does not guarantee wide reading or achievement. One can be entranced by one magazine article or one book without being an avid reader in general. One can comprehend a favorite text without being highly competent in reading a diversity of texts. However, general intrinsic motivation indeed predicts wide reading (Wigfield & Guthrie, 1997), and reading achievement (Wang & Guthrie, 2004). Therefore, it is general intrinsic motivation that we wish to enhance in education, and it appears that its growth is linked to the growth of situated motivation, at least for information books in a supportive instructional context.

Although intrinsic reading motivation tends to decline in elementary school (Eccles & Wigfield, 2002), nevertheless, some readers show high intrinsic motivation (Wang & Guthrie, 2004). As suggested in the introduction, there are two plausible frameworks for how high levels of general intrinsic motivation for reading develop in children. Students with highly developed intrinsic motivation for reading report high levels of curiosity to read, involvement in a range of reading activities, preference for challenging materials, and extended amounts of time in reading activities. The development of this cluster of attributes can be viewed from the perspectives of gradual development or situational motivation. In the gradual development view, students slowly become increasingly curious and involved, and slowly spend increasing amounts of time reading a wide range of books on diverse topics. In other words, the generalized, intrinsic motivation slowly increases from lower amounts to higher amounts.

In the situational motivation perspective, the students' initial motivations for reading are qualitatively different than they are at the later stages. In this framework, students' initial motivations are limited to specific texts on specific topics at a particular point in time. That is, a student may say, "I like this book," showing high positive affect for a particular reading material or event, while not having generalized intrinsic motivation for wide reading. As these positive, situational motivation events multiply in number and expand in diversity, these motivations become generalized. With repeated situational motivation experiences, students become positively disposed toward reading a range of topics and enjoying a variety of authors and books. Under these conditions, students' intrinsic motivation has increased to higher levels.

Of course, these are correlated changes and it is conceivable that the generalized motivation "drove" the situational motivations for reading. However, we believe this is less plausible than the reverse, in which situational motivation processes lead to and promote generalized motivation changes. We expect that as students become markedly more interested in specific types of books, by specific types of authors, on particular topics, over time their generalized motivation becomes more positive. Likewise, as students' extrinsic motivation (desire for grades or prizes) declines with respect to particular books, by specific authors, in concrete contexts, then their general extrinsic motivation for reading likewise declines.

It has been reported in a range of investigations that children's intrinsic reading motivation declines across the elementary school years (Eccles & Wigfield, 2002; Gottfried, 1990). Although we acknowledge this finding, such declines are neither inevitable nor irreversible. As shown in previous investigations, pointed efforts to increase students' intrinsic motivation can lead to increases in curiosity or involvement (Guthrie, Wigfield, & Von Secker, 2000; Wigfield, Guthrie, Tonks, & Perencevich, 2004), or decreases in students' performance

orientation toward reading, which is related to extrinsic motivation (Meece & Miller, 1999). The present findings suggest that there are likely to be two processes at work. First, situational motivation processes may occur in classrooms. These may consist of either intrinsic or extrinsic motivations. And these may increase or decrease in strength and frequency over time. When a sufficient number of classroom events occur leading to change in situational motivation, then change in generalized motivation may accompany them.

A second source of motivational development refers to contextual supports. Reading motivation is context-sensitive, and intrinsic motivation is likely to increase when the classroom context is providing support for children's choices, collaborations, interaction with challenging texts, and hands-on activities connected to literacy (Guthrie & Humenick, 2004). The occurrence of situational motivation itself is not likely to lead to long-term motivational development unless the classroom context is continually affording students experiences that increase their long-term motivation. It is evident that these classroom contexts may either increase intrinsic motivation or decrease extrinsic motivation, according to findings of this investigation and others (Meece & Miller, 1999). We did not attempt to distinguish the classroom practices or events that promote situational motivation from those that promote longer term, general intrinsic motivation in this study.

Although this was not an instructional study, there are implications for classroom instruction that might be forwarded based on these findings. To increase motivational development, teachers should provide support for situated experiences that increase intrinsic motivation. For example, an exciting activity that may be entertaining, such as reader's theater for a specific book, may increase situated, intrinsic motivation. Likewise, hands-on activities with science materials (a terrarium with plants and animals, or a field trip to a park) or hands-on

activities in history (a reenactment of a historical scene within the classroom) will increase situated, intrinsic motivation for texts related to these topics. However, these events will be insufficient to influence long-term motivation for reading. Experimental evidence suggests that increasing generalized intrinsic motivation requires the extended classroom practices of support for students' choices, collaborations, use of interesting texts, and real-world interactions related to literacy (Guthrie et al., 2004).

Some important limitations of this work should be mentioned. The sample size was relatively small and the results may not generalize beyond grade 3 students. The students in the study were taking part in the CORI program, which utilizes a particular set of instructional practices. Consequently, motivational development in different programs may not take the same developmental trajectory as it did in this investigation. The set of books within CORI, while extensive, is only a fraction of the possible books children could read and, therefore, motivational responses to different types of books remain to be investigated. These findings were based on students' reading logs and checklists, and while we believe they are valid, this response mode could be cross-examined with other methods of investigation. We did not interview students to obtain the factors that influenced their reasons for choosing their favorite books at the two points in time.

Future studies should address the two types of classroom context that influence motivation. One type of context excites students, and spurs their positive feelings of adventure, joy, and anticipation, inciting inquiry for a specific book, a single story, or a particular information text. For example, the situational context may be a hands-on experience that is connected to a book, such as dressing up like a character or looking at an iguana in a terrarium. Linked to text, such activities may be motivating, but only temporarily. The second type of

context fosters longer-term motivational development. This may include teaching students about a topic, such as a type of character (discoverer), or topic (reptiles) in a way that leads to sustained interest. This context fuels a desire to read for further experience and knowledge. A variety of experimental, qualitative-descriptive and case-based inquiries will likely be fruitful in this inquiry.

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Appendix

READING INTEREST LOG

You may have read these books or stories in class over the last few weeks in class. You probably thought some of them were interesting, and some were not as interesting. I will show you a book or story. Please say if you read it. **READING A BOOK OR STORY MEANS YOU SPENT AT LEAST 15 MINUTES WITH IT, OR READ AT LEAST FIVE PAGES OF IT.**

Let's practice first. Here is a book (or part of a book). Did you read it? If you did, put an x by Yes. If you didn't, put an x by No. If you read the book, then say how interesting it was to you by circling a number from 1 to 5.

How interesting was this book to you?

Not at all interesting					Very interesting
---------------------------	--	--	--	--	---------------------

Practice. I read this book. No ___ Yes___ 1 2 3 4 5

Now we will get started. Here is the first one. First say if you read it. If you read it, then say how interesting it was to you by circling one of the numbers from 1 to 5.

How interesting was this book or story to you?

Not at all interesting					Very interesting
---------------------------	--	--	--	--	---------------------

1. I read this book/story. No ___ Yes___ 1 2 3 4 5

2. I read this book/story. No ___ Yes___ 1 2 3 4 5

3. I read this book/story. No ___ Yes ___ 1 2 3 4 5

4. I read this book/story. No ___ Yes ___ 1 2 3 4 5

5. I read this book/story. No ___ Yes ___ 1 2 3 4 5

How much did you learn from this one?	1	2	3	4	5
	Very Little				A lot

OF THE FIVE BOOKS OR STORIES, WHICH ONE WAS MOST INTERESTING TO YOU? PUT A CIRCLE AROUND IT.

Here are some more questions about the book or story that was most interesting to you.

1. I want to read more books or stories like the one I circled.

1 2 3 4 5
 Not at Very Much
 all

2. I DID read more books or stories this week like the one I circled.

Yes ____ No ____

If you answered YES to number 2, please write the title:

CHECK FIVE REASONS WHY YOU READ THE BOOK YOU WERE MOST INTERESTED IN. There are no right or wrong answers.

- 1. ___ I wanted to talk with friends about it (I)
- 2. ___ My teacher told me to read it. (E)
- 3. ___ I got to choose to read it (I)
- 4. ___ Our whole class had to read it (E)
- 5. ___ It looked easy to read (I)
- 6. ___ I was interested in what it is about (I)
- 7. ___ I wanted to get the best grade in reading (E)
- 8. ___ I had to read it to do a worksheet (E)
- 9. ___ I did a science or social studies activity related to this book or story (I)
- 10. ___ My teacher made the book or story interesting (I)
- 11. ___ To get a sticker, award, or extra points for reading it (E)
- 12. ___ Because it made my teacher happy (E)

PLEASE CIRCLE THE ONE REASON THAT WAS MOST IMPORTANT TO YOU.

DOUBLE CHECK TO BE SURE YOU CHECKED FIVE REASONS.

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Table 1

Percentages of students who checked each item, by administration, and change in percentages between administrations, information book as favorite

Item	% checked in	% checked in	Change in %
	Administration 1	Administration 2	
Intrinsic			
Wanted to talk with friends about it	16	46	+30
I got to choose to read it	24	46	+22
I was interested in what it is about	76	85	+9
Extrinsic			
Because it made my teacher happy	56	64	+8
I wanted to get the best grade	36	36	0
To get a sticker, award, or points	28	24	-4

Table 2

Percentage of students who checked each item, by administration, and change in percentages between administrations, narrative book as favorite

Item	% checked in Administration 1	% checked in Administration 2	Change in %
Intrinsic			
Wanted to talk with friends about it	25%	28%	+3
I got to choose to read it	25%	7%	-18
I was interested in what it is about	82%	76%	-6
Extrinsic			
Because it made my teacher happy	54%	52%	-2
I wanted to get the best grade	50%	21%	-29
To get a sticker, award, or points	14%	10%	-4

Table 3

Children's reasons for choosing favorite books at Administration 1

Reasons for favorite book	Information book favorite %	Narrative book favorite %	Total group %
Personal interest	76	82	79
Easy book	64	71	67
Make teacher happy	56	54	55
Class had to read it	52	59	55
Teacher told me to	52	38	45
Get best grade	36	50	43
Teacher made it interesting	28	43	35
To do a worksheet	36	25	30
I got to choose it	24	25	25
Get a reward, prize	28	14	21
Talk with friends	16	25	20
For a science activity	20	11	16

Note: Numbers are percent of children selecting reasons.

Each student selected five from this list of 12.

Table 4

Means and Standard Deviations of Situated Motivation at Times 1 and 2

	Intrinsic		Extrinsic	
	Administration 1	Administration 2	Administration 1	Administration 2
<hr/>				
Information book				
<i>M</i>	4.16	4.76	4.20	4.24
<i>SD</i>	.62	.87	.76	.79
Narrative Book				
<i>M</i>	4.16	3.75	4.32	4.07
<i>SD</i>	.92	.65	.67	.77

Table 5

Changes in Intrinsic and Extrinsic Scores for Situated and General Motivation at 2 Administered Times

	Intrinsic		Extrinsic	
	Situated	General	Situated	General
Favorite book				
Information	Increase	Increase	No change	No change
Narrative	Decrease	No change	Decrease	Decrease

Note: Cells denote changes in scores from Administration 1 to Administration 2.

Figure 1

Changes in Level of General Intrinsic Motivation for
Students who chose Information vs. Narrative Books as Favorites

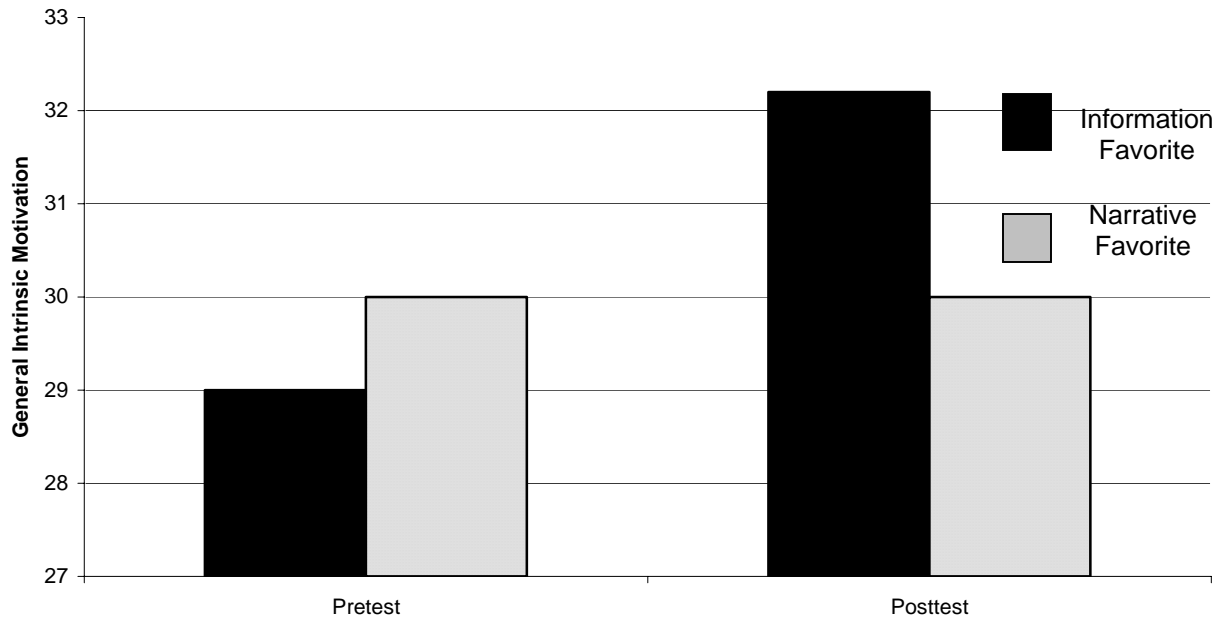


Figure 2

Changes in Level of General Extrinsic Motivation for Students who chose Information vs. Narrative Books as Favorites

