

## **11. Understanding the Complexities of Motivation and its Impact on Struggling Students**

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*Motivation impacts not only the ability to comprehend text, but the willingness to engage in comprehension to begin with. Unfortunately, the impact of motivation on readers varies widely across and within individuals. Understanding the complexities of the interactions of motivational correlates may allow educators to reach the most disaffected and struggling students. This paper provides an overview of some of the most important motivational correlates and recommends a direction for classroom instruction that maximises the growing understanding of how these correlates interact.*

Literacy development requires a conscious act of will. Everything from finding and choosing texts, to sitting down with texts, to enacting strategic reading processes, to incorporating new information into understanding requires active will and therefore motivation (Guthrie & Wigfield, 2000). Based on this idea, motivation is the foundation of active engagement. Each literacy act requires the motivation to act, the motivation to persist in activity, and the motivation to engage in cognitive and affective practices that will result in comprehension. Ability becomes meaningless if the individual lacks the motivation to act. Not surprisingly, motivation is highly correlated with measures of academic success including standardised test scores and teacher-derived grades (Gottfried, 1985).

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Those who are more successful readers are able to bring enough ability and motivation to reading events to make meaning on a regular basis. The overlapping factors of literacy motivation affect different people in different ways, and understanding may best inform literacy instruction for the benefit of the most struggling and marginalised individuals: every piece is important and needs to be considered in its own right, but it is only as we step back and examine the collection of pieces that we see the whole picture.

## **MOTIVATION, INTEREST, SELF-EFFICACY, AND RELATED CONSTRUCTS**

### **Motivation**

Hidi and Harackiewicz (2000) maintain that intrinsic and extrinsic motivational influences are not mutually exclusive and that the two can have reinforcing benefits. Extrinsic motivation may be particularly valuable for underachieving students who tend to lack intrinsic motivation.

Teacher and school-wide incentive programmes have been found to increase student reading amount. Giving students a reason to read, even if that reason is an external reward or the thrill of competition, has been demonstrated to increase reading time and recall (Agnew, 2000). Miller and Meece (1997) found that both intrinsic and extrinsic motivation are positively correlated to each other and to reading amount and frequency (Guthrie & Wigfield, 2000).

Because literacy is a developmental process potentially spanning an entire lifetime, it requires ongoing motivation. Individuals high in intrinsic motivation are likely to read greater amounts and more frequently than others. Motivation has been found to be highly predictive of reading amount, which, in turn, is highly predictive of text comprehension, even when other variables are controlled for. For this reason, motivation can be a compensatory factor, potentially mediating other discrepancies of struggling readers by creating a cycle of increased competence, increased motivation and increased reading amount (Guthrie, Wigfield, Metalsa, & Cox, 1999).

On the other hand, struggling learners tend to lack motivation or possess only situational and highly variable forms of motivation based on personally relevant information rather than the most significant information in a text (Alexander, Jetton, & Kulikowich, 1995). Struggling readers, in particular, need increases in motivation in order to risk effort in a process where they have already experienced repeated failure (Taylor & McAtee, 2003).

### **Interest**

One of the primary factors that will determine whether or not reading will occur at all and how long it will persist is the level of interest (Hidi & Harackiewicz, 2000). The first distinction many researchers make is between personal and situational interest.

Personal interest is characterised by long lasting and relatively stable interest in a topic, whereas situational interest is characterised by a more fleeting interest brought about by contextual features such as the text, the environment, or the influence of other people (Hidi & Harackiewicz, 2000; Schiefele, 1999). Both personal and situational interest have been found to be highly correlated with text recall (Schraw, Bruning, & Svoboda, 1995).

Personal interest has significant effects on cognitive performance. Schiefele (1999) argues that individual interest is antecedent to cognitive engagement that determines whether or not an individual is motivated to act. The greater the individual interest, the greater the strength of cognitions and likelihood that a motivated literacy act will occur.

Situational interest is described in the literature as being brought about by different environmental sources including ease of comprehension, text cohesion, text vividness, personal engagement, emotional reactions, and prior knowledge (Schraw, Bruning, & Svoboda, 1995). These sources of interest generate perceived interest in individuals, which is highly correlated to recall. Schraw, Bruning, and Svoboda (1995) argue that it is individual perceived interest which mediates the relationship between sources of interest and recall, and that a causal relationship between situational interest and recall can be established.

Hidi (1990) stresses that the dichotomous relationship between personal and situational interest often established in the literature has confounded the true relationship between the two. She demonstrates that both types of interest can not only be present at the same time, but can mediate each others' effects and influence each others' development. For example, a highly situationally interesting paper or presentation can evoke temporary interest in a topic. For some, this temporary state may result in added learning, attention, and interest that persist and develop into personal interest (Hidi & Harackiewicz, 2000).

They can also compensate for each others' absence. Personal interest in a topic can help motivate a person to read a boring article, whereas an article which sparks situational interest can engage a person in reading about a topic in which they have no personal interest. It is important to note that 'interest' is not synonymous with 'liking', even though these factors often accompany one another and much of the literature treats them as identical. In fact, being interested in something at the topic level may motivate one to persist even in the face of a dislikable task (Hidi & Harackiewicz, 2000).

### **Impact of interest on learning**

Even a temporary state of interest has been found to cause deep, effortless concentration and enjoyment. In this way, situational interest may be as beneficial to comprehension of a particular text as personal interest, even if it does not result in sustained textual involvement. Furthermore, situational interest that is enacted before learning occurs through an interesting discussion may create an interest to learn which functions in the same way as actual intrinsic motivation (Schiefele, 1999).

Research has demonstrated positive relationships between interest and deep-level text learning that are independent of prior knowledge and general cognitive ability. In a meta-analysis of 36 studies, Schiefele (1999) found that interest significantly and consistently relates to learning of different types of texts, regardless of other learner or text characteristics or intrinsic/extrinsic motivational stance.

At the same time, interest in a particular field has the potential to increase as a reader's knowledge in a domain increases. In fact, high levels of domain knowledge are positively correlated with high levels of interest in that domain (Alexander, Jetton, & Kulikowich, 1995). In this way, interest and knowledge can be seen to have a reciprocal relationship.

Some researchers argue that literacy acts involving personal interest will result in greater positive feelings than those of situational interest (Hidi, 1990). These positive feelings reinforce the desirability of literacy acts and result in greater task persistence and continued motivation. They also increase the chance of future engagement, increased competency and increased motivation. Research demonstrates that positive affective response is triggered by topic interest and results in greater persistence, which, in turn, is highly correlated to recall (Ainley, Hidi & Berndorff, 2002).

### **Goal orientation**

Reading for a purpose can help increase text-based interest and learning (Hidi & Harackiewicz, 2000). However, there are many purposeful positions that a reader may take. These different positions are referred to as goal orientation.

There are two types of achievement goal orientations: mastery and performance. Individuals with mastery goals desire knowledge, comprehension, and skill development. Individuals with performance goals desire positive feedback in the form of grades, praise, or comparisons with others, or seek to avoid negative feedback (Hidi & Harackiewicz, 2000). Individuals can also have task avoidance goals. In these cases, individuals are motivated to avoid an activity which they may find painful, embarrassing, or useless.

Individuals with mastery goals tend to persist longer and re-engage with challenging tasks, frequently resulting in increased comprehension and continued motivation. Mastery goals also have been shown to enhance intrinsic motivation (Hidi & Harackiewicz, 2000).

Achievement-motivated students with performance goal orientation, while having the ability to acquire deep knowledge, tend to only acquire surface level knowledge that is most likely to appear on an exam, resulting in high achievement as measured by grades, but no greater knowledge than students not likewise motivated. The process by which these students come to understand and how they use strategies such as memorisation and revision are tied to their goal orientation (Entwistle, 1994). Furthermore, individuals with performance goals tend to withdraw effort and terminate tasks sooner than mastery goal individuals, particularly when the task is difficult or perceived competence is low (Hidi & Harackiewicz, 2000).

While having a performance goal does not have a significant impact on the learning of highly interested students, it can positively impact the learning of students with low interest (Schiefele & Krapp, 1988). This is important when considering overall motivation: a deficit in one motivational component can sometimes be compensated for by a strength in another motivational component. Additionally, other research concludes that performance goals can have a positive influence on cognitive processing, self-regulation, and academic performance as well as other aspects of literacy and learning (Hidi & Harackiewicz, 2000).

Students with task or work avoidance goals are focused on minimisation of effort and quick task completion with little or no concern for either reward or comprehension. Unless this goal orientation is changed, these individuals will not benefit from text-based learning (Miller & Meece, 1997).

### **Self-efficacy**

Perhaps the most important aspect of competency beliefs is self-efficacy, or beliefs about the ability to act and successfully complete a task. Self-efficacy is the reader's belief that he/she has the capabilities to succeed at a particular reading task (Schraw & Bruning, 1999) and can be seen as a necessary condition for motivated action. Readers with high self-efficacy for a given literacy task believe they are competent to complete the task. High self-efficacy within a particular domain or task increases engagement, persistence, and strategy use, while decreasing anxiety (Bandura, 1993; Gottfried, 1985). Readers with higher levels of self-efficacy tend to set

broader goals and engage more deeply in texts. Individuals with high self-efficacy, therefore, are more likely to be, and to remain, motivated. Self-efficacy is positively correlated with transaction beliefs but not correlated with transmission beliefs (Schraw & Bruning, 1999).

### **Self-regulation**

Citing a German PISA Consortium unpublished report (2000, p. 1), Sofroniou, Shiel, and Cosgrove (2002) define self-regulated learning as 'having the ability to develop knowledge, skills and attitudes which enhance and facilitate learning, and which – abstracted from the original learning context – can be transferred to other learning situations' and state that it can be viewed as a 'goal orientated process of active and constructive knowledge acquisition, involving the guided interaction of an individual's cognitive and motivational/emotional resources' (p. 72). Self-regulated learning may involve such processes as memorising, rehearsing, planning, goal-setting, self-evaluation and monitoring, and the intentional seeking of information (Zimmerman & Martinez-Pons (1990).

Self-regulation can impact on motivation in many ways. First, individuals can learn to engage in strategies such as game creation, to make uninteresting tasks more interesting or enjoyable. By doing so, they can increase task persistence and develop enough experience and knowledge about the topic to become truly interested (Hidi & Harackiewicz, 2000). As literacy motivation decreases during adolescence, education and training in self-regulation may prove to be important in maintaining literacy development during these years. It may be particularly important when marginalisation interferes with learning processes and literacy opportunities.

### **Helplessness**

In an extensive study, Deiner and Dweck (1978) concluded that students with learned helplessness respond very differently to failure than do mastery-oriented students. The major finding was that students who have internalised a sense of helplessness tend to attribute failure internally, in the expression of negative competency perceptions, or externally, deeming the task impossible or too confusing or the teacher or system

unfair. Conversely, mastery-oriented students express high levels of competency perceptions and do not make attributional comments at all, even when receiving equal amounts of failure feedback as the helpless students. Instead, the mastery-oriented students verbalise problem-solution cognitions or enjoyment of challenge perceptions.

### **Self-perception and transaction beliefs**

Transaction beliefs help build self-efficacy, autonomy, and strategic processing by situating the learner as an active creator of information. They are directly related to reader comprehension. Readers with high levels of transaction belief systems believe that their thoughts, opinions and belief systems are relevant to the reading process. As a result, they tend to be more highly engaged in the process and build more elaborate cognitive models of the content (Schraw & Bruning, 1999).

Schraw and Bruning (1999) refer to implicit models, which are comprised of a variety of individual beliefs about self and learning which govern goal setting, strategy selection, and self-regulation. They believe it is this system of beliefs which creates a model or framework, rather than any individual belief that determines how readers view themselves and their role in the reading process. Not only are there positive benefits to high levels of competency beliefs, there also seem to be negative effects to its absence. There are positive correlations between academic intrinsic motivation and competency beliefs and a negative correlation between intrinsic motivation and anxiety (Gottfried, 1985).

### **Autonomy**

One of the most powerful affective motivators is autonomy. Autonomy can be viewed in terms of external choice making; however, autonomous control over the internal loci can be just as empowering. Students must be empowered to develop long-term personal interest by helping them to find personal meaning and relevance in literacy activities.

Autonomy is also relevant to more holistic motivational constructs. Intrinsic motivation by its very nature requires internal control (Hidi & Harackiewicz, 2000). External motivation, again, is not seen as the opposite

of internal motivation and autonomy of learning choices; rather, the degree to which external motivation involves and inspires autonomy depends upon how the individual internalises the externally motivating factors.

### **Attitude**

Taken together, all of the above can be seen as one's attitude toward reading. Attitude can be seen as a general concept defined as 'a state of mind, accompanied by feelings and beliefs, that makes reading more or less probable' (Smith, 1990, p. 156). Seen another way, attitude refers to both disposition and position. While a person may be generally positively disposed toward reading, that individual may never be in an actual position (sufficient confluence of text, context, and motivation) to turn disposition into action.

### **Environment**

One of the more significant external features may be the environment in which the potential literacy act occurs. Teacher relationships have been found to be very important predictors of academic success for Irish students (Smyth, 2000). For those students on the educational fringe, developing positive relationships is critical to ongoing motivation, particularly in the face of long-term literacy struggles.

### **Interactions of motivational factors**

It is unclear whether goals and motivation precede interest or whether interest is a necessary antecedent to goal formation, which leads to motivation. It is possible that affective responses will foster goals. It is equally possible that goal formation mediates affective responses.

Several separate constructs of motivation have been found to have high correlational relationships with each other. Pintrich and DeGroot (1990) have found that self-efficacy, intrinsic motivation, and learning goals have strong correlational relationships. Transaction beliefs and learning goals have shown similar strong correlations (Schraw & Bruning, 1999). Across subject areas, interest is highly correlated with competency beliefs, intrinsic motivation, self-esteem and skill, and emotional and

motivational reactions are highly correlated with perceptions of ability (Hidi & Harackiewicz, 2000).

Still, this correlational data does not give a picture of how these interactions play out within the individual. It is clear, however, they have an impact on comprehension.

### **MOTIVATIONAL CORRELATES AND COMPREHENSION**

There are several definitions of comprehension offered in the literature. One such definition involves the creation of a 'situation model' in which the situation being represented in the text modifies the reader's understanding of the situation at a global level. The text itself is first comprehended in its own right, using only those inferences that are necessary for coherence, and then the new information is integrated in a variety of ways into the reader's clusters of prior knowledge to create a new model of the situation (van Dijk & Kintsch, 1983, p. 196). Other definitions include the RAND Reading Study Group's Report (2002) definition, 'the process of simultaneously extracting and constructing meaning through interaction and involvement with written language' (p. 11). These definitions vary slightly in their emphasis on text and interaction, but both denote construction of new meaning as paramount to the notion of comprehension.

One of the basic principles of comprehension is that it is not an accidental occurrence, but that it is a motivated act of will, goal setting and pursuit (Alexander, Jetton, & Kulikowich, 1995). While the literacy context may be accidental in that stumbling upon a text may be unplanned, the decision to engage in an act of comprehension, a motivated literacy act, is strictly intentional. Furthermore, specific comprehension strategies as well as persistence in the face of a challenging text, one in which comprehension does not come easily, are highly dependent upon high levels of continuous motivation.

Comprehension is necessary to sustained motivation as having little or no comprehension renders the particular literacy act almost useless. On the other hand, motivation is necessary for comprehension as the

cognitive processes required to read require conscious choice to enact. At every stage of literacy engagement, before, during, and after reading, motivation is necessary to task persistence as well as to sustain the processes necessary for comprehension (Guthrie & Wigfield, 2000).

Alexander, Jetton, and Kulikowich (1995) have found that the interplay between knowledge, interest, and strategic engagement result in a significant increase in student comprehension and recall, particularly in regards to significant ideas of a text. High levels of prior knowledge and interest in a particular domain are positively correlated with high levels of recall, whereas low levels of prior knowledge and interest correlated with low levels of recall.

Research has also demonstrated that high interest, even in areas of lower domain knowledge, results in higher recall of both significant and unimportant details for all levels of readers. For struggling readers this may be a result of high levels of interesting seductive details maintaining engagement, although further research needs to be done to verify this conclusion (Alexander, Jetton, & Kulikowich, 1995).

Finally, Schiefele (1999) points out that

motivational factors affect different criteria of learning in different ways and that different motivational orientations do have different effects on the same learning criterion. Although these effects may be negligible for those purely interested in cognitive mechanisms of text learning, the importance of motivational factors becomes evident from an educational or instructional perspective (p. 258).

### **THE PROBLEM OF ALITERACY**

Aliteracy, or the choice not to engage in literate activity despite having the requisite abilities to do so, is hardly a new phenomenon. Aliteracy continues to be a problem for adolescence and adults as motivation decreases. In fact, the aliterate far outnumber the illiterate population, but have little advantage over them (Beers, 1996).

One possible reason for the trend toward aliteracy is the school systems' focus on skill building and functional literacy. When reading and writing are seen as requirements of the 'job' of school and not valuable in their own right, students will choose to only read when the job demands it (Mikulecky, 1978). From this perspective, school systems undermine the goals of establishing life-long learners and readers by decreasing the motivation to act independently of the requirements of the school environment.

While Mikulecky's comments were concerned specifically with the American school system, his conception of aliteracy being a function of the degree to which literacy is seen as a job requirement of a schooling system is relevant to an understanding of aliteracy in general and is potentially applicable to the Irish school system as well as that of the US.

Beers (1996), however, argues that there are multiple reasons for aliteracy and emphasises that there is no single reason for students to take these positions. Rather, each individual develops an aliterate stance as a result of personal interactions with texts, society, and self. As such, aliterates need to be addressed individually if there is hope to move them into the actively literate realm.

The adoption of an aliterate position in adolescence or earlier transfers into adult reading habits. High school graduates who do not choose to read after graduation may soon get passed up by ever increasing literacy demands and may eventually pass on an apathetic literacy position to their children, perpetuating the motivational problem. As such, an individual's "aliteracy, or lack of the reading habit, may guarantee his continued, life-long functional illiteracy" (Mikulecky, 1978, p. 6) and increase the chances of alliterate stances in future generations.

### **Social aspects of motivation**

Social motivation refers to readers as being situated as part of a learning or literacy community characterised by the sharing and discussion of texts. This dynamic can lead to high levels of intrinsic motivation and reading achievement (Wentzel & Watkins, 2002). A different possible socially constructed aspect of motivation derives from the performance

goal orientation, namely, competition, public recognition, and perceived feelings of superiority. These have been shown to be at least situationally motivating (Agnew, 2000).

However, social constructivism does not necessarily depend upon performance goals and extrinsic motivation in order to impact student learning, but rather strives to increase motivation through the often intrinsically motivating act of social discourse and increased competence. Students have linked increased interest in and appreciation of books to the opportunity to express their opinions and have discussions about what they are reading (Baumann, Hooten, & White, 1999). Furthermore, challenging, authentic, socially constructed and relevant learning tasks have been shown to engage typically unmotivated students in sustained, high-level literacy activities (Coiro, 2003).

### **INSTRUCTIONAL DIRECTIONS**

Although almost 82% of Irish students complete the senior cycle, students who scored at or below Level 2 on the PISA assessments increased from 27.9% in 2000 to 32.2% in 2003 (Cosgrove, Shiel, Sofroniou, Zastrutzki, & Shortt, 2004; Shiel, 2002). In the International Adult Literacy Survey (IALS), 52.6% of Irish adults scored at Level 2 or below in 2000. This dynamic is consistent with Mickulecky's concerns about the function of aliteracy as motivation declines during adolescence and adulthood. Many of these students have adopted work-avoidance goals that lead to aliteracy long before their school careers end. Shifting school instruction from transmission to transaction-based models, particularly for the most marginalised students, may be the secret to bridging the literacy and achievement gap for struggling students and creating life-long readers.

Transaction theories presume that the reader is an active participant in meaning making rather than a passive receiver of information. In the transaction model, the text, context, and learner all bring meaning to the literacy event and actively construct meaning together (Rosenblatt, 1982). Transaction-based instructional models and belief systems increase reading motivation by privileging the reader's role in the

process, thereby increasing investment, the priority of the reading goals, and the number of cognitive processes employed. Transaction belief systems may motivate readers to increase depth of text processing and strategy use, increasing ability to construct interpretations of texts and higher levels of comprehension through increased self-efficacy (Schraw & Bruning, 1999).

Transmission models and beliefs tend to decrease autonomy and increase reader compliance, reducing motivation to actively engage in cognitive processes (Schraw & Bruning, 1999). Students assigned to the bottom levels of the streamed schools in Ireland significantly underperform when compared to the lower ability students in mixed-ability classes, possibly due to fewer opportunities for transaction with text. Additionally, they have higher levels of alienation and drop-out rates (Smyth, 2000). An analysis across OECD countries shows that high engagement in reading may compensate for the literacy effects of low SES (Shiel, 2002) and is therefore critical.

By providing struggling students with a wide range of topics, learning environments, and opportunities to actively engage in authentic and meaningful literacy tasks, educators can create these highly engaging environments that offset not only the literacy impact of low SES, but the problems created by histories of low motivation and literacy success. These tasks must truly be authentic if educators are to reach all students, since the reasons for disengagement arise from individual combinations of the above factors. Different students may have different levels of interest, different goals, and be more or less motivated by reward systems. Similarly, while one student may be motivated predominantly by topic interest in one instance, s/he may be motivated by a long-term goal orientation in another. The correlates discussed above create a complex and ever-shifting Venn diagram of influence, changing both across and within individuals. Only through authentic literacy tasks can educators come to understand the motivational profiles of individual students. Students are empowered to make meaning that is relevant to their lives and feel their individual voices are respected in classes that embrace transaction with text. This is the environment in which educators can help marginalised students develop fully literate lives.

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