Understanding the Keys to Motivation to Learn

By Barbara L. McCombs

Trying to reach students who seem to have lost interest in learning and are displaying no motivation to learn in school, or who are defeated or turned off to school for any number of reasons, is a frustrating and all too common experience for teachers in today's classrooms and schools.

Why is student motivation to learn a problem in too many of our traditional educational systems? In contrast, what is present in those schools where motivation to learn is not a problem?

These questions have intrigued educators and motivation researchers for years, myself included. As both a parent and an educational psychologist, I have watched my two children start out with a boundless love of learning, natural curiosity and motivation to learn and explore their worlds, and an initial excitement about school. I have also watched this excitement and motivation become seriously eroded by the time they reached middle school. What happened to their natural motivation to learn and the motivation of a growing number of our nation's school children?

Exploring these questions, I have discovered some fundamental principles or keys to motivation to learn and to the identification of the instructional policies and practices that can re-inspire students to love school and help them recapture their natural motivation to learn. This article highlights my discoveries and their substantiation in current research. It provides specific guidelines for changes in practice that can help teachers and administrators positively address student problems with motivation to learn--whether they are in traditional teacher or curriculum-centered schools or in the growing number of learner-centered schools. Let's look first at what we know about motivation to learn; then at the conditions of schooling that can foster rather than actually work to destroy this motivation; and, finally, at what can be done to ameliorate or eliminate the negative conditions.

Understanding Motivation to Learn

The frustrations that many teachers feel in trying to motivate hard-to-reach students come from the realities of time pressure, the large number of students with learning and emotional needs, heavy accountability demands from administrators and parents, and other stress-producing situations that exist in many of our schools. It is helpful for teachers to know what those studying motivation are discovering about the nature of motivation to learn and the ways it can be developed and enhanced in students. This understanding helps teachers realize that almost everything they do in the classroom has a motivational influence on students--either positive or negative. This includes the way information is presented, the kinds of activities teachers use, the ways teachers interact with students, the amount of choice and control given to students, and the opportunities for students to work alone or in groups. Students react to who teachers are, what they do, and how comfortable they feel in the classroom. In short, this is because motivation is a function of what motivation researchers Deci and Ryan (1991) describe as natural needs for control, competence, and belonging that exist in all of us.

Knowing how to meet individual learner needs for control, competence, and belonging in the classroom is one key to student motivation to learn.

But let's look more deeply at what we know about motivation and, in particular, motivation to learn. When examining the concept of motivation, I have argued that learners of all ages are naturally quite adept at being self-motivated and at directing and managing their own learning on tasks that they perceive as interesting, fun, personally meaningful, or relevant in some way (e.g., McCombs, 1991, 1993, 1994). Typically, that means activities that are engaging or related to implicit or explicit personal goals such as feeling competent, in control, and/or connected to others. In short, the issue of needing to help students want to learn and self-regulate their learning comes up in those situations in which students (a) are asked to learn something that does not particularly interest them; (b) have little or no control or choice; (c) they lack the personal skills or resources needed to be successful; or (d) lack adequate external supports and resources, including adult help, respect, and encouragement. Since, for too many students, these conditions describe much of their schooling experiences, we

need to understand how to develop not only the student skills involved in self-regulation, but also the motivation or will to self-regulate their own learning. To enhance motivation to learn, all the preceding personal and contextual variables involved in schooling must be addressed.

Another key to motivation to learn, then, is being aware--for each learner--of the degree to which learning tasks stimulate and/or are related to student interests, the level of student control and choice that is encouraged, the necessary skill development that is fostered, and the resource and social support that is provided.

To understand how different schooling experiences can influence motivation to learn, it is important to distinguish its qualities in situations or on learning tasks that individuals perceive as interesting, fun, personally meaningful, or relevant versus tasks that are perceived to be boring, tedious, meaningless, or irrelevant from the individual's perspective. In the first case, motivation to learn is stimulated naturally because the learning tasks are perceived as exciting or personally meaningful. In the second case, motivation to learn must be stimulated from the outside to overcome the lack of intrinsic motivation that is caused by the student perceiving the learning tasks to be boring or not personally meaningful. An important distinction is whether choice is present and the degree of choice allowed. In many learning situations that are externally imposed, choices are limited to control and management of internal thoughts and feelings; behavioral choices are few. Another important distinction, therefore, is whether motivation is a natural response to the learner's curiosity or whether the learner must exert effort to manage feelings arising from negative thinking about external conditions (e.g., teacher, curriculum, instructional practices).

Motivation to learn needs to be understood as arising from both external supports and internal processes.

In my own work on motivation to learn, the self-determining aspects lie at the center of understanding why some students want to self-regulate their own learning and others do not. To understand why self-determination is so important to an understanding of motivation to learn, my colleagues and I (McCombs & Marzano, 1990, in press; McCombs & Whisler, 1989) have integrated work by Deci and Ryan (1991); Mills (1991); Mills, Pransky, & Sedgeman (1994); and Paris, Newman, & Jacobs (1985). From this integration, motivation to learn is seen as a function of both (a) a personal assessment of the meaningfulness of particular learning experiences or activities and (b) the process of self-initiating, determining or choosing, and controlling learning goals, processes, and outcomes.

For individuals to generate motivation to learn in learning situations, it is necessary for them to see that they have the natural capacity to be motivated to learn under the right internal and external conditions.

Internal conditions that can enhance motivation to learn in situations where what is to be learned is largely imposed from the outside include (a) an understanding of the self-as-agent in orchestrating thinking, feelings, motivation, and self-regulated behaviors; (b) operating from an understanding of natural capacities to control and direct one's own learning; and (c) perceptions that the learning task or experience is personally interesting, meaningful, and relevant. External conditions that support these internal conditions include provisions for relevancy, choice, control, challenge, responsibility, competence, personal connection, fun, and support from others in the form of caring, respect, and guidance in skill development.

Motivation to learn can be defined as a natural response to learning opportunities that is enhanced by: (1) a recognition of the role of thinking and conditioned thoughts in learning and motivation to learn under a variety of conditions, including self-constructed evaluations of the meaning and relevance of a particular learning opportunity; (2) an under-standing of one's natural agency and capacities for self-regulation; and (3) contextual conditions that support natural learning as well as perceptions of meaningfulness and self-determination.

What Are the Conditions that Foster Motivation to Learn?

To understand the conditions that foster motivation to learn in school, we must first consider what students are saying about their school experiences. From there, we can look at what we have learned about practices that can enhance motivation to learn, even in more traditional, non-learner-centered schools.

The learner's perspective of learning and schooling

When learners perceive learning to be interesting, fun, personally meaningful, and relevant and the context supports and encourages personal control, motivation to learn and self-regulation of the learning process occur naturally (McCombs & Whisler, 1989; Ridley, 1991). That is, in situations the learner perceives as interesting or related to personal goals that can be pursued in self-determining ways, the learner is caught up in the activity and directs attention to accomplishing the personal goal. The learner may not even be consciously aware of being self-motivated and self-regulatory. In many ways, the learner is in a state of "flow" or immersion in the enjoyment of the activity (cf., Csikszentmihalyi, 1990). In this state, the process of learning is intrinsically motivating, and motivation to learn is enhanced. Learners then want to regulate their learning and make the decisions necessary to reach personal learning goals or pursue personal interests.

From the learner's perspective, then, motivation to learn and self-regulation are natural. The problem is that students many times do not understand the role of their thinking in learning and do not see current educational content and practices as intrinsically interesting and engaging or relevant to their desired goals and personal interests. They also do not see the context as one that supports basic personal and social needs, such as to be self-determining, competent, and connected to others (cf., Deci & Ryan, 1991).

Another key to motivation to learn is helping students see ways they can change negative thinking and make learning fun by relating it to personal interests, working with others in meeting learning goals, and being able to make choices--have a voice--in their own learning process.

As borne out in work by Damico and Roth (1994), students who want to learn and stay in school, compared to students who drop out, characterize their schools as having a facilitative orientation toward students, with adults who treat them in positive ways, communicate high expectations, and also communicate joint responsibility for learning by staff and students. Students in schools with high graduation rates, as contrasted with students in schools with low graduation rates, also report that they had strong support systems, fair and consistent discipline policies, and a strong and active role and voice in school practices. Schools with low graduation rates were described by students as punitive and authoritarian, unfair and inconsistent, and with faculty who were demoralized and unsure about what type of learning environment they should be creating. Students were very clear and articulate about what needed to change. Damico and Roth concluded that, for schools to change in positive ways that will make a difference in whether students want to be in school and graduate, students need to be included in regular assessments of the impact of specific school policies and practices on creating a positive learning environment. Beyond this, students need to be involved on the front end in defining these policies and practices.

This fits with research by Zimmerman (in press) that shows that intrinsic motivation and self-regulation are, by definition, possible only in contexts that provide for choice and control. If students do not have options to choose among or if they are not allowed to control critical dimensions of their learning (such as what topics to pursue, how and when to study, and the outcomes they want to achieve), regulation of thinking and learning processes by the self is not fully possible. Externally imposed conditions then regulate the content, structure, and process of learning. Zimmerman goes on to argue that if students are not allowed choice and control, they are not likely to learn strategies for regulating their own learning and, as a result, do not attach value to self-regulation strategy training or willingly self-initiate and control the use of various strategies. Training in such self-regulation strategies as monitoring one's comprehension while learning, setting learning and performance goals, and

controlling negative emotions and cognitions have been shown to enhance school learning and performance (Zimmerman, in press). But if the major conditions required for self-regulation (choice and control) are not present, schools will actually work against helping learners want to learn and self-regulate their learning.

Contextual conditions and schooling

For a variety of reasons, our educational system operates to determine much of what students learn, when they learn it, how they learn it, and how long it takes them. The critical dimensions of self-regulation are then absent; and students' opportunities to develop self-regulated learning strategies are unequally distributed among those learners who come from families who value personal responsibility, learning and education and who are in a socioeconomic position to provide their children with opportunities to learn personal responsibility and self-regulation skills outside of school. When these more advantaged students are in school, they are characterized as being goal-directed, being able to manage their time and effort while learning, and having a strong sense of self-efficacy about their abilities to reach learning goals (Caplan, Choy, & Whitmore, 1992). They are usually the ones we see doing well in school as contrasted with children who see themselves as less likely to succeed, are more impulsive, have lower academic goals, are more anxious, and are more influenced by extrinsic factors than their more advantaged peers (Caplan et al., 1992).

Educational conditions that allow for the development of self-regulation strategies are the very ones that can address students' will to learn. They are those conditions that honor students' needs for choice and control.

Educators involved in rethinking the conditions that will not only help students learn desired outcomes but also engage students in wanting to learn these outcomes have recognized the importance of putting students in control of their own thinking and actions (e.g., AAAS, 1989; Farges, 1993; Wiggins, 1992). As stated by Farges (1993), the director of the San Francisco Project 2061 *Science for All Americans* (a K-12 curriculum model), "It is essential that students feel they have 'ownership' in decisions if they are to support them with any enthusiasm" (p. 22).

The *Science for All Americans* curriculum model is integrated from the student's perspective in that unique knowledge and skills the student brings from various disciplines are applied to a "challenge" task that is meaningful to him or her. The challenge task engages students in challenging their beliefs, actions, and imagination by having them investigate and respond to issues relating to survival and quality of life, solve problems, and/or create products. The curriculum is designed to create learning experiences that involve both critical and creative thinking skills by requiring students to define the task, set goals, establish criteria, research and gather information, activate prior knowledge, generate additional ideas and questions, organize, analyze, and integrate all this information (Farges, 1993). Students also are expected to self-evaluate the outcomes of the learning experience in terms of both the process and the product and, in short, to be self-regulated learners who control their own thinking and actions. The approach is learner centered in that it addresses the personal, social, academic, and physical needs of all students as well as maximizes their opportunities for choice. In so doing, it is in keeping with the research on motivation, learning, and self-regulation. An integration of this research helps us understand basic principles related to will to learn.

Beyond this knowledge base, however, is other work in psychology and philosophy that suggests that it is necessary for teachers to see learners as naturally motivated to learn and learning as a psychological event that flourishes in fun, exciting, personally meaningful, and supportive environments (McCombs & Marzano, in press). *This understanding by teachers is key to promoting a depth and joy of learning for a lifetime*. For teachers to create these environments, changes in thinking and practice are necessary.

Impacts of teacher beliefs and practices

A number of researchers have emphasized the importance of teacher beliefs in determining not only classroom

practices but also the orientation or perspective one has about learners, learning, and motivation. Research by Deci and Ryan (1985) has shown that if teachers have an autonomy orientation rather than a control orientation, their students will demonstrate greater intrinsic motivation and self-regulation. Thus, an autonomy orientation supports perceptions of self-determination and promotes willingness to learn. Furthermore, as students are given more responsibility for their own learning, Meece (1991) points out, both students and teachers come to believe that learning is supported by student self-regulation. Teachers then are more likely to let students make significant learning choices such as designing class projects, choosing learning partners, or setting classroom rules. Making these choices further supports self-regulated learning; and teachers' roles change from maintaining control to providing appropriate instructional supports or "scaffolding," modeling thinking and learning strategies, and being co-learners in an apprenticeship model of learning.

One set of beliefs about teaching and learning that supports an autonomy orientation is constructivism. This theory of learning holds that learning is a unique process of constructing meaning from information and experiences, that learners are responsible for their own learning, that teachers need to guide the process of learning by helping students raise questions about their understanding, and that all students can learn (Comeaux, 1993). What teachers believe about learners, learning, and teaching, however, can predict practice only to the degree that the context and policies of their school support these beliefs rather than interfering with them. For teachers to change their beliefs and practices, they also must be supported in their needs for autonomy, competence, and relatedness to others (Deci & Ryan, 1991; Ryan & Powelson, 1991) and have opportunities to learn about alternative techniques for fostering learning for all learners. Furthermore, school policies and practices must be supportive of new understandings about motivation in learning (Maehr & Midgley, 1991; McCombs & Marzano, 1990).

What is the role of the external context and supportive structures in enhancing motivation to learn?

Building on what is known about relationships between motivation to learn and opportunities to satisfy basic psychological needs for autonomy, competence, and relatedness--with a particular emphasis on the importance of autonomy-supports in developing self-determined motivation--it is clear that students need to be supported by opportunities for choice, to participate in making decisions about their educational process and activities. They also need to be encouraged to take responsibility for regulating their own learning and for being self-determined and autonomous learners. According to Zimmerman (in press), the psychological dimensions of self-regulation that are possible in school environments are in the goals and motives for learning (the "why" dimension), the method of academic learning (the "how" dimension), the performance outcomes to achieve (the "what" dimension), and the physical and social environment in which they learn (the "where" dimension). When choices are given in all these dimensions, the evidence is clear that student motivation, learning, and performance are enhanced. In addition, when students are allowed to be self-regulatory in these critical dimensions, they are more intrinsically or self-motivated, more active in planning and monitoring their learning, more aware of how well they are doing, more resourceful and efficient in their use of resources, and more sensitive to the social and environmental contexts in which they are learning. The contextual supports needed also relate to the interpersonal and classroom climate set by teachers.

The interplay between learner needs, skills, and contextual supports

In our own work with motivational contexts (e.g., McCombs, 1996; McCombs & Whisler, 1989), we have defined the enabling interpersonal context for the empowerment of will and development of skill as one that provides social support. In our reciprocal empowerment framework, social support meets needs for (a) relatedness, by creating a climate or culture of trust, respect, caring, concern, and a sense of community with others; (b) autonomy, by providing opportunities for individual choice, expression of self-determination and agency, and freedom to fail or take risks; and (c) competence, by providing feedback, challenge to elicit creative and critical thinking, and opportunities to grow and to see growth in one's capacities and skills (cf., Deci & Ryan, 1991). Our framework also addresses the will and skill components of motivation (cf., Paris et al., 1985).

We have recommended that interventions aimed at creating climates of positive social and emotional support for students and teachers are those that create opportunities for teachers and students to role model effective behaviors, and to participate in role plays that simulate listening and inter-personal activities. As teachers experience the self-determining, self-constructive nature of learning and a positive climate of support and quality relationships, they can internalize new roles and metaphors of teaching that are consistent with the current knowledge base on learning and learners' needs. As teachers modify their beliefs and practices, they are better able to support the development of self-determining and self-regulatory processes and behaviors in their students. They are also better able to focus not only on the self-regulatory aspects of learning, but also on the motivational needs and characteristics of the learner.

Research reported by Deci, Vallerand, Pelletier, & Ryan (1991) indicates that when teachers are noncontrolling and nonpressuring, students are more likely to regulate their own learning; and they have higher intrinsic motivation, feelings of competence, and self-esteem than with controlling and pressuring teachers. In addition, Stiller (in preparation) points out that those educational contexts that promote self-determination are based on different assumptions than those contexts that are controlling. In the former, motivation is seen as originating from the students themselves, whereas in the latter, motivation is seen as originating from others. Stiller defines autonomy supportive classrooms as those in which students experience a valuing of their perspectives, have opportunities to share their thoughts and feelings, and are encouraged to make choices and take self-initiative in learning activities. On the other hand, controlling classrooms are those in which students experience pressure to think, feel, or behave in a specified way defined by others rather than themselves. Externally imposed classroom regulatory structures such as rules or goals can be experienced as self-determined, however, to the degree that students accept them, value them, and personally endorse them. In such cases, the externally imposed structures have been accepted and students experience personal responsibility and choice rather than coercion and pressure (Stiller, in preparation).

Expected outcomes of effective interventions

In general, effective interventions for promoting will to learn, motivation, and self-regulated learning focus on an understanding of basic learner needs, interests, and learning capacities as well as an understanding of the personally and socially constructive nature of the learning process. Psychological research from such areas as human development, learning, cognition, and motivation are being integrated in ways that can contribute directly to practices that are responsive to the individual learner. Ornstein (1993) argues that key in those practices that foster motivation and engagement in learning are good teaching and teachers that emphasize the personal and social development of learners. He cites a variety of research indicating that people perform best when they feel respected and valued, when they can develop their own unique strengths, and when they are helped to take control of their learning and their lives. Furthermore, Oldfather (1991) contends that students' continuing impulse to learn is propelled and focused by conditions that are learner-centered as defined from the perspectives of students. Her research indicates that higher levels of intrinsic motivation are evoked in contexts that honor students' self-expression--when their voices are heard, taken seriously, and acted upon.

In addition to the benefits of enhanced motivation to learn, research shows a number of other benefits of interventions that focus on providing more learner choice and control. These include greater displays of active planning and monitoring of learning, higher levels of student awareness of their own learning progress and outcomes, more resourcefulness and efficiency in using learning resources, and higher levels of sensitivity to the social learning context (Zimmerman, in press). Benefits also include broader educational outcomes such as staying in school, higher academic performance, self-regulation of learning such as doing schoolwork, feelings of competence and self-esteem, enjoyment of academic work, and satisfaction with school (Deci et al., 1991).

From our work with learner-centered models of education (McCombs, 1996; McCombs, Swartz, Wlodkowski, Stiller, & Whisler, in press) that build on the *Learner-Centered Psychological Principles: Guidelines for School Redesign and Reform*, published by the APA Task Force on Psychology in Education (1993), it is clear that redesigning school and classroom practices and structures in keeping with what we know about learners and

learning can lead also to outcomes that extend to enhanced student valuing of schooling and learning, as well as a reduction in students' feelings of alienation, boredom, and frustration. In turn, when practices provide for critical dimensions of choice, relevancy, control, responsibility, and connection with others, outcomes such as reduced dropout and associated problems such as drug use, gang involvement, and other negative behavioral outcomes are possible.

Conclusions

From my read of the research, the support is overwhelmingly on the side of learner-centered practices that honor individual learner perspectives and needs for competence, control, and belonging. The voices of the students themselves provide even more support for this perspective. Listening to the voices of students is increasingly being advocated by researchers concerned with enhancing student motivation (e.g., Oldfather, 1992; Poplin & Weeres, 1993). When students are asked what is right about schools, they most frequently mention high quality human relationships in which people care, listen, are honest and open, understand, and respect others. When students are asked what makes school a place where they want to learn, they report that they want (a) rigor and joy in their schoolwork, (b) a balance of complexity and clarity, (c) opportunities to discuss personal meanings and values, (d) learning activities that are relevant and fun, and (e) learning experiences that offer choice and require action (Poplin & Weeres, 1993).

This integrative approach to understanding motivation to learn from the perspectives of current thinking in psychology and education leads to the conclusion that we need to rethink our models of learners and learning. It means a relatively dramatic transformation in what we think, as well as what we know about ourselves from experience with our capacities for accessing natural learning and motivation to learn. Most importantly, however, it involves a willingness to entertain alternative perspectives of motivation and what schools and classrooms, teachers and teaching processes need to look like for students to love to learn in school and in life. It means inspiring a thirst for knowledge that leads to competent performance as a natural outcome of learning and schooling.

This moves us to go beyond the perspective of *motivating* students to *fostering* and *enhancing* access to natural learning and motivation to learn capacities that exist in all of us. We will need to consider strategies for sharing knowledge, expertise, power, and control among learners at all levels of the system--students as well as teachers, administrators, parents, and community members. Building true learning communities will be key. All of this will not be easy and will most certainly be controversial within the field and in practice. But I believe this direction will be worth it, for it will move us toward the goal of *all* students learning at their highest potential inside and outside of school-and loving it.

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