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Self-Efficacy: A Key to Literacy Learning.

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Perhaps one of the greatest problems in education today is not illiteracy, but aliteracy (Cramer and Castle, 1994). Aliteracy has been defined as a "lack of the reading habit; especially, such a lack in capable readers who choose not to read" (Harris and Hodges, 1981, p. 11). With all of our knowledge of reading strategies, activities, lessons, and programs, why do so many of our students seem to prefer aliteracy? What is missing in our classrooms and in our teaching? In this article, it is proposed that a crucial ingredient in helping students become lifelong learners and joyful literates is a clear understanding of motivation.

The components that contribute to successful literacy learning are many and varied. Educators have the important job of sifting through the numerous curricula available to find those that meet the needs of their students. However, if we truly cherish the idea of transforming our students into lifelong readers, then specific reading skills and strategies might not be the place to begin. First we need to conceive a plan to motivate our students and develop their positive attitudes about reading.

Current research is just recently acknowledging the importance of motivation and other affective variables in learning to read and write. "Our longheld institutions about

the powerful impact that attitudes, values, beliefs, desires, and motivations exert on literacy learning have begun to receive the focused attention they deserve (Henk and Melnick, 1995). We are beginning to understand that teaching methods that demand attention, grade performance, and use only extrinsic rewards are not efficient ways to teach human beings (Condry, 1978). This may be how we produce aliterates who read only because they have to and never experience reading and learning for pleasure.

In contrast, our goal in teaching reading should be the "development of literature for life" (Troy, 1982, p. 252). Troy wisely asserts we can never teach all the great books, so promoting in students a motivation to read on their own is imperative. As we find ourselves moving consistently away from behaviorist ideas and toward cognitive theories of learning, most educators find themselves in agreement with the statement that students learn better when they know how to learn and when they are motivated to learn (Bouffard-Bouchard, Parent, and Larivee, 1991).

So the question now is how do we effectively motivate students to read? Motivation is complex and involves many components that are certainly worthy of much more research in the future. However, through a combination of classroom experience and professional reading, one fascinating aspect of motivation that I have found to be especially pertinent to the students in my own classroom is self-efficacy.

Defining Self-Efficacy

A broad definition of self-efficacy can be stated as the power to produce an effect (Lacour and Wilkerson, 1991). To be more specific, Henk and Melnick (1995) cite Bandura's definition which describes perceived self-efficacy as a person's judgments of his or her ability to successfully participate in an

activity and the effect this perception has on future activities. In other words, students with positive self-efficacies feel in control of their learning situation and believe they have the capabilities necessary to succeed.

Students with poor self-efficacies do not feel in control and believe they do not have capabilities for success. Students' perceptions about their abilities influence how they behave, their thought patterns, and their emotional reactions in difficult situations (Bandura, 1984). Someone with a high self-efficacy is confident and motivated to work toward a learning goal, while a student with a low self-efficacy is not motivated and finds working toward a particular goal very difficult. It is partly through perceptions of self-efficacy that one chooses what to do, how much effort to expend, and how long to persevere at a particular task (Bandura and Cervone, 1983). Self-efficacy is based on social learning theory (Lacour and Wilkerson, 1991) and is a construct that affects motivation and thus can promote or inhibit learning (Evans, 1989).

Self-perceptions can be very powerful influences on our students in the classroom. So often educators only look at a students' ability level when predicting achievement, ignoring that the efficacies of these students play an influential role also. It is also important to be aware that a student's self-efficacy does not necessarily give a true picture of ability (Bouffard-Bouchard, Parent, and Larivee, 1991). Very capable students often fail because their self-efficacies are low. They don't think they can succeed, so their poor self-efficacy overrides their true ability. Motivating these students is crucial, but in order to accomplish that goal, enhancing their self-efficacies must come first.

The man who did much of the seminal work with the concept of self-efficacy is Albert Bandura of Stanford University. In an interview with Richard Evans (1989), Bandura discussed how self-efficacy became of interest to him. He had been working with people suffering from phobias when he found their treatment seemed to affect other areas of their lives as well. He knew this was not simply a behavioral change, but an altering of their beliefs. This discovery led to Bandura's continuing work with self-efficacy which he relates to coping strategies, stress management, and health issues as well as education.

Perhaps the following concrete example provided by Bandura (1984) can help clarify the concept of self-efficacy. If we were measuring driving self-efficacy, we would not ask the driver such questions as whether they could turn the ignition key or steer, accelerate, and stop a car. We would want to use such questions as whether they felt they had the ability to navigate busy highways or steer on winding mountain roads. Self-efficacy does not reveal what a person can truly accomplish, but what they think they can accomplish, and as educators, we need to realize this can make a big difference in a student's motivation and performance in the classroom.

Bandura (1993) states that perceived self-efficacy plays a key role in the self-regulation of motivation. Students form beliefs about what they can and cannot do and this affects their motivation. Self-efficacy beliefs influence the goals students set for themselves, how much effort they will expend, how long they will persevere during difficulties, and how strong their resilience to failure may be. All four of these characteristics help determine the amount of success students will experience in their academic work and the motivation they will feel toward it.

In Evans (1989), Bandura mentions that a high self-efficacy is a quality possessed by many people who have obtained eminence in their field of expertise. Most famous individuals can recount the pain they suffered because of rejection early in their careers, but then how they overcame the pain through perseverance. This self-confidence is certainly a quality we would like to foster in our students. However, simply telling them that they can do it or that they need to keep trying is not enough (Bandura, 1993). Henk and Melnick (1995) cite Bandura's self-efficacy model to describe how students take four basic factors into account when estimating their capabilities. Although these factors work in an overlapping and interacting manner, they still give us a clearer picture of the elements that contribute to the construction of a person's sense of self-efficacy.

Performance -- A student considers his or her past successes and failures, the amount of effort and assistance that was necessary, the task difficulty, the persistence needed, and the belief of effectiveness of the instruction.

Observational Comparison -- A student compares himself or herself with classmates.

Social Feedback -- A student heeds direct and indirect input from teachers, classmates, and family members.

Physiological States -- A student notices internal feelings during the task process which may be demonstrated by such physical manifestations as sweaty palms or "butterflies" in the stomach.

People who regard themselves as highly efficacious act, think, and feel differently than those who see themselves as inefficacious (Bandura, 1984). As an example, Bandura states that students who have a high self-efficacy attribute their failures to inefficient effort and will most likely try harder the next time. Students with a low self-efficacy attribute their failures to insufficient ability and feel they have no control in

changing the situation. Efficacious students approach difficult tasks as challenges to be mastered.

Inefficacious students see difficult tasks as challenges to be mastered. Inefficacious students see difficult tasks as something to be avoided, and they worry about what will go wrong, often visualizing failure scenarios (Evans, 1989). However, we need to remember that high-ability students may have low self-efficacies. A knowledgeable student may perform poorly because of visions of failure and a feeling of no control (Bandura, 1993). Bouffard-Bouchard, Parent, and Larivee (1991) describe a study done by Collins where perceived self-efficacy affected academic performance more strongly than ability level. The study also confirmed that low self-efficacy can impair achievement of high ability students.

Motivation suffers when self-efficacy is low. Learners won't attempt a task if they feel their chance of success is poor. They need to feel efficacious enough to meet the difficulties of the task head on and plug in needed effort and strategies (Schunk, 1994).

Self-perceptions can impact a student's motivation toward the process of reading as well. Students who perceive of themselves as good readers have ongoing positive experiences with books, find reading to be a source of gratification, expend effort in reading activities, seek out challenging reading materials, and persevere in pursuing comprehension (Henk and Melnick, 1995). Henk and Melnick also provide a portrait of students who see themselves as poor readers. These students have not encountered many positive reading experiences. They don't look to reading as a source of pleasure or gratification. They avoid reading and put little effort into it, since they are afraid they will fail anyway. Comprehension is not sought out and so often is not attained

at all. All of these characteristics impact students' self-efficacies, and as a result, enhance or harm motivation.

My interest in perceptions of self-efficacy began when I realized that many of my own students fit the portrait of the poor reader. They did not believe they could make an impact — in their academic work, in their effort, in their reading, or in the classroom in general. They had lost control of their literacy learning, and I recognized that an understanding of self-efficacy might be able to empower them. Self-efficacy perceptions are thought to be situation-specific and not a permanent personality trait or a general self-concept (Pintrich, Marx, and Boyle, 1993). Thus, teachers can make a difference in their students' self-efficacy beliefs.

Developing students' positive self-efficacies

Bandura's (1993, p. 136) statement of the purpose of education features self-efficacy at its core. "A major goal of formal education should be to equip students with the intellectual tools, self-beliefs, and self-regulatory capabilities to educate themselves throughout their lifetime." To do this, we need to rethink the activities with which we involve students. Schunk (1990) cites Graham and Barker to point out that some product-oriented instructional practices used to develop skill mastery can convey to students that they lack ability and this can undermine motivation and self-efficacy.

As we determine which lessons and strategies are beneficial for our students, we need to filter them through the lens of motivational value. In Evans (1989), Bandura suggests two components for motivating lifelong literacy. First we need to teach the cognitive skills and tools necessary for students to learn, but along with that we must also enhance their self-efficacy so these skills and tools can be used successfully. Which activities will strengthen the efficacies of

our students and motivate them to participate in literacy learning? Some suggestions follow.

Performance goals and learning goals. Schunk (1994) distinguishes between performance goals and learning goals in the classroom. Performance goals are those in which a task is to be completed or a product created. A problem with setting performance goals is that students may compare themselves with their peers instead of their own previous performance. It may seem at times that competition such as this motivates students to work harder, but this is short term. In the long run, self-efficacy can be damaged and motivation is lost.

Learning goals refer to strategies and knowledge to be acquired and educators are increasingly putting their emphasis on these. When students work toward learning goals, they are focusing their attention on processes and they experience enhanced self-efficacy when their skills improve through expended effort, persistence, and use of effective strategies (Schunk, 1994).

A practical example of performance and learning goals might be the following taking place during a reading lesson. While reading a novel, students working on performance goals might be writing answers to questions at the end of each chapter, completing a book report when the book is finished, or computing the number of pages read to meet the requirements of an assignment. Students allowed to attend to learning goals might be keeping a journal of their reactions and opinions as they read through the novel, creating an art project that demonstrates what the book means to them, or participating in literature circles where discussions would include making connections between the novel and their own lives and choosing confusing sections to reread and ponder.

The difference between the two types of goals is crucial. The performance goals are simply testing a student's "ability," even though the test doesn't take into consideration all the factors involved in a student's "ability." Some students may fail this test. Competitiveness and deterioration of self-efficacy may occur. Thus, motivation is decreased as well. In contrast, the learning goals stress cooperation, risk-taking, and self-expression. The learning is set up so all students can experience some success. Positive self-efficacy is promoted and motivation is instilled.

To be most effective in promoting self-efficacy and motivation, it has been found that goals need to be more specific than general, proximal rather than distant, and attainable rather than too easy or too difficult (Bandura, 1986). These characteristics ensure that students feel they can stay in control of the steps taken to advance learning. Also, students who are allowed to adopt their own goals experience increased self-efficacy as they watch their progress and note skills being gained. They feel a heightened sense of capability, and when the goal is attained, are motivated to set new goals (Schunk and Swartz, 1993). Students should always be aware of goals in the classroom, and if the goals are set with promoting efficacy and empowering students in mind, motivation to achieve these goals will increase.

Progress feedback. Even if learning goals are in place, students don't always know if they are progressing satisfactorily and if their use of strategies is effective. Perceived progress, in addition to process goals, is necessary to raise self-efficacy (Schunk and Swartz, 1993). Students need periodic feedback to demonstrate to themselves they are progressing toward the desired goal. The purpose of the feedback is not to test their ability at that point, but to establish that they are

improving and learning, to foster their self-efficacy, and to encourage their motivation.

Schunk and Swartz (1993) conducted a study in which students displayed higher self-efficacy and a maintenance of those self-perceptions for six weeks when process goals and progress feedback were paired. The study also showed an enhanced use of strategy use, but more research is needed on the transfer of self-efficacy beliefs.

The self-efficacy cycle. When a student believes he or she can control success in school, performance is improved (Skinner, Wellborn, and Connell, 1990). Then when success is achieved, self-efficacy is enhanced and the student is empowered. This causes motivation to increase and the student can begin the cycle again, this time feeling even more in control of their learning situation.

To encourage this cycle in the classroom, one suggestion is to find ways to tap into the self-efficacies of your students. This is not meant to be a scientific study, but just a way to get to know your students so you are aware of their self-perceptions and can foster success and motivation in their learning activities. Below are some general statements taken from Henk and Melnick's (1995, pp. 478-479) Reader Self-Perception Scale that can indicate how a student feels about reading. You might like to ask your students to respond to these statements at the beginning of the school year and then at intervals throughout the following months. For a detailed description of the Reader Self-Perception Scale and its uses, refer to Henk and Melnick (1995).

— I feel good when I read.
— I can read faster than other students.
— When I read, I can figure out words better than other students.
— My classmates think I read pretty well.

— When I read, I don't have to try as hard as I used to.
— People in my family think I am a good reader.
— I am getting better at reading.
— I understand what I read as well as other students.
— My teacher thinks I am a good reader.
— I read faster than I could before.
— I feel calm when I read.
— I read more than other students.
— I feel comfortable when I read.
— I think reading is relaxing.
— I enjoy reading.

Pintrich and DeGroot (1990, p. 40) listed some similar self-efficacy statements from the Motivated Strategies for Learning Questionnaire, although these refer to general learning self-efficacy. Students used a seven-point Likert Scale to rate their feelings. Some sample statements follow:

— Compared with other students in this class, I expect to do well.
— I'm certain I can understand the ideas taught in this course.
— Compared with other students, I think I'm a good student.
— I'm sure I can do an excellent job on the problems and tasks assigned for this class.
— I think I will receive a good grade in this class.
— My study skills are excellent compared with others in this class.
— Compared with other students in this class, I think I know a great deal about the subject.
— I know I will be able to learn the material for this class.

An awareness of students' self-perceptions, teamed with knowledge of learning goals and progress feedback, can make important changes in the classroom. In this way, true learning is put in the forefront.

Teacher efficacy

There are three levels of self-efficacy theory that Bandura (1995) has applied to cognitive development: how children's perceived efficacy affects their learning, how the teacher's perceptions of instructional efficacy affect children's learning,

and how perceived efficacy of the school as a whole affects children's learning. We have already discussed the first level, we will now go on to the next two.

Perhaps the starting place for developing positive self-efficacies in students is in cultivating positive self-efficacies in teachers first. Moore and Esselman (1992) cited a variety of researchers who noted that there is a strong link between teacher beliefs and student achievement. Bandura (1993) has also concluded that a teacher's self-efficacy can affect the types of learning environments that are created in the classroom and the level of academic progress of their students. As educators, I don't think we always realize how much we influence our students. Through the study of self-efficacy, we find that even our own beliefs can make a difference.

Lacour and Wilkerson (1991) refer to several researchers who define teacher efficacy as a teacher's belief about their own ability to affect student achievement. A study done by Ashton and Webb measured long-term effects of the teacher's perceived instructional efficacy on students' academic achievement (Evans, 1989). Testing was done in reading, math, and language, and the students with the most marked academic gains were those that had studied under the teachers with the highest self-efficacies. These teachers were confident that they could instruct students effectively, and this positive self-efficacy seems to have made a difference in the classroom.

Lacour and Wilkerson (1991) mention several characteristics of efficacious teachers gleaned from other researchers. They include adherence to high academic standards, concentration on academic instruction, consistent monitoring of student behavior, establishing non-threatening relationships with low achievers, and referring problems to others less often. Bandura believes teachers who have confidence in their

own instructional efficacy support the development of students' intrinsic interests, believe all children are teachable, and persevere with students who have difficulty (Evans, 1989). However, teachers with a low sense of instructional efficacy give up on students easily, criticize failure, and want quick learning results. These teachers also tend to take power away from students and rely heavily on external rewards to motivate them (Bandura, 1993). This undermines the students' own efficacies as it takes the control away from them. Bandura expands this description by adding that teachers with low instructional efficacies usually don't think they can motivate difficult children and that environmental conditions eradicate any educational gains (Evans, 1989). In short, just as poor self-efficacies in students can be detrimental to their academic achievement regardless of ability level, likewise, teachers' low instructional efficacies can harm their classroom cultures and diminish their efforts to teach their students despite their satisfactory teaching ability.

Empowering students is imperative for them to achieve high levels of motivation and achievement, and similarly, empowerment is crucial for teachers who need to work in an environment that encourages and motivates their professional involvement with students. Teachers appear to feel greater empowerment when their influence reaches beyond the classroom (Moore and Esselman, 1992). This can be achieved by allowing teachers input into district or schoolwide decision-making, supplying a responsive administration, and fostering a feeling of community among staff members (Lacour and Wilkerson, 1991). While these things have often been considered as beneficial for the teachers themselves, we now know they also have an important affect on student performance as well.

Efficacy beliefs of teachers have been measured in several studies. One study conducted by Greenwood, Olejnik, and Parkay was noted in Lacour and Wilkerson (1991, p. 7) for the purpose of specifying four items defining and classifying teacher efficacy beliefs. The four items are as follows:

Teachers in general cannot motivate students, and I am no exception to this rule.

Teachers in general can motivate students, but I personally cannot.

Teachers generally can motivate students, and I am no exception to this rule.

Teachers in general cannot motivate students, but I personally can if I try hard.

Other efficacy statements were used in a study done by Short and Rinehart (1992, p. 957) with over two hundred public school teachers. Teachers rated these statements and others according to how they made them feel empowered.

— *I believe that I am helping kids become independent learners.*
— *I believe that I am empowering students.*
— *I feel that I am involved in an important program for children.*
— *I see students learn.*
— *I believe that I have the opportunity to grow by working daily with students.*
— *I perceive that I am making a difference.*

Thinking about these statements can help any teacher reflect on feelings about their teaching, their students, and their self-efficacy. Although an awareness of efficacious beliefs assists teachers in their own motivations and work in the classroom, ultimately it serves the students. Students learning along with a self-efficacious teacher will benefit by receiving

strategies not only to increase their knowledge, but to become motivated, self-efficacious individuals themselves.

The third level of self-efficacy theory has to do with the efficacy of a school as a whole. Bandura discusses successful schools in Evans (1989) as those that have a strong sense of their own efficacy. This positive efficacy promotes learning for their students and fosters high personal efficacies in their teachers. If a staff thinks they are powerless, that feeling pervades the whole school, but if a staff thinks they are capable of promoting academic success, the positive atmosphere in the school actually helps support that academic achievement (Bandura, 1993). Moore and Esselman's (1992) study showed that students in schools with a positive atmosphere showed higher academic achievement than schools whose teachers did not rate the school atmosphere as positive. This is an interesting area for further study. More work needs to be done to define the relationships between school efficacy, positive school climates, academic achievement, and literacy learning.

Implications for the classroom

If our goal as educators is to nurture our students, caring more about them becoming lifelong learners than master test-takers, then self-efficacy is a topic that deserves our serious reflection. Knowing that a positive self-efficacy helps students learn, we need to decide on a plan of action and implement instructional techniques in the classroom that we feel will strengthen our students' self-efficacies. Bandura (1993) lists several things we should attend to as we create a classroom environment conducive to improving self-efficacies. We should make sure students experience the following:

— See themselves gain mastery and make progress;
— Be aware when they are efficiently thinking;
— See performance gains;
— Know ability is treated as an acquirable skill;

— See competitive social comparison de-emphasized;
— Be aware that self-comparison of progress is highlighted.

Many students will come to the classroom with fairly positive self-efficacies already created. For these students, the above suggestions should continue to improve their self-perceptions and help them become even more efficient learners. Other students come to school with very poor self-efficacies. Henk and Melnick (1995) list some suggestions to assist these children who need extra attention.

First, treat individual differences as not only tolerable, but desirable and respected. Second, increase the positive reinforcement given to the students. Third, give more frequent and concrete illustrations of the students' progress. Fourth, model the enjoyment, appreciation, and relaxation of reading and learning. Fifth, provide a rich array of literature and learning materials. Sixth, help the students notice ways in which they are performing comparable to their peers. And last, be patient. Self-efficacies are difficult to construct, and the smallest of improvements take time. However, even this amount of empowerment has the potential of influencing the student for life.

Evaluation and assessment are other important areas to consider as a teacher tries to incorporate self-efficacy support in the classroom. Beach (1994) warns teachers to be extremely careful in choosing evaluation procedures. If performance is stressed, social comparisons are made, or grading is used to control the learner, then self-efficacy is not being developed. Evaluation should focus on individual progress, provide learners with a variety of ways to display their knowledge, and give valuable feedback so students can see their progress toward learning goals. If the teacher keeps in mind that all classroom activities, including assessment procedures, should

pass through the filter of self-efficacy awareness before being passed on to students, then motivation can take root and learning can grow.

Conclusion

Perceived self-efficacy is a powerful human characteristic. As we study it and find out more about its relationship to learning and the classroom, the more it seems there is to discover. Continued research is sure to be attempted on this topic in the near future. Lacour and Wilkerson (1991) and Bouffard-Bouchard, Parent, and Larivee (1991) mention several interesting areas for future research. The correlation between self-efficacy and teaching is yet to be explored fully, as well as the link between self-efficacy and ability. Patterns of efficacy in education and practical information on how to maintain and increase it is desperately needed. The impact of self-efficacy beliefs at different developmental levels is wide open, as is the effects of self-efficacy on underachievers and very young children. The effect of self-efficacy perceptions on reading and writing is especially important to literacy educators. Perhaps the one area where it is needed most is in teacher education. Prospective teachers need to be aware of the existence of self-perceptions and be prepared to deal with them positively when they reach the classroom.

As a teacher myself, I think the most important thing I want to remember is that performance goals and achievement scores are for the moment and too often temporary. I can't teach just for them. If I want to truly influence my students' educations, I must aim for educating them for life. Nurturing their self-efficacies and motivating them to read and learn are lasting endeavors. In our world today, it is impossible to teach everything our students need to know. We must empower them, motivate them, and set them on the path to lifelong learning.

References

Bandura, A. (1984). Recycling misconceptions of perceived self-efficacy. *Cognitive Therapy and Research, 8,* 231-255.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs NJ: Prentice-Hall.

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist, 28,* 117-148.

Bandura, A. (1995). Exercise of personal and collective efficacy in changing societies. In A. Bandura (Eds.), *Self-efficacy in changing societies* (pp. 1-45). NY: Cambridge University.

Bandura A., & Cervone, D. (1983). Self-evaluative and self-efficacy mechanisms governing the motivational effects of goal systems. *Journal of Personality and Social Psychology, 45,* 1017-1028.

Beach, S.A. (1994). Engagement with print: Motivation to read and learn. *Reading Psychology: An International Quarterly, 15,* 69-74.

Bouffard-Bouchard, T., Parent, S., & Larivee, S. (1991). Influence of self-efficacy on self-regulation and performance among junior and senior high-school age students. *International Journal of Behavioral Development, 14,* 153-164.

Condry, J. (1978). The role of incentives in socialization. In M. Lepper & D. Greene (Eds.), *The hidden costs of reward* (pp. 179-192). Hillsdale NJ: Lawrence Erlbaum Associates.

Cramer, E.H., & Castle, M. (1994). Developing lifelong readers. In E.H. Cramer & M. Castle (Eds.), *Fostering the love of reading: The affective domain in reading education* (pp. 3-9). Newark DE: International Reading Association.

Evans, R.I. (1989). *Albert Bandura: The man and his ideas — a dialogue.* NY: Praeger.

Harris, T., & Hodges, R. (Eds.). (1981). *A dictionary of reading and related terms.* Newark DE: International Reading Association.

Henk, W.A., & Melnick, S.A. (1995). The reader self-perception scale (RSPS): A new tool for measuring how children feel about themselves as readers. *The Reading Teacher, 48,* 470-482.

Lacour, E.D., & Wilkerson, T.W. (1991). *Efficacy in education: A synopsis of the literature* (Report No. Sp 033 549). Office of Educational Research and Improvement, U.S. Department of Education. (ERIC Document Reproduction Service No. ED 341 663).

Moore, W.P., & Esselman, M.E. (1992, April). *Teacher efficacy, empowerment, and a focused instructional climate: Does student achievement benefit?* Paper presented at the annual conference of the American Educational Research Association, San Francisco CA.

Pintrich, P.R., & DeGroot, E.V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology, 82,* 33-40.

Pintrich, P.R., Marx, R.W., & Boyle, R.A. (1993). Beyond cold conceptual change: The role of motivational beliefs and classroom contextual factors in the process of conceptual change. *Review of Educational Research, 63,* 167-199.

Schunk, D.H. (1990). Introduction to the special section on motivation and efficacy. *Journal of Educational Psychology, 82,* 3-6.

Schunk, D.H. (1994, April). *Student motivation for literacy learning: The role of self-regulatory processes.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans LA.

Schunk, D.H., & Swartz, C.W. (1993, April). *Goals and progress feedback: Effects on self-efficacy and writing achievement.* Paper presented at the annual meeting of the American Educational Research Association, Atlanta GA.

Short P.M., & Rinehart, J.S. (1992). School participant empowerment scale: Assessment of level of empowerment within the school environment. *Educational and Psychological Measurement, 52,* 951-960.

Skinner, E.A., Wellborn, J.G., & Connell, J.P. (1990). What it takes to do well in school and whether I've got it: A process model of perceived control and children's engagement and achievement in school. *Journal of Educational Psychology, 82,* 22-32.

Troy, A. (1982). Motivation and the adolescent reader. *Reading Horizons,* 22, 247-252.

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