READING HORIZONS
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Since 1988 I have had the challenge and pleasure of serving as editor of Reading Horizons. It has been a privilege to know Ken VanderMeulen, editor emeritus, and Dorothy McGinnis, editor emerita, and to follow in their footsteps.

My professional knowledge has been enhanced by reading the wide array of articles submitted to the journal, and the scholars who are the journal's contributors have my appreciation. Assistant editors Susan Coker and Susan Standish have been outstanding, and I will long remember their cheerfulness, skill and generous expenditure of time.

I am particularly obliged to the editorial advisors who have served as reviewers. The intelligence, expertise and energy they have brought to the ongoing, unremunerated task is inspirational. Although there are a sizable number of these scholars whom I have never met in person, I know their writing, their style, and their approach, and they have my grateful thanks.

In January, I accepted a position as Senior Research Fellow with the A.C. Van Raalte Institute at Hope College in Holland Michigan. Joe Chapel now assumes the interim editorship of Reading Horizons, and he has my best wishes in this important work.

Jeanne Jacobson
Self-Efficacy: A Key to Literacy Learning

Jill E. Scott

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 school-wide 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


Jill E. Scott is a seventh grade language arts teacher at Henry Senachwine Grade School, in Henry Illinois.
Enhancing Metacognitive Awareness of College Learners

Amelia E. El-Hindi

By the time young adults reach college environments, they are expected to actively engage with text in order to obtain meaning from text. As Brown and Campione (1990) indicated, the demands of a technologically advanced society require "complex forms of literacy" (p. 108) and that among other skills, educated individuals must be able to read critically and to clearly articulate in both written and oral language.

Success in college depends on a certain sophistication of reading and writing skill, however, between 30 and 40 percent of first-year college students have deficiencies in reading and writing skills for college performance (Moore and Carpenter, 1985). Furthermore, changes in demographics and open-admission policies have resulted in colleges admitting large numbers of first-year students who are considered at-risk for completing their programs (Hodge, 1991). Instructional support for such students is critical and this need will continue until well into the next century (Wyatt, 1992).

In assisting first year college students with the demands of college reading and writing, educators should consider the potential power of metacognitive skill instruction.
Metacognition, loosely defined as "thinking about thinking," has witnessed a recent surge of interest. Flavell (1993) defined metacognition as "... knowledge or cognitive activity that takes as its object or regulates any aspect of the cognitive enterprise" (p. 150). As such metacognition has come to be defined as the awareness and regulation of cognitive activity (Baker and Brown, 1984; Flavell, 1976; Flavell, 1978; Flavell, 1993; Flavell and Wellman, 1977). It is a construct that has broad applicability within educational contexts (Flavell, 1993). In particular, metacognition has become a defining characteristic of an active learner who exercises control over the learning process (Mayo, 1993).

Recently Brozo and Simpson (1995) identified metacognitive awareness as characteristic of an active reader. Active readers activate prior knowledge to facilitate comprehension, are sensitive to how ideas are organized in text through understanding text structure, elaborate on information presented in text, and use metacognitive awareness to orchestrate all these processes (Brozo and Simpson, 1995). Others have also argued that metacognitive skill is central to effective reading (Baker and Brown, 1984; Hare and Pulliam, 1980; Paris, Wasik and Turner, 1991; Mealey and Nist, 1989).

Metacognitive awareness has also been identified as characteristic of an effective writer. Englert, Raphael, Fear and Anderson (1988) studied the metacognitive knowledge learning disabled and non-learning disabled children have about writing. They found evidence to suggest that learning disabled children do lack the metacognitive knowledge needed to regulate that writing process and that specific metacognitive behaviors correlated with writing performance. Raphael, Englert and Kirscher (1989), who studied fifth and sixth graders' metacognitive knowledge about writing as a function of types of writing instruction, found that metacognitive
awareness could be increased through instruction and that this increase in metacognitive knowledge contributed to writing performance.

In light of such recent scholarship, it follows that instruction in metacognitive development can assist students with the reading and writing skills necessary for independent learning in college. Evidence suggests that first-year college students have limited metacognitive skill. Simpson (1984) and Simpson and Nist (1990) reported that first-year college students have limited repertoires for interacting with text. Instructional programs which enhance metacognitive awareness could benefit this population.

Within this study, first-year university students who enrolled in a pre-college summer program received instruction in metacognitive skill development that promoted an increase in metacognitive awareness for both reading and writing. Metacognitive awareness was measured by two questionnaires which will be described below. Results indicated that instruction in metacognitive skill development can increase metacognitive awareness for both reading and writing for this population.

Method

Participants. Participants were volunteers from a six-week summer residential academic program for first-year students from a major northern university. Students participated prior to their first-year at the university. This program targets students from underrepresented populations who show academic potential but who can also benefit from intensive instruction in reading, writing, math, and study skills.

Students enrolled in a required course on reading and writing. The students who enrolled in four sections of this
course received the metacognitive instruction (N=43). Among the 43 participants (27 female, 16 male) the mean age was 17.58 with a standard deviation of .55. The majority of the students were African-American (72.09%) while a minority were Hispanic (11.63%), White (11.63%), and Asian or Indian (4.65%). Before starting the program, students were tested on the Nelson-Denny Reading Test (Form E) (Brown, Bennett and Hanna, 1981). The mean pre-test percentile score on the comprehension sub-test of the Nelson-Denny Reading Test for the study participants was 37.67 (SD = 27.87) and the post-test percentile score on the comprehension sub-test of the Nelson-Denny Reading Test was 54.91 (SD = 28.01).

Procedure

Metacognitive skill instruction. In order to organize the metacognitive instruction for these learners, a model was developed by integrating the scholarship on metacognition as it relates to reading (Baker and Brown, 1984; Paris et al., 1991) with scholarship on metacognition as it relates to writing (Englert et al., 1988; Raphael et al., 1989). The work of Hayes and Flower (1987) on the writing process and the work of Tierney and Pearson (1983) on the integration of reading and writing also contributed to the thinking behind this model.

The model is represented by Figure 1 below. One assumption of this model is that reading and writing are interactive processes linked to one another. Reading lends itself to writing and writing lends itself to reading as is illustrated by Figure 1. Another assumption is that both reading and writing are processes which involve three recursive phases: a planning phase (before reading or writing), a drafting phase (during reading or writing), and a responding phase (after reading and writing). Conceiving of reading and writing as these phases was justified by integrating the work of Paris et
During the six weeks, students were taught specific metacognitive strategies that corresponded to each of the phases of reading and writing. As Figure 1 illustrates, the metacognitive strategies associated with each of the three phases for reading and writing are quite parallel. Students were taught that planning for reading involves identifying a purpose, activating prior knowledge, previewing text, and making predictions about the text.
According to Baker and Brown (1984) effective readers engage in self-questioning and comprehension monitoring to keep track of their success in understanding the text. The students were taught self-questioning and comprehension monitoring as metacognitive strategies associated with the drafting phase of reading. For the third phase of reading, responding, the students were taught to evaluate their understanding of the text, to react to the text, and to relate the text to prior experience. Again, these specific strategies are consistent with descriptions of metacognitive activity advanced by Baker and Brown (1984) and Paris et al. (1991).

Figure 1 shows that the metacognitive strategies for writing parallel the metacognitive strategies for reading. Planning for writing involves the metacognitive strategies of identifying a purpose for writing, activating prior knowledge, and organizing ideas. Hayes and Flower (1987) maintained that writing is goal-directed and necessitates the retrieval of topic knowledge. Raphael et al. (1989) also identified setting a purpose as a fundamental metacognitive activity associated with writing.

During the drafting phase of writing, learners conduct self-questioning of their own texts and monitor their success at completing the writing task. Englert et al. (1988) suggested that self-regulating and monitoring a paper's completion during writing is as important as the monitoring process associated with reading comprehension. Self-questioning assists the monitoring process of writing. Hayes and Flower (1987) identified monitoring and directing one's own writing process as part of the problem solving necessary for effective writing.

During the responding phase of writing, learners evaluate their success at the writing task, react to their texts as
readers, and examine their texts holistically in order to see connections among different parts of their text. Englert et al. (1988) identified self-evaluation of a paper's completeness as an important metacognitive activity for writing. By reacting to their own texts as readers, they are better able to evaluate their texts for completeness. Examination and awareness of text structure or relations among segments of a text is also important for success in writing (Englert et al., 1988; Raphael et al., 1989).

In addition to the specific strategies, two other essential components are the awareness and regulation of strategy use. Within the model, awareness and regulation are represented as thought processes which are used in conjunction with any and all strategies presented. For example, while students were taught how to identify a purpose for reading, they were also taught that they need to be aware of activating this strategy and to regulate its use (e.g., decide when and why this strategy is appropriate). Similarly, students were taught not only how to mark text which supports the monitoring strategy, but to identify when marking text is appropriate and to regulate their use of the strategy according to the reading situation.

Another important component of metacognitive instruction which was taught in conjunction with the responding phase of reading and writing is increasing learners' sensitivity to text structure. Baker and Brown (1984) in describing metacognition and its relation to reading identified the importance of self-awareness of cognitive processes while reading. One element the reader should be aware of is text construction (Baker and Brown, 1984, p. 376). Englert et al. (1988) also suggested that knowledge of text structure informs the learner's decision-making process during the process of either comprehending or producing expository text. Within this
study, teaching students to be aware of text structure and organization was part of the metacognitive skill instruction.

Assessment of metacognitive awareness for reading

A 36-item questionnaire was used to assess participants' metacognitive awareness for reading. Scenarios were used that corresponded to the three phases of reading. The first scenario introduced "Vicki," a college student faced with a difficult essay to read. The intent of this scenario was to elicit responses from students about strategies they may or may not use before they read a passage. The prompt was as follows:

Vickie is a college student who is taking a class in English. Her professor often gives the students essays to read. The essays are by well-known authors and are about different topics. The next page has the first two pages of an essay the professor has given the students to read. Think about what you typically do before you start to read something for a class. Then answer the following questions.

Participants responded to the prompt, "if you were in this situation would you..." for nine specific activities. Six of the activities represented strategic behavior, and three represented non-strategic behavior. For each activity the participants checked either "yes" or "no" for that activity. For example, in response to the scenario based on the planning phase of reading, the participants responded to the following nine activities: 1) think about why you are reading; 2) write down a reason for doing the reading; 3) just start reading; 4) think about what you already know about the topic; 5) read over the title, headings, author or anything else that stands out; 6) make notes about what you think the author is going to say; 7) count the number of pages; 8) memorize the title; 9)
think of something from your experience that relates to the topic.

Each of the nine responses that followed a scenario was considered either strategic or non-strategic. For example, activities 1, 2, 4, 5, 6, and 9 were considered strategic, while activities 3, 7, and 8 were considered non-strategic.

After responding to each of the nine activities, participants were asked to respond to the following open-ended question: "Are there any other things that you would do? If so, write them down below." This question was designed to identify any metacognitive strategies the participants may use which were not part of the initial nine responses.

The remainder of the questionnaire for metacognitive knowledge for reading followed the same format. Each scenario represented a specific component of the reading/writing process model and was followed by nine activities to which the participants responded with either "yes" or "no." Participants then responded to the open-ended prompt by writing down any other strategies or thought processes they would engage in if they were in the same situation.

The second and third scenarios described Vickie's situation as she read the passage and discovered that it was difficult for her. These scenarios were designed to assess the learners' thought processes during the drafting phase of reading. The fourth scenario was designed to assess learners' thought process for the responding phase of reading.

Assessment of metacognitive awareness for writing

The questionnaire for metacognitive knowledge of writing represented the situation of "Joel," a student faced with the task of writing a short paper. It was parallel in format to
the questionnaire for metacognitive knowledge for reading in that it was comprised of four scenarios which corresponded to the phases of writing outlined in the model illustrated by Figure 1. The first scenario was designed to assess learners' use of metacognitive strategies before they engage in a writing task. Participants responded to the following prompt:

Joel is a college student who is taking a writing course. His writing instructor told him to write a short paper on any topic he liked. Joel decided to write about rock music. He has a problem, however. He can't seem to get started. Think about what you do before you start to write.

Just as they did for the questionnaire of metacognitive knowledge for reading, participants responded to the prompt, "If you were in this situation would you ..." for nine specific activities. Six of the activities represented strategic behavior and three represented non-strategic behavior.

For each activity the participants checked either "yes" or "no" for that activity. In response to the scenario based on the planning phase of writing the participants responded to the following nine activities: 1) talk about your ideas with a friend; 2) think about why you are writing the paper; 3) just start writing; 4) jot some thoughts on paper; 5) talk to a friend about rock music; 6) think about what you already know about rock music; 7) write your name on your paper; 8) go find a dictionary; 9) draw a diagram of the types of rock music.

For this scenario, activities 1, 2, 4, 5, 6, and 9 were considered strategic, while activities 3, 7, and 8 were considered non-strategic. After responding to each of the nine activities, participants then responded to an open-ended question asking them about anything else they would do.
The remainder of the questionnaire for metacognitive knowledge for writing followed the same format as that for reading. However, it differed from the questionnaire of metacognitive knowledge for reading by providing successive portions of Joel's paper in the second, third, and fourth scenarios. The first scenario was designed to assess the learners' thought processes during the drafting phase of writing; and the fourth scenario was designed to assess learners' thought processes for the responding phase of writing.

Scoring procedures for questionnaires of metacognitive knowledge

Scoring of the metacognitive questionnaire accounted for levels of strategic activity. A "yes" response to a strategic activity was scored as a 1, and a "yes" response to a non-strategic activity was scored as a 0. A "no" response to a strategic activity was scored as a 0, and a "no" response to a non-strategic activity was scored as a 1. For each questionnaire, the scores on all the items were added to provide an overall score of metacognitive knowledge for reading and an overall score of metacognitive knowledge for writing.

These definitions of strategic and non-strategic were also used to score the open-ended responses for each scenario. Two researchers using the same definitions of strategic and non-strategic scored the open-ended responses. Inter-rater reliability was accounted for in two ways: the extent to which the raters agreed that the behaviors elicited by each open-ended response could be selected for classification as either strategic or non-strategic, and the extent to which the raters were in agreement about whether each reported behavior was strategic or non-strategic. After working through approximately 16% of the overall open-ended responses, the raters achieved 88% agreement for mutually identifying an open-ended response in the same way, and 93% agreement for
identifying each behavior reported as either strategic or non-strategic.

Each open-ended response was scored according to the rubric and this score was added to the score for each scenario. The scores for each reading scenario were totaled, generating a total metacognitive score for reading. The questionnaire of metacognitive knowledge for writing was scored in a similar manner. Consequently, each participant had a total metacognitive knowledge score for reading and a total metacognitive knowledge score for writing.

Results

Correlated t-test procedures were used to determine if training in metacognitive skill development made a difference in participants' metacognitive questionnaire scores for reading and writing. The post-test metacognitive knowledge for reading score (M = 26.50, SD = 5.27) was significantly higher than the participants' pre-test metacognitive knowledge for reading score. (M = 21.63, SD = 6.20), t(41) = 5.74, p = .000001. A one-way repeated measures analysis of variance was conducted to reveal a coefficient of determination of .45 which accounts for 45 percent of the variance. This result provides evidence that the metacognitive instruction did heighten metacognitive awareness for these students.

A correlated t-test procedure was used to determine if training in metacognitive skill development could also make a difference in metacognitive knowledge for writing. The post-test metacognitive knowledge for writing score (M = 29.71, SD = 4.40) was significantly higher than the pre-test metacognitive knowledge for writing score (M = 27.28, SD = 4.93, t(41) = 3.45, p = .001. A one-way repeated measures analysis of variance was conducted to reveal a coefficient of determination of .22 which accounts for 22 percent of the variance.
This result provides evidence that for this population of learners, metacognitive awareness for writing was also enhanced.

Discussion

This study provides evidence that metacognitive awareness for both reading and writing can be enhanced through direct instruction for this population of learners. Findings suggest that metacognitive awareness can be taught, an idea suggested by Baker and Brown (1984) and Armbruster, Echols, and Brown (1982). Other research also supports this notion. In working with underprepared college learners in a reading and study skills course, Shenkman and Cukras (1986), compared the effectiveness of overt metacognitive strategy instruction, separate skills instruction, and the absence of comprehension instruction.

The two treatments did not differ in the actual comprehension strategies taught; however, learners in the metacognitive strategy group received instruction in four metacognitive "macrostrategies" which stressed the importance of strategic planning, self-regulation, and evaluation of the use of strategies. The authors found that the metacognitive instruction promoted a significantly greater increase in metacognitive awareness among the learners than did the separate skills instruction. They concluded that separate skills training in the absence of metacognitive training is not sufficient to provide such learners with the necessary control over the entire process of gaining meaning from text.

Metacognitive skill is at the heart of learners who are actively engaged and in control of their own learning. Hodge, Palmer, and Scott (1992) provided metacognitive instruction in the form of reciprocal teaching in cooperative groups to at-risk college students. Basing their work on Palinscar and
Brown's (1982) notion of reciprocal teaching, Hodge, Palmer, and Scott (1992) found that metacognitive training through reciprocal teaching contributed to an increase in reading comprehension as measured by the Nelson Denny Test. They concluded that the training in metacognition helped the students to become more actively engaged with text.

Attention to developing metacognitive awareness on the part of college learners is also in keeping with the more current cognitive view of reading comprehension (Dole, Duffy, Roehler, and Pearson, 1991). As opposed to the traditional behavioral view of reading comprehension instruction, the cognitive view advocates teaching comprehension strategies in conjunction with metacognitive awareness so that readers learn to exercise control over the reading process and can knowingly employ a variety of strategies in order to make sense of any text (Dole et al., 1991).

Teaching metacognitive skill in conjunction with both reading and writing processes is also consistent with a recent focus on the interfacing of theories of reading with theories of writing (Harris and Sipay, 1990). This integrated notion of reading and writing has recently been advocated by Brozo and Simpson (1995) who described reading and writing as "parallel processes" by which students construct meaning from text (p. 203). They appealed to notions developed by Tierney and Shanahan (1991) who described reading and writing as companion processes which share specific underlying activities such as goal setting, self-correction, and self-assessment.

The interfacing of reading and writing and the emphasis on metacognition suggests a more integrative approach to literacy instruction. Such an integrative approach to literacy instruction has yet to take hold within college environments. Sadly, much of the instruction used to support college
learners is characterized by isolated skills instruction (Applegate, Quinn, and Applegate, 1994; Hodge et al., 1992), in which students are taught a number of skills and subskills in isolation without attending to the metacognitive activity which allows the learner to control and master the learning process.

There is reason to believe that more integrative approaches to literacy instruction which stress metacognitive awareness may benefit college learners seeking to improve their reading and writing skills. Such an approach, which promotes active processing of text is more in keeping with the demands placed on college students. Instructional programs targeted toward assisting college students with reading and writing proficiency would be improved by attending to metacognitive skill development for these learners.

References


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Developmental Spelling in Fourth Grade: An Analysis of What Poor Readers Do

Kathryn L. Laframboise

Since Carol Chomsky (1971a, 1971b) and Charles Read (1971) published their pioneer reports on the development of writing behaviors in young children, examinations of the developmental or invented spellings of emergent writers have contributed to changes in emphases in early literacy instruction. Before that time educators seldom advocated writing experiences for children before they learned to read (Adams, 1990). During the past twenty-five years, there have been careful descriptions and analyses of the developmental stages and strategies of young children who experiment with and work through patterns of spelling while discovering written language. As a result of this body of work, more teachers have learned to decipher and assess the development of spellings of preschoolers and primary grade students. The increased ability to understand beginning attempts with print of the youngest writers has no doubt contributed to the encouragement of story writing, journals, and other writing activities from the earliest school years. Fortunately, the increase in opportunities to write also enhances the development of phonemic awareness and word recognition, both of which are predictors of future reading success (Gill, 1992; Juel, Griffith, and Gough, 1986; Perfetti, 1985; Tunmer and Nesdale, 1985).
Spelling research with children beyond the primary grades have differed somewhat from research with emergent writers. Studies with older children include identifying frequently misspelled words (Farr, Beverstock, and Robbins, 1988; Farr, Kelleher, Lee, and Beverstock, 1989) and the frequency and location of orthographic elements in troublesome words (Frederiksen, 1978; Juel and Solso, 1981), determining the percentages of misspellings in lists of isolated words (Tulley, 1990) or running text (Applebee, Langer, and Mullis, 1987), and describing elements of English orthography that cause students difficulties (Schlagal, 1989). The research on the strategies of the younger writers who create spellings does not identify difficult words or calculate percentages of misspellings because, at the early stages of invented spellings, most words are difficult and misspelled. These studies provide descriptions of spelling strategies used by young children (Chomsky, 1971a, 1971b; Gentry, 1978, 1981, 1987; Henderson and Chard, 1980; Read, 1971, 1986), and the descriptions have enabled teachers to unlock the meanings of the writing of young children. In fact, Henderson (1981) called the work of Chomsky and Read the "Rosetta Stone" of children's invented spelling.

No such "Rosetta Stone" exists for the spellings of slightly older students who may, in fact, employ similar strategies, but whose writing looks very different from their younger schoolmates. The invented spellings of older students cause considerable difficulties for readers and may become a reason why teachers select fewer open-ended writing activities and more workbook-type activities for the students whose writing they cannot read. The purpose of this study is to examine the developmental spellings of fourth grade students who are poor readers. The analysis of spellings used in written story retellings suggests categories of misspellings that may demonstrate developmental spelling strategies used by
this sample of students. Current research is reviewed to present possible interpretations of the strategies used by these developmental spellers. Finally, instructional practices are summarized that may influence the spelling strategies of below average readers.

**Subjects.**

The study was conducted in a rural school district of approximately 30,400 students. Sixty-three fourth grade students in six self-contained Chapter One classes in six schools were used in the study. Class sizes ranged from 9 to 12 students. Students' performance in reading comprehension on the Stanford Achievement Tests (Psychological Corporation, 1985) ranged from a percentile score of 8 to a percentile score of 46. Students with verified learning disabilities were served in other programs in the school and were not students in these classes.

**Writing Samples.**

Written story retellings were taken from 63 subjects using four wordless cartoon videos, each between five and seven minutes in length, as prompts. Students were given a purpose-setting question before viewing each cartoon. At the video's conclusion, students were told to pretend they were retelling the cartoon story to a friend who had not seen it. When students did not know how to spell a word, they were encouraged to figure out the spelling for themselves. They were not told the spelling of words if they asked.

Each of the six classes participated in four writing sessions with the video prompts counterbalanced across groups and writing sessions. A random selection procedure was used to obtain equal numbers of writing samples from each of the classes for each video prompt and writing session. The result was two writing samples from each class for each writing
session. Forty-eight writing samples, each from a different student, were analyzed.

**Spelling Analysis.** The written story retellings were read by the author and a second reader, and a list of misspellings was generated for each of the writing samples. Misspellings were then compared to the intended words, and categories descriptive of the misspellings were created. Finally, each misspelling was examined for the sources of misspellings within the word. The three steps are described below.

Operational definition of a spelling error. While a mismatch between the child's spelling and dictionary spelling is a logical definition of a spelling error, there are also many usage errors often classified as spelling errors. In order to establish comparability between this study and other studies, guidelines established in previous studies were reviewed. Criteria established by Farr, Beverstock, and Robbins (1988) and Farr, Kelleher, Lee, and Beverstock (1989) in a study of approximately 22,000 writing samples of students grades 2 through 8 were used. In addition to the mismatches between the student's spelling and the dictionary spelling, criteria for misspellings included the following: 1) homophones spelled but not used correctly; 2) one word written as two words; 3) two words written as one word; 4) addition, omission, or misplacement of apostrophe; 5) addition or omission of suffixes that produced non-words; and 6) incorrect verb forms (e.g., lie for lay) when the incorrect form changed the meaning of the sentence.

**Categories of misspellings.** The list of misspelled words was examined for possible categories of misspellings. Categories reflect what the student actually wrote compared to what the student intended to write. Intended words were
determined by story sense based on the cartoon story. Preliminary categories of words were the following:

**Phonic misspellings.** Misspellings in this category contain some of the phoneme-grapheme correspondences of the intended word. The student may choose an incorrect but possible phoneme-grapheme correspondence. The resulting misspelling is not a real word (e.g., *dowen* for *down*).

"Near Misses." The misspellings are real words, but not the words intended by the writer. The written word when pronounced correctly may sound similar but not identical to the intended word (e.g., *not* for *knocked* or *that* for *thought*). These misspellings are also phonetic misspellings but, because of the number of occurrences, are classified and discussed separately.

**Homophones.** This category contains words that are pronounced the same but are spelled differently and have different meanings (e.g., *there* for *their*).

**Other misspellings.** A general classification was used for usage errors and spelling punctuation errors. Included in this category were incorrect verb forms (e.g., *runned* for *ran*) words with omitted inflectional endings (e.g., *play* for *played*), words with misplaced, added, or omitted apostrophes; and incorrect compound words (e.g., *sun shine* for *sunshine*).

During the preliminary classification of misspellings, a category of non-phonetic misspellings was used, but this was later deleted because all misspellings contained at least some of the phoneme-grapheme correspondences of the intended word.
Sources of spelling errors within words. In addition to the four categories used to classify the misspellings made by the students in their writing, sources of spelling errors within words were described using the following categories:

**Vowel errors.** Four types of vowel errors were determined. First, the student chose an alternative, but possible orthographic representation of the appropriate vowel sound (e.g., *wate* for *wait*). Second, the student wrote an incorrect representation of a vowel sound (e.g., *fented* for *fainted*). Third, the student omitted a pronounced vowel (e.g., *pi* for *pull* or *bgn* for *began*). Fourth, a pronounced vowel was added (e.g., *dowen* for *down*).

**Consonant errors.** Consonant misspellings were of five types. First, the student chose an alternative, but possible orthographic representation of the appropriate consonant sound (e.g., *chace* for *chase*). Second, the student wrote an incorrect representation of a consonant sound (e.g., *junp* for *jump*). Third, a pronounced consonant was omitted (e.g., *sade* for *saved*). Fourth, a pronounced consonant was added (e.g., *fanted* for *fanned*). Fifth, the student misspelled a blend or consonant digraph (e.g., *sring* for *string* or *shair* for *chair*). Misspellings of blends and digraphs also belonged in one of the four subcategories described above. For example, *sring* has a missing consonant, and *shair* has an incorrect representation of a consonant sound. They were classified separately because of the number of occurrences and were not counted in the above groups.

**Misspelling of an inflectional ending.** Students making this type of error unsuccessfully attempted a spelling of an inflectional ending (e.g., *bugz* for *bugs* or *helpt* for *helped*).
**Reversal of the order of phonemes.** An example of this category of misspelling is *firts* for *first*.

**Reversal of letters.** An example of this category of misspellings is *wed* for *web*. While spelling errors in this study were not counted twice, words in one category may have actually been the result of a different type of error. For example, the word *web* was misspelled as *wed* several times. Source five above assumes the child intended to write the letter *b* but reversed it. The writer may actually have written an inappropriate grapheme.

### Results

**Percentages of misspellings**

The 48 students produced 5145 running words in their writing samples, with 842 of the words misspelled. The range of percentages of misspellings in individual writing samples was from 5.63% to 48.15% of the total words, with a mean of 19.39%. Applebee, Langer, and Mullis (1987) and Farr et al. (1989) determined average fourth graders make spelling errors in approximately 8% of their words, while Stewig's (1987) sample of fourth grade students made misspellings in fewer than 3% of their words. Students described here clearly experienced greater difficulties in spelling than those expected for the average fourth grader.

### Categories of misspellings

In order to understand the spelling strategies the students used while writing their story retellings, the misspellings were classified in the four categories previously described. Table 1 reports number and percent of misspellings for each category. While phonetic misspellings that were not real words accounted for the largest proportion of spelling errors, a large number of the misspellings ended up as other real words (e.g., *head* for *hand*). Some of the students made
nearly half of their spelling errors in this category. Inspection of the data did not suggest the percentages in the latter category, which we called "near misses," was correlated to the length of writing samples.

<table>
<thead>
<tr>
<th>Category</th>
<th>n</th>
<th>%a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phonetic</td>
<td>523</td>
<td>62.11</td>
</tr>
<tr>
<td>Near Misses</td>
<td>175</td>
<td>20.79</td>
</tr>
<tr>
<td>Homophones</td>
<td>47</td>
<td>5.58</td>
</tr>
<tr>
<td>Other</td>
<td>97</td>
<td>11.52</td>
</tr>
<tr>
<td>Total</td>
<td>842</td>
<td>%a</td>
</tr>
</tbody>
</table>

%a = percent of misspellings compared to the total misspelled words

Strategies used by students making errors in the third and fourth categories seem to be different from spelling strategies employed when writing phonetic misspellings and near misses. Incorrectly selecting a homophone may reflect a transitional spelling strategy, but for many writers it is a vocabulary problem; that is, the writer knows the possible spellings but hasn't correctly matched the spelling with its definition. Words in the fourth classification, which were mostly omissions of inflectional endings, incorrect use of apostrophes, and errors in compound words, typically reflected use of dialect or lack of mastery of spelling rules, such as placement of apostrophes. For these reasons words in the third and fourth categories were not further analyzed. The sources of errors within words for the first two categories, however, were analyzed to discover strategies students might have used.
Sources of spelling errors within words

Table 2 reports the number of percentages of each source of error within words. The spelling of vowel and consonant phonemes comprised approximately 90% of sources of spelling errors within words. Not surprisingly, vowel graphemes caused more problems for the writers in the study than did consonants, 51.32% compared to 38.21%. Of the 842 misspelled words, 24.58% contained more than one source of error.

<table>
<thead>
<tr>
<th>Category</th>
<th>n (a)</th>
<th>% (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vowels</td>
<td>505</td>
<td>51.32</td>
</tr>
<tr>
<td>Consonants</td>
<td>376</td>
<td>38.21</td>
</tr>
<tr>
<td>Inflectional endings</td>
<td>62</td>
<td>6.30</td>
</tr>
<tr>
<td>Order of phonemes</td>
<td>32</td>
<td>3.25</td>
</tr>
<tr>
<td>Reversal of letters</td>
<td>9</td>
<td>.91</td>
</tr>
<tr>
<td>Total</td>
<td>984</td>
<td></td>
</tr>
</tbody>
</table>

n (a) = number of errors in each category
% (b) = percent of errors in each category compared to the total number of error sources within words

Vowel errors were classified according to four sources (see Table 3). Three sources of error are relatively small. The exception is the representation of a vowel phoneme with an inappropriate grapheme (e.g., scrim for scream). Over 37% of the vowel errors were the use of inappropriate graphemes compared to approximately 7% of the errors containing possible but incorrect vowel spellings.
Table 3
Sources of Vowel and Consonant Spelling Errors Within Words

<table>
<thead>
<tr>
<th>Category</th>
<th>Vowel Errors</th>
<th>Consonant Errors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n (a) % (b)</td>
<td>n (%)</td>
</tr>
<tr>
<td>Alternative orthographic representation of appropriate phoneme</td>
<td>66 (6.71)</td>
<td>119 (12.09)</td>
</tr>
<tr>
<td>Representation of phoneme with inappropriate grapheme</td>
<td>369 (37.50)</td>
<td>46 (4.67)</td>
</tr>
<tr>
<td>Omission of phoneme</td>
<td>58 (5.89)</td>
<td>91 (9.25)</td>
</tr>
<tr>
<td>Addition of phoneme</td>
<td>12 (1.22)</td>
<td>43 (4.37)</td>
</tr>
<tr>
<td>Misspelling of blend or digraph</td>
<td></td>
<td>77 (7.83)</td>
</tr>
<tr>
<td>Total</td>
<td>505 (51.32)</td>
<td>376 (38.21)</td>
</tr>
</tbody>
</table>

n (a) = number of errors in each category
% (b) = percent of misspellings in each category compared to the total number of error sources (N=984).

Table 3 also reports the number and percentages of consonant errors in five categories. The sources of consonant spelling errors were more evenly distributed than vowel errors. Unlike the vowel errors, students were more likely to use an alternate but possible consonant spelling than an inappropriate one. The patterns of spelling errors will be discussed in the following section.

Discussion

Vowel spelling errors

Representations of vowel phonemes with inappropriate graphemes make up 37.50% of the sources of spelling errors in
the writing samples and comprises, not only the largest proportion of vowel errors, but also the largest single source of spelling errors within words. Research offers possible reasons for these difficulties.

Treiman (1987, cited in Adams, 1990) determined four factors influencing the correct spellings of words: 1) phonemes containing letter-names; 2) the simplicity of the letter-sound correspondence; 3) the number of possible ways the phoneme can be spelled; and 4) the number of letters in the grapheme. In general, vowels are considered to be more difficult to spell because vowel phonemes have more alternative spellings and the spelling representations contain more letters (Horn, 1957). Students often substituted vowel graphemes within words and used familiar, but inappropriate, vowel patterns; for example, creed for cried, thir for there, and alime for alarm. In these examples all phonemes were represented.

Exposure to printed text may have also affected the vowel spelling strategies of students (Cunningham and Stanovich, 1990). Many of the spellings were not simply attempts to phonetically reproduce the words. While poor readers are given fewer opportunities to read in the classroom (Allington, 1980, 1983, 1984) and, therefore, have less exposure to print than good readers, these fourth grade students have been exposed to print in varying degrees during their years in school. Visual memory, as well as spelling instruction, influences the way children attempt to spell a word. Students may have remembered certain words are longer or they contain a difficult vowel spelling and so tried to reproduce something that looked like the word they remembered. One of the cartoon stories told how a spider caught insects, and many of the retellings used the word caught. Cot, a simple phonetic spelling typical of the invented spelling of younger children,
occurred infrequently. Many longer variations, including cout, couht, and cought, were used by the students. Other examples of misspellings that likely reflect the effects of visual memory and spelling instruction include throuw for threw, and ound for owned, apoun for upon, cuold for could, oriand for around, trow for through, flowting for floating, and fawnd for found. The written words demonstrate attempts of spellers who have not yet stored the orthographic representations of words and are ineptly applying orthographic principles.

**Omission of phonemes**

Omission of pronounced vowels and consonants made up 15.14% of the sources of errors. The ability to segment phonemes, that is, hear individual phonemes in words, is a predictor of the child's ability to read (Adams, 1990; Goswami and Bryant, 1990), and spelling is often used diagnostically to indicate students' ability to segment phonemes. The omission of pronounced consonants in words may indicate the lack of ability to segment phonemes while omission of pronounced vowels may be the result of their occurrence in an unstressed syllable or their pronunciation as part of an adjacent consonant (Treiman, 1985; Treiman, Berch, and Weatherston, 1993). The relatively large percentage of omitted phonemes, 9.25% (n=91) for consonants as opposed to 5.89% (n=58) for vowels, is an indicator of the problems of the students in this study who were poor readers and whose writing samples contained large percentages of misspellings.

**Near misses**

The approximately 20% of the misspellings that were other real words were a source of difficulty for the two readers in their comprehension of the written story retellings. Seven of the writing samples contained no near misses, but an equal number of students made over 35% of their misspellings in
this category. Possible reasons why students wrote so many near misses is an interesting question. The answer may lie in the nature of the words as well as in the nature of the spellers. Phonetic spellers usually represent all phonemes in their spelling attempts. Transitional spellers will frequently choose a possible orthographic representation of a phoneme, for example, *ee* for *ea* or a vowel digraph for the consonant-silent e (V-C-e) spelling pattern. Phonetic and transitional spellers who exchange vowel graphemes for vowel graphemes and consonant graphemes for consonant graphemes may produce other real words (e.g., *fine* for *vine* and *oat* for *ate*). Semi-phonetic spellers who omit vowel graphemes usually write non-words. Only 5.89% of the spelling errors were omissions of pronounced vowels. This may reflect the developmental spellings of phonetic and transitional spellers who can discriminate vowel phonemes and also be the result of instruction emphasizing the presence of a vowel phoneme in every syllable.

Previous exposure to print, spelling instruction, and development may have also eliminated some invented spelling patterns that do not exist in English orthography. While these factors did not produce skilled spellers, the fourth grade students did not use some of the invented spelling patterns common in younger writers. For example, *ir* is a common phonetic spelling of the *dr* grapheme that occurs in the writing of younger students, even though it does not occur in English orthography. One of the cartoons showed a character driving a machine. Although drive was misspelled in several stories, *ir* was never used.

**Implications for instruction**

**Spelling and reading instruction.** The students in the present study are caught in a catch-22 situation. Their poor reading skills limit their exposure to spelling patterns that
should be encountered in reading of instructional and independent level materials. Gill (1992) theorizes the student does not notice everything that is seen in text, but what is noticed is a reflection of the child's theoretical word knowledge. Repeated exposures to invariant spelling patterns during reading in inappropriate level materials become what is noticed and allow the child to construct the next level of phonological and word knowledge, leading to new understandings of orthographic concepts necessary for fluent reading. On the other hand, without these underlying orthographic principles, students will continue to struggle with both reading and spelling, further limiting their exposure to text.

Curriculum in the six classes followed county guidelines and included county adopted texts. A basal reading program was the main source of instructional materials for reading, and students were placed in below grade level basal materials when appropriate. Similarly, students were placed in below grade level math materials. Content subjects, spelling, and language arts, however, were grade level texts. Whether using tradebooks or district adopted texts, finding enough materials on instructional and independent reading levels is a serious problem, especially in the content subject areas. Many students, therefore, spend a portion of each day in reading materials above their instructional level.

Spelling placement is another area that needs to be examined. Schlagal (1992) and Trathen, Schlagal, and Blanton (1994) found that children benefit from instruction when placed in spelling materials on their instructional level rather than grade level. Children in their studies learned more words targeted by the spelling series when working in instructional level materials than when working in grade level texts that were too difficult. They also transferred their learning to more words not included in the word lists of the programs.
Schlagal and Trathen et al., concluded that placing children in grade level spelling programs was an obstacle for many children in developing spelling strategies.

**Opportunities for writing.** Providing fewer opportunities to write limits students' access to knowledge leading not only to accurate spelling in writing, but also to fluent decoding during reading (Adams, 1990; Schlagal and Schlagal, 1992). In a state-wide survey of writing instructional practices in elementary schools, Laframboise and Klesius (1993) found limited writing opportunities in classrooms contrary to stated county or state level guidelines. Sizable percentages of teachers reported they did not include the following types of writing in their language arts program: journals and logs (24.47%), creative and expressive writing (10.84%), and informational writing (31.56%). The survey did not distinguish opportunities for high achieving students compared to low-achieving students.

Keith Stanovich (1986) describes and Allington (1980, 1983, 1984) has documented the "Matthew effect" in the reading classroom. Good readers are given more opportunities to read in all areas of the curriculum and, therefore, become even better readers while the poor readers are given fewer opportunities to improve their reading skills. While not documented, it is possible that the "Matthew effect" also works in the writing class, that is, poor writers are given fewer opportunities to write.

Poor spellers need opportunities to write if they are to become better writers. This analysis of the spellings of fourth graders who are poor readers and spellers has provided descriptions of developmental spellings that make students' written stories especially difficult to read. The study was limited by the size of the sample. The classifications of spelling
errors were based on definitions used in other studies. The analysis was not exhaustive, and other categories and interpretations could be made with a larger or different sample of students. Further research could provide a more in-depth analysis of the strategies of similar writers.

Descriptive studies have unlocked the writing of very young students to adult readers. The spellings of words in stories of this sample of intermediate grade students was a formidable obstacle to the readers' comprehension. Facing such difficulties in reading students' writing, both teachers and peers may become reluctant audiences for writing experiences. The understanding of these strategies may encourage teachers to offer students more writing experiences that will help poor readers, writers, and spellers in their acquisition of literacy.

References


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What Counts as Good Writing? A Case Study of Relationships Between Teacher Beliefs and Pupil Conceptions

Zhihui Fang

Theoretical framework

Influenced by the cognitive revolution in psychology, the popularity of qualitative research paradigm, and the conception of the teacher as a thoughtful professional, teacher education researchers have, in the past decade or so, demonstrated growing interest in aspects of teacher thought processes (e.g., teacher planning and teachers' theories and beliefs) and their relationship to sound pedagogical practices in the classroom. This signals that research on teaching and learning have shifted from a unidirectional emphasis on correlates of observable teacher behavior with student achievement to a focus on teachers' thinking, beliefs, planning, and decision-making processes (Clark and Peterson, 1986). This new line of research has generated findings that are of practical implications for teacher education (Ashton, 1990).

In the field of literacy, researchers have examined how teachers' personal beliefs about teaching and learning affect their decision-making and behaviors (see Fang, 1996 for a
review). While some studies indicate that teachers possess theoretical beliefs toward reading/writing and that such beliefs tend to shape the nature of their instructional practices (Johnson, 1992; Mangano and Allen, 1986; Richardson, Anders, Tidwell, and Lloyd, 1991; Rupley and Logan, 1984), others have suggested that because of the constraints of classroom life and social realities, many teachers are not able to provide instruction that is consistent with their beliefs (Davis, Konopak, and Readence, 1993; Duffy and Anderson, 1984; Kinzer, 1988).

Although a growing body of literacy research continues to question whether reading teachers are able to provide instruction which is consistent with their theoretical beliefs, only a few (Meloth, Book, Putnam, and Sivan, 1989; Wing, 1989) have examined connections between teachers' beliefs, instructional decisions, and students' conceptions of reading and writing. Understanding these relationships is important for several reasons (Wing, 1989). First, children's orientation toward literacy may influence how they view and approach reading/writing instructional experience. Children whose conceptions of reading/writing are congruent with the orientation of instructional experiences may be more likely to achieve expected outcomes. Second, elementary teachers may also benefit from knowing that school experience influences children's perceptions about literacy. For example, such knowledge may help them better understand why some children develop a writing style that is consistent over time, so that they can better tailor instruction to individual needs. Third, understanding such relationships may be important for parents too, as they try to decide which school/teacher to send their children to.
The purpose of this study was to examine the relationships between an elementary language arts teacher's beliefs about and her fourth graders' conceptions of good writing.

The study

Methodology. The data for this study came from extensive interviews with 15 fourth graders and their language arts teacher from a university laboratory school in a southern state. The teacher has a master's degree in education and several years' elementary teaching experience. She had followed the same group of pupils from the second grade. There were 15 pupils. Semi-structured interviews (Briggs, 1986) were conducted over a period of four weeks, each lasting about 30 minutes. Both the teacher and her pupils were asked questions about their perceptions of what an exemplary piece of writing should be like. Data sets or case records were created for each participant. Inductive analysis (Miles and Huberman, 1984) uncovered tentative categories of interest. Theses categories were then refined through repeated fieldwork and constant comparison. The participants' reports were checked through triangulation.

Results. The results of the interviews generally indicate that the teacher's beliefs about writing have considerable impact on the pupils' perceptions of writing. That is, the students' perceptions of what counts as good writing are highly correlated with their teacher's definition of and expectations about exemplary writing.

Specifically, the teacher believed that an exemplary piece of writing should simultaneously address substance, mechanics, and style. According to her, a good piece of writing uses transitional words, sequences right (e.g., go together), has extended vocabulary, is not mundane or sloppy, contains no misspelt words, and paints a vivid picture. In addition, it
must show effort and be able to "jump out at you." The following excerpts from an interview illustrate the teacher's beliefs about exemplary writing.

Teacher: The first time the student shows it [writing] to you, you look at it ... I look for what they have in comparison to what I think they should have.

Interviewer: Ok, so you have a model. You have certain kinds of expectations. What are your expectations?

Teacher: My expectations are that they use extended vocabulary.

Interviewer: What do you mean?

Teacher: Use words other than saw and said. You know like he said, they said, we said ... and they have everything they need in order to do what I want (showing a notebook) and this is what they have to use as a guide to keep away from the 'said' thing, so they have this to use.

Interviewer: Ok, you are expecting them to use your vocabulary?

Teacher: Yes, they have challenging words from their reading that I expect them to use. And they have transitionals. I've given them a page so they have transitional expressions and sequencing.

Interviewer: Then your expectations are that they have some kind of extended vocabulary?

Teacher: I want them to use vocabulary they wouldn't normally use, in second grade, third grade, or fourth grade, they didn't have the material available for them. I've given them what they need to do to think about these things. I want them to develop into better writers. So I give them what they need to do, and they do a lot of writing.

Interviewer: So, besides providing vocabulary, what kinds of other assistance do you give them?

Teacher: This is not just vocabulary. They have a writer's guide too. They have all the background stuff they need in order to write, and in the teacher-directed things that we do, that's when I enter, do something like grading a persuasive paragraph, or writing a descriptive paragraph, trying to do certain types of poetry ... we'll do something like that, like something they haven't done before so that they know the format and then after that they can choose whatever they want.
When you see a student's writing, how do you judge between adequate, inadequate, and exemplary pieces of writing? Do you say this is an exemplary piece of writing, whereas this piece of writing is just sort of inadequate?

Well, I don't think of it in terms of adequate. I think it's acceptable or unacceptable.

What makes you think that this piece of writing is acceptable?

How do I define that? If something is sloppy or obviously not expressing thoughts; I mean by working with children, you know what they can and cannot do. If something is full of misspelled words, and is not sequenced right or has basic vocabulary, it's not acceptable. But if somebody has put a lot of effort into it, you can see the effort. There may be some mistakes and you work with those mistakes to make it better. Some people come up with things that are just fine. Basically, the piece has to go together.

What is there in that moment that makes a piece of writing good?

Different things. Sometimes it's just the manner in which the words are put together ... I mean they all fit in together.

You don't look for structure, the grammar...?

No, it's not just that, but if you read many of these, some of them are going to jump out at you. I mean they will jump out at you in a different way.

What really jump out at you?

Humor will do that. And the wording will do that. I mean if you have something structured in such a way that it paints a vivid picture in your head, you know it's going to jump out at you. If it's just kind of mundane, it's just mundane.

Consistent with their teacher's beliefs, all of the 15 pupils interviewed said a good piece of writing must have a lot of details (e.g., elaboration, description), be mechanically neat (e.g., mistake-free, no run-on sentences, right punctuation and capitalization), contain challenge words, adventure, fun, and be interesting and "effortful." The vocabulary these pupils used in describing the criteria of good writing bears striking resemblance to that of their teacher's. One response quite
typical of the group was "It (a good piece of writing) has a lot of information, detailed ... and it has no mistakes. It has the right punctuation."

One teacher justified the need for elaboration, saying that it helps paint a vivid picture.

*When you are writing, you should have a little detail in it, mostly so that people can understand. It's good to have elaboration so people can understand better. The book we just read is ever-lasting. It doesn't have any pictures, except in your mind you can see what's happening.*

Another teacher exemplified what elaboration means this way:

*Let's say a child writes about dogs. Dogs are fun. Dogs like to do this, dogs like to do that, dogs make things fun, but the ending is weak. You've got to give full detail so the reader understands and can go home and say 'You know, I'll tell you this, dogs are fun and dogs can do this ... So when you don't give full detail you might hear, 'What did you learn about dogs? Dogs are fun, that's all I've learned.' It's not as good when you lack details or elaboration; readers don't learn anything about your subject.*

Another teacher was able to identify other qualities of good writing such as presence of story grammar and audience orientation.

*Writers have to think of their audience. If it's about war or something and you read it to kindergartners, then, it's not a good story.*
Interestingly, most pupils agreed that a good piece of writing does not have to be long, though a few noted that the longer you write, the more details you'll provide. What matters to them appears to be the amount of effort put in writing the story. For example, when asked the question "How long do you usually write?" most children's responses were invariably given in terms of the amount of time they spent on their story, rather than in terms of the number of pages they wrote. According to some of the teachers, a good piece of writing represents "100 percent effort," which is indicated by absence of grammatical errors, use of challenge words and elaborations.

When asked about the things they look for in rewriting, most pupils reported that they checked for elaborations, use of challenge words, sequencing, in addition to punctuation and capitalization. One student's response to revision is fairly representative:

Interviewer: How do you revise your first draft?
Student: Let's say I had a story about a toad and I say, 'The toad was eating a carrot.' And the second time I read it I say, "You know, I can make it better." I could say 'The fat, fat grubby toad was eating a juicy orange carrot.'

Interviewer: So you add more adjectives.
Student: Yes. More elaboration and details. And then I say, if it's a fat toad eating a juicy carrot, was it a raw carrot or a boiled carrot? What was it? I want more detail so that the reader can see it in their mind. If they don't have the picture you could say 'The big fat green grubby toad was eating a raw, tasty, juicy long carrot.'

Discussion. Taken together, the findings indicate that the teacher held theoretical beliefs and expectations about the subject she taught and that her pupils have developed clear conceptions of what counts as good writing. Given the striking similarity between the teachers' beliefs about, and the pupils' perceptions of good writing, it is reasonable to suggest
that the teacher beliefs have substantial impact on the pupils' perceptions of literacy. Such influence is likely to have come about through daily instructional practices. As Moore (1985) notes, "The methods, materials, and procedures employed by the teacher operate to form and develop the child" (p. 5).

In light of the close association between teachers' beliefs and pupils' perceptions reported in this case study, it may be beneficial for teacher educators to consider whether pre-service teachers' beliefs are associated with successful learning and how to help them effectively translate their beliefs into sound instructional practice. The issue here is not whether teachers should possess theoretical beliefs about the subject area they teach. They should and do. What is important is to determine whether their knowledge or belief is aligned with sound teaching and learning theories. Rather than simply providing teachers with more theories, teacher educators should help them realize what theory or combination of theories is most effective in promoting student learning. Once teachers are equipped with sound theoretical frameworks about a subject area, the issue then becomes one of how teachers can apply this knowledge in real classrooms where the relationship between theory and practice is complex and where constraints and pressures influence teacher thinking. Teacher educators must help them understand how to cope with the complexities of classroom life and how to apply theory within the constraints imposed by those realities.

Conclusion

In recent years, research on teachers' theoretical beliefs about content areas has been on the increase (Baldwin, Readence, Schumm, and Konopak, 1990). It is however, still in its infancy (Bean and Zulich, 1993). Sustained efforts are needed in this new area of research on teaching, because, as
Armour-Thomas (1989) boldly predicts, the field promises to "yield information that may revolutionize the way we traditionally conceived the teaching-learning process" (p. 35).

References


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**October 1996**

**National Conference on Research in Developmental Education**

The National Center for Developmental Education announces the Second National Conference on Research in Developmental Education. The conference will be held at the Adam's Mark Hotel in Charlotte, NC, October 23 — 26, 1996. Presented by the National Center for Developmental Education, this conference is also co-sponsored by the National Association for Developmental Education (NADE), the College Reading and Learning Association (CRLA), and the North Carolina Association for Developmental Studies (NCADS).

The purpose of the conference is to integrate research with practice in the field of developmental education and learning assistance. Although based on research, presentations are designed to help practitioners improve their own developmental courses, programs, and support services for underprepared college students. Proposals for presentations will be accepted through May 1, 1996. Information about the conference may be obtained by calling (704) 262-3057 or writing to the National Conference for Developmental Education, Suite 300, Duncan Hall, Appalachian State University, Boone, NC 28608.
Thinking About Making Reading Easy

Giovanna James

Why not use "Hooked on Phonics" with remedial readers? Recently a colleague asked this rhetorical question as we sat waiting for a meeting to begin. She claimed to be "eclectic" in teaching high school reading classes and she was pleased to report on the reading improvement of several students.

During the last school year I had contributed negative input into the decision on whether or not to purchase a "Hooked on Phonics" kit for the high school Special Education Resource Room. Her comment made me realize that I had not clearly explained my reasons. In the end the kit had been borrowed from the parent of one of the Resource Room students and was apparently being used with several students by both the Special Education teacher and this reading teacher.

Her question led me to examine my beliefs about reading, and in particular it brought to mind a question I had been asked to answer on written comps in graduate school: What are the issues regarding making reading easy? As I recall, this was one of those questions that I had chosen to answer in my own way. In other words I had come to the test situation with so much information crammed into my head that I had to spit it out just as I had programmed it in. Nothing else would work. Two years later and safely past the written and oral
exams, I felt like I could explore this question in a thoughtful and meaningful way, with no pressure to satisfy anyone but myself in formulating the answer.

**Reading is a meaning-making activity**

Dorothy Strickland (1994) recently stated that basic skills are not precursors to actual reading. In fact using skills out of context makes reading harder. So if we are to facilitate students' learning to read it seems important to examine just how we can make that process easier.

Discussions of reader response theory (Rosenblatt, 1978; Squire, 1990) and reading as a meaning-making activity (Goodman, 1992; Tierney and Pearson, 1983; Wells, 1986) stress the fact that the reader's focus must remain on constructing meaning through interaction with print. The brain can only engage in one process at a time — either attending to letters or attending to meaning (Smith, 1988). Therefore asking children to sound out individual words only slows the reader and prevents reading for meaning.

A program like "Hooked on Phonics" puts the cart before the horse. It assumes that learning phonics will result in good reading. In fact the opposite is true. Phonics is a result, a consequence of good reading rather than a cause. Good readers understand phonics rules because they can read; they do not read because they understand phonics rules (Smith, 1978). So spending class time on phonics may teach phonics, one small part of the reading process, but does not teach reading. Actual reading is the only way to become a fluent and proficient reader.

Much of phonics instruction emphasizes the various vowel sounds and stresses the importance of recognizing these sounds for accurate reading. In reality vowels provide
very little information to the reader. Consonants are much more regular and much more helpful to the reader's meaning-making efforts. Try reading these two sentences and see for yourself:

_ _ ee _i_ _ a _ _ _ o _ _ e _ _ o e _ o 
_e _e e _ _ e _ _ oo _ a _ _ e _ eo _ a _ _ o o
_e i io_.

Thr_ _ g_rls _nd tw_ b_ys w_r_ ch_s_n t_ r_pr_s_nt th_ sch_ l _t th_ g_ _gr_phy c_mp_t_t_ n.

(Three girls and two boys were chosen to represent the school at the geography competition.)

**Five ways to make reading easy**

Here are three suggestions for guiding actual classroom practice and two suggestions for changing attitudes. All will positively affect student performance.

**Develop and maximize prior knowledge.** Read aloud to students of all ages. This provides knowledge of story schema or structure (Tancock, 1994) as well as "book language", which in turn enables predictions about print. Children need exposure to a variety of genres. In addition, repeated readings of texts result in semi-memorization and allow more accurate guesses and predictions about print (Blum and Koskinen, 1991). Listening to texts on tape is another way to provide repeated readings of favorite texts. Students should follow along with the print as they listen. Use activities which teach children how to think about what they already know and what they expect to learn from a next text. Pre-reading discussion and brainstorming generate many ideas to bring to the text while communicating an appreciation of each child's thoughts and experiences.
Use familiar materials that are fun, interesting, and meaningful. The use of familiar rhymes, songs, and chants is especially effective in facilitating reading for meaning. The rhythm and flow of the language along with prior knowledge of the text allows the student to read without having to examine letters and words to insure accurate decoding of the print.

Allow children to choose their own reading materials (Spaulding, 1992). According to Henk, Stahl and Melnick (1993), a reader's interest and level of involvement in a topic has an important bearing on comprehension. Controlled vocabulary materials are less interesting than literature selections. The reduced number of words makes it more difficult to make meaningful predictions while reading.

Model fast, fluent reading. Demonstrations of what real readers do are instrumental in developing reading behavior in children (Cambourne, 1988). Teachers can model effective strategies like skipping difficult words and focusing on the meaning, reading ahead for clues to the meaning, guessing and asking if the word makes sense in context, and rereading sections which are difficult to understand. Explain what you do and why as you read aloud to students. By reading content area materials to older students the teacher is able to familiarize them with the materials, reveal the schema of the text, activate prior knowledge, and encourage guessing and predicting when reading.

Reading for students provides the support or scaffolding (Vygotsky, 1978) necessary to assist students as they gradually become more independent in their reading. "When adults help children to accomplish things that they are unable to achieve alone, they are fostering the development of knowledge and ability ... From this perspective, which places instruction at the heart of development, a child's potential for
learning is revealed and indeed is often realized in interac-
tions with more knowledgeable others." (Wood, 1988, p. 24)

**Accept all efforts.** Students must learn to be risk-takers if
they are to learn something new (Cambourne, 1988). School
must be a safe place to learn. Errors must be welcomed as
signs of growth rather than interpreted as signs of failure.
Teachers can learn to use reading miscues to gain insight into
the reading process for individual students (Goodman,
Watson, and Burke, 1987).

**Expect success of all students.** This reduces anxiety in the
learning process. A relaxed child can activate prior knowl-
edge and make guesses about print without fear of correction.
Constant interruptions and corrections emphasize word accu-
curacy rather than the importance of meaning in print.
Requiring close examinations of print for accurate decoding
teaches word calling and prevents fast, fluent reading for
meaning (Hiebert, 1983).

Older students can participate in content area reading us-
ing the jigsaw model (Larrivee, 1989). This method facilitates
participation in assignments by reducing the amount of actual
reading required — an amount which can seem overwhel-
ming and cause anxiety and avoidance behaviors. When using
the jigsaw model, students are placed in small groups or
teams. Content area material is broken into sections and each
section is assigned to an individual student. Students read
and then study their section with members from other groups
assigned to the same section. They then return to their own
group and teach their section to their group members.
Conclusion

Reading is a meaning-making activity, a construction of meaning by the reader as he/she interacts with the text. Teachers can facilitate this process or make it more difficult for students. Materials which focus attention on letter sounds and individual words slow the student's efforts and interfere with fast, fluent reading for meaning. They result in high school graduates who can complete skills worksheets but who do not read for enjoyment and who cannot read with understanding.

Teachers of reading are responsible for making reading an easy task for students. We can do this in several ways: 1) by showing children how to use their prior knowledge of text as well as topics; 2) by providing access to a variety of motivating reading materials; 3) by modeling real reading behavior; 4) by supporting all attempts and efforts that students make; and 5) by expecting that all students will learn to read.

References


*Hooked on Phonics.* Orange CA: Gateway Educational Products.


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An Environmental Impact Statement: Designing Supportive Literacy Classrooms for Young Children

D. Ray Reutzel
Mary Wolfersberger

The physical environment of the classroom can be a powerful tool in support of literacy learning or an unrecognized and undirected influence (Loughlin and Martin, 1987). Teachers who organize, arrange, and dress up their classrooms intuitively understand that, "Every home, every classroom, every school contains a certain atmosphere" (Van Manen, 1986, p. 31). Although peripherally accepted as an important part of literacy instruction for many years, too little attention has been focused on what the literacy environment of the classroom brings to children and their learning. Recent research by Neuman and Roskos (1990, 1992) demonstrates a clear relationship between the quality of classroom environments and literacy related behaviors and learning.

Four effective design concepts for literacy learning classrooms

Young children's literacy learning is facilitated through immersion in language- and print-rich environments (Holdaway, 1979, 1984; Reutzel and Hollingsworth, 1988;
Reutzel, Oda, and Moore, 1989; Goodman, 1986; Taylor, Blum and Logsdon, 1986). Studies of the homes of early readers and the effects of classroom design changes on children's literate behavior indicate several important concepts related to the development of classroom environments which support young children's literacy learning. Based on recent literacy environmental research, we present four basic concepts (See Figure 1) to help teachers of young children understand various aspects of the environment-behavior-learning relationships that condition and shape literacy acquisition in school classrooms where "literacy is inseparable from living" (Calkins, 1991, p. 13).

**Concept 1:** Children's literacy learning is affected by the presence or absence of literacy tools. Early readers and writers (children who read and/or write before formal instruction) come from homes where a wide range of printed materials, paper, and pencils are readily available (Durkin, 1966; Teale, 1978, 1980). Homes of low socio-economic early readers often contain abundant supplies of non conventional print e.g., fliers, advertisements, and scraps of paper with messages rather than books and newspapers (Taylor, 1983; Taylor and Dorsey-Gaines, 1988). Research by Neuman and Roskos (1990, 1992) has shown that enriching play centers in school classrooms with a variety of literacy props leads to dramatic increases in literacy learning. Similarly, when children's play areas are impoverished by the lack of literacy tools, it stands to reason that opportunities for engaging in literate behaviors become limited and the classroom environment is characterized as setting deprived (Spivek, 1973).
Figure 1
Concept Model for Designing Classroom Literacy Environments

Using Literacy Props to Facilitate Interaction
A. Demonstration
B. Engagement
C. Sensitivity

Providing Literacy Props
A. Appropriateness
B. Authentic
C. Utility

Creating Environmentally Authentic Literacy Learning Settings
A. Concrete
B. Personalized
C. Support curriculum
D. Foster sustained work
E. Creates community
F. Aesthetically pleasing

Arranging Literacy Props
A. Accessibility
B. Suggest Uses
C. Change Regularly
D. Partition Area
Concept 2: Children's literacy learning is affected by the arrangement of space and the placement of literacy tools within the arranged space. Clearly defined areas which provide readily accessible literacy tools increase children's demonstrations of literate behavior. The addition of a well-designed library corner to a classroom increased the number of children who used the corner voluntarily during free-choice periods (Morrow, 1982, 1989, 1990; Morrow and Weinstein, 1982, 1986). Conversely, poorly designed library corners are among the least chosen areas during free-choice periods in early childhood classrooms (Morrow and Weinstein, 1982). In the homes of early readers, literacy tools are easily accessed (in plain sight and underfoot) (Clark, 1984; Durkin, 1966; Taylor, 1983) and kept in special storage places located throughout the house (especially in the kitchen and child's bedroom) (Morrow, 1983; Teale, 1978, 1986).

Concept 3: Children's literacy learning is affected by social interaction using literacy tools. Early conventional reading is associated with interaction between the child, literacy tools and an adult or another child (Teale, 1978; Sulzby, 1985). In studies of early readers, the most frequently mentioned sources of stimulation for literate behaviors are vast displays of environmental print and an adult reading aloud to the early reader. In contrast to Freire's (1993) banking concept of education where children become passive recipients of information deposited by an all-knowing adult, early readers have been shown to acquire literacy through interactions with literacy tools in conjunction with other language users — both children and adults.

Concept 4: Children's literacy learning is affected by the authenticity of the context into which literacy tools are placed. In the homes of early readers, literacy is presented as purposeful, inviting, authentic, and associated with deep satisfaction.
Neuman and Roskos (1993) suggest three primary considerations regarding how literacy props can be used to establish authentic literacy learning settings in school classrooms: 1) create clearly identifiable spatial boundaries, 2) display literacy props prominently, and 3) include personal touches. At the core of each of these recommendations is the concept of organization — organizing the classroom to inform children in concrete, authentic, developmentally appropriate, and personal ways.

Strategies for creating supportive early literacy classrooms

Based on the preceding concepts related to research and practice, we present strategies within four categories, provisioning, arranging, interacting, and authenticating, to help teachers create supportive literacy classrooms for young learners.

Provisioning literacy classrooms for young children

Fill the classroom with print. Professionally produced printed materials and children's own language products form the foundation for enriching the print examples available to young learners in classrooms. Printed materials might be selected to show classroom organization, charts and signs provide directions and schedules. Displays for lunch count, attendance, center and material use, and classroom responsibilities provide structure for daily routines. Labeling objects, storage containers, shelves and other areas of the classroom helps young children take responsibility for the maintenance and orderliness of their classroom environment.

Displays, experiments, observations, graphs, charts of familiar poems and songs, and captioned pictures and photographs are used to celebrate class or student discoveries and activities. Charts (e.g., birthday list, upper and lower case letter
formation, frequently misspelled or misused words, word banks) provide children with ready language references to support reading and writing activities. Message boards and activity centers stocked with abundant writing tools encourage young children to use print to communicate with others. Child-authored products, such as letters, notes, murals, books, or cards are displayed prominently in all areas of the classroom.

Numerous quality books which are readily accessible encourage young children to view literacy as a lifelong source of enjoyment. The young child's classroom should become a "virtual storehouse of literature" (Holdaway, 1984, p. 35). The number of books needed for young children in a classroom setting ranges from a minimum of 90 to approximately 500 books or about 4-20 books per child.

Six criteria should be considered when selecting books to enrich the literacy classroom for young children. First, teachers should select multiple copies of the same title to provide text sets for groups of children. Second, sets of related books should be selected. Books in a set might be related by topic, author, illustrator, series, or awards received. Third, a range of books varying in difficulty from three to four readability levels should be available. Fourth, a variety of genre such as picture storybooks, poetry, fairy and folk tales, fables, short stories, plays, and nonfiction should be gathered. Fifth, books with differing formats, e.g., paperbacks, hard cover, big books, wordless books, newspapers, magazines, pamphlets, and participation books (e.g., pop-up, lift-the-flap) should be obtained. Finally, teachers should seek to place a variety of printed materials other than story or information books into the classroom such as joke and riddle books, comic books, music books, phone books, directories, catalogues, books reflecting ethnic
and cultural diversity, and books related to television programs or movies.

Include a variety of writing utensils and surfaces. Research has demonstrated that when specific play areas (e.g., kitchen, post office, business office, or libraries) are stocked with an abundance of related literacy props, young children employ speaking, listening, reading and writing behaviors spontaneously and purposefully. In Figure 2, we provide a partial listing of literacy props suitable for suggested play centers.

<table>
<thead>
<tr>
<th>Telephone books</th>
<th>Real telephone</th>
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<tbody>
<tr>
<td>Cookbook</td>
<td>Recipe cards</td>
</tr>
<tr>
<td>Magnetic letters</td>
<td>Stationery</td>
</tr>
<tr>
<td>Message Board</td>
<td>Food coupons</td>
</tr>
<tr>
<td>Newspapers</td>
<td>Calendars</td>
</tr>
<tr>
<td>Note pads</td>
<td>Writing instruments</td>
</tr>
<tr>
<td>Appointment books</td>
<td>Signs</td>
</tr>
<tr>
<td>Magazines</td>
<td>Books</td>
</tr>
<tr>
<td>Index cards</td>
<td>Business cards</td>
</tr>
<tr>
<td>Business forms</td>
<td>Typewriter</td>
</tr>
<tr>
<td>Computer</td>
<td>Clipboards</td>
</tr>
<tr>
<td>Post-it notes</td>
<td>Envelopes</td>
</tr>
<tr>
<td>Posters</td>
<td>Stamps</td>
</tr>
<tr>
<td>Paper of assorted sizes</td>
<td></td>
</tr>
</tbody>
</table>

In addition to the crayons and pencils typically available, more creative writing utensils should be provided (e.g., chalk, highlighter and felt-tip pens, pens in a variety of colors and widths, calligraphy pens, colored pencils, fluorescent crayons). Even with access to computers, young children continue to enjoy producing print with a typewriter, lettering stencils, stick-on letters, or a set of alphabet stamps accompanied by stamp pads of various colors.
Paper, the standard writing surface, should be supplied in various sizes, shapes, types, and colors (e.g., index cards, lined and unlined paper, stationary, post cards, graph paper, post-it notes, butcher paper, chart paper). Additional types of writing surfaces may include blank books, ditto masters, magic slates, overhead transparencies, and individual or wall-mounted chalkboards and wipe-off boards.

Change literacy tools and displays of written language frequently. Literacy props and displays in classrooms designed for young children need to be changed regularly. Two weeks to one month seem to represent a reasonable time frame for planning changes. Children's written language products should be displayed two weeks or less to encourage increased production rates. At least one new book should be introduced to children daily. A balance should exist between the introduction of new books and materials and the recirculation of familiar and favorite ones.

Arranging literacy classrooms for young children

Play is a major component contributing to the development of young children's literacy. The symbolic play of preschoolers (e.g., play involving an object used in literate ways) and the oral language surrounding it are good predictors of reading and writing growth in kindergarten (Pellegrini and Galda, 1993). When preschoolers' play settings are enriched with literacy tools, the frequency, duration, and complexity of literate behaviors occurring during spontaneous free play also increase significantly (Neuman and Roskos, 1992). Taken together, these findings indicate the importance of arranging play areas in preschool and kindergarten classrooms. Play areas shown to have greatest utility for fostering literate behaviors include: a kitchen, an office, a post office, a print shop, and a library. Additional settings to develop include: 1) a writing/editing/publishing area, 2) areas for individual
conferences and whole class or small group meetings, 3) areas to display children's written language products including windows, walls, doors and the ceiling, and 4) informational areas focusing on topics of study or interest.

Create a library corner. A well-designed library corner is the focal area of the classroom and should be highly and immediately visible, attractive, and physically accessible. The classroom library should be located in a quiet area, have adequate lighting, and be partitioned off from the rest of the room by bookshelves, file cabinets, moveable bulletin boards, and other pieces of furniture with multiple uses. Although partitioned off, the areas should be visible from any number of classroom locations by the teacher. It is helpful if the classroom library is large enough to accommodate five or more children at one time and occupies about 15% of the floor space. The library corner is named, preferably by the students, and labeled. Posters, book jackets, displays of favorite books, and items related to specific books (e.g., stuffed animals, feltboards with story characters, puppets) encourage reading. Bookcases or racks can be used to display books with both spines and covers out. Multiple copies of a single title can be shelved in cereal boxes cut at a 45 degree angle with the title of the books on the lowest cut side of the cereal box as shown in Figure 3. Furniture should create a comfortable, home-like atmosphere (e.g., a rocking or beanbag chair, pillows, throw rugs, lamps, aquarium) and be arranged so children can sit and lie in various positions.

Finally, research by Morrow and Rand (1991) has shown that the arrangement of literacy props within classroom play centers significantly increases children's literacy learning. Issues specifically related to arranging classroom literacy props for optimal effectiveness focus on two major ideas. First, literacy props should be kept in clearly marked or labeled
containers that can be easily accessed and put away. Children will not use literacy props as readily if they must ask teachers for assistance in accessing them. Likewise, teachers will not want to allow children access to materials if they must take responsibility for their clean up and storage. Second, teachers should suggest possible uses for literacy props. For example a message board may be used to post a grocery list, or take telephone messages. Used in an early childhood science activity center, a message board may be used to make a listing of materials needed to conduct an experiment, record the steps of an experiment, or make a diagram for displaying the process. In any case, suggested uses for literacy props often displayed through the use of picture or icons combined with words help young children to see the many potential uses of reading and writing as they learn.

Figure 3
Cereal Box Storage Containers for Multiple Copy Book Sets

Side View of Cereal Box

Front View of Cereal Box
Literacy interactions invite young children to learn

Frank Smith (1988) described three interactive conditions which must be present in literacy classrooms for young children to learn successfully: 1) demonstrations, 2) engagement, and 3) sensitivity.

**Demonstrations of literacy.** When adults and children have access to literacy props, they demonstrate what it means to be literate and how reading and writing are done. When teachers share their favorite books such as *Poems for Laughing Out Loud* (Prelutsky, 1991) and chuckle or laugh or read *A Taste of Blackberries* (Smith, 1976) and tears stream down their cheeks, children learn that books, a literacy prop, evoke an emotional response that teachers and children can share, discuss, and ponder. When a child brings cookies from home and finds a thank you card on her desk from the teacher the following morning, she learns that cards, another literacy prop, facilitate the mutual sharing of gratitude. In each of these examples, demonstrations accomplished using various literacy props help children see the value, utility, and purposes for learning to read and write.

**Engaging in literacy.** When children engage in the literacy demonstrations of others or engage on their own using available literacy props, they "learn by doing." Having seen, experienced, and understood the value and power of reading and writing through demonstrations, children often choose to engage in literacy related activities themselves or with others. It is no longer enough to allow teachers the singular privilege of using literacy props. Drawing upon the demonstrations provided in the classroom environment and the available literacy props, children engage in reading books, writing notes, telling stories, recording messages, listening to poems, and writing at the board. In short, they come to explore,
experiment with, and use literacy props in ways that approximate the demonstrations they have experienced.

Children do not engage in literate acts without a belief or confidence that learning to read and write is possible. In fact, Frank Smith (1985) maintains that the major precursor of reading and writing difficulties is a belief that learning to read and write is hard, painful, or impossible. Hence student attitudes and interests frame the motivation for engagement. Literacy props, particularly a variety of these tools for reading and writing, must anticipate a broad spectrum of attitudes and interests that spark desire and press children into engaging in literacy learning. A typewriter in the corner of the room may be just what a child needs to move ahead with literacy whose handwriting is difficult to read. A telephone for talking and a notepad for taking down messages may be just the set of tools needed to influence a reluctant student to write. Literacy props influence the motivations or sensitivity of children to engage in literate behaviors in the first place. And conversely, children's engagement in literacy in the classroom affect the tone, the feel, and the available demonstrations of literate behavior for the other children in the classroom as well.

**Sensitivity to literacy.** It is important to understand that children do not choose to commit literate behaviors spontaneously without a degree of personal sensitivity to the literate demonstrations of others. When demonstrations are offered and invitations to engage are extended, children typically develop sensitivity to the literacy activities and props in the classroom and desire full participation. Children and teachers must understand and must constantly assess their sensitivity toward the available demonstrations and invitations to engage in the literacy environment. Taken together, literacy props affect the dynamics, existence, and the nature of young children's literacy related interactions in the classroom.
Authenticating literacy classrooms for young children

Divide the classroom into smaller activity settings. The spatial boundaries for each activity center in the classroom need to be clearly identifiable and evident to children. Classrooms for young children, as research suggests, should be broken up into smaller specific activity settings. Doing so encourages quieter classrooms, sustained engagement in literacy learning, more cooperative behaviors, and a sense of privacy to pursue personal projects.

Physical and symbolic cues can be effectively used to create the necessary definition of spatial areas. Physical cues are conveyed by the placement of semi-permanent fixtures (e.g., furniture, bookshelves, moveable bulletin boards, mirrors, artificial trees, boxes, easels, and aquariums). The arrangement of furnishings is one way of cordon off specific activity areas in the classroom. Symbolic cues use print combined with other items to signal spatial boundaries (e.g., low hanging mobiles and signs, information or direction-giving signs, displays of books or children's written language products). Each of these objects should attract attention, teach, and inform children as they roam the room.

An important concept related to spatial divisions, displays, and storing literacy props is the concept of aggregation. This means that props are collected into a related network of materials or objects for a particular purpose. For example, when designing a classroom library area, teachers would aggregate or collect literacy props such as library books, cards, due date stamps, book marks, posters of favorite children's books, pictures of authors, and advertisements of new books. There might also be a card catalogue, a librarian's desk, a rotating wire book display rack, and a poster explaining the check out system.
Bookshelves could be labeled with section headers such as biographies, fiction, fables, folk tales, and fairy tales.

Aggregated displays and areas in the classroom could also focus on themes taken from curriculum subject areas such as science or social studies. An area could be established in the classroom that focuses on community workers. Literacy props might include student-made maps or murals of the community, commercially produced posters of various community workers, a collection of books related to community workers, and artifacts related to the responsibilities of community workers (e.g., telephone books, catalogues of postage stamps, and newspapers).

Every classroom area should enjoy a personal touch from home. Furnishings and objects provide the key to this concept. Items such as plants, bean bag chairs, pillows, children's portraits, mailboxes, message boards, galleries for art work, and mobiles for displaying the main characters in books enhance the "personal" nature of the classroom. All combined, these elements of literacy classroom design create a press for young children to engage in literacy as an ongoing and enjoyable source of learning, creating, and growing.

Literacy classroom environmental impact statement: Concluding caveats

There are many compelling reasons for using literacy props to create authentic settings for learning literacy. Literacy props properly organized can be used to extend and enrich every area of the curriculum. Because children enjoy using literacy props, they tend to remain on task for longer periods of time. They sustain attention and effort longer. As children work together in activity areas using literacy props, they develop a sense of independence in literacy as well as establishing a strong network of interdependence with their classroom
peers. And when properly designed, authentic literacy learning settings are aesthetically pleasing to children. A warm, comfortable, well-lit reading nook with the quiet bubbling sound of an aquarium has a calming and tranquilizing effect on children's behaviors. This is a place to go to think, experience quiet, and share a peaceful moment with print and peers. Thus, placing literacy props into environmentally authentic literacy learning settings provides not only an aesthetically pleasing learning environment but one indispensable to children's future growth in language and literacy.

References


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**Call for Manuscripts for the 1996 Themed Issue:**
**Integrating Reading and Writing Across the Curriculum**

The 1996 themed issue of *Reading Horizons* will be devoted to articles linking reading and writing with all areas of the school curriculum. Articles relating excellent practice, theory, and research, to integrating reading, writing, speaking and listening across the curriculum should be sent to Editor, *Reading Horizons*, WMU, Kalamazoo, MI 49008. Manuscripts should be submitted following Reading Horizons guidelines: send four copies and two stamped, self-addressed business size envelopes; include a cover sheet with author name and affiliation; using a running head (without author identity) on subsequent pages; follow APA guidelines for references and use gender-free language. Manuscripts intended for the themed issue should be postmarked by March 31, 1996.
I Want to Hear a Story
Kara McKenzie

Teacher, teach me. I want to read.
I want to learn to sound.
I want to hear a story,
as the leaves spin round.

No story, child, no story;
You have to learn the sounds.
Don't look toward the window,
as the leaves spin round.

No, no, my child, don't look that way.
Look at what I have found.
The letters, child, they form the words,
as the leaves spin round.

Sounds and symbols push and pull,
as the children sigh and frown,
and roll their eyes toward the window,
as the snow drifts down.

Turn around child, learn to read;
ah, ba, town.
Don't look out the window,
as the snow drifts down.

Nose pressed to the window,
and a heart devoid of mirth,
watching in the springtime,
as the colors paint the earth.

I'm losing you, child. What do I do?
You must study for all your worth!
Come back my child, don't waste your day,
as the colors paint the earth.

My teacher, I am learning.
I'm learning for all I'm worth.
I'm learning about the springtime,
as the colors paint the earth.

I'm looking at the beauty,
as you toil and you toll.
I'm listening to the bluejays,
as the heavens warm my soul.

Oh, teacher, it's a book!
Is reading now your goal?
I'll listen now and learn from you,
as the heavens warm my soul.
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