PROFESSIONAL DEVELOPMENT AND THE IMPROVEMENT OF INSTRUCTION

El desarrollo profesional y el mejoramiento de la enseñanza

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Abstract

This chapter describes the underlying philosophy and research base of a program of professional development designed to support teachers in low-performing schools in Santiago, Chile. Scientific teaching methods in literacy learning combined with intensive training for teachers and long-term follow-up were used to improve the achievement of elementary students in reading and writing. The major components of effective professional development and their impact on school change and student performance are identified and discussed. The application of these various standards in the AILEM program (Reading, Writing and Mathematics Early Learning) a collaborative project with the Foundation for Comprehensive Early Literacy Learning, is also reviewed.

Key words: teacher training, effective teaching, literacy learning, school change

Resumen

Este capítulo describe la filosofía y fundamentos de investigación subyacentes al programa de desarrollo profesional diseñado para apoyar la labor docente en colegios de bajo rendimiento en Santiago de Chile. Se utilizaron métodos científicos de enseñanza de lectoescritura en conjunto con capacitación intensiva de profesores y seguimientos en el largo plazo para mejorar el nivel de logro en lectura y escritura de alumnos de Enseñanza Básica. Se discuten e identifican los principales componentes del desarrollo profesional eficaz, así como su impacto en el cambio escolar y en el desempeño del estudiante. Por otra parte, también se analiza la aplicación de estos diversos estándares en el programa AILEM (Aprendizaje Inicial de la Lectura, Escritura y Matemática), proyecto realizado en colaboración con la Fundación para el Aprendizaje Inicial Comprensivo de la Lectoescritura (CELL).

Palabras clave: formación de profesores, enseñanza efectiva, aprendizaje de la lectura y la escritura, *cambio en la escuela*

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Introduction

School reform initiatives beginning in the 1990s and continuing into the new century have been increasingly evident in the majority of industrial countries. This reform has been and continues to be focused on student outcomes. In the past, our evaluation of schools and their work has considered issues such as standards, curriculum, teaching materials, and school organization and administration. The impact of these considerations on student achievement was not primary. In the school reform movement, everything that is done in schools is measured by how it affects the achievement of students. The scientific research in education and teaching is reviewed and only those methods that are proven effective are chosen. All of the work in schools is designed to have a positive outcome for the students. Schools are now asked to shift the focus of their work from the role of adults to the role of the student as learner. The single criterion of increased achievement for students as a measure of our success is used.

Using Professional Development to Affect School Change

There has been a great deal written about school reform and the need to change our public schools so that they do a better job of educating all children. Schools have been probed, criticized and analyzed in ways unprecedented in our history. It is interesting that most of the examination of schools has been completed with very little involvement and input from, inarguably, a very key group of players, the teachers. Much has been heard from pundits, professors, and politicians, but little from our teachers. Who would trust proposals for medical reform without the involvement of doctors or legal reform without the involvement of lawyers? The same question should be asked about school reform. To be effective, any efforts to accomplish change in schools must involve the teachers, those who spend the most time in schools and with students, and those who will be expected to take the primary role in the change process. Anything less than this is a formula for disaster.

School reform begins with the assumption that teachers and administrators recognize the need for change in their schools and change in the procedures used for teaching and learning. Though there are various political pressures to improve schools and the achievement of students, real change is only likely when it is embraced by professional educators. Neither political mandates nor the adoption of programs or curricula will ensure change in educational practice. What can be said of people generally, also applies to teachers specifically, and that is, the need to change is a personal one and the benefits of change to those involved must be clear. There are a number of major components of school reform and the professional development that supports reform necessary to affect both change and improvements in student learning and achievement. It should be

clear that criticism of teachers, absent effective professional development, is misplaced. If teacher accountability is an important standard, efforts to support teachers improve their instruction is a necessary prerequisite to any accountability efforts.

Major Components of Effective Professional Development

Professional development is considered to be a primary method by which to ensure that each student has a highly qualified teacher, and affect school change (Snow, Burns, & Griffin, 1998; Neumann, Copple, & Bredekamp, 2000). Teachers and their classroom practices are the focus of the professional development. No specific classroom materials are recommended or required, rather professional development is designed to help teachers use whatever instructional materials they have and organize their teaching for maximum result. The only variable that consistently impacts improved school achievement is high quality, long-term professional development for teachers.

Professional development focused on specific, higher-order teaching strategies increases teachers' use of those strategies in the classroom. This effect is even stronger when the professional development activity is a reform type (e.g., faculty study group) rather than a traditional workshop or conference; provides opportunities for active learning; is coherent or consistent with teachers' goals and other activities; and involves the participation of teachers from the same subject, grade, or school (Eisenhower, 2000).

Ten components of effective professional development have been identified: intensive professional development, use of a capacity building model, leadership, family involvement, scientific research, content areas, increase evidence on literacy, align teaching methods, instructional use of data, and student performance.

1) Professional development should be intensive, long-term and include follow-up

Most schools and school districts arrange professional development for their teachers. Many of these activities take the form of one-day workshops, the content of which is never revisited. The recommended alterative to this model is professional development organized as a series of focused workshops that reflect the interests and needs of a particular subset of teachers. These workshops should be collaboratively planned by teachers and leadership personnel and generally use group inquiry models (Strickland, 2001, U.S. Department of Education). Professional development should also include follow-up, where teachers are given the opportunity to review previous training and assess its impact on their teaching. Teachers need the opportunity to interact with trainers after they have had the opportunity to apply new teaching methods or classroom procedures.

2) School change efforts should use a capacity building model

One of the great difficulties of school change activities is how to sustain those efforts over time. Experts can be effectively used as catalysts in this process but they are typically deployed in consulting roles. Continued support for these activities need to be organized at the school site so that the resources are independent and "owned" by the teachers and administrators at the school.

Faculty study groups have been identified as an important support to increasing teacher effectiveness (Murphy & Lick, 1998; Strickland, Ganske, & Monroe, 2002). These groups are, by design, used to support curricular and instructional innovations, integrate the school's instructional programs, target schoolwide instructional need, and monitor the impact of changes on children. It has been a common practice in schools to allow teachers to isolate themselves and not work as a school team. Faculty study groups are an important vehicle to develop cooperation amongst teachers and foster the attitude that the work of each individual teacher is dependent on every other teacher in the school.

Peer coaching has also been identified as an important element of professional development (Joyce & Showers, 1995; Showers & Joyce, 1996; Strickland, Ganske, & Monroe, 2002). This support has been found critical in developing specific teaching strategies, finding ways to meet school goals, and the integration of various strategies.

Peer coaches are, by definition, other teachers released from some of their teaching duties to support their colleagues take on new learning and attempt new teaching methods. The distinct advantage of a coach who is also a teacher cannot be overemphasized. It is difficult enough for teachers to accept coaching but the likelihood of accepting support from others increases with the level of credibility enjoyed by the coach. A coach who doesn't teach, or who hasn't taught for many years, will not be as readily accepted as the coach who is a teaching colleague. It takes the form of, "if you can do it, then it is very likely that I can do it as well."

3) Leadership is a critical element of school change

Most of our current thinking in school administration is that the principal needs to take a position of instructional leadership and have teaching and learning as the primary focus of their work. This is a substantial divergence from the principal role as it has evolved, where the management of a wide variety of administrative details takes the highest priority. Often the only involvement in instruction by the principal is the evaluation of teachers or the adoption of curriculum. One obvious influence affecting this change is the fact that principals are now held accountable for the achievement in their schools. It is well known that the support of the school principal will not guarantee the success in the school change process, but their lack of support will guarantee its failure.

Teacher cynicism because of cyclical changes of direction by local and national leadership is justified. New initiatives are taken on before they have the opportunity to embrace, understand and implement what has already begun. It is the strong leader who is able to stay the course of teacher efforts already in progress. The pressure on new principals to demonstrate that their leadership results in school improvement is a frequent cause of those changes in direction that create low teacher morale.

Effective school change requires a principal engaged in the process and focused on classroom instruction. The improvement of instruction should be the highest priority for principals and the need to recognize that teachers are primary to this improvement is the important first step of any school action plan. Teaching and learning are the business of schools, not facilities, related services, and a multitude of other distractions that take administrative time and effort.

4) Family involvement is a critical element of improving student achievement

It is common to hear teachers blame children and their families for their failings or low achievement. Many will say that their lack of abilities can be attributed to the family and that these conditions are not under their direct control and therefore not their responsibility. Imagine a physician who believes that his work is only contained within the four walls of his office or in a hospital. Whatever happens outside of this area is not his concern or not something he can influence. This is, of course, an unacceptable view of the work of physicians and one that would not be tolerated. We expect them to take into consideration all of the variables that might affect the health of a patient and develop a plan that addresses all of the conditions that might affect the outcome. The result is treatment that includes medication taken at home, diet, exercise, and a wide range of lifestyle issues. In other words, everything that might impact the result is taken into consideration in the treatment.

This medical model needs serious consideration by schools. Likewise, schools and teachers should consider all of the variables and develop a plan to address each issue as it affects student learning. If children are hungry; we feed them. If they are ill; we arrange treatment. If the level of language stimulation in the home is low; we increase our efforts in school. If there are no reading materials at home; we send books home.

Even with these kinds of school efforts, family involvement in the schooling process is important to the success of each individual child. It is the responsibility of schools to encourage this involvement, but it is necessary that the role of the school be even more proactive. It is a school responsibility to ensure that families are able to participate in the educational experience of their children. Lack of family engagement is an explanation not an excuse. If family involvement is important, and it is generally agreed that it

is, then the support needed for children to be successful becomes the responsibility of the school. Schools must engage directly in training families to provide the necessary support to maximize the school experience of their children.

5) Teaching reading should focus on the scientific research

Much has been made of the need to use rigorous scientific research to identify effective teaching methods. Comparisons of education to medicine abound, and research that uses random assignment to treatment groups is considered the "gold standard" because this kind of research has had such a dramatic effect in the medical field. The reasoning goes that if it has so clearly improved medical treatment, should we not expect the same effect if this standard is applied to education and teaching.

One of the difficulties in applying this research standard of random assignment to treatment groups is ethical. Few parents are willing to agree to research where their child is assigned to a group that will not receive the benefit of a method that is believed to be one with great potential. And teachers are of the same opinion. The question is whether we can ethically deny any child the opportunity of access to a treatment for the purposes of scientific research-only without any consideration as to the impact on the child. In other words, can we ethically experiment on our children in school settings? Parental consent is an essential part of the work of schools and random assignment of children to different treatment groups is a clear ethical problem.

An assumption of this scientific research as it applies to reading instruction, is that we can identify the best and most effective way to teach reading and that this method will apply to all learners. This assumption has begun what might best be compared to the search for the Holy Grail, an obsession by some researchers that there is only one way to teach reading and that this way can be found using scientific research.

A Story

I had the opportunity to participate in a meeting with one of the chief architects of the reading initiative of President Bush in the United States. During this meeting this high government official was attempting to explain the scientific research about how to teach reading. He was persuaded both that phonics instruction was a necessary prerequisite to learning to read and that a scripted program of instruction could be developed for teachers to ensure that they were using the correct methods. It would be a teacher proof approach to teaching children to read, something he thought important. Take out the teacher variable and instruction would be more powerful. This, of course, begs the question as to why you would need teachers at all. If you have a scripted, teacher proof

method, you could employ someone off the street to teach reading. Nevertheless, this was what the scientific research, a la medical research, shows.

My question to the group was to ask, by a show of hands, who used what treatment for the common headache. The responses to this question included: aspirin, ibuprofen, and brand names like Tylenol, Advil, and Motrin. My question to the expert was, same problem but different treatments, why do you think that is? His response, one that he regretted immediately, was that each person was different. My response to him was that the same was true for children learning to read. Children are different, learn in different ways, and we will need various teaching methods to teach them to read. There is no one-size-fits-all approach to reading.

Scientific Research in Reading

There is a considerable body of Scientific Research in Reading that identifies effective ways to teach students how to read (National Reading Panel, 2001). Five areas of instruction have been identified that are critical elements to success in teaching reading.

Phonemic Awareness

Phonemic awareness is the ability to notice, think about, and work with individual sounds in spoken words. Before you become a reader you must be aware of the sounds that are in words. Readers understand that written words can be spoken and that they use phonemes or particular speech sounds when they read a word.

Note: It is apparent that children who live in poverty come to school with much lower levels of oral language (perhaps as much as 25% less) than their middle class peers. The approach to reading that emphasizes the decoding of words must consider the futility of calling a word that is not in a child's oral vocabulary. Reading obviously begins with the development of a child's language; however, most commercial reading programs begin the teaching of reading with the decoding of words rather than the development of language.

Phonics

Phonics is the relationship between the sounds of the spoken language (phonemes) and the letters of the written language (graphemes). Phonics is a system for remembering how to read words. The letters of the alphabet and their corresponding sounds when placed in memory are used to decode words.

Note: Phonics instruction has been politicized to the extent that it is a back-to-basics kind of issue. The phonics-first advocates take the position that modern teaching methods (constructivism in particular) have moved away from phonics and that is the

primary cause of failure in reading. They believe that phonics is basic and fundamental. This might also translate into basic is good enough for those who will occupy the lower strata of our society. Society's workers don't need to think, just reach a level that supports the professional class. How much literacy or achievement is needed by the person who cleans my house, does my laundry, or mows my lawn? Access is not denied, but extraordinary efforts to ensure that access are too costly and for that reason alone, unavailable. This might be particularly true of the immigrant population who some believe shouldn't be here anyway and others believe should primarily occupy service roles and are certainly not entitled to the same services as citizens.

Fluency

Fluency is the ability to read a text accurately and quickly. Fluent readers decode automatically and therefore are able to concentrate their attention on the meaning of the text. Fluent readers recognize and comprehend words at the same time.

Note: Certainly the beginning reader who is having difficulty decoding might have some problems attending to the meaning of text. However, as readers become more proficient, fluency might have the opposite effect. Children who have been taught to decode, read fluently but with low levels of comprehension. Dysfluent reading, where the child stops to consider meaning, or rereading to check for meaning, is a more obvious indicator of a child attempting to understand what is being read, than fluency alone. Fluency as a goal independent of comprehension is misguided.

Vocabulary

Vocabulary is the words we know and need to communicate. Oral vocabulary is the words we use when speaking and reading vocabulary is the words we can read in print. Reading text with meaning relies on the words used being part of the vocabulary of the reader. A reader needs to know most of the words that are read to comprehend the text. Understanding phonics and using these skills to decode text is not helpful if the word decoded by students is not a word in their vocabulary or the meaning of the word can't be determined by context.

Note: As with many aspects of reading, the question is not whether, but how. Some teaching reading methods introduce new vocabulary in lists or in isolation rather than in the context of stories or meaningful text. The thinking goes if you know the meaning of a word you will be able to understand what you are reading when that vocabulary word appears. The alternative view is that vocabulary is more likely developed as new words show up in text.

Text Comprehension

The purpose of reading is to understand what is read. Comprehension is the ability to take meaning from text and remember and communicate the meaning from the text. Good readers are those that monitor their comprehension to make sure they understand the text.

Note: Understanding what you read is, of course, the whole point. Again there are commercial reading programs that emphasize skill development over reading of text. These approaches assume that if you have the skills before you begin to read, you will be a more successful reader.

A Baseball Story

My youngest son, when he was five years old, wanted to be a baseball player like his older brother. I signed him up for, what was called, the Pee Wee league. Kindergarten aged children learning the game for the very first time. Rather than having a pitcher, this league used a pitching machine that would slowly lob the ball toward the batter to make sure that no one would be injured.

My son's first at bat was quite memorable. The pitched ball hit his bat by accident, went only a few feet, he ran the bases, the other children threw the ball over each others heads, and generally ran around chasing the ball with little success. But they were having a great time. My son began his baseball career with an accidental home run.

We have much to learn from the coach of this team. He could have chosen to teach the children first how to catch and throw and run and bat. He could have made sure that they had all of the basic skills before they were allowed to play the game. He, however, chose to allow them to begin to play using whatever skills they had and then attempt to improve their performance as they played. This choice was a good one and it was obvious that the children loved the game and were having a great time playing at whatever level they could. What fun would there have been to only practice the skills and not be able to play?

I think this same principle applies to the teaching of reading. We need to make sure the experience of learning to read is pleasurable and fun even as children are learning and becoming more proficient readers.

This scientific base of research is generally agreed as to what are the needs of individual learners. Of considerable debate however, is how these goals are best accomplished with two very specific and different perspectives advocated by experts in the field, skills-first instruction, often employing scripted programs, and authentic learning where skills are acquired as the need to employ them comes up.

Focus on Literacy Learning

Students who struggle with literacy are viewed as a universal problem that knows no borders. Research in the last two decades has significantly increased our understanding of how children learn to read and write and the type of instruction that provides the necessary support to children in the learning process. Teachers who understand the process of literacy, use teaching methods proven effective by research, and who are provided professional development to improve their practice are the key to achievement gains in students.

Teachers do not deny the need for change and improvement of classroom instruction. However, recognizing this need and having the resources to accomplish these changes are another matter entirely. Teachers also accept the need for accountability in their work but take the reasonable position that this accountability should not be imposed absent appropriate support and professional development to improve their teaching. Resources, and the lack thereof, are an issue that should be an important consideration in efforts to improve student outcomes generally, and reading and writing achievement, specifically. A cursory examination of the books available for teachers in Chile to teach children to read, suggest the obvious fact that teaching someone to read requires that first you have something to read, has been lost sight of or forgotten or ignored.

Learning to Read and Write

The Reading Process

Literacy acquisition is a complex task involving the development of oral language and the mastery of written language, both reading and writing. As parents of more than one child can attest, their children did not acquire oral language in the same way or at the same pace. Language acquisition is progressive, and it involves more than just modeling and copying. Children develop oral language by participating in increasingly complex conversations and extending their understanding of the language they hear and use.

The acquisition of written language is a similarly complex process. Students do not progress at the same pace or in the same way. Teachers have historically relied on various means to help students acquire an understanding of the language system. Most students succeed in constructing their own understandings based on the methodology used in their classrooms. Some students, however, need additional support in learning to read and write.

An approach to reading instruction that uses various teaching methods with various levels of teacher support, which is based on the student's own oral language processes

and provides them with a means to develop their own reading behaviors to become proficient is of greatest benefit to the largest number of students. To provide this kind of reading instruction, teachers need to know what knowledge, skills and strategies students already possess. Teachers also need a strong theoretical and practical understanding of the process of oral and written language acquisition. This understanding of theory and practice, together with ongoing and thorough observation of each student, is what makes an effective approach to reading.

Reading is a cognitive process. Basic to the process is the understanding that what can be said can be written down and then read again by the writer or by someone else. Once students grasp this basic concept, they must acquire an understanding of print—the code by which speech is represented as visual information—and the skills to decipher the code and turn it back into speech. This visual information is composed of the letters of the alphabet, arranged in systematic patterns and clusters to spell words. Each letter has its own distinctive visual features, and each letter stands for a sound. Beginning readers need to learn to associate letters with sounds in order to access the information represented by print and comprehend the intended message. Comprehending the author's intended message is the goal of reading.

Readers, at all levels, bring their own knowledge and experience to the task of reading and comprehending what is read. Oral language and background knowledge are important resources that readers use to decode print and make sense of the message. As students progress through the grade levels to more complex text, the language in books becomes increasingly complex; the language of books is academic language rather than basic oral or conversational language. This change must be part of their understanding as students become proficient readers and writers.

Reading in the Classroom

The development of literacy is progressive. The process of learning to read involves surrounding students with conversation and print, modeling how reading is done, providing direct instruction in specific areas of need, and encouraging them to engage in similar activities independently. Various teaching methods are available to provide this support throughout the reading process.

Reading Aloud

Reading aloud to students allows them to experience great examples of literature, works they would not be able to read on their own at this point in their learning, and to experience a variety of forms and styles of writing. It acquaints them with the language and form of books and allows them to appreciate the pleasure that comes from reading

without having to concentrate on the mechanics of decoding the printed word. Reading aloud encourages them to want to emulate the reader and to acquire the skills that will allow them to enjoy the pleasure and satisfaction of reading for themselves. The listening and thinking skills used during reading aloud help students with the development of comprehension skills that are used when students read themselves, Adams (1990); Clark (1976); Cochran-Smith (1984); Cohen (1968); Durkin (1966); Goodman, Y. (1984); Green & Harker (1982); Hiebert (1988); Huck, Hepler, & Hickman (1994); Ninio (1980); Pappas & Brown (1987); Schickedanz (1978); Wells (1985).

Shared Reading

In the classroom, the reading done *with* students is called shared reading. The technique of shared reading in the classroom was created to replicate the experience of storybook reading, where the student follows along as the adult reads aloud. Shared reading is commonly done with books large enough to allow a group of students to see the print and follow along. Shared reading can also be done with poems and songs that are written on chart paper or the overhead projector and with the products of interactive writing activities. The teacher's role in shared reading is to: 1) choose appropriate material, 2) point to the text while reading word-by-word for beginning readers and phrase-by-phrase or line-by-line for more advanced readers, 3) read along with the students, 4) read in a fluent and expressive manner, 5) select explicit skills for direct instruction, and 6) observe the students' responses and behaviors, Holdaway (1979); Martinez & Roser (1985); Pappas & Brown (1987); Rowe (1987); Snow (1983); Swartz, Shook, & Klein (2002); Sulzby (1985); Teale & Sulzby (1986).

Guided Reading

In guided reading, students assume more responsibility than in shared reading. The teacher and a group of students, or sometimes just one student, have their own copy of the book being read. The teacher provides an introduction to the story, and then observes the students as they read orally, talk, think, and question their way through the story. The text chosen for guided reading should be within an instructional range and should permit some new learning and the opportunity for problem solving by the students. The teacher assists the students in the problem solving experiences in such a manner as to promote future use of the behaviors and strategies needed by the students in problem solving situations, Clay (1991a; 1991b); Fountas & Pinnell (1996); Holdaway (1979); Lyons, Pinnell, & DeFord (1993); McKenzie (1986); Routman (1991); Swartz, Shook, & Klein, et al. (2003); Wong, Groth, & O'Flahavan (1994).

Independent Reading

In independent reading the students assume responsibility for reading. Opportunities for independent reading should be part of each stage of students' literacy development. Materials for independent reading can be familiar stories that students know from reading aloud, shared reading, and guided reading experiences. New books appropriate to a student's independent level may also be used. The teacher can take this time to observe individual student reading and problem solving behaviors, Clay (1991a); McKenzie (1986); Taylor (1993).

The Reciprocity of Reading and Writing

Reading and writing are reciprocal processes. When a student reads, he is decoding the message that the author has sent. When a student writes, he needs to organize his thinking to form the message that he intends to send to himself or to another reader. During writing, students need to use alphabetic principle, word analysis, spelling, and the conventions of print required for the particular message that is being written. There are many important skills that are necessary to learn in the reading and writing process. Different kinds and levels of understanding are needed for students to use these skills in reading and in writing. The ability to read or decode a word does not guarantee that a student will be able to write or encode the same word.

The Writing Process

Writing instruction is based upon student's oral language development and knowledge of the world around them, very much like reading instruction at the acquisition phase. Learning that what one says can be recorded in written form and then read by another becomes a goal even for the very youngest student. In order to provide writing instruction, teachers need to know what knowledge students already possess.

The reciprocity of reading and writing is an essential connection that all students need to develop and draw upon. Writing is done at many different levels of understanding and thinking. The writer needs to understand the basic principles of letter-sound correspondence, letter formation, and using systematic patterns in words and word clusters to spell words. Central to the process is, of course, that the writer is sending a message to the reader and that the message carries a meaning.

Writing generally develops more slowly than reading. A reader has the advantage of gaining new knowledge by reading the writing of others. Writers on the other hand have only their own knowledge and must use this information to express themselves in

print. Beginning writers are encouraged to write about things they know and are familiar with in their lives. They are encouraged to use the language that they hear every day in their homes and communities. Even though this writing might not be grammatically correct, it helps students understand that their thoughts and ideas can be written down and communicated to others. This level of ownership is an important part of becoming a writer.

Writing in the Classroom

The development of oral language is progressive. As vocabulary grows, language structures become more complex and the knowledge base expands as students progress in their language acquisition. Likewise, in their writing, students progress from beginning levels of vocabulary, sentence structure, spelling and phonology to more complex levels. There are a variety of teaching methods and experiences that support students' growth in writing.

Interactive Writing

Interactive writing is a process in which the teacher and the students collaborate on the construction of the text and share the role of scribe. The negotiation of text is a process that develops thinking, planning, refining and consolidating while at the same time developing appropriate language structures and increasing vocabulary. Different types of interactive writing provide different levels of support. In transcription, students focus on known text and how that text was constructed. In innovation, students also work with known text but add their own thinking and writing to the end product. In negotiation, students and teacher share the responsibility for deciding what to write and then the writing itself. The teacher and students can work at many levels of competence, from letter recognition and formation, to learning various types of writing. Interactive writing is an effective method to support skill development in beginning readers, focus on the confusions of struggling readers, and teach advanced writing skills to more proficient readers and writers.

Interactive Editing

Interactive editing is a teaching method where the teacher and students collaborate to edit familiar, error-free text. Interactive editing provides an opportunity to discuss grammar and all of the conventions of writing in the context of an authentic writing activity. The importance of the reciprocity of reading and writing is emphasized in interactive editing. The reading style and form becomes the model for the writing, particularly

with expository materials, Button, Johnson, & Furgerson (1996); McCarrier, Fountas, & Pinnell (2000); Pinnell & McCarrier (1994); Swartz, Klein, & Shook (2001).

Independent Writing

Independent writing is the ultimate extension of all the other methods of writing instruction. The goal is that the students are all given the time necessary to independently write text, incorporating all they have learned in large group and small group writing methodologies, Bissex (1980); Clay (1975); Dyson (1982; 1988); Ferreiro & Teberosky (1982); Goodman, Y. (1984); Harste, Woodward, & Burke (1984).

A Parable for Our Times

I can still see my grandmother bustling around the kitchen preparing fried chicken and baking pies. She was a wonder to watch, all efficiency and know-how. If she had a recipe, I never saw it. She just cooked and to use a phrase, whipped up a miracle. Ingredients were fresh, many from her own garden, and there were no boxes or prepared packages of food. I asked where she learned to cook and she replied, "From my mother, of course."

Grandma Swartz was what was once called, a farm cook. She grew up on a farm, the fourth of 13 children. The boys (nine of them) helped their father with the farming and the girls (four in number) helped their mother with the cooking and household chores. The food was good and, as you can imagine, plentiful. I remember her telling me that they always baked three kinds of pies, because the boys (she always called them, the boys), could never choose, so they gave them a slice of each. She told me, in case I might not have realized it, "they worked hard, you know."

Christmas at her house was a feast. Her own family now numbering more than thirty, including grandchildren and in-laws, descended upon her in the morning and stayed until late in the evening. The front door of her house was rarely used and everyone entered through the backdoor straight into the kitchen. The wonder of it all will stay with me forever. What a sight and what a display of skill.

As she became older it occurred to me that some of her great cooking shouldn't be lost to the next generation, so I asked if I could have her recipes. To my amazement she said that she had none. I asked how she could remember how to make things and she replied, "I've done it for a long time and I just remember." Even so she did her very best to write it down so that my new wife could try them out. To make a long story short, it was a disaster. The ingredients were there, but the how and the how much, were not. The result was nothing like my grandmother's. I shared this with her and she told me

to just send your wife out and she'd show her what to do. We learned that a pinch of this and a pinch of that could only be learned from an expert. No recipe can capture the essence of wisdom and experience. You can't follow a recipe and become a great cook. It takes experience and the guidance of an elder.

The moral: Great cooks and great teachers don't follow recipes. They learn by doing with the support and encouragement of a master.

6) Support continued literacy learning in the content areas

Teachers are encouraged to consider literacy as how to teach, rather than what to teach. Teachers are trained to use literacy best practices as the primary teaching method regardless of the content area. In the end, we should not lose sight of the fact that reading is a skill, a means to an end. We want children to be good readers because of the access it provides to literature and subject matter.

7) Increase the emphasis on reading and writing in the curriculum

Massive opportunities to read and write are needed throughout the curriculum. Without minimizing the importance of other content areas, literacy learning is established as the highest priority. There are still classrooms where the amount of time spent reading each day is at a very low level. It is also interesting that reading is not a typical homework assignment. These conditions raise the continuing question of how important reading is considered in the overall school process.

8) Align teaching methods within and across grade levels

Imagine if you would, a hospital where all of the departments operate independently of each other and where the doctors use their favorite treatment methods irrespective of the practices of their colleagues. The laboratories in this hospital run whatever tests they like and surgeons choose procedures they prefer rather than those needed by the patient. This might sound ridiculous, but it characterizes many of our schools. Teachers in the same grades and across grades use different teaching methods. Each teacher is free to choose their teaching method and there is little or no interaction with their colleagues. Teachers use teaching methods that do not increase the achievement of their students and persist with these methods in spite of clear evidence that they are not working. As I would not like to be treated in the hospital described, I would also not want to send my child to a school that operates in the same way.

Teaching faculties are trained to align their teaching practices and coordinate their work at all grade levels. Achievement gains are enhanced when transition from grade

to grade is accompanied by teachers who use the same teaching methods. Classroom instruction, early intervention, and special education are also aligned.

9) Use student data to inform teaching

Diagnostic information is collected to inform instruction. Teachers are trained in various assessment procedures to improve their observation of students to better inform instruction. Strategic teaching can only be accomplished if you have specific information on each child. It is important to know what a child can do and what they are confused by or struggling with. Most teachers can tell you who their good readers are and who are the children who are struggling, but they cannot tell you why or what specific problems exist for each child. Data collected on individual children are necessary if we are to focus on individual needs. The analogy that might be used is that we need to use a rifle rather than a shotgun. We need to be able to focus on needs and not just use a broad approach and hope that what is needed will be provided.

10) Measure success by student performance

Intensive staff development and ongoing support should be a condition of teacher accountability. Standardized test measures are used to track both individual student and class achievement.

It has been our custom in education to evaluate the work of our schools by our efforts on behalf of children rather on the learning outcomes of our instructional program. This is, of course, wrongheaded. I do not want to know how hard my doctor worked on my behalf; I want to know that he chose the right procedure and had a successful outcome. Teachers can only be appropriately evaluated by student outcomes. If children are not learning then we must look to the methods we are using. There is no alternative to this and it is necessary to use this perspective at all levels of education, with each group accepting its appropriate responsibility for positive learning outcomes for children.

The Collaboration

Accepting the challenge to support teachers in the public schools who work with struggling learners, members of the Faculty of Education in the Pontificia Universidad Católica de Chile identified best practices in literacy learning and designed a program of professional development for teachers in low performing public schools in Santiago, Chile. The criteria used for the development of this program included: 1) teaching methods must be proven to be effective, 2) professional development must be of high quality, intensive, and with follow-up, and 3) the model must include capacity building

at school sites to ensure the sustainability of the program. The program of professional development designed by the Foundation for Comprehensive Early Literacy Learning developed at the California State University was selected as a collaborator because of the use of these key principles. The effort is labeled Aprendizaje Inicial de la Lectura Escritura y Matemáticas (AILEM) and is a reconstruction of the Comprehensive Early Literacy Learning (CELL) program used in the United States for application in schools in Chile.

In order to impact classroom practices, the AILEM framework emphasized the alignment of teaching methods and content standards within and across grade levels, involving principals and primary coordinators in a process of structural school reform. Teacher training procedures included intensive workshops conducted by CELL and AILEM trainers, oriented to the school team of teachers and administrators and followup support provided by AILEM through on-site training, class visits and monthly professional meetings during the school year. Individual members of the Faculty of Education were assigned specific schools to provide ongoing support between training sessions. The program focused on improving the teachers' classroom practices, based on a better understanding of the process of literacy learning and on a gradual decline of support based on observation of individual student growth, through a decision making process about the ways to assist each student toward the goal of independence. Teachers learned to use the elements of an instructional framework that use literacy activities throughout every school day, coordinating their work at all grade levels. After a year of implementation of the instructional framework in all schools, one teacher was selected at each school as the AILEM coordinator. These teachers received advanced training in coaching through intensive workshops and on-site support during the second year of intervention to ensure sustainability in the school change process.

The program was designed to help teachers meet the needs and strengths of each individual student. The model stresses and encourages active participation from each student regardless of his or her current level of literacy acquisition. High progress students are encouraged to continue their rapid growth while low progress students are guided through the process with continuous support and an opportunity to accelerate their learning. The opportunity to try new learning in a risk-free environment and practice new strategies throughout the day is encouraged. Teachers are trained to use a gradual decline of teacher support and a gradual increase in student independence based on demonstrated student capability. This reduction of teacher support is based on observations of individual student growth and understanding the process of literacy. The students' use of a variety of problem solving strategies is supported through good teacher decision making about ways to assist each student toward the goal of independence.

The elements of the instructional framework were designed to help each student and the whole class move together toward that goal. The framework was used to structure classrooms that use literacy activities throughout the day of every school day and emphasizes instruction in phonemic awareness, phonics, fluency, vocabulary and text comprehension. Other curricular areas are delivered using literacy activities as the method of instruction. The frameworks include oral language, phonology, higher order thinking skills, reading and writing activities, and test-taking strategies.

AILEM was developed with the strong belief that improved classroom instruction and increased student achievement are best achieved by providing more support and professional development for teachers. Helping teachers become more effective in their work was the primary goal. The training programs are based on a high level of confidence in the ability of teachers to become more powerful in their teaching, given appropriate training and long term support.

The Role of University Faculty

One of the unique elements of the AILEM project was the significant role played by university faculty. This involvement included some fundamental questions regarding universities and what part they might play in supporting the school change process.

University teacher training programs have assumed the ever-increasing risk of irrelevancy. The so-called ivory tower (or knowledge for the sake of knowledge alone) position maintained, somehow found its way into professional schools of education. In their attempts to be considered legitimate, scholars in the academy have directed much effort to research that has little likelihood of affecting teaching practices in the schools. It is remarkable how much of the work in schools of education is esoteric and disconnected to the daily reality of teachers and the schools in which they work.

The historic and longstanding standard of evaluating teaching in the university is to ask students to evaluate their professor. This procedure might serve the humanities well, but it is not sufficient for the faculty of education. The evaluation in teacher training should not consist of the subjective view of students on the quality of instruction received. The true evaluation of teacher training is to determine the impact of that training on the students of their students. In other words, does the teacher training we provide result in positive learning outcomes for the students of the teachers we train? The data we collect to demonstrate the success of teacher training should be the same data used for the accountability of the schools. This will, of course, change the relationship between universities that provide teacher training and the schools. Universities will become real partners in efforts to reform schools rather than maintaining the current position of interested bystanders.

Some conclusions

School change is difficult and will require a substantial commitment of resources, both fiscal and human.

Improved instruction and increased student achievement will only be accomplished by helping teachers improve their teaching. Anyone who thinks otherwise is wrong.

There is no best way to teach reading. Children learn in different ways and different teaching methods are necessary to support their learning.

Teaching is part science and part art. Science might be absolute in physics, but not when applied to education. Because controlling all of the variables of human learning is not within our reach, the scientific base will always be flawed.

Schools need to take responsibility for the whole child. If home conditions represent an obstacle to learning, then these issues require our attention.

University faculties of education can have a positive impact on the work of the schools. They will need to leave their offices and their campuses to do that.

If you do not understand that the outcomes for children are the primary business of the schools, you are in the wrong profession.

References

- **Adams, M. J.** (1990). *Beginning to read: Thinking and learning about print.* Cambridge, MA: MIT Press.
- **Bissex, G.** (1980). *GNYS at work: A child learns to write and read*. Cambridge, MA: Harvard University Press.
- **Button, K.; Johnson, M. J. & Furgerson, P.** (1996). Interactive writing in a primary classroom. *The Reading Teacher, 49*, 446-454.
- Clark, M. M. (1976). Young fluent readers: What can they teach us? London: Heinemann.
- Clay, M. M. (1975). What did I write? Portsmouth, NH: Heinemann.
- Clay, M. M. (1991a). Becoming literate: The construction of inner control. Auckland, NZ: Heinemann.
- **Clay, M. M.** (1991b). Introducing a new storybook to young readers. *The Reading Teacher*, 45, 264-273.
- Cochran-Smith, M. (1984). The making of a reader. Norwood, NJ: Ablex.
- **Cohen, D.** (1968). The effects of literature on vocabulary and reading achievement. *Elementary English*, 45, 209-217.

- **Durkin, D.** (1966). *Children who read early*. New York: Teachers College Press.
- **Dyson, A. H.** (1982). Reading, writing and language: Young children solve the written language puzzle. *Language Arts*, 59, 829-839.
- **Dyson, A. H.** (1988). Negotiating among multiple worlds: The space/time dimensions of young children's composing. *Research in the Teaching of English*, 22, 355-390.
- Chambers, J.; Lieberman, J.; Parrish, T.; Kaleba, D.; Van Campen, J. & Stullich, S. (2000). *Study of education resources and federal funding: Final report.* (ERIC Document Reproduction Service No. ED 445178)
- Ferreiro, E. & Teberosky, A. (1982). Literacy before schooling. Portsmouth, NH: Heinemann.
- Fountas, I. & Pinnell, G. S. (1996). *Guided reading*. Portsmouth, NH: Heinemann.
- **Goodman, Y.** (1984). The development of initial literacy. In H. Goelman, A. Oberg, & F. Smith (Eds.), *Awakening to literacy*. Portsmouth, NH: Heinemann.
- Green, J. L. & Harker, J. O. (1982). Reading to children: A communicative process. In J.A. Langer & M.T. Smith-Burke (Eds.). *Reader meets author/Bridging the gap: A psycholinguistic and sociolinguistic perspective*, (pp. 196-221). Newark, DE: International Reading Association.
- Harste, J. E.; Woodward, V. A. & Burke, C. L. (1984). Language stories and literacy lessons. Portsmouth, NH: Heinemann.
- **Hiebert, E. H.** (1988, November). The role of literacy experiences in early childhood programs. *Elementary School Journal*, 89, 161-171.
- Holdaway, D. (1979). The foundations of literacy. Sydney, Australia: Ashton Scholastic.
- **Huck, C.; Hepler, S. & Hickman, J.** (1994). *Children's literature in the elementary school.* Madison, WI: Brown and Benchmark.
- **Joyce, B. & Showers, B.** (1995). Student achievement through staff development: Fundamentals of school renewal (2d ed.). White Plains, NY: Longman.
- Lyons, C. A.; Pinnell, G. S. & Deford, D. E. (1993). Partners in learning: Teachers and children in Reading Recovery. New York: Teachers College Press.
- **Martinez, M. & Roser, N.** (1985). Read it again: The value of repeated readings during storytime. *Reading Teacher*, 38, 782-786.
- McCarrier, A.; Fountas, I. & Pinnell, G. (2000). *Interactive writing: How language and literacy come together*. Portsmouth, NH: Heinemann.
- McKenzie, J. (1986). Journeys into literacy. Huddersfield, England: Schofield and Sims.
- **Murphy, C. U. & Lick, D. W.** (1998). Whole-faculty study groups: A powerful way to change schools and enhance learning. Thousand Oaks, CA: Corwin Press.
- **National Reading Panel** (2000). Report of the National Reading Panel: Teaching children to read: An evidence-based assessment of the scientific research literature on reading

- and its implications for reading instruction: Reports of the subgroups. Rockville, MD: NICHD Clearinghouse.
- Neumann, S. B.; Copple, C. & Bredekamp, S. (2000). Learning to read and write: Developmentally appropriate practices for young children. Washington, DC: National Association for the Education of Young Children.
- **Ninio, A.** (1980). Picture-book reading in mother-infant dyads belonging to two subgroups in Israel. *Child Development*, 51, 587-590.
- **Pappas, C. C. & Brown, E.** (1987). Learning to read by reading: Learning how to extend the functional potential of language. *Research in the Teaching of English*, *21*, 160-184.
- **Pinnell, G. S. & McCarrier, A.** (1994). Interactive writing: A transition tool for assisting children in learning to read and write. In E. Hiebert & B. Taylor (Eds.). *Getting reading right from the start: Effective early literacy interventions*. Needham Heights, MA: Allyn & Bacon.
- Routman, R. (1991). *Invitations*. Portsmouth, NH: Heinemann.
- **Rowe, D. W.** (1987). Literacy learning as an intertextual process. *National Reading Conference Yearbook*, 36, 101-112.
- **Schickendanz, J.** (1978). "Please read that story again!" Exploring relationships between story reading and learning to read. *Young Children*, 33(5), 48-56.
- **Showers, B. & Joyce, B.** (1996). The evolution of peer coaching. *Educational Leadership*, 54, 12-16.
- **Snow, C. E.** (1983). Literacy and language: Relationships during the preschool years. *Harvard Educational Review*, 53, 165-189.
- Snow, C. E.; Burns, M. S. & Griffin, P. (1998). Preventing reading difficulties in young children. Washington, DC: National Academic Press.
- Strickland, D. S.; Bodino, A.; Buchan, K.; Jones, K. M.; Nelson, A. & Rosen, M. (2001). Teaching writing in a time of reform. *The Elementary School Journal*, 101, 386-494.
- Strickland, D. S.; Ganske, K. & Monroe, J. K. (2002). Supporting struggling readers and writers: Strategies for classroom intervention 3-6. Portland, ME: Stenhouse.
- Swartz, S. L.; Klein, A. F. & Shook, R. E. (2001). Interactive writing and interactive editing. Carlsbad, CA: Dominie Press.
- Swartz, S. L.; Shook, R. E. & Klein, A. F. (2002). Shared reading. Carlsbad, CA: Dominie Press.
- Swartz, S. L.; Shook, R. E. & Klein, A. F. (2003). *Guided reading*. Carlsbad, CA: Dominie Press.
- **Taylor, D.** (1993). From the child's point of view. Portsmouth, NH: Heinemann.
- **Teale, W. H. & Sulzby, E.** (1986). *Emergent literacy: Writing and reading*. Norwood, NJ: Ablex.

- Wells, C. G. (1985). Preschool literacy-related activities and success in school. In D. Olson, N. Torrance, & A. Hildyard (Eds.), *Literacy, language, and learning: The nature and consequences of literacy*, (pp. 229-255). Cambridge, England: Cambridge University Press.
- Wong, S. D.; Groth, L. A. & O'Flahavan, J. D. (1994). *Characterizing teacher-student interaction in Reading Recovery lessons*. Universities of Georgia and Maryland, National Reading Research Center Reading Research Report.

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