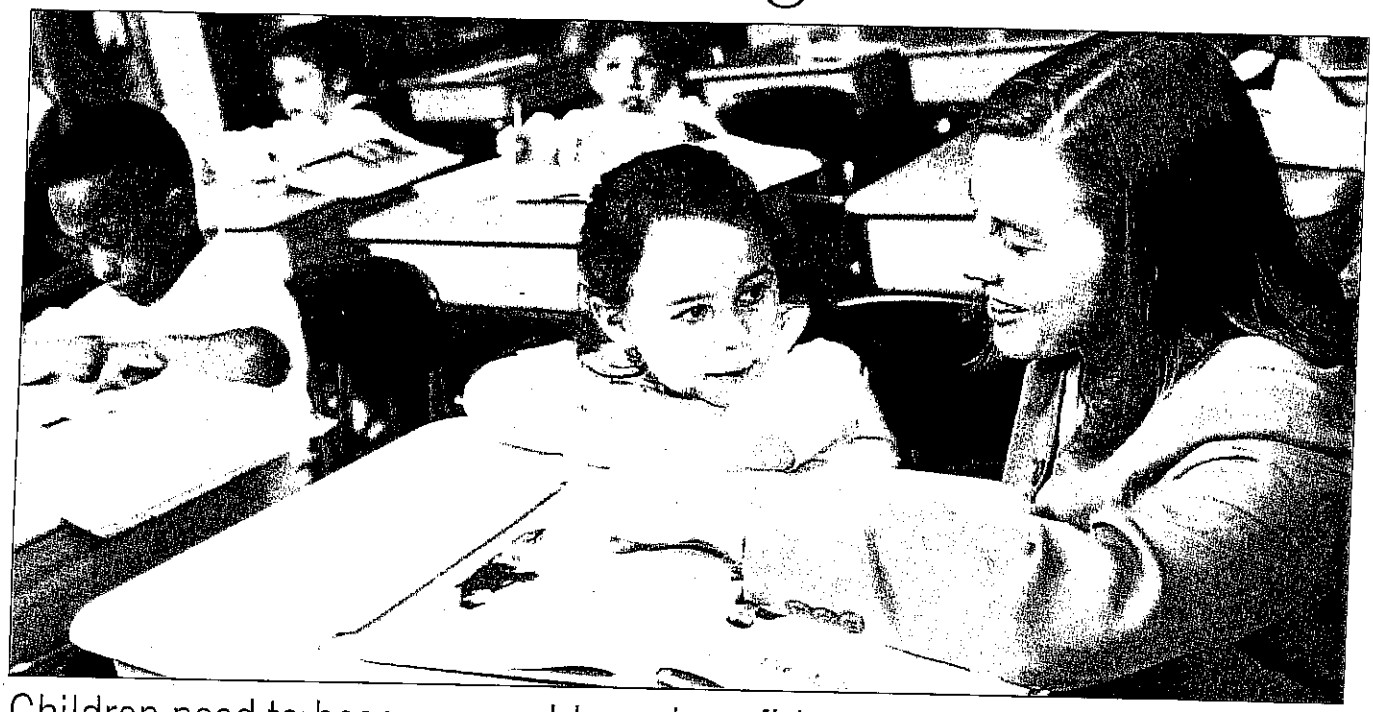
Using Early Literacy Monitoring To Prevent Reading Failure



Children need to become capable and confident readers by the end of second grade. Ms. Sloat, Ms. Beswick, and Mr. Willms describe a means of keeping close tabs on children's development in this crucial skill.

BY ELIZABETH A. SLOAT, JOAN F. BESWICK, AND J. DOUGLAS WILLMS

MOST CHILDREN who do not learn to read during the primary grades will probably never learn to read well. Children who reach the end of third grade with low literacy skills typically have less access to the regular curriculum, require long-term support, and fall further behind their peers in literacy achievement and curricular knowledge. The negative ramifications of low literacy skills are pervasive and well documented — poor self-esteem, low motivation, behavioral difficulties, academic underachievement, and, ultimately, reduced occupational and economic status. However, these negative trajectories can be altered. Children experiencing reading difficulties can be identified early and, with appropriate early intervention during the primary grades, can learn to read.[1]

Reading is a complex process, and that complexity is reflected in the range of philosophies, pedagogies, curricula, and programs available to guide early elementary reading instruction. It is little wonder, given the myriad of op-

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tions available and the constraints imposed by limited resources and students' diverse skills, that a crucial question for practitioners and researchers alike is how best to ensure that children do learn to read early and well.

The Committee on the Prevention of Reading Difficulties in Young Children suggests a three-tier framework to address that question: 1) provide excellent classroom literacy instruction for all children, 2) further reduce literacy failure by allocating supplementary resources and offering enhanced learning opportunities to at-risk children, and 3) ameliorate the effects of established reading difficulties by providing intensive interventions.

Efforts to translate research into practice always generate additional questions, and early literacy is no exception. As with most issues in education, responses to concerns about early literacy programming must take into account the needs of multiple stakeholders — students, parents, teachers, and administrators — while at the same time respecting empirical evidence of what constitutes effective practice. Research strongly supports both the vital role of early identification in the prevention of reading difficulties and the urgent need to teach children to read during the first few years of school so that they can "read to learn" in grade 3 and beyond.

These issues were the driving force behind a yearlong process in which a group of researchers from the Canadian Research Institute for Social Policy consulted with the New Brunswick Department of Education and five district school boards. The consultation evolved into a five-year pilot program aimed at lowering the rate of reading failure at the K-2 level. The pilot program involves implementing a school-based, continuous monitoring system during those crucial years to assist teachers in the early identification of children who encounter difficulty in their literacy development. This early literacy monitoring program, currently in its third year of data collection, is being piloted in 20 public schools and six federal First Nations schools. It responds to needs expressed by teachers, department officials, and school administrators and provides a mechanism for keeping parents apprised of their children's progress.

IDENTIFYING WHAT WE NEED

Throughout the first year of our five-year program, two members of our project team traveled frequently to participating schools and district offices to gather input from teachers, reading specialists, program coordinators, and school administrators. After each round of meetings, the entire research team, including researchers, programmers, analysts, early reading consultants, and support staff, would review partner specifications in order to design the components of the monitoring program. At each stage, return visits to districts and schools sought further input that the research team would again take into account, a process that continued over the course of the year until we had a structure in place that met the expectations of all partners. The needs and issues that arose during that consultative process were many and wide-ranging.

Department of education officials and school administrators identified the K-2 initiatives they had recently undertaken. These included allocating the first 90 minutes of each school day to literacy learning activities, appointing school-based literacy mentors to support teachers and students, increasing financial resources at the K-2 level, and implementing a wide range of initiatives to support struggling students. These partners expressed the need for a valid and reliable assessment mechanism that would generate data for determining whether their initiatives were achieving intended results and for identifying areas in which programs might require strengthening. They also wanted aggregate data that they could use to guide program development and to formulate and evaluate policy decisions, as well as normative data to compare their regional early literacy outcomes with those of a large national sample.

Teachers and literacy consultants said they wanted concrete and instructionally relevant information to guide teaching and learning. They wanted these data to be sufficiently sensitive and specific to capture small increments of change in crucial literacy fundamentals and to identify children who were not "on-track" in literacy development. While K-2 teachers relied extensively on informal assessments, they expressed a desire to augment these approaches with measures that provided empirically derived learning benchmarks, concrete data on children's progress, and clear evidence of where children were struggling. Teachers also expressed concern about the increasing numbers of children whose entry-level skills and behaviors were below expectations, children for whom

the transition to kindergarten posed significant academic and behavioral challenges. Given the diversity of entry-level skills, they felt that a systematic and comprehensive assessment of students' readiness to learn at school should be undertaken during the first semester of kindergarten.

During the collaborative process, all partners concurred on a number of other needs. They agreed on the urgency of early identification and felt that children at risk of experiencing difficulty in learning to read should be identified by the end of the first term in kindergarten so that interventions could begin early in the second term. They saw school-based monitoring as a mechanism not only for identifying at-risk students but also for ensuring that interventions were achieving intended results. They suggested that, to be effective, the system had to be user-friendly and capable of immediately providing teachers with relevant information to guide instructional goals for each child.

During the development of the monitoring program, all partners were cognizant of the ideological and pedagogical arguments against the use of standardized assessments with young children, and they fundamentally agreed that the monitoring system should not interfere with pedagogy. There was consensus that learning to read requires a balanced approach in which instruction on early literacy fundamentals is skillfully integrated within stimulating, relevant, and holistic activities. The partners also agreed that literacy learning is optimal when children actively engage in making meaningful connections to texts and thus capitalize on their inherent love of literature and their innate desire to learn to read. Furthermore, there was recognition that not all children are the same. Some children, especially those from impoverished backgrounds, typically require more direct and concentrated skills-based instruction because they do not start school equipped with the phonological awareness, language knowledge, and literacy experience they need to learn to read early and well. Nor have they acquired the strategies to interpret, reflect on, and derive meaning from what they read.

Thus everyone involved in the project agreed from the outset that our approach would not be to adopt a highly uniform curriculum that prescribed all instructional materials and specified the instructional strategies to be followed. Our collective interest had to remain fixed on determining whether learning to read was occurring at a level and rate appropriate to age and grade level. Tightly controlling instruction and pedagogy could not provide the developmental diagnostics we sought, nor would it guarantee children's early reading success. We did agree, however, that the one component of effective early literacy instruction we could apply consistently across classrooms was the continuous, systematic monitoring of crucial early literacy fundamentals.

Given all of these factors, we designed a formative monitoring system. It provides continuous monitoring of students' early literacy development, identifies vulnerable students early in their school careers, and provides data that can be compared to a national norm. By augmenting teachers' contextual assessments, it helps them to identify at-risk children, determine areas of learning difficulty, plan targeted interventions, monitor responsiveness to instruction, and inform parents. It further supports district administrators and departmental officials by providing tangible evidence of the efficacy of their early literacy initiatives, thus enabling them to strengthen effective practice. It also provides data for effective advocacy at all levels — student, class, school, and district.

A SCHOOL-BASED EARLY LITERACY MONITORING SYSTEM

A comprehensive review of the monitoring systems available locally, nationally, and internationally did not yield any models that met the criteria identified by our partners. They called for a continuous, school-based monitoring system that would

- provide a profile of each child's readiness to learn at school;
- balance direct assessments with classroom-based contextual assessments;
- provide individualized information that would clearly capture small increments of change over short periods to identify risk factors, inform instruction, and track literacy growth;
- include valid and reliable measures and allow for comparison with same-age peers at the regional and national levels; and
- follow standardized administration procedures so that aggregate data could be used to inform policy and practice at the classroom, school, and district levels.

To meet these criteria, we selected four measures and designed a longitudinal framework for collecting data.

The first measure, the *Early Years Evaluation — Teacher Assessment* (EYE-TA), was developed by Douglas Willms and Joan Beswick to address teachers' need for a comprehensive, objective assessment of students' readiness to learn.[2] It was designed to assess the "whole child" and thus centers on the same five domains stipulated by the National School Readiness Indicators Initiative.[3] Our previous research suggested that, in assessing kindergarten students' early literacy development, teachers were influenced by such factors as gender, socioeconomic status, and behavior.[4] Thus, in designing the EYE-TA, a number of elements were incorporated to ensure greater objectivity: items are knowledge-

and skill-specific, rather than general questions about overall ability, and teachers are asked to indicate the extent to which a child can do particular tasks. This type of evaluation differs from many other teacher-based assessments that rely on teachers' judgments about how well children's performance compares to that of their peers.

The EYE-TA is completed by teachers based on their observations and ongoing contextual assessments during the first few months of instruction. As mentioned above, it covers five domains considered essential for gauging a child's readiness to learn at school. The portion devoted to the Awareness of Self and Environment domain assesses a child on such general knowledge factors as the ability to identify roles of community members, understand relational concepts, and complete simple analogies. The portion devoted to the Social Skills, Behavior, and Approaches to Learning domain assesses children's social and behavioral interactions in the school setting. This portion includes items that focus on how children approach new learning situations and whether they exhibit hyperactivity, inattention, anxiety, emotional difficulties, or physical aggression. The portion devoted to the Cognitive Skills domain assesses mastery of early literacy and numeracy skills, including phonological and phonemic awareness, letter recognition, matching sets, and counting. The portion devoted to the Language and Communication domain assesses both receptive and expressive communication and includes items directly related to communicative functioning in the classroom: following directions, delivering verbal messages, and retelling stories. The portion devoted to the Physical Development domain assesses fine and gross motor skills.

Kindergarten and first-grade teachers use a secure website to complete the EYE-TA. Feedback is immediate — teachers receive reports as PDF files within a few moments of completing the assessment. These reports provide a clear profile of developmental status across the five domains for individual students and for the entire class. In this way, the EYE-TA serves as the first step in a multi-tiered early identification procedure by calling attention to developmental strengths and needs of both individual students and the class as a whole.

The second tool is the *Dynamic Indicators of Basic Early Literacy Skills* (DIBELS),[5] a series of brief teacher-administered measures of fluency on such literacy fundamentals as letter naming, initial sound identification, and syllable segmentation. These research-based measures assist in the early identification of children with potential difficulties and provide precise information that teachers can use to target interventions and to monitor students' responsiveness to instruction. Benchmark assessments are administered three times a year, and alternative forms are available so that children experiencing difficulty can be monitored more closely. As the name of the instrument implies, DIBELS is not intended to provide a comprehensive evaluation of students' reading achievement but is meant only to be an indicator of foundational reading skill acquisition. Those children who appear to be at risk of reading difficulty typically require a more comprehensive assessment to isolate specific areas of weakness and to identify the instructional support they require.

The DIBELS measures are valid and reliable. They require standardized administration but are easy to learn and are sufficiently brief that an entire class can be evaluated in one day. Feedback is immediate, and student performance can be compared with benchmarks derived from the performance of more than one million children. While this instrument is designed to be administered three times — fall, winter, and spring — we added extra administrations in the fall (November) and winter (March). With five time points, we are better able to track each child's early language growth from kindergarten to grade 2.

The third tool, the Word Reading Subtest of the *Wechsler Individual Achievement Test, Second Edition* (WIAT-II)[6] is a valid, reliable, norm-referenced measure that provides a direct assessment of emergent and early reading skills. The subtest is administered by retired teachers trained by our institute. The measure is individually administered on four occasions: in the fall of kindergarten and at the beginning of grades 1, 2, and 3. Results are used broadly to aid in the early identification of struggling learners and thus to inform instruction, and to compare reading performance of our sample to national norms, a need identified by our research partners. WIAT-II results also allow us to track children's overall reading progress from kindergarten to the beginning of grade 3.

The fourth measure, the *Phonological Awareness Literacy Screening* (PALS),[7] is a criterion-referenced literacy screener developed at the University of Virginia. It has standardized administration procedures, is technically sound and easy to administer, and yields specific information to plan targeted intervention. We provide the PALS to all pilot schools so they can conduct in-depth literacy assessments of students who have been identified as experiencing difficulty in learning to read. Since some districts had already decided on other screening measures, the PALS is an optional instrument to be used specifically with those children experiencing reading difficulty. Thus, while PALS data are recorded by schools for instructional purposes, they are not used to track student trajectories or to evaluate the efficacy of the monitoring system.

Assessment results derived from the first three measures (EYE-TA, DIBELS, and WIAT-II Word Reading) constitute the

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core of our monitoring system. Taken together, they address the needs identified by our research partners and provide a powerful picture of early literacy development. Assessment results are consolidated into a single report that can both identify a child's risk status and indicate the domains in which children are struggling. The EYE-TA uses a criterion-referenced approach to indicate whether children have mastered or partially mastered the tasks in each domain. For the DIBELS, we established norms from our own monitoring system sample in all 26 schools, and for the WIAT-II, we used national norms. The three approaches together are used to develop profiles of children that describe their results as they progress through kindergarten and the primary grades.

Comprehensive reports are delivered to schools and districts in December so that interventions can be planned for January. Although teachers receive an electronic report immediately after entering the EYE-TA results earlier in the fall, these results are also included in the December report. Final reports go out in May so that teachers have precise year-end data to inform parents, to make recommendations for summer support initiatives, and to plan instruction for the start of school in September.

We have devised a rather unusual way of presenting the data in the reports. The December report for Ms. Smith's kindergarten class, for example, has a row for each student that displays his or her results for each of the three assessments. The results appear not as numbers but as green, yellow, or red blocks. This system makes it easy to read the reports and to interpret the results. The colors are keyed to developmental levels as well as to instructional recommendations. Green signifies that skills are within an appropriate developmental range and recommends continued high-quality instruction; yellow signals that the child is experiencing some difficulty and is in need of support targeted to the areas of identified weakness; red denotes that there is evidence of significant difficulty and that individual or small-group intervention should augment classroom instruction.

WHY SCHOOL-BASED EARLY LITERACY MONITORING WORKS

Qualitative information gathered during discussions with our research partners indicates that the student-level data and reports generated from school-based continuous monitoring are having an effect. In essence, they are serving as a catalyst for instigating action to support children who are likely to fail if not given appropriate intervention. This perception contrasts with current views about the utility of most large-scale monitoring systems.

Monitoring systems essentially are orderly, systematic procedures that use measurement instruments to assess and record data on a regular basis to ensure that change efforts are producing the results intended.[8] Monitoring systems can vary in form and scale depending on their aims. For example, many education jurisdictions administer assessments to all children at the end of certain time periods to discern how well the education system is performing. Such large-scale assessments are summative in nature, and when conducted at the end of a period of common schooling, they serve many useful purposes. They can elucidate the areas where the system needs strengthening and can assist in setting policy and determining systemwide resource allocation. What they cannot do, however, is provide detailed information that is sensitive enough to enable classroom teachers to make concrete changes in the short term so that individual learning needs can be addressed. As one school administrator in an impoverished neighborhood with an exceptionally high ratio of special-needs students told us, "Fair is not always about getting what everybody else has; it's about getting what one needs."

Teachers can certainly attest to the diversity of needs children bring with them when entering school. Early school-based monitoring allows them to identify those needs right away so that initial school experiences are positive. Since school trajectories are established at the outset and are resistant to change, early monitoring can identify and support students before they fail, rather than reacting once failure occurs. The margin for guesswork and error is also greatly diminished when standardized, diagnostic assessments are used in concert with the range of contextual assessment practices teachers already employ. Monitoring through individualized assessments helps teachers identify children's literacy learning strengths and weaknesses, thereby substantially reducing the number of children who are incorrectly diagnosed or escape notice. For example, quiet and unobtrusive children with literacy learning difficulties are not

overlooked; boisterous, behaviorally challenged children with appropriate literacy skills are not falsely identified as reading disabled; and children with strong literacy skills are not bored by materials well below their competency.

We also found that the monitoring system facilitates appropriate and flexible classroom grouping practices that are based on the needs and interests of individual students. When grouping is applied flexibly, with regular restructuring, children do not suffer from the deleterious effects of inflexible tracking practices, and the damaging effects of student segregation and labeling are avoided. Therefore, with careful design and implementation, monitoring can serve as a protective factor for all children and can increase equity.

School-based continuous assessment also supports the outcomes-based curricular documents currently in use in many schools. Continuous assessment enhances the clarity of outcome statements and ensures greater agreement in the interpretation of learning and achievement statements. It thus provides a guiding framework for ongoing instruction because it is administered against clearly delineated learning benchmarks with defined incremental achievement standards.

Implementation of school-based early literacy monitoring also enhances teachers' literacy knowledge and assessment expertise. In our monitoring system, teachers new to the program or grade engage in an average of two training sessions annually, typically September and January, to learn how to administer the DIBELS assessment measures. They are provided with a substitute teacher to enable them to focus directly on assessing and learning about each child's early literacy skills. During October, trained assessors conduct the WIAT-II Word Reading Subtest with each child. Between mid-October and mid-November, kindergarten and first-grade teachers complete the EYE-TA based on their observations of the child in the school setting. In some cases they use support materials provided on the EYE-TA website to directly assess a few children on items for which they do not have clear answers. November entails a second DIBELS assessment for all children, so there is a tremendous amount of observational and direct assessment conducted by teachers throughout the first term. Early assessment information enables team meetings to begin in September and progress throughout both terms.

Although this process places a great deal of responsibility on teachers, the input received from teachers and administrators suggests that it has many benefits. Teachers receive ongoing training and become highly adept at administering the assessments. They acquire knowledge and skill that translate to greater confidence in their own judgment and in their day-to-day instructional practices. They see themselves as more adept at individualizing instruction in both large and small learning contexts, and consequently they are more flexible in employing alternative instructional strategies. They are more assertive about articulating their own professional development needs and preferences. For example, teachers tell us that, as a result of monitoring the oral retelling of stories as part of the DIBELS assessment, they now place greater emphasis on the early development of reading comprehension skills. Thus they have sought out additional teaching strategies to broaden their repertoire of instructional tools. Overall, teachers have developed enhanced assessment expertise, become comfortable with assessment-led instructional practices, and improved their ability to communicate with parents and professionals about where students are in literacy development and what children need to learn to move forward. By frequently collecting and sharing evidence of students' literacy progress, including both contextual and direct assessment results, teachers feel more competent in planning instruction and in motivating young students to assume increasing responsibility for their own learning.

While standardized assessment and progress monitoring have long been used to measure educational outcomes of older students, there is relatively little documented information on the efficacy of comprehensive monitoring at the K-2 level. Our school-based monitoring system differs from most large-scale assessment systems in its continuous focus on literacy development during the primary grades, its capacity to yield instructionally relevant information specific to the learning needs of each child, and its usefulness in planning intervention and preventing the emergence of most reading difficulties.

NEXT STEPS

In addition to engaging in ongoing collaboration to design and implement the K-2 monitoring system, we are using several data sources to determine the efficacy of the system. Our principal hypothesis is that, upon entering grade 3, children attending schools in which the monitoring program was implemented will achieve better literacy results than same-grade peers in nonparticipating schools. A strong test of this hypothesis would be to randomly assign schools within districts to treatment and control groups. However, this is a researcher/practitioner partnership, and school districts wanted control over which schools were selected. Since it was impossible to randomly assign schools to treatments, our research design is quasi-experimental.

The New Brunswick Department of Education conducts an annual provincial literacy assessment of all children at the end of second grade. Therefore, we have measures of reading performance for all schools before our monitoring

program was introduced and during its implementation. Our hypothesis is that the grade-2 results of our "treatment" schools will improve year to year, compared with their own results and in comparison with other schools in the system. In addition, the WIAT-II Word Reading Subtest is administered at the beginning of grade 3 in all of our study schools. This enables us to track the progress of the school as successive cohorts of students who have received the intervention reach third grade.

At a micro level, the efficacy of our monitoring program requires that children who have inadequate skills upon school entry or fall "off track" during kindergarten or first grade be given the instruction and other resources they need to help them learn to read. A key feature of our monitoring system is that it furnishes longitudinal data that allow us to track the progress of each child. Therefore, we can systematically examine the growth trajectories of children in kindergarten and first grade and discern whether those with slow growth are brought back on track so that they are learning at the same rate as their peers. At a macro level, we can use multilevel statistical models to examine the growth trajectories of children's reading skills and discern what factors at school entry are the best predictors of reading performance, thereby strengthening our knowledge about when to intervene and with which children.

CONCLUSION

All of our partners have committed to a five-year pilot of the monitoring system to see if it significantly increases the proportion of children entering third grade with the literacy skills they need to succeed. Through regular meetings with teachers, administrators, and district personnel, the one thing we hear consistently is that the data cannot be ignored. The red coding in particular is so pronounced that teams are mobilized to help children. Although the interventions differ significantly among schools and districts, children exhibiting early signs of vulnerability are getting the attention they need. Our partners realize that literacy trajectories are established early, that close monitoring is fundamental to early identification and intervention, and that preventive early intervention is both a more efficient and more cost-effective option than later remedial programming.

Classroom practices also appear to be changing — teachers are using assessment information derived from the monitoring system to plan instruction, implement interventions, and communicate with parents. These indicators and many others are encouraging. They suggest that our continuous school-based monitoring system is making a difference in students' literacy trajectories and ultimately in the lives of children.

We continue to work closely with teachers and school administrators to refine the monitoring system and to obtain qualitative information on their impressions of its efficacy. We will also conduct quantitative analyses as each cohort exits second grade. Our research-to-practice partnership is ongoing, and over the next two years we will collectively evaluate the role of our early literacy monitoring system in achieving a goal that is in the best interests of students, parents, teachers, and administrators — the reduction of reading failure at the K-2 level.

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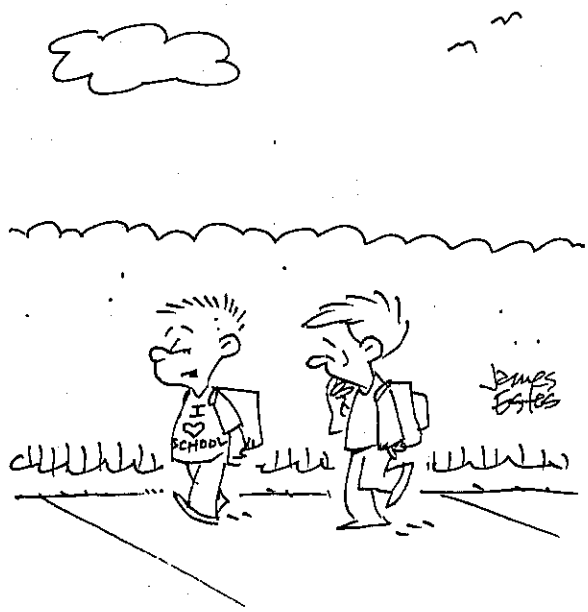

"Of course it's not true — but teachers eat it up."