

Using student outcome data to help guide professional development and teacher support: Issues for Reading First and K-12 Reading Plans

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Introduction

One of the key elements in modern approaches to providing professional development and support for teachers involves using objective data about student performance to help guide and focus these efforts. In fact, one of the core principles contained in the National Staff Development Council's *Standards for Staff Development* (National Staff Development Council, 2001) requires the use of student data to establish priorities for adult learning, to monitor progress or growth in teacher skills, and to sustain continuous improvement. In the influential book *Teaching as the Learning Profession* (Darling Hammond & Sykes, 1999), the first of eight principals of professional development is that professional development should be driven by analyses of the differences between goals and standards for student learning and student performance.

The idea of using student outcome data in such important areas as reading, math, and science as a way to help set priorities for professional development is linked to the idea that effective professional development has a measurable impact on student performance (National Reading Panel, 2000; The Education Alliance, 2005). That is, professional development for teachers, if targeted and delivered appropriately, can improve teacher practices that help students meet rigorous performance standards in key areas of academic development such as reading (Garet, Porter, Desmone, Birman & Yoon, 2001; McCutchen, Abbott & Green 2002; Moats, 2004). This idea is not controversial, and it is widely accepted throughout the professional community (Strickland & Kamil, 2004). For example, all Florida teachers develop individual professional development plans annually. These plans, approved by the school principal, are designed to ensure that teachers participate in professional learning experiences aligned with the learning needs of their students as demonstrated by student data. Both teachers and administrators should welcome the use of student performance data in an overall plan of professional development and growth for teachers if the data leads to high quality professional development in areas of greatest need.

There are at least two important ways that student performance data can be used to help guide and focus professional development and teacher support. The first way involves the use of a set of student outcomes measures to describe areas of instruction that need to be improved across a broad group of teachers. For example, data from Reading First schools in Florida has indicated for the last two years that more than half of the students in these schools are not learning alphabetic reading skills (phonics) rapidly enough to meet performance benchmarks beginning in February of first grade. Furthermore, fully half of the students still have not met these February 1st grade benchmarks at the beginning of second grade! Additionally, student data across the state indicates that students in Reading First schools lose considerable ground relative to normal growth rates in the development of reading fluency in second grade. On the basis of

these findings, Reading First Professional Development coordinators throughout the state are providing focused professional development to improve instruction in phonics and fluency in both first and second grades this year. We also know that many students in Reading First schools are struggling in the development of vocabulary and reading comprehension strategies, but the decision was made for this year to strengthen phonics and fluency instruction in order to provide a strong foundation for continued growth in reading comprehension.

The second way that student data can be used to help guide professional development is to use it as the basis for differentiated training and support across teachers. In this case, student performance data could be used to identify teachers whose students are not making adequate progress toward important learning goals. Professional development and support efforts, such as coaching, required attendance at special training sessions, supervisory visits, close review of lesson plans, might then be provided on a differentiated basis to teachers who have the greatest need for improved instructional practices. Needless to say, this latter use of student data as a way to guide professional development is likely to be the most controversial within a school or district because it identifies specific teachers who have special needs for greater supervision, training, or support.

Issues in the use of student data to guide professional development and support

One key in using student performance data to guide professional development is to use only reliable data. Preferably, the assessments used to collect student data should measure in a reliable and valid way the extent to which students have achieved performance goals that are widely agreed upon in the educational community. For example, if a state or school district has agreed upon a specific goal for reading comprehension at the end of third grade, achievement of this standard should be measured with a reliable and valid measure of reading comprehension. In Florida, the achievement of the state standard for reading comprehension is assessed with the Florida Comprehensive Assessment Test, which happens to be a reliable and valid measure of reading comprehension (Schatschneider, et al., 2004). Almost all state level accountability measures in reading are measures of reading comprehension. This is appropriate, since the ultimate goal of reading instruction is to provide students with the skills and knowledge required to comprehend the meaning of text efficiently and fluently.

A second key to the appropriate use of data to guide professional development, particularly as it might be provided differentially to groups of teachers, is that a growth, rather than static standard of performance be applied. That is, students assigned to a very effective, hard working teacher might actually achieve lower results on an end-of-year test than students from a less effective teacher, if students of the harder working and more skillful teacher began the year with substantially lower reading or language skills. Rather than indicating the need for more professional development or closer supervision, the lower results of the first teacher might actually indicate the need for more classroom support (paraprofessionals, reading resource teachers, technology) to help meet the much greater instructional needs of students in that class. Only when students in various classes are roughly equal in their talent and preparation for learning can end of year student outcomes be used as an indicator of differences in teacher effectiveness. This example also underscores the potential utility of observational data, in

addition to student outcome data, in identifying teachers who may have greater or lesser needs for additional professional development or other kinds of support.

A third key to long-term success in using student performance data to guide professional development and support is that appropriate measures be used. In the case of reading, an array of measures will be necessary in order to insure that reading instruction is being provided effectively at each grade level. For example, in kindergarten, effective reading instruction will stimulate the growth of phonemic awareness, knowledge about letters, beginning phonics skills, vocabulary, and oral language comprehension. A complete assessment of teacher effectiveness in kindergarten as it relates to beginning reading skills would require reliable and valid measures of each of these constructs. The danger of focusing on only one of these measures, particularly if the data is used evaluatively to decide which teachers need more training and supervision, is that it could lead to distortions in which only the skills that are being measured are being taught. For example, if only growth of letter knowledge and phonemic awareness were monitored as indicators of teacher effectiveness, this could easily lead to less emphasis in kindergarten classes on the development of vocabulary and oral language skills. This would ultimately undermine instruction for most poor and minority students who often come to school with severe limitations in the development of the vocabulary required for reading comprehension (Beck, McKeown, & Kucan, 2002).

This leads us directly to a consideration of the use of subtests from the *Dynamic Indicators of Basic Early Literacy Skills* (DIBELS) as indicators of the need for differentiated professional development and supervision of teachers. The DIBELS measures are reliable and valid indicators of specific reading subskills, but they do not directly assess reading comprehension or vocabulary. Thus, student performance data derived from performance on the DIBELS tests should not be used as the sole indicator of the need for greater or lesser amounts of teacher supervision and professional development. It is perfectly appropriate to use these measures as indicators of greater or lesser need for professional development and support in specific areas of reading development such as phonemic awareness, phonics, or fluency. However, it is not appropriate to use them as a primary indicator of overall success in teaching reading because they do not directly assess reading comprehension, which is the most important overall reading outcome. Similar to the example given above for kindergarten, if DIBELS Oral Reading Fluency measures were the only measures used to assess teacher effectiveness in second grade, it could lead to long-term neglect of instruction in vocabulary and reading comprehension skills, since these skills are not assessed directly by the DIBELS measure. While it is important for teachers to provide instruction and practice opportunities that stimulate the growth of reading fluency and accuracy in all their students, it is equally important that they help children use their emerging fluent word reading skills to construct meaning from text. If teachers are only evaluated on the growth of oral reading fluency in their students, over the long term, this could very easily produce distortions in instruction with too much emphasis on reading fluency and not enough emphasis on all the other skills required for good reading comprehension.

Another mistake that could potentially be made in using DIBELS (or any test for that matter) as an indicator of greater or lesser need for professional development or supervision is to judge teacher effectiveness by using a static standard of performance rather than a growth standard. One of the most firmly established facts from the science of reading is that students vary

enormously in the ease with which they learn to read (Share & Stanovich, 1995, Torgesen, 2000). If students vary substantially from class to class in either their ability or their preparation for learning to read, then procedures that mandate specific levels of professional development or supervision based on the percentage of students who meet specific performance benchmarks within each class will be unfair to teachers who have higher proportions of “at risk” students. The only fair way to judge teacher effectiveness in cases like this is to use statistical procedures that take account of the skills and knowledge students brought with them to the class. As mentioned before, another way to guard against mistakes created by differences in student preparation or learning ability across classes is to use observational data as well as student outcome data in designing differentiated professional development or supervision.

At this point, a small digression is required. I would not want to be misinterpreted as saying that students with low ability or poor preparation cannot learn to read proficiently. We know that most students, if they are provided enough high quality instruction, can acquire basic levels of proficiency by third grade (Mathes, Denton, Fletcher, Anthony, Francis, & Schatschneider, 2005; Rashotte, MacPhee, & Torgesen, 2001, Torgesen, 2002). I also would not want to be misinterpreted as saying that classrooms in which a high proportion of students do not meet important performance benchmarks in reading do not require some kind of intervention. However, rather than automatically assuming that relatively lower performance in a classroom is the primary result of an ineffective classroom teacher, school administrators should also consider the possibility that, because of the number of “at risk” students in the class, they should provide extra instructional support in that classroom.

The supports that may be required for some teachers in meeting the needs of challenging students goes beyond professional development opportunities and closer supervision. School and district administrators should consider one or more of the following support strategies in addition to increased professional development or closer supervision when the data indicate the need to improve reading outcomes in specific classrooms.

1. Assistance by the reading coach in implementing targeted interventions
2. Availability of research based intervention programs and instructional materials
3. Reduction in teacher-student ratios through reassignment of selected students to other classrooms.
4. Adding instructional supports within the classroom by using paraprofessional staff and enhanced technology resources.
5. Scheduling small group interventions for selected students on either a “push in” or “pull-out basis”. These interventions can be provided by resource teachers, special education teachers, or other well-trained school support staff.
6. Exploring funding options to increase district-level support to schools through assignment of additional resources including instructional personnel with advanced skills in reading instruction.
7. Funding support and approved time during the school day for teachers to provide mutual support through common planning

In principle, using student data to identify teachers who need additional professional development, increased supervision, or both is an excellent idea. Usually, professional development and supervisory resources are limited, and it makes sense to employ them where

they are most needed to improve student performance. We know that there is enormous diversity in the level of training and experience of teachers currently teaching reading at all grades. It is therefore highly likely that some teachers within a school will require more training or supervision than others, if the ultimate goal is to provide consistently high quality instruction to all students. However, in practice, such systems are difficult to execute with fairness because they require that all teachers start on an equal footing, in terms of the preparation and learning ability of the students in their classrooms.

As we move forward with trying to implement the recommendations of the National Staff Development Council to use student data to guide our professional development and training efforts, we need to work as hard on our methods for identifying professional development needs as we do on providing the professional development and supervision itself. The key advantage of using student outcome data to guide professional development is that it helps us to focus our efforts where they are most needed and it keeps us centered on the most important outcome from good teaching and good professional development, which is student learning. However, both the efficiency and power of this process, as well as its fairness to teachers, depends on a data collection plan that reflects student growth and that focuses on our most critical instructional priorities.

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