Targeted Training

hink for a minute about how you selected the last workshop for teachers in your school or district. Which of the following statements best describes your preparation for the professional development activity?

 I selected it after a careful review of our achievement data to determine the training that could best address staff and students' needs.

 I read an article on the strategy and it sounded great.

 My first choice of workshop facilitator was already booked and I was under pressure to fill an in-service slot.

If your answer is anything but the first, you are missing your best opportunity to engage teachers as partners in strengthening curriculum and instruction in your schools.

Needs Analysis

Professional development coordinators consider a host of variables when they plan training initiatives, but a formal needs analysis has not typically been part of the picture. Increasingly, though, school systems are paying more attention to their data on student achievement. Savvy administrators analyze this information before they make decisions about finances, strategies for improving

Using data to avoid random acts of professional development

classroom practice and, just as important, the professional development they provide for staff members and faculty.

For many districts, the movement toward data-based decision making comes after realizing that random acts of professional development do not lead to sustained school improvement. If a district does not base continuing education decisions on careful examination of its data, then fads and good marketing campaigns are more likely to set the agenda. As a result, professional development activities may not be connected to improvement plans. If teachers don't immediately see the relevance of a workshop or seminar, they may be less motivated to try the proposed strategies in their classrooms.

Consider the experiences of districts that have tried to integrate academic and vocational-technical curricula.

Many have hired expensive facilitators to lead workshops or sent teachers to conferences only to discover later that few if any teachers were implementing the concepts they learned. The lesson? Workshops are not enough.

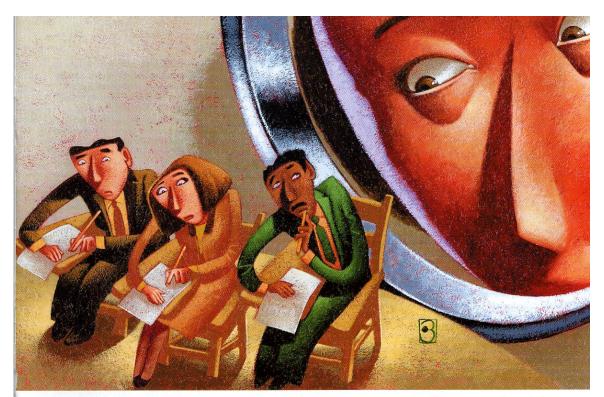
All too often, districts provide a workshop on integrated curriculum (or some other improvement strategy) and neglect to plan for monitoring and further support. Administrators are then disappointed when they realize that teachers "ignored" the initiative and put the workshop binder on a shelf. Another common problem is administrators plan new activities for the coming year without reviewing the results of their past investments. Teachers roll their eyes and say "not another workshop" as the cycle begins yet again.

Some school districts are trying to break out of this endless loop by creating a culture of improvement based on assessing their own data.

The Pella Profile

The 2,130-student Pella Community Schools in Iowa is one such district. When Superintendent Mark Wittmer arrived in 1999, his first priority was to improve the district's student achievement. Test scores were good, but he thought they could be better. During





that first year, Wittmer and his curriculum director, Lowell Ernst, came to understand that hard data would provide the building blocks for change.

"We had to know the criteria that would tell us we were making progress," Wittmer says. "And we had to get the right information into the hands of the people who needed it—the teachers."

The first step was to get away from an ad hoc professional development approach that led to one-time workshops on assessment methods or instructional strategies that may not have been research-based or particularly relevant to district goals. A successful shift toward data-driven professional development depended on the involvement of teachers from the beginning.

Wittmer, Lowell and Pella's six school principals established planning teams that included both teachers and administrators to address four key issues: assessment, research, staff development and technology. All teams collect, analyze and use data for planning, but the assessment team has the primary responsibility for the data system.

A key outcome of the team meetings was a profile that clarifies districtwide goals for student achievement and acts as an internal progress report. It continues to be the basis for all planning, espe-

cially professional development. The profile includes student grades and test scores by grade levels, attendance rates and other measures of behavior and performance. To complement the profile, Pella also produces standards-based report cards that show how well students perform against every benchmark.

Customized Approach

One important discovery that emerged from this planning process came through a review of data that looked inside classrooms. Teachers found overall class scores to be high, but they then had to "look at the micro, not just the macro," says Lowell Ernst, Pella's curriculum director. Their next step was to look within district, school and classroom test scores for evidence of students' performance in specific skill areas.

Pella's research showed that too many students were weak in one area of early reading skill, phoneme segmentation, the ability to isolate sounds from a stream of speech. Test results showed only 30 percent of students scored at the proficient level or above.

Based on this evidence, teachers created an action plan to address the problem and attended a course of professional development delivered through the area educational agency. Teachers in

vestigated and learned about strategies that were new to them and closely monitored the impact of these practices.

Tested again one year later in phoneme segmentation, 80 percent of Pella students scored at the proficient level or above.

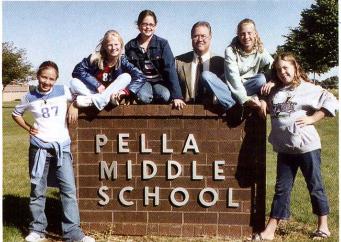
Each year the teams review their goals and sift through assessment data to identify other problem areas, update action plans and target professional development. This examination is the basis for each department's action plan and all professional development activities. Pella's Web-based data retrieval system, customized from an off-the-shelf database program, allows all qualified personnel to easily access district, school, classroom and student data.

Efficiency is one of the many benefits of this type of system. Teachers across the district can administer a fluency test, for example, and the results are entered by district administrative personnel soon afterward. Teachers can write inquiries and run reports for their entire classroom or for individual students. If the assessment results are delivered to the district in the morning, teachers have access to the data in the afternoon.

Staff Ownership

By looking first at data, teachers also re-





Mark Wittmer (fourth from left) is superintendent of Pella, Iowa, Community Schools

alized they needed to make changes in the format of professional development. Rather than a workshop at the beginning of the year, Pella started using a minicourse structure that allowed teachers to learn a strategy, try it in the classroom and discuss it with their peers at follow-up meetings. Departmental meetings focus on examining data and the results of

their work, setting goals and deciding the type and content of the professional development for the coming year.

This collaboration is evidence of teacher ownership, which was a clear priority for the central office from the start. Wittmer combined state school improvement funds with district funds to pay for staff time, new technology po-

Pella, Iowa, Community Schools.

Glendale's Journey

sion for their schools.

In the Glendale, Ariz., High School District, central-office administrator Dean Petersen describes data-driven school improvement as a journey. "We find that we constantly learn more about our own data and how they can best be used, and we have also found that we didn't always get it right the first time," says Petersen, the district's administrator of vocational education and special pro-

District administrators are just as satisfied with their data-driven system.

They now have concrete evidence of

whether they are meeting targets-evi-

dence they can show the school board

and community members to foster better communication and build a shared vi-

sitions and release time for teachers to coordinate programs. He remained committed to funding after-hours grade-level meetings even after the state reduced the school improvement allotment. The continued support from the central office is likely to have helped sustain the enthusiasm for standards and benchmarks that Ernst now sees among teachers. Early on, they looked at standards because they were required to, says the curriculum director. Now teachers have internalized the benchmarks that they helped clarify. They also use the data to identify gaps in student learning and take a self-critical stance on how they might change their practice. "I hear few complaints about irrelevant staff development anymore," Ernst says.

The journey began in the mid-1970s, when Glendale noticed some gaps in student learning, initially reading and writing skills. Glendale has since placed all curriculum areas, including vocational education, under the data microscope.

"Examining data and basing decisions on research is now a part of our culture," says Rowe, former associate superintendent for curriculum and instruction, who was a key player in Glendale's move toward data-driven decision making.

After many years of learning to use and appreciate data, Glendale is seeing some results of changes begun a decade ago.

The vocational teachers began by aligning their curricula to nationally set industry standards and using those standards to evaluate student projects. In June each year, teachers use the same rubric to review students' work. As was true for the academic areas that started with an alignment process, vocational teachers developed a formal performance-based

FAQs: Starting Targets and First Steps

Q: How do you set your initial targets on more effective professional development?

School administrators using data analysis point to several lessons learned.

They all agree on the need to go slowly at first. Take the time to ensure everyone understands the need for a new approach, then be sure they understand the approach itself.

Teams will need information about the data and how they are collected to make use of them. Even a seemingly simple technique like developing a rubric for a specific student assessment will be more meaningful if teachers are involved in the process. Teachers need to be able to answer the question, "How will my students be better off next year if I do this?"

Analyzing data takes resources. Teachers should be paid for the additional responsibilities, meeting time and staff development sessions. Developing software to manage the data and securing the help of experts are typical expenses. If administrators themselves do not have all of the expertise they need to collect and analyze the data,

seeking resources and finding the appropriate help for their teams is a critical step.

Q: What steps are essential for planning professional development using data?

First, set student achievement goals for the district and review all of your existing data. What stories do your data tell about your students?

Second, determine the priorities for the year and how you will assess progress. How will you know when you have met your goals?

Third, in collaboration with teachers, administrators and research consultants (internal or external), develop a system for collecting and analyzing assessment results. What system will work best for your teams?

Fourth, plan and evaluate professional development to address specific goals for your students. Does every department have an action plan with targeted professional development activities aligned to student learning goals?

— Jane Sanborn

assessment system to determine how well their students met the standards of the program, to monitor the effectiveness of their instruction and to plan future staff development.

Early on, in Glendale's IntroTech program, teachers found only 40 percent of students successfully met all of the standards. For the final assessment, students had to select one technical system on which to focus (for example, manufacturing or communications) and design and build a product that works. Students were assessed on their design process and on the final product. While many products met the standards, students' designing skills were weak.

Teachers arrived at this conclusion by relying on a rubric that described in detail the multiple components of the task at four performance levels ("outstanding" to "not yet successful"). Through this examination and discussion process, teachers realized they themselves did not know about all aspects of the design process. So the district devised a professional development strategy that included external conferences, in-house workshops and courses. A year later, the extensive training paid off: almost 80 percent of the students met the standards.

Petersen says the strength of the Glendale system is its collaborative nature. Teachers grade in teams, sharing ideas on student work and planning how to improve the curriculum and instruc-



Jane Sanborn

tional practice in the next year. The district has approached other subject areas with a similar zeal for discovering what can be done to bolster student learning.

Managing the Process

Glendale advises other districts to consider the resources they will need to effectively use data to plan professional development. First, identify a leader with strong research skills. This leader



Vernon Jacobs (left), superintendent of Glendale, Ariz., Union High School, with Dean Petersen, who directs Glendale's vocational education.

can be a teacher, another staff member or perhaps a consultant.

Whatever the method chosen, data collection and analysis must be seen as valid, reliable and fair. The district also must be prepared to pay for the time teachers need to examine their data, analyze underlying problems and develop solutions such as identifying the types of professional development they need as a group or as individuals.

Glendale administrators stress that teacher involvement in this process is critical. Teachers will stay on board if they are involved, treated with respect and allowed to develop ownership over the results.

"Data can be intimidating if you don't have this process as a part of the culture; data can become a threat, not an aid," says Petersen. School boards and other governing bodies also must be included. The board will need to set aside funding to support improvement efforts and must understand every aspect of the process. At the same time, Glendale advises other districts against trying to persuade every staff member that data-driven school improvement will work.

"There will always be some naysayers, and trying to battle each one is a waste of time," says Rowe. "You win by proving it works."

Forcing teachers to attend workshops on a hodgepodge of topics will not help them to improve their practice. Teachers need to know that a proposed strategy will address a specific problem in their school. Basing professional development planning on data helps teachers understand what the need is and how the strategy will address that need. Even those teachers who are most resistant to changing a beloved lesson plan—the

one that is laminated—are more likely to be open to a new approach if data consistently show that their students are not doing well in a particular area.

Schools and districts that base staff development on a careful examination of data are more likely to find their improvement strategies align with goals and are actually implemented. If they monitor the data, they can make midcourse corrections, adjusting plans and adding support where needed. This approach is cost effective and purposeful. Professional development becomes part of the improvement process—not just another random workshop.

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Resources

Want to know more about the approaches taken by the Pella and Glendale school districts? Here are the best contact persons:

- ◆ Lowell Ernst, curriculum director, Pella Community School District, 212 East University Ave., Pella, IA 50219. 614-628-2220. pchslee@pella.k12.ia.us
- Dean Petersen, administrator of vocational education and special programs, Glendale Union High School District, 7650 North 43rd Ave., Glendale, AZ 85301. 623-435-6056. dapeters@smtp.guhsd. k12.az.us