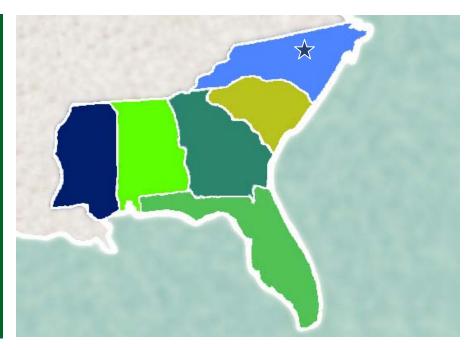
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Making Decisions about Teacher Professional Development:

Practices in 8 Alabama School Districts

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Introduction

The current teaching model, which assumes a twenty-five year commitment to standand-deliver instruction in self-contained classrooms, is no longer educationally sound or economically viable. To meet the needs of 21st century teachers and students, we need to restructure the education workforce by transforming our schools from teaching organizations into learning organizations (Governor's Commission on Quality Teaching, 2008).

One of the foundational principles of the No Child Left Behind Act (NCLB) is the idea that teacher quality is critical to student success (The Commission on No Child Left Behind, 2007). Past research has supported this correlation between student achievement and teacher quality (e.g., Goldhaber, 2002; Goldhaber, Brewer, and Anderson, 1999). The impact of having a high-quality teacher can be profound. Sanders and Rivers' (1996) landmark Tennessee study on the cumulative and residual effects of teachers on future student achievement found differences in student achievement of 50 percentile points over three years as a result of an improvement in teacher effectiveness. Wenglinsky's (2002) analysis of data from the 1996 National Assessment of Educational Progress in mathematics found the effects of classroom practices, when added to those of other teacher characteristics, are comparable in size to those of student background, suggesting that teachers can contribute as much to student learning as the students themselves.

Improving teacher quality through professional development is an important strategy for raising student achievement. A 2007 study by Yoon, Duncan, and colleagues examined more than 1,300 studies identified as potentially addressing the effect of teacher professional development on student achievement in English-language arts, mathematics and science. Of these studies, only nine met the U.S. Department of Education's What Works Clearinghouse evidence standards. However, these nine studies found that students in control groups would have improved their achievement by 21 percentile points if their teachers had received substantial professional development. Providing professional development to teachers had a moderate effect on student achievement across the nine studies, and the effect size was fairly consistent across different content areas (Yoon, Duncan, Lee, Scarloss, & Shapley, 2007).



Drawing upon the rich literature in the evaluation of teacher professional development, the writers of the Elementary and Secondary Education Act (ESEA) defined the characteristics of "high quality professional development," to include professional development that is sustained, intensive, classroom-focused, and intended to improve teachers' knowledge of academic subjects (U.S. Department of Education, 2006; see sidebar).

The design of professional development, however, has to be clear in its purpose. If the goal for the selection of a particular professional development approach is improved student achievement, the new knowledge and skills expected of teachers need to be clearly articulated so that they can be transferred and implemented in their classrooms. Thornton and West (1999), in a study of the first and second years of implementation of a standards-based mathematics program, found that the higher the level of implementation, the higher the student achievement. This research underlines the importance of monitoring instruction for implementation of professional development content.

High-Quality Professional Development

"High-quality professional development" meets the criteria contained in the definition of professional development in *Title IX*, Section 9101(34) of ESEA and includes activities that:

- Improve teachers' knowledge of academic subjects and enable teachers to become highly qualified;
- Are an integral part of school-wide and districtwide educational improvement plans;
- Give teachers the knowledge and skills to help students meet challenging state academic standards;
- Improve classroom management skills;
- Are sustained, intensive, and classroom-focused and are not short-term workshops;
- Advance teacher understanding of effective instructional strategies that are based on scientifically based research; and
- Are developed with the extensive participation of teachers, principals, parents, and administrators (U.S. Department of Education, 2006).



Background for this report

The SERVE Center contracted the Educational Policy Institute, a nonprofit research organization based in Virginia Beach, Virginia, to describe the evidential bases for administrators' decisions about professional development as reported by a small sample of small and medium-sized school districts in the State of Alabama. The work was collaboratively designed by SERVE, EPI, and the Alabama State Department of Education (ALSDE) to improve understanding of current decision-making practices.

The evidence-based decision-making (EBDM) cycle as articulated by the SERVE Center, which is summarized in the following section of this report, provided a conceptual framework for understanding districts' professional development cycle, from assessment of training needs to identification and selection of appropriate professional development strategies, consideration of contextual constraints, monitoring of implementation, and evaluation of outcomes. SERVE sought to identify the type of evidence used to plan and evaluate professional development based on an interest in this topic expressed by the ALSDE.

The following questions guided the discussions with the districts:

- 1. What information do districts use to identify needs for professional development?
- 2. How are decisions made about major professional development strategies/programs at the school and district level? What are the influencing factors?
- 3. How do districts evaluate and gather information on the implementation and outcomes that result from the professional development strategies/programs selected to implement? What data are examined for evidence of implementation and outcomes?

Staff at the Alabama State Department of Education identified eight school districts across the state to engage in this discussion. The focus on smaller districts was deliberate. With small central office staffs, these districts usually do not employ full-time professional development directors. In these settings, district administrators may be more likely to rely on external sources of expertise and assistance, including the State Department of Education. Since the State Department is in the midst of a significant policy overhaul in the area of teacher



quality and professional development, it was appropriate to focus this study on districts most likely to request state assistance in these areas.

While the districts were similar in the number of enrolled students, they differed in the percentage of students who were eligible for free or reduced-price lunch and in the type of locale. Three of the eight districts had more than 60% of students eligible for free or reduced-price lunch. Two of the eight districts had less than 40% of students eligible for free or reduced-price lunch. In terms of locale, 4 districts were considered rural, 2 as suburbs, 1 as a town, and one as a city. To protect the confidentiality of the state and district administrators, individual names and districts are not identified in the report.

Discussions with district administrators were conducted during a site visit to Montgomery and Birmingham, Alabama, on April 30 and May 1, 2009. A meeting with senior Alabama State Department of Education personnel from the Instructional Services division was held as part of the site visit on April 30. The guidelines for discussions with state and district personnel are presented in Appendix A.

Background on State Policies

The State of Alabama has undertaken a significant policy overhaul of its state standards for teacher quality and professional development and of its teacher evaluation system. The focus on teacher quality is a deliberate outcome of state administrators' understanding that improving student achievement requires supporting teachers in improving their practices.

The Alabama Quality Teaching Standards, recommended by the Governor's Commission on Quality Teaching and adopted in March 2007, are organized around five standards—Content Knowledge, Teaching and Learning, Literacy, Diversity, and Professionalism. Aligned with the Alabama Continuum of Teacher Development, these standards provide a comprehensive underpinning for Alabama's teaching profession and provide the foundation for recent improvements in the State's teacher evaluation system and professional development, including the Alabama Continuum for Teacher Development (Governor's Commission on Quality Teaching, 2008).

Professional development can and should play a significant role in helping Alabama's teachers align their practices with the Quality Teaching Standards. The state's Standards for Effective Professional Development, passed by the State Board of Education in 2002, support this alignment by providing guidelines for how professional development should be planned and implemented across



the state. This policy document consists of twelve standards that directly align with the National Staff Development Council's Standards for Staff Development and the ESEA definition of high quality professional development. These standards emphasize, among other things, the use of disaggregated student data to determine adult learning priorities, monitor progress, and help sustain continuous improvement, and the use of multiple sources of information to guide improvement and demonstrate its impact (Alabama State Department of Education, 2002).

As part of its work to improve teacher quality, Alabama introduced changes in its regulations to require instructional leaders, including teacher leaders, to attain Professional Learning Units (PLU) to renew certification. PLUs are content driven, long-term units of professional study that address all knowledge and ability indicators under an Alabama Standard for Instructional Leaders. Notably, professional study that constitutes a PLU requires multiple professional development experiences over time and must be approved either by the Alabama Council for Leadership Development (ACLD) or by the local superintendent. The PLU will take the place of the continuing education unit (CEU) which was based on seat time at one event rather than the development of knowledge and ability over time (Alabama Department of Education, undated, a).

Another state policy tool in improving teacher quality is the newly revised teacher evaluation system, Educate Alabama, which replaces the Professional Education Personnel Evaluation (PEPE). This evaluation system, which has been described as a "more concise, effective, teacher-oriented process," is based upon the Alabama Quality Teaching Standards (Alabama State Department of Education, May 2009, p. 1). Educate Alabama is a formative assessment system designed to provide data about a teacher's current performance as compared to the quality teaching standards, which can be used to set goals and plans for teacher professional growth (Alabama State Department of Education, undated, c).

When fully deployed, Educate Alabama holds the potential to serve as a systemic approach to identifying needs for professional development (PD) at the school, district, region, and state levels:

The principal will take the teachers that were evaluated and look at the professional development needs as a school. Then the superintendent will take the schools' professional development needs and look at it as a system. Then we will take the 132 school systems in the state and look at patterns of PD from the state level



and also break it into 11 pieces for the 11 in-service centers—all tied back to the standards.—(Administrator, Alabama State Department of Education)

This systemic approach to the improvement of teacher quality will provide a commonality to align the work of the ten departments within the Instructional Services division. It is very important to note that Alabama has made a significant investment in statewide initiatives such as the Alabama Reading Initiative (ARI) and the Alabama Math, Science & Technology Initiative (AMSTI). ARI, a statewide K-12 reading initiative managed by the Department of Education, aims to significantly improve reading instruction and ultimately achieve 100% literacy among public school students. A core strategy of ARI is to require commitment of at least 85% of the faculty and administration of participating schools to attend a two-week intensive summer institute about reading improvement and ongoing professional development throughout the school year and the appointment of full-time reading coaches to work with teachers and struggling students (Salinger & Bacevich, undated). AMSTI, also a statewide initiative but focused on improving achievement in math, science, and technology, requires the entire math and science teaching staff and administrators of participating schools to attend a two-week long AMSTI Summer Institute for two consecutive summers.

Academic year support is provided by designated AMSTI sites that implement the state's initiative within the 11 geographical Regional In-Service Center areas. Alabama provides funds to support eleven regional in-service centers that provide professional development services to school districts. These university-based centers were created by the Alabama State Legislature to enhance the training of school personnel in critical needs areas. Established in 1984 (Act 84-622), these centers exist to provide "rigorous in-service training in critical needs areas for the state's public school personnel," including teachers, superintendents, principals, and local board of education members (Alabama Staff Development Council, undated).

Until recently, Instructional Services departments and initiatives, such as ARI and AMSTI, functioned as independent groups, including designing and implementing their own statewide professional development. Under the leadership of Deputy State Superintendent of Education Dr. Thomas Bice, the final outcome of the State's work on teacher quality should be a seamless "menu" of PD services offered to Alabama districts by the Instructional Services division (Administrator, Alabama State Department of Education). This integrated system of PD will help fulfill the vision of Alabama's Continuum of Teacher Development.



Evidence-Based Decision Making about Professional Development

The charisma of a speaker or the attachment of an educational leader to an unproven innovation drives staff development in far too many schools. Staff development in these situations is often subject to the fad du jour and does not live up to its promise of improved teaching and higher student achievement.—(National Staff Development Council, 2009)

Today's educational administrators are aware that they are expected to make data-based decisions in this era of heightened accountability and transparency. The implementation of standards-based accountability under the federal No Child Left Behind Act (NCLB) presented incentives for data use in education. NCLB required states to adopt test-based accountability systems, the reporting of test results in aggregated and disaggregated forms, and school and district accountability for the improvement of student performance (Marsh, Pane & Hamilton, 2006). NCLB also requires educators to select educational interventions that are based on scientifically based research (U.S. Department of Education, 2006). The Regional Educational Laboratory (REL)-Southeast's Consortium of Educators for Evidence-Based Education (CEEBE), a group of state and local leaders committed to exploring the use of evidence-based decisionmaking to improve the quality of teaching and learning, offers a model for visualizing evidence-based decision-making (EBDM) as a cycle of decision making. This EBDM cycle, provided below, helps in thinking about how the sources of information relate to each other as part of a process in making evidence-based decisions.



1. Use data to Reflect-2. Examine studies identify need and research Reflect Reflect 7. Evaluate 3. Use professional wisdom outcomes Revise and Reflect Reflect improve 6. Monitor and 4. Consider assess implementation contextual constraints Reflect Reflect Make the best choice based on information

Figure 1: Evidence-Based Decision Making Cycle (REL-Southeast, 2007)

This same EBDM cycle, applied to professional development (PD), provides an approach to understanding districts' decision-making processes about teacher professional development. In this approach, districts use data to identify PD needs. District administrators then can examine research results, experience-based conclusions, and contextual constraints to select appropriate PD strategies or programs to address the identified needs. The EBDM framework suggests that implementation of PD should be monitored and assessed formatively, and its outcomes evaluated. Data generated through the evaluation process also inform the needs assessment for the next PD cycle. Information collected at any stage of this cycle may be used to revise or improve PD.

Through review of documents and meetings with representatives from eight small and medium-sized school districts within the State of Alabama, districts' practices in planning, implementing, and evaluating professional development are described through the lens of the EBDM cycle. Findings from this process are summarized below.

Use Data to Identify Professional Development Needs

The test scores come in.... I crunch numbers and say "this is where we were last year, this is where we were 3 years ago," and we break that down, pull counselors in, our atrisk teacher program, principals, core-subject meetings, et cetera. We point out where our deficits were, very specifically. The data doesn't come in and sit on a shelf—it's discussed.



As districts enter a cycle of evidence-based decision-making, administrators use data to identify the need for professional development. The most common data source is student assessment scores, although other sources of data on students, including dropout rates, suspension rates, and attendance, are also used (REL Southeast, 2007). The U.S. Department of Education also recommends using information about numbers of teachers (disaggregated by subject taught and grade level) who lack full teacher certification or licensure, assessments by administrators and mentor teachers who evaluate teacher and student performance, and teacher self-evaluations (U.S. Department of Education, 2006). A thorough analysis of data helps districts clearly define the nature of the problem—a necessary prelude to identifying appropriate solutions.

Student Assessment Data. School district administrators in Alabama we talked to reported using a variety of data—from student assessments, teacher surveys, as well as informal sources, including meetings with teachers—to identify professional development needs. All participating school districts reported using student scores from standardized tests as part of their needs assessment: "We put the data on the table and say 'what are the needs." Cross-sectional and longitudinal analyses of assessment data were frequently reported in order to "isolate" the needs and identify the "deficits."

One district described their use of student assessment data to identify the need for a comprehensive reading initiative.

Reading instruction is a top focus this year. . . . When I first got to [this district], we were about 8 percentile points below the national average on the SAT. . . . We began paring down what were the problems... basal readers, phonics not being taught. . . . We were initiating use of DIBELS -- Dynamic Indicators of Basic Early Literacy Skills. We saw we had too large of a group of students that were not at benchmark on DIBELS. . . . That's when PD activities started being designed. . . . The teachers who have gone through material for a year already will fine-tune what they are doing and take most recent data and say "where are we not hitting the mark? Decoding, comprehension, et cetera?" We want training that is consistent with where the data shows we need to improve—need one-to-one correspondence.



District administrators often conduct preliminary analysis on assessment data, and then convene staff to examine these data as part of a needs assessment process. These meetings usually kick off a process of planning professional development and other interventions for the following school year.

The test scores come in; the three of us sit down. I crunch numbers and say "this is where we were last year, this is where we were three years ago" and we break that down, pull counselors in, our at-risk teacher program, principals, core-subject meetings, etc. We point out where our deficits where, very specifically (Alabama history, for example).

Failure to make Adequate Yearly Progress (AYP), a measurement defined by the No Child Left Behind Act (2001) that is based on standardized assessments, also signals to districts a need to improve conditions at the school or district level. NCLB, with its focus on improving achievement of all students, has heightened awareness of the need to examine achievement data on subgroups. Not surprisingly, Alabama districts are also looking at AYP subgroup data as part of their needs assessment for professional development, as one district administrator shared:

We do look at our subgroups. Where this came up this year was in special ed. We began to realize two or three years ago that, clapping and saying "yay" because the "all" group met AYP is not going to get it anymore—we have to look at our subgroups, including special ed.... That hit us like a brick wall—the "all" group looked great, but the subgroup of special ed was not looking so good. So, we have had some things just for special ed teachers system-wide.

Administrators also look at other types of student data, including dropout rates, suspension rates, or problems with attendance. At least one district reporting a poor drop-out rate had engaged their high school faculty in professional development to improve student engagement as a direct response to the dropout data.

Teacher Survey Data. Surveys of instructional faculty are another common method of identifying needs for professional development. Five of the eight sample districts reported using surveys for this purpose. Some district teams reported collaborating with their regional in-service center on the administration of a formal professional development survey to assess training needs and priorities of personnel that is "crunched at the State level." One district team



reported that a formal survey administered as part of the development of their SACS review plan would yield the main goals and topics of their professional development. Less formal surveys are also utilized by district administrators to collect feedback on professional development: "We do surveys to ask teachers what they want to do for professional development. . . . We use Survey Monkey to ask teachers questions."

Informal Data. The emphasis on using quantitative measures for needs assessment does not diminish for district administrators the importance of using informal methods of collecting information. Five districts reported learning about professional development needs through conversations with staff. In one district, the superintendent conducts annual visits to every school and does a "listening post" with teachers during their planning time, using that time to collect information about their needs. Other district administrators shared that they learned about needs through participating in departmental meetings or through regular communication.

Several district administrators emphasized that in a small school district, speaking with staff about their perceptions of their training needs is a method of needs assessment superior to other, more formal methods. One administrator expressed an opinion that "communication doesn't show on the survey, but word of mouth is so much better. We are small enough and family oriented enough that if they don't like the PD, they'll tell me." Another administrator expressed a similar view: "The one thing about a small school system is, yesterday I had every math teacher from 6-12 around my table, and I had input from every teacher in the secondary math department."

Teacher Evaluation Data. Notably, only one district shared using data collected through the teacher evaluation process as a method of assessing need for professional development. The district representative stated that in June of each year, the district's administrative team comes together to examine data from surveys and the Alabama Professional Education Personnel Evaluation Program (PEPE) forms as part of their needs assessment for professional development. We hypothesize that one issue in using teacher evaluation data in assessing professional development needs is that often evaluations are uniformly high.



Examine Research and Studies

I can isolate [the needs], but then I don't have the resources to know exactly what I can do about it or if I know what to do about it, to bring in the people who can help.

After the need has been identified, the next stage of the evidence-based decision-making cycle involves examining research and studies on approaches to address the need. The NCLB legislation suggests that practitioners should assess whether an intervention is effective in achieving the desired outcomes by examining research-based evidence (REL Southeast, 2007). Unfortunately, the term "research-based" is too often applied equally to professional development or intervention programs and practices that vary considerably in the scientific rigor used in their investigation. Book authors or educational program developers may claim the descriptor of "research-based" without providing any supporting evidence for that assertion. Others may cite only teachers' selfreports of changes in their teaching practice and improved student learning as sufficient evidence for the value of the program or practice (National Staff Development Council, 2009). Ideally, evidence supporting professional development or intervention programs should be based on rigorous quasiexperimental or experimental research that includes methodologies such as pretests and post-tests of students and teachers and classroom observation of teachers' instructional practice (National Staff Development Council, 2009; Yoon, et al., 2007). However, this kind of evaluation is very expensive to do and is difficult to do well.

Examination of Scientific Evidence. Only one district representative reported that they had adopted or used professional development programs based on an examination of the scientific evidence of their effectiveness. One representative reported adopting a professional development program in part based on its "published improvement results." The same district also tested an intervention by piloting its strategies with a smaller group of teachers. The use of pilot data is an acceptable alternative when rigorous evidence supporting program adoption is lacking (National Staff Development Council, 2009). In fact, the idea of piloting professional development on a small scale before offering more widely or in subsequent years is advisable to work out implementation issues and determine whether it meets with expectations. Other district representatives did not share that they had examined scientific evidence of a professional development program's effectiveness prior to its selection.



Use Professional Wisdom

I was an agriscience teacher by nature, and I knew the students could use hands-on [activities] relating to the real world. When I found this program did that, I knew students would gravitate to it and be more successful.

As educators examine research and studies on approaches to meet the identified need, they may find some interventions that have been found to be effective in settings different from theirs. If they find that there are no high quality studies on a specific topic, they have to consider the results they find from the research literature in light of their professional wisdom (REL-Southeast, 2007), drawing upon their past experience or, in the case of Alabama district administrators, the past experience of their colleagues. The REL-Southeast clarifies that while incorporating professional wisdom into the EBDM Cycle recognizes and values the experiences that individuals have, it should not be used in lieu of research as it provides a limited view restricted by individuals' experiences in specific environments and affected by biases (REL-Southeast, 2007).

Expertise of District Staff. A common approach to identifying professional development strategies was for district administrators to tap into the professional wisdom of their staff, often in lieu of reviewing research and studies. Representatives from four districts reported that their staff led the process of identifying and planning professional development interventions. One representative explained that at roundtables with teachers, held at the end of the academic year, professional development strategies are identified. This representative viewed the identification of professional development strategies as a "grassroots" process:

At the roundtable in June, we decide what [next year's professional development activities] will be. And then we say, "I know someone who will meet that need." It is pretty much the knowledge that comes to the roundtable that we use. It's not just me saying "these are the absolutes." The information is grassroots. Logistics are top-down.

Another district also shared a similar grassroots approach to the identification of professional development strategies. In this district, administrators coordinate a series of "strands," or sequential classes, intended to provide a "sustained, high quality professional development to address teacher needs in pedagogy and instruction", a concept consistent with the definition of high-quality professional development that is in the Elementary and Secondary Education Act (U.S.



Department of Education, 2006). Ideas for strands are solicited through a RFP process, and a committee of school and district administrators reviews and approves the strands. Originally a district-level initiative, school principals now propose strands that are implemented exclusively within their schools and are responsive to the needs assessment in the school improvement plan. Groups of teachers within schools now also propose grade- or subject-specific strands in addition to school-wide strands. The district representative emphasized during the interview that "it's not me planning PD, its teachers who solicit and seek out PD opportunities and design their own PD experiences."

Expertise of Peers in Other Districts. District administrators also tap into the professional wisdom of their peers in other Alabama districts to help identify professional development interventions and strategies, with representatives from two districts reporting that they had either traveled to another district to observe a program or had consulted with a personal network of other superintendents. The latter strategy was particularly important for the following superintendent:

We have a network of superintendents and PD people in each system that talk back and forth. Each time someone in my place goes to a conference with a good speaker, they share the information. . . . I don't have a speaker for our first day back because I don't know when [the school year is] starting. So what I'll do for a speaker is call different superintendents and ask them for their input. So, it's informal.

Influence of Statewide Initiatives. Alabama's two major statewide initiatives—the Alabama Reading Initiative (ARI) and the Alabama Mathematics, Science, and Technology Initiative (AMSTI)—provide professional development in nearly all of the sample districts. Significantly, some districts reported learning about professional development strategies through their involvement in statewide initiatives, and then later applying these same strategies in district-funded initiatives. For example, one district learned about walk-throughs during their participation in Reading First. Recognizing the value of the process, district administrators birthed the idea of extending walk-throughs district-wide. Similarly, another district hired at its own cost instructional coaches to work with teachers and principals on a daily basis to support the AMSTI initiative. The district had been exposed to instructional coaches through other statewide initiatives, and, having seen the results, the superintendent believed this professional development strategy to be "a good investment."



Use Information to Make the Best Choice within Contextual Constraints

[Our district] is not big or small enough, rural or urban enough, dumb or smart enough, poor or rich enough. So, I really have to fight to have the resources, and if I weren't capable of doing budgets and leveraging resources and getting funding, we wouldn't be where we are.

The evidence-based decision-making model suggests that decisions about programs and practices made within a district must consider context—the interrelated conditions in which professional development occurs (REL Southeast, 2007). Conditions or factors within the district, including policy and regulatory conditions emanating from other governmental levels, influence decisions about the selection of professional development and, ultimately, its success. After investigating the research and informing the research with professional wisdom, district administrators use the information at hand to identify and select the professional development strategy that is the best choice given the contextual constraints. This decision is informed by the anticipated (or actual) responses of key stakeholders, including staff, the school board, parents, and available funding (REL-Southeast, 2007).

Influence of Key Stakeholders. Representatives from Alabama districts mentioned key stakeholder groups that influence, both positively and negatively, the selection and implementation of professional development strategies. School boards influence professional development through their role in establishing strategic goals for the district. In some cases, school boards' choices in selecting superintendents are an indirect influence on professional development. When one superintendent was hired, it was with the understanding that technology would become a significant focus during that superintendent's tenure:

I wanted to bring [technology] in because it enriches the classroom and allows you to meet so many individual needs that you can't necessarily meet without a lot of personnel. Also, that was the Board's desire.

State elected officials also play a role in influencing professional development through the link to state-level funding. At least one administrator had reported that the region's senator and representative had played a significant role in leveraging state funding for a combined professional development program and intervention within the district.



State and Local Funding. Not surprisingly, Alabama districts reported that decisions about professional development are significantly influenced by the resources and funds available for implementation. The costs associated with professional development can be considerable. Personnel costs associated with time spent providing or receiving professional development include teacher time engaged in professional development, district administrator time spent managing and planning activities, salaries and benefits paid to instructional coaches or other specialists who provide teacher training, pay for substitute teachers, and stipends paid to teachers who participate in professional development on their own time. Non-personnel costs include conference and tuition fees, travel, supplies, and contracted services (Chambers, Lam, & Mahitivanichcha, 2008).

Funding was a concern for all but one of the districts. The current economic conditions have placed additional constraints on districts, who are struggling to produce balanced budgets and continue to offer services at current levels. State budgetary reductions for fiscal year 2010, signed into law by the Governor in the months following the interviews, include "zeroing out PD," a significant issue for districts, especially for those without significant Title I funding.

Beyond providing formula funds to districts, the state sets aside funds to provide major statewide learning initiatives, which include professional development and that support student achievement in areas of critical concern, namely reading, science, and technology. The majority of districts interviewed participated in these initiatives. All sample districts participated in a statewide reading initiative and seven districts participated in the math, science, and technology initiative.

Regional In-Service Centers. Four of the districts interviewed mentioned the regional in-service centers, which should be considered a regional resource for professional development and are therefore a contextual consideration. Several of these districts mentioned that funding reductions to these centers had adversely affected the quality of their services. One district representative, for instance, considered their regional in-service center a useful resource, but had experienced frustration with their services.

Regional in-service centers usually help provide [needs assessment], but their money is being cut every year, so we are getting less and less support from them. This is frustrating because I know of at least two trainings during the school year where the [regional in-service center] consultant that was supposed to come did not show up because they didn't have



enough consultants to go around. [We] found out the day they didn't show up.

Another district had also experienced frustrations working with their regional center because of their funding cutbacks. According to a district representative, "the first year or two, the in-service center helped us. But then the money got short and we got cut some materials. So, there's not a partnership there at all for our initiatives in the in-service center."

At least two of the districts expressed a viewpoint that the districts could do a better job of providing professional development than the regional in-service centers. A district representative shared that "to be honest, we can plan and execute much more focused PD in our own system than what we can glean from our in-service center." Another district representative, while acknowledging the quality of an in-service center's services, noted that the distance of the center from their district limited their staff's access to center programs. "They aren't as effective to me because my school system is in an in-service [center] system that is an hour away. If they start [sessions] at 3:00 or 3:30, we can't get there on time."

State Regulations. Recent changes in state regulations that designate professional development as a prerequisite for professional staff to renew their certification were often cited by district administrators. As described in the Introduction section, Alabama now requires instructional leaders to attain Professional Learning Units (PLU) to renew certification. Notably, professional study that constitutes a PLU requires multiple professional development experiences over time and must be approved either by the Alabama Council for Leadership Development (ACLD) or by the local superintendent. The PLU will take the place of the continuing education unit (CEU) which was based on seat time at one event rather than the development of knowledge and ability over time (Alabama Department of Education, undated).

This significant change in the recertification process garnered both praise and criticism from the districts we met with.

I really like the professional learning units and I think it will help us a lot. We're doing a book study on the under-resourced learner to try to get at those children we're not serving through another angle. I love that the state is doing this and we don't have to do anything extra for PLUs. I think what they're doing also makes sense. It gives me a good opportunity to leverage things I already want to do.



Some district representatives expressed concern that this change in the recertification process may frustrate staff who do not want to do things in a "different" way. "So rather than doing the PD, they may leave early." "We have a staff that ranges from new to 35 years in service. . . . it's hard to move some of those people along at the rate the State wants them to."

The new PLUs also represent to some districts a greater workload, since the PLU approval process "will take more planning on the school district part," which is a concern for small, under-staffed districts.

We used to have just a 2 hour session that counted for 2 hours of credit and now it doesn't work that way—it has to be approved, meet requirements and there are standards. It's good but it takes more time and planning. A smaller district doesn't have a lot of people in place for this additional time and planning. It will be a task on us to take the existing staff to create PD to meet these requirements. It's time consuming and we don't have staff in place or the funding to do it the way I'd like to see it done.

Federal Funding. Federal Title I, Part A funds (Grants to Local Education Agencies) can be a significant source of professional development support for those districts with high poverty schools. Title I provides financial assistance to school districts and schools with high numbers or high percentages of poor children to help ensure that all children meet challenging state academic standards. There are a number of regulations that govern the use of Title I funds. School districts must target the Title I funds they receive to schools with the highest percentages of children from low-income families. Unless a participating school is operating a school-wide program, the school must focus Title I services on children who are failing, or most at risk of failing, to meet state academic standards. Only schools in which poor children make up at least 40% of enrollment are eligible to use Title I funds for school-wide programs that serve all children in the school (U.S. Department of Education, 2009).

Title I regulations sometimes constrain districts in use of these funds for professional development. Title I funding, for instance, can only support professional development for that specific Title I school, which hinders its support for district-wide professional development. "So, if we have a couple schools that don't qualify for Title I, they do not get that PD training [that is supported by Title I funds]." One district also reported that it was unable to use some of its federal funds for professional development training in technology and school safety because "it wasn't in our Title I plan." These formal plans require administrators to identify training needs, professional learning



strategies, the expected outcomes of professional development, and, significantly, how participants will be held accountable for successful implementation. It also requires administrators to describe in what ways evidence will be collected to show effective assimilation and integration of strategies (Alabama State Department of Education, undated, a). Several district representatives reported that the Title I plan is the primary driver of professional development at the school level. In either situation, the district had to use local funds to support the professional development.

Other Funding. Several districts reported that funding is an ongoing but necessary struggle to accomplish its strategic goals. For districts without high levels of Title I funding or strong local support, the challenges are even greater. For one district, finding other sources of funding is an ongoing task. The superintendent for this district noted that part of his/her job was to "write at least one grant a month, sometimes three or four. Some of these grants were written to support professional development initiatives.

Monitor and Assess Implementation

We have spent a lot of time this year working on active participation. . . . When our leadership team is in the schools doing walk-throughs, they know one of my focus areas is active participation—I want to know will I see teachers asking higher-order questions. Are children involved in discussion? We chart that and when I go back in I can say "we went into 10 classrooms and in those I saw active participation in 8 of them, and that is great."

After the intervention has been selected, the next stage of the evidence-based decision-making cycle involves monitoring and assessing its implementation. Examining implementation can inform decisions about future PD as well as suggest necessary mid-course adjustments to PD currently under evaluation. Monitoring implementation of teacher professional development involves at least two steps: monitoring of the implementation of professional development sessions, and monitoring of teachers' application in the classroom of knowledge and skills gained through professional development (if such change is the goal of the PD).

Monitor and Assess Implementation of Professional Development. First, the implementation of professional development sessions is ideally monitored to assess the degree to which activities were implemented as planned. Some key questions to consider are:



- Did these activities occur at the intended levels of frequency and duration as specified in the PD plan?
- Did teachers targeted to participate actually attend the sessions? Did they participate in all key learning activities as specified in the PD plan?
- What was teachers' response to these sessions? (Guskey, 2000; Haslam, 2008)

Because of state requirements for teacher recertification, the districts we talked to had mechanisms in place to collect data on PD activity implementation and teacher participation. Beyond relatively simple methods of monitoring, including activity sign-in sheets, districts in Alabama now use the state online database for professional development enrollment and tracking—STIPD. This web-based management system assists Alabama districts with the organization and management of employee training and the course enrollment process, and the tracking of individual teachers' credential status and professional history (Alabama State Department of Education, undated, b).

Districts reported recognizing the importance of moving to an online system of monitoring PD implementation. One district representative reported that STI PD has increased awareness of PD activities that are "going on in other school districts" across the state. Another representative commented:

It's the most accurate way of recording information. Theoretically, the state will no longer have to call us for the information on teachers/staff; they can log on and collect the information. . . . We do understand the big picture that this is the better way to keep track of PD hours.

There were some reports of problems in the use of STI PD. One district shared perceptions of some of the issues with this system. First, there are "software glitches" that hinder the process of uploading teacher records from the office module to the web module. Secondly, there is considerable user error, which creates a situation in which some districts' records are more accurate than others.

It's supposed to work that there is one record per teacher in the state. You're supposed to upload from office module to web module, but the records are not moving correctly due to software glitches. Records have been left to be ghost records.... Some PD managers that don't understand what to do will delete the records



of teachers who are no longer working there instead of transferring the teacher from one place to another.

Another issue for at least one district is teachers' use of the system for enrollment. The representative explained that as PD programs were developed, district staff would "have to go into the system to create the training so that people can sign up for it." District staff would frequently attend the training without enrolling in STI-PD, which would then require the district staff to enroll them after the training was completed. For this reason, the district decided to stop asking staff to enroll in STI-PD in advance, since "it's easier to have the roll sheet and add the information afterwards."

A basic strategy to assess implementation is to ask for teachers' responses to professional development. Representatives from four districts reported that teachers completed an evaluation immediately following a professional development activity. This evaluation strategy collects teacher feedback on the format and content of training sessions. The utility of this type of evaluation is in providing feedback to the professional development coordinator, as the following comments suggest:

At all of our PD sessions, our participants are asked to evaluate. So we have an evaluation form, and we get feedback from them. As I was looking through them this week to see how they were gauging things—[do] they like the PD? The only negative comments I saw in most of them came from the day the PA system was messed up at the institute.

Monitor and Assess Implementation of PD Content in the Classroom. Ensuring that knowledge and skill gained through professional development has been successfully and routinely implemented in the classroom is critical to improving student achievement (Guskey, 2000). For this reason, the implementation of PD goals or objectives relative to teachers' instructional practices must be monitored and assessed (if classroom practices are the focus of the PD). Some key questions to consider are:

- Did teachers implement the PD content or focus in their classrooms?
- Did teachers integrate PD content into their instructional practices?
- How were teachers supported by school peers and administrators in the implementation and integration of PD content in their classrooms?



• To what degree did contextual factors, such as changes in leadership or priorities, influence implementation (Guskey, 2000; Haslam, 2008)?

Implementation logs represent a formal approach to monitoring implementation of interventions. Teachers' use of software, for example, can be tracked using automated implementation logs produced by the software. This method was used by one district to track teachers' use of two educational software packages following training. For other interventions, teachers' use can be tracked using an implementation log. This log could assess whether teachers implemented specific strategies taught through PD (with or without modifications), time spent on the strategies, and factors that influenced implementation. There was no evidence shared during the interviews that the sample districts utilized implementation logs as a strategy for monitoring implementation.

Another approach to monitor and assess implementation of PD content is to conduct observations of teachers engaged in instruction. Two districts reported using formal walk-through programs, led by administrators, to monitor for PD implementation in classrooms. This non-evaluative process focused on the improvement of instructional practices through short visits to classrooms with focused areas of exploration (Downey, et al., 2004). The district, which uses formal walk-throughs to support school improvement efforts, also utilizes walk-throughs to monitor how teachers are implementing PD content.

We have spent a lot of time this year working on active participation- we worked on it from preK-12. When our leadership team is in the schools doing walk-throughs, they know one of the focus areas is active participation—will I see teachers asking higher-order questions? Are children involved in discussion? We chart that and when I go back in and say "we went into 10 classrooms and in those I saw active participation in 8 of them, and that is great." And we write up those walk-throughs and provide that information back to the teachers to tell them what we saw happening.

Several of the districts reported participating in the state AMSTI and ARI initiatives, which utilize coaches—teacher specialists who work directly with teachers in the classroom. They provide more intensive reading instruction for students who need additional attention and support teachers on the implementation of PD content in their classrooms. Because coaches work in several classrooms within a school, they are in an ideal position for monitoring the implementation of PD content. One district superintendent reported on the role of reading coaches in monitoring the implementation of reading PD content:



We have reading coaches who do the training and every reading teacher and principal goes. If they see it taught the way it shouldn't be, the coaches intervene. Then this information is used to provide feedback on training. . . . We do have mechanisms in place that let us know if we have to do additional training or if it has been initially successful.

Evaluate Outcomes

It's about laying out your plan in advance and then asking critical questions along the way. It's the more in-depth questions where you have to get ready to go to. The number questions are easy—how many people who come to the PD sessions are easy to count. It's about being clear on paper so everyone is moving along with you because you know what it takes to get the PD you want out there and that the ultimate goal is to improve student achievement—but how are you going to get there?

Ultimately, districts need to assess the outcomes of teacher professional development, particularly when PD is in a pilot stage or when it is being rolled out to a large number of teachers, or expensive or time-intensive for teachers. Evaluations of teacher professional development collect data on (1) outcomes for teachers, including acquisition of new knowledge and skills and sustained changes in professional practice, and (2) outcomes for students in the areas of learning, behavior, and/or engagement in school that are associated with the teacher outcomes (Guskey, 2000; Haslam, 2008). The evaluation of outcomes does not represent the final step in the professional development process. Instead, the evidence-based decision-making cycle suggests that evaluating outcomes provides the data needed to make the next decision, whether that is to continue, modify, or discontinue the program (REL-Southeast, 2007).

Teacher Outcomes. Among the districts, the primary method of evaluating teacher outcomes was to collect information informally from teachers. Representatives from five districts reported collecting teachers' perceptions of the effectiveness of the PD through informal conversations. For example, in response to a question about how the district determines whether a PD activity had an impact, one representative responded:

I go back to my conversations around the table. The only evaluation I have is informal feedback. We could stop there but when I bring the next group to the table, it will either make a difference, made an impact, or not. That's real obvious in our conversation. I don't have a survey or a piece of paper that will



tell me that. That is a very weak point for us—to say if it worked or not.

Other more systematic measurement methods exist to evaluate professional development outcomes on teachers (e.g., measures of teacher knowledge or ratings of samples of teachers' work such as the quality of their assignments or units). To be systematic, such an evaluation of outcomes would have to compare teachers' performance on the measures after the PD to their performance on the measures before they participated in the PD (which is considered the baseline measurement). That is, it would take repeated observations to assess change in teachers' instructional practices. These kinds of more systematic evaluations of changes in teachers' performance over time were not mentioned by district administrators.

Student Outcomes. The most common approach to assessment of the impact of professional development on students was to examine student assessment data, with representatives from four districts reporting this practice. For these districts, improvement in student achievement is the ultimate measure of the success of a PD initiative. As one representative said, "the bottom line is those workshops are what make the difference between making and breaking the improvement a child makes."

Only one district shared using observations of students as part of the evaluation of PD. This representative reported using student engagement as an informal indicator of the success of PD.



Summary

As the State of Alabama seeks to improve teacher quality through state-wide policy initiatives, including the deployment of a new teacher evaluation system and the improved integration of services provided through the Instructional Services division, it is important to understand how district administrators make decisions about professional development. Using the REL-Southeast's framework for EBDM, the evidential bases for district administrators' decisions were described in order to more fully understand the rationale for decision-making. We summarize below areas that might be fruitful for more discussion within the state.

Understanding needs or areas for improvement. According to the EBDM cycle, districts should use multiple sources of data to identify PD needs. Data sources should include student assessment data, other student outcome data, such as attendance and drop-out rates, and teacher data, including certification and personnel evaluation data. It appears from our discussions with 8 small and medium-sized Alabama school districts that they are conversant with using multiple data sources—from student assessments, teacher surveys, as well as informal sources, including meetings with teachers—to identify professional development needs. However, some data sources about teachers, especially teacher evaluation data, were not mentioned by administrators as important to the needs assessment (the reasons for which could be explored more fully in future discussions).

Understanding the research on PD effectiveness. The EBDM model suggests that as district administrators identify and select professional development strategies, they should search for and examine prior research and evaluation studies to determine the extent of rigorous evidence that exists about the PD intervention or approach. However, it was not apparent through the discussions with district administrators how critically they reviewed the scientific evidence of various professional development strategies they selected. Consultation with district faculty and administrators as well as with their peers on professional development strategies to respond to district needs appears to play a larger role in the identification and selection process for PD. Thus, this is another area in which more exploration between the state and districts about support needed in helping them search for and review available "evidence" on PD programs or strategies of interest could be productive.



Understanding the context for the PD choices. District administrators described some contextual constraints that inform their selection of professional development strategies and programs. Most district administrators pointed to funding. In the upcoming fiscal year, with state funding for professional development zeroed out, funding for professional development is a considerable concern for districts, especially for those without considerable Title I funding. Another contextual constraint frequently noted related to regional in-service centers, a resource for professional development. At least some of the issues related to quality of services are blamed on state funding reductions to the centers, although accessibility to center services was also mentioned as a concern.

Implementation monitoring. The EBDM cycle highlights the importance of monitoring and assessing the implementation of professional development. There were a few mentions of technical, training, and procedural issues with the STIPD online enrollment and tracking system, which may limit its capability to adequately support the monitoring process. However, more importantly, the implementation of PD content in the classroom was weakly monitored and assessed in some districts, with only two districts reporting the use of classroom observations to monitor and assess PD implementation. Thus, this area of how to monitor implementation in a way that informs improvements to the PD program is one that might be of future importance to the state and districts.

Evaluation of PD outcomes. The last step of the EBDM cycle is to evaluate the outcomes of the intervention or program. Rigorous assessment of teacher outcomes from professional development, including growth in content or pedagogical knowledge and in actual classroom instructional or assessment practices, was not reported by districts. Instead, administrators appeared to rely on self-reported information collected informally from teachers in determining whether the PD "worked." District administrators demonstrated strong commitment to using student assessment data to assess the outcomes of professional development. However, without building a chain of evidence, which includes monitoring and assessing the implementation of professional development content in the classroom and assessing teacher outcomes, it is hard to suggest any causality between professional development and student outcomes (Guskey, 2000). That is, just monitoring student achievement annually does not tell you whether any one or more PD programs specifically contributed to the trends in achievement. More information on what constitutes a "rigorous" study of PD impact could be of benefit to districts. Although rigorous, experimental studies of PD impact are very expensive and may not be feasible in many small districts, there may be ways that districts could systematically collect



measures of the particular area of PD focus like student engagement and examine trends over time.

One final note: This report should not be considered a comprehensive representation of how Alabama school districts approach decision-making about professional development. The information reported was from a small set of primarily small districts and therefore the findings cannot be generalized to larger school systems within the state. Because we only talked to such a small group—limited to eight school districts—the reader is cautioned to not generalize findings to other small districts within the state.



References

- Alabama Staff Development Council. (undated). *Alabama regional inservice centers*. Retrieved June 27, 2009, from: http://www.asdc.info/links1.html.
- Alabama State Department of Education. (May 2009). Educate Alabama: Creating a professional learning collaborative for Alabama educators. *Alabama Education News* (May 2009), pp. 1-2.
- Alabama State Department of Education. (2009). 2009-2010 Continuous Improvement Plan, Title I Schoolwide Plan. Template form. Retrieved June 21, 2009, from: http://www.alsde.edu/.
- Alabama State Department of Education. (2002). Alabama standards for effective professional development. Montgomery, AL: Author.
- Alabama State Department of Education. (undated, a). *Professional learning unit (PLU)*. Retrieved June 26, 2009, from: http://alex.state.al.us/showleaderpg.php?lnk=plu.
- Alabama State Department of Education. (undated, b). *Alabama's Professional Development Management System*. PowerPoint presentation. Montgomery, AL: Author.
- Alabama State Department of Education. (undated, c). Educate Alabama:

 Alabama professional learning collaborative: Creating a collaborative culture for Alabama's educators. Montgomery, AL: Author.
- American Educational Research Association. (2005). Teaching teachers:

 Professional development to improve student achievement. Research

 Points 3 (1). Retrieved April 22, 2007, from:

 http://www.aera.net/uploadedFiles/Journals_and_Publications/Research_Points/RPSummer05.pdf
- Bohn, A. (2006). A framework for understanding Ruby Payne. *Rethinking Schools Online 21* (2). Retrieved June 20, 2009, from: http://www.rethinkingschools.org/archive/21 02/fram212.shtml.
- Chambers, J., Lam, I., & Mahitivanichcha, K. (2008). Examining context and challenges in measuring investment in professional development: A case



- study of six school districts in the Southwest region. San Antonio, TX: REL Southwest at Edvance Research, Inc.
- Commission on No Child Left Behind. (2007). Beyond NCLB: Fulfilling the promise to our nation's children. Washington, DC: The Aspen Institute. Retrieved April 22, 2007, from http://www.aspeninstitute.org/atf/cf/%7BDEB6F227-659B-4EC8-8F84-8DF23CA704F5%7D/NCLB_Book.pdf.
- Downey, C., Steffy, B., English, F., Frase, L., Poston, W. (2004). *The three-minute classroom walk-through: Changing school supervisory practice one teacher at a time*. Thousand Oaks, CA: Corwin Press.
- Goldhaber, D. (2002). The mystery of good teaching: Surveying the evidence on student achievement and teachers' characteristics." *Education Next 2*(1): 50–55.
- Goldhaber, D., Brewer, D., & Anderson, D. (1999). A three-way error components analysis of educational productivity. *Education Economics* 7(3): 199–208.
- Governor's Commission on Quality Teaching. (2008). Innovations in teaching:

 Creating professional pathways for Alabama teachers. A report to

 Governor Bob Riley and the Alabama State Board of Education. Retrieved

 June 27, 2009, from:

 http://governorpress.alabama.gov/documents/InnovationsinTeachingRpt
 .pdf.
- Guskey, T. (2000). *Evaluating professional development*. Thousand Oaks, CA: Corwin Press, Inc.
- Haslam, B. (2008). *Maryland teacher professional development evaluation guide*. Bel Air, MD: Harford County Public Schools.
- Loucks, S. (1975). A study of the relationship between teacher level of use of the innovation of individualized instruction and student achievement.

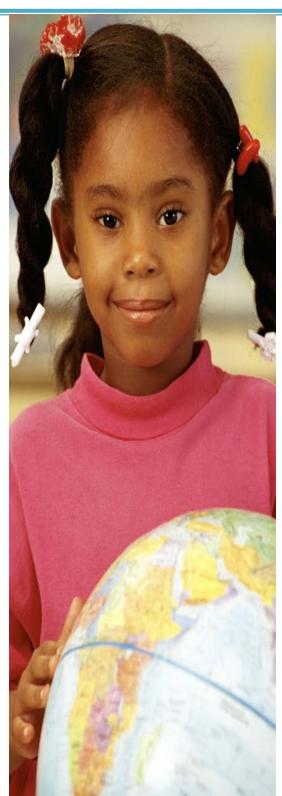
 Unpublished doctoral dissertation, University of Texas, Austin.
- Marsh, J., Pane, J., & Hamilton, L. (2006). *Making sense of data-driven decision making in education: Evidence from recent RAND research*. Santa Monica, CA: Rand Corporation.



- National Staff Development Council. (2009). *NSDC standards: Research-based*. Retrieved June 27, 2009, from: http://www.nsdc.org/standards/researchbased.cfm.
- National Staff Development Council. (2001). NSDC's standards for staff development. Retrieved June 26, 2009, from: http://www.nsdc.org/standards/index.cfm.
- Ng, J. C. & Rury, J. L. (2006). Poverty and education: A critical analysis of the Ruby Payne phenomenon. ID Number: 12596, *Teachers College Record*. Retrieved June 4, 2009, from http://www.tcrecord.org.
- REL-Southeast. (2007). *Making informed decisions about programs, policies, practices, strategies, interventions, etc.* Greensboro, NC: Author.
- Salinger, T., & Bacevich, A. (undated). Lessons & recommendations from the Alabama Reading Initiative: Sustaining focus on secondary reading. Washington, DC: American Institutes for Research.
- Sanders, W. L., & Rivers, J. C. (1996). Cumulative and residual effects of teachers on future student academic achievement [electronic copy]. Knoxville, TN: University of Tennessee Value-Added Assessment Center. Retrieved March 28, 2009, from http://www.mccsc.edu/~curriculum/cumulative%20and%20residual%20effects%20of%20teachers.pdf.
- Snow-Renner, R., & Lauer, P. A. (2005). *McRel insights: Professional development analysis*. Denver, CO: Mid-Continent Research for Education and Learning. Retrieved February 27, 2007, from: http://www.mcrel.org/PDF/ProfessionalDevelopment/5051IR_Prof_dvlp mt_analysis.pdf.
- Thornton, E., & West, C.E. (1999). Extent of teacher use of a mathematics curriculum innovation in one district: Years 1 and 2 levels of use. *Journal of Classroom Interaction*, 34 (1): 9-17.
- U.S. Department of Education. (2009). Improving basic programs operated by local educational agencies (Title I, Part A). Washington, DC: Author. Retrieved June 26, 2009, from: http://www.ed.gov/programs/titleiparta/index.html.



- U.S. Department of Education. (2006). *Improving teacher quality state grants, ESEA Title II, Part A. Non-regulatory guidance*. Washington, DC: Office of Elementary and Secondary Education, U.S. Department of Education.
- U.S. Department of Education. (2002). *Title I—Improving the Academic Achievement of the Disadvantaged. Final regulations*. Washington, DC: Office of Elementary and Secondary Education, U.S. Department of Education.
- Wenglinsky, H. (2002). How schools matter: The link between teacher classroom practices and student academic performance. *Education Policy Analysis Archives 10*(12). Retrieved April 14, 2009, from: http://epaa.asu.edu/epaa/v10n12/.
- Yoon, K.S., Duncan, T., Lee, S.W., Scarloss, B., & Shapley, K. (2007). Reviewing the evidence on how teacher professional development affects student achievement [electronic copy]. REL 2007-No. 033. Washington, D.C.: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.





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