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OP-ED

Teacher professional development as a critical resource in school reform

MICHELE D. CROCKETT

Many view policy as a normative instrument from which improved practice directly follows. This view leads to the erroneous conclusion that resources do not matter. Resources do not enact themselves. What does matter is resource use. In the account offered here, the district superintendent presented many resources in his plan for district reform. Remarkably, his reform plan lacked provisions for teacher professional development. From an equity standpoint, the superintendent's lack of a professional development plan may exacerbate achievement disparities. Without such a mechanism, I believe that resources in the district will be squandered and that school stakeholders and observers will continue to conclude erroneously that resources do not matter.

Keywords: resources; school reform; teacher professional development.

Adler (2001) comments that teachers employed in both poor and prosperous communities often cite the lack of human and material resources as the reason for their difficulties in meeting reform goals for instructional practices. She writes, 'Whereas new practices entail "more" resources (new resources and/or different uses for existing resources), more resources do not relate in an unproblematic and linear way to better practice' (p. 187). Similarly, Cohen *et al.* (2003) argue, as they critique conventional approaches to policy research, that educational resources do not enact the changes that instructional policies seek: 'The effects of resources depend on both access and use,' (p. 122). Resources do matter, but for Cohen and colleagues 'The central focus ... should be ... [on] which resources are used—and how they are used, and to what effect—not the resources alone' (p. 133). Chalkboards, state-of-the-art computers, or microscopes only matter to the degree these resources enter into instruction.

If classroom instruction is the unit of analysis, or the site of resource use, how should schools facilitate the uptake of resources in classroom practices?

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In the US, teacher professional development's centrality to instructional improvement is taken as fact. This importance given this fact is reflected in many consensus documents emphasizing the relationship between high-quality teaching and high-quality learning (e.g. National Council of Teachers of Mathematics 1989, 1991, 2000, National Staff Development Council 2001, US Department of Education 2000).

In this essay, professional development as an institutional norm, albeit inadequately conceived and practised, is viewed as both a critical educational resource and a mechanism that ought to serve as a system for developing knowledge-bases and the knowledge for knowing *how* to deploy resources *in* classroom instruction. A system of professional development practices serves to mediate resources and achievement outcomes.

A personal story

I have gone about doing research on professional development assuming that it constitutes the core of school reform. But seeing professional development as a resource constitutes a subtle shift in thinking about its role in school reform—a perception influenced, in part, by an experience of a failed professional development intervention. Thus the participants in this failed study called my attention to the efforts that the superintendent was making to improve district achievement outcomes. As a result I became interested in the role of professional development in the superintendent's plan to reform the school district, which offered an abundance of resources—good news to school stake-holders and to community activists concerned with the chronic low achievement of its African American students.

However, remarkably, professional development was not a part of the superintendent's plan. There was no provision for resourcing instruction (Adler 2001), although the superintendent's goal was to transform class-room practices in an environment in which the No Child Left Behind Act of 2001 [NCLB] aims at ridding the US of achievement inequities. To tell this story, I draw on district documents, newspaper accounts, informants, observation notes, and transcriptions of tape-recordings collected during and after my time with the teacher-participants. I begin by outlining Cohen and his colleagues' (2003) perspective on the relationship between resources and instruction.

Resources and instruction

As they reflect on resource use in instruction, Cohen et al. (2003) say teachers must navigate several domains of knowledge: 'they must hold and use knowledge, co-ordinate instruction, mobilize incentives for performance, and manage environments' (p. 124). Holding knowledge means that teachers must know a subject well, how to make it comprehensible, and understand the role of students' misconceptions in student learning. Teachers must also co-ordinate many aspects of instruction—pacing lessons across time while considering how lessons relate to students' intellectual development, curriculum

guidelines, local and national learning standards, and mandatory evaluation. As teachers use knowledge and co-ordinate instruction, they must also *mobilize incentives* as they press for academic success. Teachers' efforts to promote success are not without dilemmas since demanding excellence may be met with resistance or failure. Teachers must also *manage environments*. Instruction occurs in classrooms influenced by external forces—governing board members, local activist groups, state boards and ministries of education, and the like. These influences are manifest in classrooms and constitute the environment in which teaching and learning happen. Cohen *et al.* contend that a teacher is better able to manage her environment within a school focused on, for example, conceptual understanding of mathematical ideas when the curriculum materials, administration, and parents also fully support that academic goal.

The use of resources in instruction—by way of knowledge-use, coordination of instruction, mobilization of incentives, and management of environments—is the unit of analysis for determining the effects of resources on learning outcomes. Thus, Cohen *et al.* (2003) advocate a research approach that takes resource use in classroom instruction as an intervening variable which determines resource effects on student achievement. Although Cohen and colleagues are concerned with theorizing about research methodologies, they also point out that teachers, parents, and administrators assume the same relationship between resources and learning as many empirical approaches do. That is, although *in practice* resources and learning are, at best, distantly related, it is assumed that curriculum materials or the addition of a computer lab will increase student learning by virtue of being available. But since resources are not self-enacting, teachers need to know how to deploy resources effectively for use in instruction.

The failed study and local context

In fall 2002, I set about conducting a one-year professional development project with a group of 7th-grade teachers interested in improving their students' pre-algebraic thinking. I targeted these teachers because they taught at a school that had been 'racially identified,' a term used by the superintendent. Forty-two percent of the school's student body was African American compared to the district average of 30.9% and the state's average of 20.8%. About 46% of the student body was white.

For my planned project, I engaged in a long and involved recruitment process. Initially 9 teachers expressed interest in participating in the study. Three committed immediately, with one who would join the group in the winter. Since I wanted at least 5 participants, recruitment efforts continued over the course of most of the 2002–2003 academic year. Once the group was established, however; it became clear that the implications of NCLB had become a major concern for the teachers, and a primary concern for the district's newly appointed superintendent.

According to the state's 2002 school report card, African American students who attended this school performed poorly. On the state's standardized test, only 37% of the school's black students met state standards in

256 MICHELE D. CROCKETT

reading; none exceeded standards. For white students, the percentages were 71 and 13 respectively. Mathematics scores for black students painted a more dismal picture. Only 10% met state standards; none exceeded the standards. In other words, 90% of black students at the school did not meet minimal state standards for mathematics. On the other hand, 50% of white students met state standards, while 19% exceeded state standards in mathematics.

This startling achievement gap presented a profound crisis in the education of African American students at the school. The teacher-participants were genuinely concerned about the academic achievement of their African American students. My project's focus was on professional learning within weekly 'teacher inquiry group' meetings. The teachers viewed this as a regular opportunity to address their students' achievement in mathematics. In addition, they appreciated the research goal of trying to learn more about how to improve instruction in general and teaching pre-algebraic thinking in particular.

Despite their interest, maintaining the group proved to be impossible. The teachers reported problems regarding working conditions. With respect to several NCLB-related issues, the teachers said things like, 'We're not sure what's going to happen'. They were uncertain about the direction the district was taking to improve test scores. They expressed fear that the superintendent would standardize curriculum across the district and mandate pacing schedules. In addition to the uncertainty, one of the participants, a 2nd-year teacher, was struggling with classroom management issues and was in need of professional support. He was receiving virtually no assistance from the school or district for his difficulties. From week to week, the situation deteriorated. There were absences due to illness or after-school obligations. Only one or two were present at any given time. After 3 months, I had no choice but to disband the group.

This troubled me since I had worked with teachers before in stressful environments. One thing was clear in the present case. They felt considerable pressure to improve scores on the state test. One teacher put it this way: 'What I've felt is that we're really just trying to teach so that the students do well on the [state standardized test]. There's a big emphasis ... with the goal of raising test scores. That's our major priority this year.'

After the group disbanded, a district informant told me that the superintendent was only interested in professional development activities that produced 'immediate results'. By immediate results, he meant improved scores on the state test. By implication, activities involving teachers working collaboratively to improve instruction was considered to make no contribution to improving test scores. It seemed that my plans to research teacher inquiry groups had no future in this district, at least for the present moment. In hindsight, I realize that this may have been why otherwise interested teachers decided not to participate, that the teachers in the study discontinued their participation, and why, perhaps, when I contacted principals, many were very vague about their commitment or slow to return my calls, if at all.

The local newspaper accounts¹ supported what the informant told me about the superintendent's position on professional development. He took

actions that seemed to have little or nothing to do with improving teaching and learning. He transferred principals from one school to another, or removed them. The principal of the school where I began my study resigned at the end of the year, to be replaced by the principal of a high-performing, mostly white elementary school. The lowest-performing school in the district, a school composed of mostly African American students, was 'reconstituted', anticipating a corrective action mandated by the NCLB since the state had already identified it as a failing school. He modified the existing 'choice' plan meant to desegregate some of the district's most segregated schools. And, he established a summer 'enrichment' program for lowachieving (mostly black) students.

The reform plan: a cornucopia of resources

About one year after I first attempted my study, I attended a public presentation at which the superintendent was the keynote speaker. The principal focus of his talk was the district's racial achievement gap, a community concern. He attributed the achievement gap primarily to systemic issues and proposed a programme of reform that seemed to offer abundant resources of 'policies, programmes, practices, and people':

I think whenever you're in an environment or in a school system where there's an achievement gap, that's a clear indication that it's not the children, in my opinion. That's a clear indication that there are systemic problems. There needs to be some system changes. And what do I talk about when I refer to system change? I'm talking about basically changes in four categories: policies, programmes, practices, and the last is really difficult—people!

Policies and practices

The district's primary approach to improving scores on the state's test seemed to involve developing curriculum guidelines, pacing schedules, and aligning the curriculum with the state tests. According to the superintendent, teachers and administrators were hard at work bringing curricular alignment to fruition in both policy and practice. These policies and practices were met with criticism:

Some people look at [curricular alignment] and say, 'You know, that's not right. You're taking away the teachers' academic freedom.' But that's not what we're doing. What we're doing is simply making sure, first of all, that the curriculum is aligned to the [state's] learning standards, and is broken down into 9-week chunks. So what we're doing, we're looking at the [state] learning standards, as well as national standards in the core curricular areas, and making sure that our curriculum teaches those skills and knowledge that should be taught.

Teaching to and for the test was the key reform strategy. 'No Child Left Behind, as well as the [state board], hold our feet to the fire to make sure that these kids master the national and state assessments.' The superintendent

strongly defended curricular alignment practices and his defence of these practices constituted a large portion of his presentation. He disputed the notion that such practices take away teachers' academic freedom and creativity by questioning the ethics of testing children on knowledge they had not been taught:

They say that that's teaching to the test, and that establishing a timeline for the district, with everyone who's teaching the same field [unintelligible] each 9 weeks, that's taking away their creativity. But believe me, folks, nothing could be further from the truth. As for teaching to the test, I'd like to ask this question: What is ethical about testing students on something that he or she has not be taught? Is that ethical? I mean, that's my answer when people say we're teaching to the test, 'That's not right, you're taking away our academic freedom.' Truly, what is ethical about testing students on something that they have not been taught? My training and commonsense tells me that a student should be assessed only on what has been taught, and what should be taught is of course central knowledge and skills that have been identified by the district as well as our state and national standards. This aligns with the written part of the test. [T]he curriculum requires significant changes in practices.

In addition to emphasizing and defending curricular alignment practices, the superintendent talked about revising budget plans, grading policies, reconceptualizing attendance and truancy policies, and changing programme evaluation practices. He outlined the programmes that were then under consideration, emphasizing three programmes in particular: (1) Advancement Via Individual Determination (AVID), an in-school academic support programme, targeting largely poor and minority students with average academic performance in grades 5–12.² (2) 'Pre-Advanced Placement' courses at the middle school to prepare middle-school students to take Advanced Placement³ (AP) in high school; and (3) personalized education plans for underachieving students. These plans would identify areas of weakness to be addressed during the course of a student's educational career.

People

The final component of the superintendent's reform programme was 'people':

Now, I've mentioned programmes and policies, practices. Now, you think those three things are hard? The people are hard. It's really hard! And unfortunately, that's a part of the process. You have to take a look at your people. That's a hard thing to do. I firmly and absolutely believe that schools exist for the benefit of the children, not for the benefit of the adults that work in those schools. So you have to take a hard look at people and see, 'Are they effective?' 'Are they popular?' 'Does everyone like them?' 'Who are they connected to or tied to?'. You have to look at what are they doing for children. And you have to look at objective data to determine that. Although I have great personal regard for every member of my administration team, they know that they must produce results or I will change my team. They know that it's not about your personality, about whether I like you, it's about what are you doing for kids, and what objective data do we have in place to look at to measure that? And guess what? If I can't lead the team successfully, and produce objective data to

show that we're being successful, then guess what? The superintendent will be changed. Do you think the [school] board is going to leave me in place if we're not making changes and being successful? I guarantee you they won't!

People, that is, school personnel must effectively serve children's educational needs. By effective, he meant 'objective scores on standardized tests to show that we're being successful'. He, too, was not exempt from these criteria. 'Do you think the board's going to leave me in place if we're making changes and being successful? I guarantee you they won't.' He spoke with unabashed passion and commitment. There was no doubt that the superintendent and his team had devoted a tremendous amount of energy developing the district's reform programme. Remarkably, however, very little energy seemed to be devoted to teachers' professional learning. In other words, there did not seem to be opportunities for teachers to learn about the district's reform plan and its translation into classroom practices.

The superintendent's comments on professional development came in a roundabout way in a question-and-answer session that followed his presentation. An audience member asked, 'Can you talk about some of the things that you're finding will help change attitudes about expectations of staff for students who haven't been achieving well?'

I hate to admit, but I'll just have to tell you, when you look at our district, we really have not had in the past a district-wide long-term systematic staff development or professional development programme for our teachers, for our administrators, for our bus drivers, for secretaries, for our food-service people, for our teacher assistants, for anybody. It's been everybody, you know, doing their own thing.

Later in the question-and-answer session, I had an opportunity to ask him about teacher professional development:

You talked about professional development with regard to teachers' attitudes and dispositions regarding kids. I think that teaching is a practice that's strongly linked to student outcomes. The higher quality the teaching, [the superintendent overlapping my words] the higher quality the student learning. Can you talk to us about a professional development system that helps teachers get smarter in an on-going fashion about their practice and subject matter?

His response:

Sure. And that is a part, as I mentioned earlier, unfortunately, we have not had a staff development long-range plan for all teachers. What I've found and what I've witnessed in other places, is that you look at the art of teaching, and you know that your staff-development programmes should be linked to several things. One is you have to look at your students' outcomes on your national tests and your state tests....

Another thing that you do is you look at the category that I call classroom management, and when I say 'classroom management,' I'm not just talking about discipline... The other category that you have to have staff development in is instructional strategies. You have to have the staff development programme that's going to make sure that teachers are being taught a diverse set of instructional strategies to teach, using manipulatives, co-operative learning, and these kinds of things.

I was still curious about what the district was doing. I wanted to know details about the current professional development programme. I asked, 'Is there something already in place that you're ... [The superintendent cut off my sentence]:

We're in the process. You know again, I wish I could just 'Boom!' make it all happen, but unfortunately it takes time. And we have started that process, but we're not [not finishing the thought], so what we're doing, there's so much to do, and we're working on a lot of things at one time, and what I've found is that, you know it's in my head, and it's in our plans. I know what we need to do. We've done it [before in other places]. But it just takes time, and that's the frustrating piece of it. But the good news is that we know how to do it.

Squandering resources: neglecting teacher professional development

The superintendent's four-pronged approach to improving student achievement represented a sweeping programme of systemic reform. Every component of his programme was motivated by the mandatory testing required by both NCLB and the state board of education. His concern with improving test scores pervaded his talk. 'No Child Left Behind, as well as the [state board], hold our feet to the fire to make sure that these kids master the national and state assessments.'

That mandatory testing drives changes in practices is a reasonable assumption. Curricular alignment defined as coherence across curriculum, teaching practices and assessment is an essential ingredient for school change. From this perspective, it would seem that the superintendent's efforts at curricular alignment might prove productive. But curricular alignment requires that teachers learn how to ensure coherence across curriculum, teaching, and assessment practices in ways that prepare students for tasks on high-stakes standardized evaluations. Though professional learning is taken to be fundamental to school improvement, the fact seemed lost on the superintendent. He admitted to the district's lack of a plan.

The superintendent's admission supported my own observations as well as findings outlined in a 2003 report, the result of a curriculum management audit conducted by consultants not affiliated with the district. In the introduction to the findings regarding the district's staff development programme, the auditors make clear that high-quality professional development is essential to improving teaching and learning:

Staff development is directed towards improved student achievement, demands leadership, both central and site-based, that guides on-going instructional improvement. Leaders of school districts need to structure ways of learning and working together on system goals that produce learning communities. Effective organizations are marked by highly focused team efforts.

The auditors found that the district lacked on-going training for teachers and a central focus for staff development. The auditors found little staff training in technology. The auditors also found no data to illustrate that

staff development is data-driven and based on the academic needs of the students. The auditors further found that there was no long-range staff development plan in place to guide effective staff development programmes.

Based on this finding, the audit team made the following recommendation:

Direct the Superintendent to develop a comprehensive, long-range staff development plan that is focused and is linked to the district's own strategic plan. The plan should cover at least a 3-year period, with the understanding that annual updating/revisions will ensure tight linkages to emerging priorities and the needs of Prairie Land School District.⁴

But as indicated by the superintendent's public discussion some 5 months after the report's release, the findings seemed to have had little influence. To my question about the implementation of a district-wide professional development system, the superintendent responded, 'We're in the process. You know again, I wish I could just "Boom!" make it all happen, but unfortunately it takes time.' He made no specific mention of efforts to develop any long-range plan for both district and site-based professional learning. He made no mention of the need to establish professional learning communities. The superintendent's actions focused on everything but professional development, despite the curriculum audit recommendations, national policy consensus on the centrality of professional development in school reform, and his claim to know how all of this is done. He provided little evidence that substantive efforts were underway in developing a professional development system.

The superintendent's reform agenda was made up of resources to improve learning outcomes as measured on standardized tests. But, as Cohen and his colleagues (2003) emphasize, resources are not self-enacting. Although their theoretical scheme does not emphasize professional development as a resource, it presents a compelling rationale for the mediating role that professional development needed to play if the superintendent's plans were to achieve his reform goals. Professional development lays the groundwork for the knowledge the teachers need to enact his reform plan. Professional development would facilitate teachers' knowledge about and understanding of the curriculum guidelines, pacing schedules, and the proposed individual education plans (IEP) for underperforming students. Opportunities to discuss the use of this knowledge in teaching practices promote resource use in teaching.

Cohen et al. (2003) contend that the effective use of resources depends upon the co-ordination of instruction. The superintendent's plan offered as resources curriculum guides, pacing schedules, and individualized education plans (IEPs)—which also provides a framework for teachers to co-ordinate instruction from one lesson to the next, across grade levels, student needs, and mandated assessments. AVID and Pre-AP programmes provide incentives for both teachers and students to press for academic excellence. An AVID assignment, rather than a remedial assignment, serves to motivate teachers to raise their expectations of students. An AVID placement instead of a remedial placement presses students to achieve. Similarly, pre-AP courses at the middle grades acts to motivate both teachers and students to improve teaching and learning. Mobilizing incentives, knowledge-use, and

co-ordinating instruction require that teachers manage the environment in which schooling takes place.

Within Cohen and his colleagues' (2003) scheme the ways in which teachers manage their environment is influenced by the priorities set at the school level. In a chaotic environment even the most accomplished teachers will fail to recognize resources, or they may even squander them. In school reform, an intervening variable is professional development. Rather than being external to teachers' daily work, professional development, when it provides substantive opportunities to learn, should be the primary means for developing knowledge-bases and local curriculum languages, and for establishing priorities so that teachers can effectively manage their environments using the resources made available for instruction.

Resources, equity, and professional development

As I have suggested, many policy-makers, researchers and publics view policies as normative instruments from which improved practice follows directly (Cohen *et al.* 2003). The superintendent held the same view. His reform plan lacked provisions for teacher professional development, which ought to serve as a mechanism promoting the uptake of resources in instructional practices. From an equity standpoint, the superintendent's lack of a professional development plan may exacerbate achievement disparities. The key to closing the racial achievement gap, according to the advocates of NCLB, is to attack the 'soft bigotry' of low expectations and to demand that schools close the achievement gap between African American and white students. But, a focus on 'expectations' and the 'achievement gap' is not sufficient.

The curriculum audit report I mentioned earlier elaborated what is arguably the most alarming aspect of how the district functioned. The auditors pointed out that Prairie Land School District had no coherent professional development system in the months before the superintendent made his public address. They recommended on-going training that was data-driven and based on the needs of the district's students. They also recommended that the superintendent be directed to develop a 3-year professional development plan, to be updated annually to ensure linkages to priorities that may emerge. The superintendent's programme of reform provided a variety of resources but without a 3-year plan for on-going teacher learning recommended by the auditors.

Teacher professional development ought to be viewed as a critical educational resource that serves as a mechanism for developing knowledge-bases, and in particular for the knowledge for knowing how to deploy resources in classroom instruction. Conceived this way, a system of professional development practices mediates resources and achievement outcomes. However, the role of professional development in this superintendent's reform agenda invites not only an examination of the relationship between resources and student achievement, but also an examination of the relationship between equity and resource-use. Without professional development as both a resource and a mechanism to mediate resources and student outcomes, it is likely these resources will be squandered and achievement gaps will persist.

Then, once again, policy researchers, school stakeholders and observers will claim that resources do not matter.

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Notes

- To protect the identities of members of the community, references to local newspapers and district documents are not cited.
- The programme is designed to prepare these students for eligibility into a four-year college or university; see http://www.avidonline.org, accessed February 19, 2007.
- The Advanced Placement Program (AP) provides an opportunity for US students to take college-level courses at their high schools. After taking AP courses, high school students may take AP tests to determine if they can opt out of these courses at the college level.
- 4. Prairie Land School District is a pseudonym.

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