Doing Research in a Professional Development School and Why I Feel Like Houdini in a Straight Jacket

Jane Neapolitan
Towson State University

When I was a little girl, my father told me the story of how he once saw the great Houdini escape from a straight jacket. In the early 1900s, Harry Houdini fascinated thousands of people by performing feats of life-threatening daring and agility. In the straight jacket escape, Harry was suited in a formidable looking garment made of canvas with extremely long sleeves that ended in ties. Harry's arms were crossed over his chest, with the long sleeves tied in the back. To make matters worse, a large iron chain was wrapped around poor Harry's body and his feet were padlocked together. Finally, Harry was hoisted upside down, while the fascinated crowd waited anxiously to see if he could break his bonds. After what seemed like an eternity of writhing and contorting as he dangled above the ground, Harry set his hands free, unshackled his feet, and landed safely on the ground! The crowd cheered wildly in enthusiastic but naïve astonishment.

My father's generation thought Harry's act was, at least in part, "magic." How could a man create an effective solution to such an overwhelming predicament? What knowledge and skills did he possess to carry out the solution? How could Harry remain calm under pressure while making the act look so easy under the scrutiny of a live audience?

Jane E. Neapolitan is an assistant professor in the Department of Elementary Education and director of the Institute for Professional Development School Studies at Towson State University, Baltimore, Maryland. E-mail jneapolitan@towson.edu

Surely, there must have been something supernatural about his performance!

As a little girl living in a simpler time, I thought Harry Houdini was pretty magical, too. Undoubtedly, he had secrets of his trade that average people would never know. But as I grew up, the world changed a great deal: mysteries were examined, accepted "truths" were exposed, and average people were given opportunities to learn more about phenomena in the world. Alas, Harry Houdini hadn't used magic at all! He had no supernatural powers! Instead, he had specialized knowledge and skills. He practiced tirelessly and perfected his craft. He was a professional in the traditional sense: he acted alone, kept his trade secrets to himself, and instilled respect in his audience. The audience believed in Harry's performance implicitly, perhaps guessing about his methods but never questioning his ability or its outcome.

As a teacher educator, I now look upon Harry Houdini's magic act as a metaphor for my own work. For the past four years I have served as a researcher, teacher educator, and mentor in a Professional Development School (PDS) and I have come to know the anticipation of the audience (applause!) the jeers of some bystanders (boo!) and the need to rethink what I'm doing (duh)! In this article, I reflect on what I believe are some of the key issues concerning research in the PDS magic show from the standpoint of the person in the straight jacket. I first describe the status of inquiry and research in PDS and how it relates to the expectations of the National PDS Standards set forth by the National Council for Accreditation of Teacher Education (NCATE). This is followed by a detailed description of the case of a PDS that conducted an inquiry project as part of its participation in the NCATE PDS Standards Field Test Project (1998-2001). The case study provides an illustration of the benefits as well as shortcomings of doing PDS research, and I include some lessons learned while I served as the research liaison for NCATE. Finally, I discuss the lessons learned from the case study as they relate to using inquiry and research in PDS to their fullest potential.

Standards for Inquiry: What Are the Expectations for Harry's Performance?

According to Teitel (2000), impact research on specific outcomes of PDSs has not been widely conducted. This is due, in part, to the fact that most PDS research has relied on data from surveys and other methods that only scratch the surface of the phenomenon. PDS work is complex and "asks participants to let go of important beliefs, significant alle-

giances, and deeply ingrained practices" (Trachtman, 1997, p. 190). University faculty continuously reinvent themselves as they go about working with other university- and school-based partners to affect whole-school reform (The Holmes Group, 1995). However, formal preparation for taking on this transformative role is virtually absent in the higher education community. Mentoring for PDS work is scarce and oftentimes does not coincide with the more traditional expectations for faculty performance in teaching, scholarship, and service. Even in institutions where PDS work is accepted toward promotion and tenure, faculty sacrifice reflection and analysis over the demands of having to take action (Teitel, 1995). Since university faculty (usually untenured or clinical positions) are also responsible for taking the lead on research and inquiry in a PDS relationship, it is not surprising that PDS research has not lived up to its potential. Inquiry models have been reported as the least developed dimension (Berry & Boles, 1998), in contrast with the more developed dimensions of PDS life such as teacher preparation and professional development.

Berry and Boles (1998, pp. 123-124)) describe three types of PDS inquiry. These are *inquiry as* teaching and learning (articulating beliefs about the teaching and learning process); *inquiry in* PDS (collaborative inquiry using action research, case studies, authentic assessment, curriculum redesign, and the like); and *inquiry on* PDS (effects of the PDS that inform both policy and practice in a significant and sustained way). Inquiry *on* PDS continues to be the least reported. Recently, some experts (e.g., Teitel, 2000; Knight & Wiseman, 2002) have offered research guidelines for measuring the effects or impacts of PDS and other types of partnerships in education. These are complex designs that require multiple sources of different types of data that go beyond traditional models of measuring program or school effectiveness.

The Standards for Professional Development Schools (NCATE, 2001) uphold that inquiry "is the process through which professional and student learning are integrated" (p. 4), a key concept imbedded in the standards. Inquiry helps sustain the other PDS functions of teacher preparation, professional development, and student learning. In a PDS that is at the "standard" level of implementation, "inquiry is used routinely at an individual classroom, departmental, and school-wide level (at school and university) to inform decisions about which approaches to teaching and learning work best" (p. 17). In a "leading" PDS, "sustained collaborative inquiry into improved learning for P-12 students is at the center of the partnership's vision and practices" (p. 17). Thus, inquiry in PDS serves as a medium for integrating the multiple dimensions of a partnership and provides a vehicle for answering the "so what" question

about student learning. Without convincing evidence that directly addresses how PDS activity supports student learning, sustaining PDS work in a substantive way becomes a magic act, indeed.

Like Harry Houdini, the researcher is bounded by certain expectations for his or her performance as an eager audience awaits. Unlike Houdini, however, the researcher is dependent on the *context* in which he or she performs. The performance is not generic. Rather, it is customized to the needs of the partnership and the guidelines for the performance must frequently be reexamined in light of appearing and disappearing variables (Berkeley, 2003).

An Inquiry Project Both *In* and *On* PDS: Demystifying Harry's Performance

In 1999, I began working with a school-university team in one of the PDSs that had been chosen to participate in the NCATE PDS Standards Field Test Project (Neapolitan & Scott, 2004). The NCATE project included 20 PDS sites in the United States and represented a variety of partnerships at different stages of development. Participation in the project included a self-study conducted by the PDS, an inquiry project that reflected the goals of the partnership, and a site visit to the PDS by a team of national experts. (It should be noted here that only three of the 20 sites conducted an inquiry project as part of their participation with NCATE.)

The PDS is a suburban elementary school on a commercial corridor in northwest Baltimore County, Maryland, and has been a partner with a comprehensive state university since 1994. It is a Title I school in which more than 50% of the children receive free and reduced meals and receive additional academic support from paid and volunteer tutors trained in math and reading strategies by the school's assistant principal. The school has an enrollment of approximately 700 racially and ethnically diverse pre-K-5students housed in a 70-year-old building that has been annexed several times in order to accommodate a growing student body. In 1998-2000, the school hosted a cohort of 16 undergraduate teacher candidates (white females, ages 20-27) who spent the entirety of their teacher preparation (junior and senior years) in the school. Through the university's PDS network, courses continue to be delivered on site and teacher candidates participate in extensive professional development with their mentors. During its partnership with the university, the PDS consistently improved its scores on the Maryland School Performance Assessment Program (MSPAP). (MSPAP was administered for the last time in May 2002, and was replaced by the Maryland State Assessment in 2003).

As part of its school improvement plan, the PDS concentrated all of its professional development for inservice and preservice teachers on designing and implementing performance-based assessment (PBA) in reading and writing. Because the school had devoted so much of its new energies on PBA, the school-university team (consisting of the assistant principal, several mentor teachers, the university department chair and the associate dean) agreed that the inquiry project for NCATE should focus on some aspect of performance assessment as well.

The inquiry project, titled "Tying Together Teacher Education and Student Learning" (Neapolitan & Harper, 2001), examined how some of the partnership's performance assessment activities impacted children, teacher candidates, and mentor teachers in the school. The inquiry examined: (1) the level of understanding about performance assessment held by teacher candidates; (2) the ways in which collaboration on performance assessment and instruction affect the knowledge, skills, and attitudes (KSAs) of both mentor teachers and teacher candidates; and (3) the effects on students that result from collaboration between mentor teachers and teacher candidates.

Participants consisted of three convenience samples selected in Spring, 2000. These included 15 undergraduate interns (white females, ages 20 to 27), five mentor teachers (two minority females and three white females with a range of 10 to 20 years teaching experience), five students from Grade 3 (three minority males, one minority female, and one white female), and four students from Grade 5 (one white male, two minority females and one white female). This was a microethnographic study in which multiple and varied sources of data for qualitative analyses were used. Data sources included, for example, teacher candidates' written reflections on their student teaching experiences, mentor teachers' written reflections on their collaboration with the candidates, and performance assessments designed and implemented by the teacher candidates and their mentor teachers. Other sources of data included transcripts of focus groups with teacher candidates, mentor teachers, and children in which they discussed their understandings of performance assessment.

A total of 276 documents for the project were digitally scanned and subjected to qualitative analysis using QSR NUD*IST 4 software. As principal investigator for the study, I had the major responsibility for analyzing the data. A graduate research assistant also helped with the data analysis. The transcripts of focus groups were returned to the participants to be reviewed for omissions and biases and were subjected to expert review by teachers and university faculty outside the partnership. Teachers in the PDS participated in a debriefing session with me to look for themes and provide interpretation for the transcripts of focus

groups with third and fifth graders. Analysis of the documents yielded 2,122 coded units used to create the categories for the findings. The inquiry project was limited because it was a case study that used intact groups and was conducted by a participant-observer. Also, it was limited by the small number of participants in the study. However, the implications drawn from the study can be applied to other cohorts of teacher candidates and to mentor teachers and children in similar PDSs.

What Did Teacher Candidates Learn about Performance Assessment?

"Tying Together Teacher Education and Student Learning" suggested there was an interdependency of learning within and among the three groups of mentor teachers, teacher candidates, and students at the school. Teacher candidates understood why they implemented certain technical aspects of performance assessment and related those "whys" to broader issues of instruction, classroom management, and developing a personal teaching style (Neapolitan, 2001). Findings suggested that teacher candidates developed their understandings of performance assessment through co-learning experiences with other candidates, mentor teachers, university professors, and children. In a focus group, "Tanya" reflected on this interdependency in the following:

> And most of us can figure out what we want the end product to be, but how to go from step one to there, that's where I have difficulties. So I know I can go to people in my team and within the building…It's been a learning experience for me, as well.

Another teacher candidate, "Helen," reflected on the quality of her instruction when she wrote:

> The main thing I am working on right now is trying to keep the students actively involved with a variety of learning activities. My students function better, learn more, and are ten times more enthusiastic when I create activities that are different but that help them attain the same concept….I [have] learned to assess my students throughout the lesson and to follow their lead. Rather than the lesson plan telling me what to do next, it is my students who are telling me what do.

Throughout the study, the teacher candidates reflected on their learning experiences in which, to use Helen's words, they were "weaned from their teachers" in order to perform independently. The underlying impetus for these understandings was the preparation of children to perform well on MSPAP. "Roseanne" addressed this impetus when she wrote in her journal:

> I know a lot of us have said it makes a difference being able to be in a classroom where you're seeing [performance based assessment] being done. But it's not just seeing it being done, you need to be able to sit down with somebody and go through their thinking process with them as well. It makes a lot of difference between doing that and actually knowing that this is going to be implemented with the kids…and that is making sure that they understand what's going through the PBA, giving them that practice and making sure they're giving each other feedback. And going back and forth with each other [saying] 'Well, is this really a PBA?' and 'What are the different things we can do?' and 'Let's make this as good as we can make it, to get these kids at the level they need to be at for MSPAP.'

What Did Mentor Teachers Learn about Performance Assessment?

Mentor teachers at the PDS had a slightly different take on performance assessment than did their less experienced teacher candidate partners. As a part of their professional development, they praised the process of learning how to use performance assessments side-by-side with the teacher candidates. "Carol" wrote in a reflection letter to me:

> You asked about my relationship with [Caitlyn] compared to that of other student teachers where there wasn't much emphasis on performance assessment. In many ways, I have had the same relationship with her as with others. I have put more emphasis on performance assessment because that is OUR goal at [the PDS]. I have had to learn more about performance assessment this year, too. Therefore, this has been a good experience because I have had someone to learn and work directly with on PBA. I think that this emphasis helps to keep us focused on improving instruction and making it more meaningful. The relationship is helped because more assistance tends to be needed using this strategy. Overall, [Caitlyn] and I have worked very well together. I feel that she is comfortable coming to me for help or with questions, and I am comfortable sharing and reflecting with her. This has been a very positive experience, and I know that she will be a dedicated teacher next year!

Although the mentor teachers enjoyed the benefits of collaborating with the teacher candidates, they were also more concerned about learner differences when using performance assessments. Like the master teachers they were, the mentors analyzed their experience with performance assessments more critically and with an eye toward helping *all* children learn. For example, in one of her reflection letters, "April" stated:

> I have found that lots of students participate in family experiences that make authentic learning/lessons easier to understand. On the other hand, some students need to be brought on board, updated, informed, and shared with more to gain a clear understanding of information.

Carol also reflected on some of the deeper issues affecting performance assessment in her school when she wrote back to me with the following:

> In your last letter, you asked about my opinion over the standards and how they hinder teachers from making decisions. I do think that some standards placed on us make it difficult for us to meet everyone's needs at the same time. As classroom teachers, we know what is best for our students. We know that there are certain things we are required to teach, and certain milestones that the children are expected to meet. Unfortunately, the people setting the standards do not account for the differences between social classes, exposure to early literacy, materials/resources available to schools, and teacher support from the school, parents, and the community. Some of the standards are more difficult for our students, but we set such high expectations that one day we, too, will meet the standards.

Finally, the mentor teachers took a practical stance concerning the amount and types of resources needed to effectively implement performance assessments. Obtaining and purchasing materials, e.g., to make pancakes or carve pumpkins, required resources that went beyond typical school supplies. In short, the mentor teachers felt responsible for the real world effects of the assessments on their students, especially children with diverse backgrounds and needs.

What Did Students Learn about Performance Assessment?

Students, like their adult counterparts in the school, learned that if they took risks and made mistakes, they would be given multiple opportunities to re-learn and re-do important information and skills and that their peers were a source of support for their learning. In focus groups with third and fifth graders, some students had the opportunity to describe what they understood about "reading and writing to inform" and "reading and writing to perform a task." Students reported that skills such as using a highlighter pen effectively, paying attention to bold print, and carefully following numbered steps were important for improving their performance on MSPAP. In the students' eyes, they were learning these skills in a context of support and caring. "Shawn," a third grader, summed up the situation very well when he stated:

> Say you are on a step and its says, 'Use scissors and cut the dotted lines' and it says, 'cut the dotted lines' and it's in bold print, and say you don't cut the dotted line you cut all the lines, even the solid lines. You'll say, 'This is wrong. I messed up." And the teacher will come over and say, 'Did you listen to the question?' And then, you have to go back and see [how] its says cut the dotted lines. It'll help you remember what to do. It is important.

Behind the Scenes and Reflecting on the Illusion

From all outward appearances, the NCATE inquiry project at the PDS was a successful one. It demonstrated with some confidence that the partnership's members had benefited from its collaboration on performance assessment. However, like Harry Houdini, I was constantly trying to break free of my metaphorical straight jacket. Going into the project as the research liaison I had made many assumptions about the school's capacity for conducting inquiry of a collaborative nature. The NCATE project would supersede the "inquiry as teaching and learning" model that had been used in the professional development workshops on performance assessment. I had a rude awakening when I realized that the 15 mentor teachers had not embraced the project, nor did they care to take on the extra work of participating in it.

I shared my concern with a researcher friend when I wrote to her the following:

> I wondered if any of the other sites were having difficulty getting their mentor teachers to participate in their inquiry projects? As of last week, I had only three out of 15 mentors give their consent. Apparently, most of them objected to writing a one-page weekly reflection on their teaching. Same old excuse of "not having enough time" was given. I went back to them and said, one paragraph, if that would make it better. I haven't checked yet to see if any more have agreed to participate.
>
> Because I'm new… I realize that I haven't had a chance to establish "trust and rapport" with the mentors yet. I also have a hunch that this new focus on THEIR teaching (and by a newcomer, no less) is making them uneasy. Your suggestions or comments on this would be appreciated. (March 6, 2000)

My researcher friend replied:

> It seems to me that you and your colleagues are experiencing some of the "challenges" associated with conducting inquiry. It takes awhile for practitioners to agree to collect information. And then it might take even longer for them to use the results of their data collections and analysis. My guess is that this activity becomes especially tricky when participants feel as though the decision to "collect information" about a new initiative is not part of the initial agreement to try something new. At your PDS, mentors may feel as though your request related to this inquiry represent additional work that was not part of their Summer Institute planning process (the June 1999 Institute described in your proposal.)
>
> It may be prudent to scale back your inquiry and focus on the ways in which participants are engaging in the assessment of teacher candidates with the new performance-based instruments. Since the mentors

> agreed to assess the candidates in this way, you would not be asking them to do additional work. Further, you would not be asking them to examine the ways in which they are using performance-based assessment with the children in their classes. In this way, you would be asking the teachers to participate in an inquiry process that for them is less risky, less time-consuming, and more connected to what they believe is their role. (March 9, 2000)

In hindsight, it was not surprising that only five out of 15 mentor teachers were willing to participate in the NCATE inquiry project described here. Although the inquiry was aligned with the school's professional development goals, teachers felt it went beyond their work agreement for the year. I arrived on the scene in January, asking for their participation, and did not realize the extent of their work commitments that would intensify as the MSPAP administration dates in May became closer. Offering stipends did not seem to be a motivating factor, either. Instead, I offered to give written feedback to the five participating mentors on a weekly basis if they would agree to write a series of one-page reflections on their work with performance assessments and collaboration with their teacher candidates. My offer seemed to be a motivating factor, albeit somewhat risky for all of us because the teachers and I barely knew each other. I believed, however, that entering into these new relationships would help support both the teachers and me as we sought to understand the art and science of working with teacher candidates and children in the PDS. My researcher friend helped clarify the situation for me when she responded in an email message with the following:

> After reading your note a second time this morning what struck me was the part where you indicated that you will be 'writing back' to the teachers weekly. I believe that the teachers will welcome your engagement; in fact, given the minimal feedback that most teachers receive, your input may be critical to them. I know that PDS participants sometimes provide this kind of feedback to each other, but that is not always the case in busy schools. Further, most folks continue to be reluctant to exchange ideas with each other in a regular and systematic way. (March 20, 2000)

The leadership in a school guiding PDS efforts also has much to do with how far along PDS efforts can move. The role of the principal is important on a continuing basis for sustaining the PDS effort. This also pertains to the impetus for ongoing and collaborative inquiry. In the case described here, inquiry frequently appeared and disappeared in various manifestations during the partnership's development. Collaborative inquiry (inquiry "in" PDS) requires the endorsement and active support by the school's principal. This commitment to collaborative inquiry can be thwarted when a principal's "administrative and teaching skills that

have distinguished the principal from other teachers and contributed to his advancement in the school's hierarchical system may prevent the principal from working comfortably and effectively in a collaborative inquiry group" (Dickens, 2000, p. 34). The following excerpt from a journal I kept explains how I became aware of this reality:

> The mentor teachers and I discuss the format for the portfolio review, how the portfolios will be evaluated…["Steve," the principal and "Amy," the AP] give input on the community service project. They would like the [teacher candidates] to help with the Math Facts program. I agree and ask if we could use the data from the project as our action research [required during student teaching]. [Steve] says OK. He has returned from staff development [where he has heard Michael Fullan, a famous researcher/school reformer speak]. He seems motivated. He says there are many more PDSs now and we need to work at staying as a leader in the movement.
>
> He asks, does anyone know what action research is? [A teacher who presented with me at a research conference] asks, isn't that what we did when we presented our papers…I say yes. Also, I point out that the School Improvement Plan is the outline for an action research project. We just need to focus on one strand of it, collect data, and analyze/share it with the wider community. [Amy] nods in agreement. This is a big breakthrough. Also, it is public. (December 4, 2001)

By asking this straightforward question about action research to his teachers, the principal began to demystify collaborative inquiry in a public way. Before this incident, he had been putting the onus of inquiry on the university side of the partnership. He believed that the university should take the lead and provide the resources for inquiry. Although the NCATE project was a one-shot deal, at least it had adequate resources. These included a reduced teaching load for me as research liaison, a research assistant who helped analyze and manage the data, new qualitative data software, transcription costs, and food and travel costs. The question remained, however, how could inquiry fulfill its potential in the PDS without the necessary resources to sustain it?

The Future of PDS Inquiry: Escaping the Straight Jacket?

As states such as Maryland move toward using PDS as the only model for teacher preparation (Maryland State Department of Education & Maryland Higher Education Commission, 1995) it is necessary to find ways to loosen the ties of Houdini's straight jacket and put inquiry front and center in the professional development school magic act. Undoubt-

edly, more resources need to be devoted to PDS research so that the impacts of PDS may be examined in a rigorous way, thus ultimately affecting policy and practice. In Maryland, for example, the disappearance of the Eisenhower Grants and the Goals 2000 Grants have hurt the establishment of new PDSs and the sustainability of older ones. In the study described here, external funds from NCATE helped provide necessary tools to make the inquiry project more rigorous than it would have been without such resources. Money for data analysis software, professional transcription, mailing, printing, and refreshments helped to make the escape from the straight jacket easier. Money to pay a graduate research assistant ensured that the data were carefully managed and, just as importantly, ensured that an outsider to the PDS would regularly provide some degree of objectivity to the study's interpretation. Including a junior researcher in the process also ensured that the knowledge and skills for conducting PDS research would be passed along to the next generation of researchers, thus keeping the spirit of simultaneous renewal of the profession through PDS work (Proffitt, Madden, Wittmann, & Field, 2004).

Establishing relationships among teachers, university researchers, and school administrators for conducting inquiry is the key to opening the lock on Houdini's shackles. Taking sufficient time to reflect on the experience of the inquiry (Neapolitan, 2002) helps create a safe and trusting environment for doing work that goes beyond the typical expectations for each performer in the magic act (Bryant, King, Neapolitan, Madden, & Rifkin, 2004). Using action research as professional development can build capacity in a PDS for collaborative inquiry both *in* and *on* PDS. All members of the partnership benefit from a mutual understanding and improved ability to conduct inquiry when they learn about action research through extended inservice courses, summer institutes, and research conferences held by PDS networks. Finally, when schools and school districts legitimize the importance of inquiry for sustaining school-university partnerships, Houdini's escape act will be made complete. Action plans, memoranda of understanding, and school improvement plans that contain a specific inquiry component can place research out in the open for all to share.

In the case of the PDS described in this article, a standard agreement form implemented in 2003 by the school district has set expectations for conducting research that documents the impacts of PDS on students' success. At present, 17 teachers in the PDS are taking a 3-credit graduate course on "Teacher As Researcher" taught by the university supervisor who is the higher education liaison to the school. As a result of the course, it is expected that teachers will implement their action research, share

and discuss their findings with other members of the PDS community, and help bring greater clarity to policies and practices in the partnership. Thus, through dedicated financial and personnel resources, the development of trusting relationships, the use of formal PDS agreements, and targeted professional development, it may be possible to make over Houdini's straight jacket into a lifejacket for renewal, and his escape act into a true collaboration.

References

Berkeley, T. (2003, March). The constancy of changing: Maintaining form when all around us is different. Paper presented at the Ethnography in Education Research Forum, Philadelphia, PA.

Berry, B. & Boles, K. (1998). Inquiry and professional development schools. In N. Lauter, (Ed.), *Professional development schools: Confronting realities*. New York: The National Center for Restructuring Education, Schools, and Teaching.

Bryant, G., King, N. R., Neapolitan, J. E., Madden, M. & Rifkin, L. (2004). Transforming faculty roles by waving the magic wand. In J. E. Neapolitan, T. D. Proffitt, C. L. Wittmann, & T. R. Berkeley (Eds.). *Traditions, standards, and transformations: A model for professional development school networks*. New York: Peter Lang.

Dickens, C. (2000). Too valuable to be rejected, too different to be embraced: A critical review of school/university collaboration. In M. Johnston, P. Brosnan, D. Cramer, & T. Dove, (Eds.), *Collaborative reform and other improbable dreams*. Albany, NY: State University of New York Press.

Knight, S. & Wiseman, D. (2002, April). *Measuring the impact of school-university partnerships on K-12 student outcomes*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Maryland State Department of Education & Maryland Higher Education Commission. (1995). *The redesign of teacher education in Maryland*. Annapolis, MD: Authors.

National Council for Accreditation of Teacher Education. (2001). *Standards for professional development schools*. Washington, DC: Author.

Neapolitan, J. E. (2001, April). *"Oh, so this is why I'm doing it": What teacher candidates understand about performance assessment in a standards-based PDS experience*. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.

Neapolitan, J. E. (2002, January). *Doing PDS work: A tale of heroes, allies, and dragons at the door*. Maryland Professional Development School Network Research Conference. Annapolis, MD.

Neapolitan, J. E. & Harper, S. (2001, January). *Tying together teacher education and student learning: Results of the NCATE PDS Standards Field Test Project*. Paper presented at the Maryland Professional Development School Network Research Conference, Annapolis, MD.

Neapolitan, J. E. & Scott, C. (2004). The NCATE Professional Development

School Standards Field Test Project. In J. E. Neapolitan, T. D. Proffitt, C. L. Wittmann & T. R. Berkeley (Eds.). *Traditions, standards, and transformations: A model for professional development school networks*. New York: Peter Lang.

Proffitt, T. D., Madden, M., Wittmann, C. L. & Field, T. T. (2004). History and development of the Towson Professional Development School Network. In J. E. Neapolitan, T. D. Proffitt, C. L. Wittmann & T. R. Berkeley (Eds.). *Traditions, standards, and transformations: A model for professional development school networks*. New York: Peter Lang.

Teitel, L. (1995). *NCATE PDS Standards Project literature review*. Washington, DC: National Council for Accreditation of Teacher Education.

Teitel, L. (2000). *Assessing the impacts of professional development schools*. Washington, DC: American Association of Colleges of Teacher Education.

The Holmes Group. (1995). *Tomorrow's schools of education: A report of the Holmes Group*. East Lansing, MI: Author.

Trachtman, R. (1997). The stories of insiders. In M. Levine & R. Trachtman (Eds.), *Making professional development schools work: Politics, practice, and policy* (pp. 185-193). New York: Teachers College Press.