

Polly, D. (2017). Providing School-Based Learning in Elementary School Mathematics: The Case of a Professional Development School Partnership. *Teacher Development: An International Journal of Teachers' Professional Development*, 21(5), 668-686. doi: 10.1080/13664530.2017.1308427

Polly, D. & Hannafin, M. J. (2010). Reexamining technology's role in learner-centered professional development. *Educational*

Technology Research and Development, 58(5), 557-571. doi:10.1007/s11423-009-9146-5.

Polly, D., Martin, C. S., McGee, J. R., Wang, C., Lambert, R. G., & Pugalee, D. K. (2017). Designing curriculum-based mathematics professional development for Kindergarten teachers. *Early Childhood Education Journal*, 45(5), 659-669. doi: 10.1007/s10643-016-0810-1

Scherff, L. (2018). Distinguishing professional learning from professional development. Institute of Educational Sciences: Regional Education Laboratory Program. Retrieved from: https://ies.ed.gov/ncee/edlabs/regions/pacific/blogs/blog2_DistinguishingProfLearning.asp#:~:text=Professional%20development%2C%20which%20%E2%80%9Chappens%20to,and%20customized%20to%20teachers'%20needs.

Essential 5: What Can Collaborative Research Look Like in PDS and School-University Partnerships?

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Why is Essential 5 Important?

How do we know that our work in Professional Development Schools (PDSs) and school-university partnerships makes a difference? If you were in a situation where you had to make a succinct argument with data and evidence about why your PDS and partnerships should be supported and funded could you? Essential 5 aims to support participants in partnership work by encouraging PDS participants to participate in collaborative research and the public sharing of results.

Essential 5 of the Second Edition of the NAPDS Nine Essentials (NAPDS, 2021, p. 4) states that:

A PDS is a community that engages in collaborative research and participates in the public sharing of results in a variety of outlets.

Table 1 provides a comparison between the First Edition and Second Editions of Essential 5.

The Second Edition of Essential 5 differs from the original Essential 5 in that it focuses on collaborative research as well as a variety of outlets for the public sharing of results. In the next section we elaborate on key concepts and terms in the Second Edition of Essential 5.

Key Concepts and Terms in Essential 5

Key Concepts

The Second Edition of Essential 5 emphasizes a few key concepts and themes. First it values collaborative research and inquiry as a critical part of PDSs. This collaborative research and inquiry should involve participants from both colleges and universities as well as those who work primarily in P-12 contexts. In doing this, the goal is to demystify traditional ideas about who can and should be designing, implementing, and sharing the outcomes of research studies. The historical trend of university-based individuals conducting research without engagement of those in school contexts must change for PDS research to advance the knowledge base about what we know about PDS and school-university partnerships.

Other key concepts that are emphasized in the Second Edition of Essential 5 focus on the emphasis on the public sharing of results, ideas, and outcomes. Sharing these aspects of our partnerships is important work in a variety of outlets. Some of the outlets mentioned in the elaborated description of Essential 5 include but are not limited to journals, books, presentations, blogs, newsletters, digital media, and other communications.

Key Terms

As a writing group of the Second Edition of the Nine Essentials we felt that there would be a benefit to provide a definition of *research* and *collaboration*.

Research. Research was defined as the “systematic investigation, inquiry, or application of topics/subjects to discover or revise facts, theories, or practices (NAPDS, 2021, p. 17).” While the word systematic seems very formal,

basically it speaks to the idea that research is an intentional, planned out set of processes that is not random or spontaneously done. The document later elaborates on these ideas by providing 4 goals of PDS research: 1) improve practice and outcomes for all learners, 2) contribute to improvement within the PDS and to the field of education, 3) simultaneously renew schools/school districts and universities/colleges of education, and 4) inform educational policies (NAPDS, 2021, p. 15).

The first goal tends to be the primary motivation of administrators in both colleges/universities and P-12 school contexts who are charged with leading individuals and efforts that have a return on investment or improvement of teaching and learning processes and data for individuals including, but not limited to P-12 students, teacher candidates, and in-service teachers. It is hard to imagine support for PDS and school-university partnerships if individuals who are in positions of authority did not see evidence of the benefit of these collaborative endeavors. The same could be said for goal 4; educational policies should be based on research and PDS and partnership-related studies should inform the development and refinement of policies.

Goals 2 and 3 are similar but have a nuanced difference that is worth noting. While improving the PDS or partnership (Goal 2) and simultaneous renewal (Goal 3) both speak to the idea of collecting data from a specific partnership and using that data to improve aspects of the partnership. Goal 2, though, is more broad than the specific partnership as it suggests that PDS and partnership-related research should impact the broader field of education. Educational researchers that are not directly involved in PDS work should be able to access PDS-related research and consider how it contributes to the

Table 1: Comparison of the First and Second Editions of Essential 5

Original Essential 5	Second Edition of Essential 5
Engagement in and public sharing of the results of deliberate investigations of practice by respective participants.	A PDS is a community that engages in collaborative research and participates in the public sharing of results in a variety of outlets.

broader knowledge base related to teaching and learning. If PDS research is not accessible to others outside of those who conduct PDS research we are just talking to ourselves in an echo chamber.

Collaboration. The notion of collaborative research mentioned in Essential 5 includes opportunities for “P-12 and college/university PDS stakeholders to work together to achieve common goals (NAPDS, 2021, p. 17).” Research is part of the mutually beneficial partnership that has been an element of PDS and school-university partnerships since the Holmes Group advocated for these collaborative efforts (Holmes Group, 1995). Additionally, Goodlad’s (1994) advocacy and recommendation for simultaneous renewal is only possible when there is a joint partnership to examine and investigate the state of schools, and work together to take actionable steps to improve them.

Specifically, Simultaneous renewal is the continuous process of getting better together. Goodlad (1994) argued that true educational renewal happens when P-12 schools and universities/colleges of education mutually change, grow, and improve because they examine and refine their purposes, roles, responsibilities, and structures in an ongoing manner as a result of their collaboration (NAPDS, 2021, p. 14).

It is not feasible to engage in deep simultaneous renewal and processes of continuous improvement if participants in PDS or school-university partnerships are not collaborating and involved in the research and examination of teaching and learning related to the partnership. While in some cases individuals primarily housed in universities may have a specific job responsibility to conduct research, they should look to involve P-12 school-based partners in that work when it involves and relates to partnership work. Research should be an extension of partnership between individuals housed in colleges/universities and P-12 settings that is mutually beneficial to both groups of PDS participants. In the next section, we elaborate on the concepts with examples of collaborative research and the public dissemination of results.

Examples of Essential 5 in the Context of PDS’ and School-University Partnerships

Collaborative Research

In an effort to improve mathematics teaching and learning at a PDS school in the Charlotte region, the PDS liaison and the administrative team of an elementary school met to discuss ways to support teachers and chart out a plan for the next year of collaborative activities. The Principal had recent data from the state mathematics test from the year before. The plan for this collaboration focused on the university-based PDS liaison to spend time working with teachers in Professional Learning Community (PLC) meetings and spend time supporting teachers in classrooms. They

“A PDS is a community that engages in collaborative research and participates in the public sharing of results in a variety of outlets.”

brainstormed on what to collect data about and decided to look at data from student work samples, unit assessments, and classroom walkthroughs. All of these data sources were a natural part of teaching and learning processes and did not ask teachers to do any extra surveys or assessments. Making the decision to not ask more of teachers led to an increase in teacher buy-in and helped to establish a stronger relationship between the university-based PDS liaison and the teachers.

As units of the mathematics curriculum were completed, teachers had a naturally-occurring process of bringing data and student work to PLC meetings and considering what actionable next steps should be taken to provide additional learning experiences for students based on the data. These PLC meetings included teachers, the Principal, and the university-based PDS liaison. Through a cyclical process of continuous improvement teachers, the Principal, and the liaison examined data and then planned how to use small group learning experiences to best support teachers. The cycle occurred after each unit during the year and the liaison, the Principal, and teachers were equally invested and involved in the research process.

In line with the Second Edition of NAPDS Essential 5, the public dissemination of the findings included presentations at the local PDS network event, state and national conferences, articles in practitioner-oriented and research-focused journals, book chapters, as well as more informal sharing with district leaders, as well as other Principals and teachers in the school district. These efforts were led by the liaison and the Principal with a group of teacher-leaders also being greatly involved in this work. More about this project can be found in some of our publications such as the story about how the partnership was started (Polly et al., 2020), the outcomes from our partnership work (Polly, 2017), a shared perspective from a teacher-leader and the university liaison (Polly & Little, 2015), and a project that was embedded in our partnership work (Polly et al., 2012).

Public Dissemination of Results

In the early years of our school-university partnership at the University of North Carolina at Charlotte we hosted an annual partnership event that included breakout sessions where university faculty and school-based administrators and teachers shared their partnership activities for the

year and discussed their data and evidence related to the status of the partnership. As is the case with any partnership network we had partnerships that had varied levels of sophistication and depth of their research. In some cases, university-based researchers had conducted sophisticated analyses related to P-12 student data or data from teachers, while in other partnerships their data included a brief survey after an event or experience related to the partnership.

The public dissemination of results, which started with the local partnership-specific event, blossomed from there. Some participants in these partnerships went on to share their work at the NAPDS annual conference, some P-12 school-based leaders shared their work at content-specific state conferences (e.g. literacy, mathematics, talent development or Academically or Intellectually Gifted), some university-based individuals shared their work at national and international teacher education and educational research conferences. Additionally, information about their partnerships were included in updates to district Superintendents, school boards, school newsletters, college/university administrators, university Board of Governors, and state licensure officials.

Recommendations and Future Directions

Collaborative Research

The Second Edition of Essential 5 of the revised NAPDS Nine Essentials (NAPDS, 2021) provides recommendations for PDS and school-university partnerships to consider how to engage in collaborative research that involves both individuals based in college/university and P-12 settings. This part of the Essential calls for the side-by-side work of partnership participants to work closely to design and implement a plan to examine and research the influence of partnership activities on teaching and learning.

The construct of iterative research, design-based implementation research (The Design-based Research Collective, 2003; McKay, 2017; Penuel et al., 2011), and other approaches that begin with a plan and adjust that plan based on preliminary data or findings have a great deal of potential to inform the research of PDS and school-university partnerships (Polly, 2017). Research approaches, in addition to being collaborative, should consider what initial research question or questions could benefit all participants in the partnership at the

onset. Then, as data is collected and analyzed, future studies and investigations can take shape in a manner that is responsive to the needs of all involved.

Public Dissemination of Results

Essential 5 challenges and encourages participants involved in partnership work to collaborate on research projects related to the impact of their work. Further, the Essential encourages the sharing of results in multiple and varied publication outlets, in an attempt to demystify the misconception that research can only be shared at conferences and in articles. As an organization NAPDS aims to support this effort with multiple outlets including the journals *PDS Partners: Bridging Research to Practice*, a practitioner-oriented research-practice journal, *School-University Partnerships*, a research focused journal. Additionally, the organization supports *Stories from the Field*, which are shorter blog posts about PDS and partnership endeavors, as well as *Partnership Voices*, which are videos of individuals involved in partnership work. Lastly, NAPDS has a publishing partner Information Age Publishing, who supports individuals and groups of people who want to write or edit books on partnership work.

In addition to those publication outlets, this article provided examples of partnerships sharing their outcomes and partnership work with administrators from both school districts and colleges/universities, parents through newsletters, websites, or social media, and through informal conversations with others in education. We

strongly encourage your partnership to consider ways to effectively communicate the work and impact of your partnership to your school community. After all, our impact as a partnership is only strengthened when we share our stories and the impact that we are having on our students!

Biographies of the authors of the NAPDS Second Edition of the Nine Essentials have been shared in previous articles. ♦

References

Goodlad, J. I. (1994). Educational renewal: Better teachers, better schools. Jossey-Bass.

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

McKay, S. (2017). Quality improvement approaches: Design-based implementation research. Carnegie Foundation for the Advancement of Teaching. Retrieved from: <https://www.carnegiefoundation.org/blog/quality-improvement-approaches-design-based-implementation-research/>

National Association for Professional Development Schools. (2021). What It Means to be a Professional Development School: The Nine Essentials (2nd ed.) [Policy statement]. Author.

Penuel, W. R., Fishman, B., Cheng, B. H., & Sabelli, N. (2011). Organizing research and development at the intersection of learning, implementation, and design.

Educational Researcher, 40, 331–337. doi:10.3102/0013189X11421826

Polly, D. (2017). Providing School-Based Learning in Elementary School Mathematics: The Case of a Professional Development School Partnership. *Teacher Development: An International Journal of Teachers' Professional Development*, 21(5), 668-686. doi: 10.1080/13664530.2017.1308427

Polly, D. & Little, M. (2012). Leveraging professional learning communities and collaborative team meetings to address student achievement in mathematics. Invited article in *PDS Partners*, 8(1), 10-11.

Polly, D., Little, M., & Rodgers, E. (2015). Leveraging interactive clickers as a tool for formative assessment in elementary school mathematics. In D. Polly (Ed.), *Cases on Technology Integration in Mathematics Education* (pp. 331-350). Hershey: PA: IGI Global. DOI: 10.4018/978-1-4666-6497-5.ch016.

Polly, D., Rock, T. C., Binns, I. & Zainz, R. (2020). Tracking the path of a multi-faceted Professional Development School partnership. In E. Garin & R. W. Burns & (Eds.), *The NAPDS Nine Essentials in Action: Cases of Professional Development Schools*, pp. 79-86. Information Age Publishing: Charlotte, NC.

The Design-Based Research Collective (2003). Design-based research: An emerging paradigm for educational inquiry. *Educational Researcher*, 32(1), 5-8.

Essential 6: Articulated Agreements – Foundation and Guidance for PDS Work

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Introduction

Clearly written agreements between parties serve as crucial components in ensuring the creation, effectiveness, success, and sustainability of any partnership. Professional Development Schools (PDSs) are no exception. Highlighted in Essential 6 of both the original and updated versions of the National Association for Professional Development Schools (NAPDS) guiding statement document, *What it Means to Be a Professional Development School (NAPDS 2008; 2021)*, is the need for an articulated agreement to serve as a foundation of understanding among all parties involved.

As NAPDS approached the process of revising the original Nine Essentials (NAPDS, 2008), the input and perspectives of many individuals and groups were shared, reviewed, and considered. Many of those ideas and considerations are addressed in the revised edition, including in Essential 6: Articulated Agreements. Although the original Essential 6 (see Table 1) captured the essence of the need for partners to agree on various aspects of the interaction and collaboration between the college/university and P-12, it was agreed that this essential needed updating in several ways. From revision work, several key terms and concepts arose as needing to be clearly addressed in light of articulated agreements. These terms and concepts are included in the updated essential.

The full text of revised Essential 6: Articulated Agreements reads as follows.

PDS partners collaboratively create, review, and renew written articulated agreements. The document(s):

1. Identify the commitment of each entity,

2. Articulate the expectation that each partner will have an equal voice in decision-making, including in determining the content of the agreement(s), describe the roles and responsibilities of various individuals, and
3. Outline processes for developing, maintaining, and identifying desired shared outcomes to promote sustainability and renewal.

Renewed agreement(s) should reflect the evolution of the partnership (NAPDS, 2021).

Intentionally written in a way that communicates the spirit of aspiration, the revised Nine Essentials are not so prescriptive that they limit partnerships to certain formats or requirements. Instead, they are written to encourage PDS work that is sound and built on evidence-based practices that challenge those of us working in the PDS setting to focus on the needs of our particular learning communities as we plan, learn, and grow together.