

Rural Research Brief

High-Quality Teaching: Providing for Rural Teachers' Professional Development

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Policymakers and educators see professional development as a way to improve the quality of instruction in classrooms across the nation, but the empirical literature linking professional development to improved student achievement is extremely thin. Logically, though, it would seem that the right kinds of professional development would improve instruction, and that better instruction would result in higher student achievement. Very limited empirical evidence suggests that such linkages may exist.

Quite a number of studies report that teachers believe professional development improves their teaching (Sandercock, 1996; Nadolny, 1999). A few studies—particularly case studies—report changes in teachers' practice that seem to result from their participation in professional development (Bodone & Addie, 1999; Borko, Elliott & Uchiyama, 2002). In addition, some experimental evidence suggests that certain instructional practices that teachers can learn to deploy are, in the main, somewhat more successful than other practices (Baker & Beisel, 2001; Burrowes, 2003).

Other research is less sanguine, however, suggesting that traditional teaching often persists even after participation in programs that seek to foster improved instructional practice (Garet, Birman, Porter, Desimone & Herman, 1999). Furthermore, an accumulating body of research about teachers who "add value" (i.e., help students achieve at higher-than-expected levels, given their previous attainment) suggests that high-performance teaching has less to do with particular instructional practices than it does with content knowledge (Goldhaber & Brewer, 1997) or with some as-yet-undiscovered set of characteristics (Sanders & Horn, 1998).

Three Proposed Principles of Organizational Learning

Which features of professional development actually might serve to increase schools' instructional capacity? Because so little education research exists, we turn to recent organizational research and theory, which reveal three principles that are thought to contribute to expanded organizational capacity.

1. Learning must be situated (Lave & Wenger, 1991; Wenger, 1998).
2. Learning requires open and sustained dialog among members of the organization (Senge, 1994).
3. Learning depends upon the propensity to reflect on data about organizational performance (Choo, 1998).

Several approaches to professional development draw on these principles.

Professional learning communities

Some authors have advocated sustained programs of school-level professional development under the aegis of "the professional learning community" (Boyd & Hord, 1994; Hord, 1997; Hord, 1998; Wald & Castleberry, 2000). With this approach, all educators in a school assume responsibility for students' success by themselves becoming learners. Educators engage in learning collaboratively and share widely what they learn. Typically, the focus of professional learning communities is on teaching practice, so these efforts feature reflective inquiry in a variety of ways.

Data-based improvement

Grounded in management approaches such as Total Quality Management, some improvement strategies involve educators in the establishment of standards and benchmarks followed by an ongoing process of assessment and classroom-level reform. The Malcolm Baldrige program is

perhaps the best-known approach of this type, but there are other, less prescriptive alternatives (Walpole & Noeth, 2002). With all such approaches, the processes used to set standards and periodically assess performance constitute professional development (Feldman & Tung, 2001).

Reflective inquiry

Somewhat more narrowly defined than programs of data-based improvement or those cultivating professional learning communities are strategies that involve teachers in systematic examination of their instructional practice. Early efforts of this type—with names such as “peer coaching” and “collegial supervision”—organized small groups of teachers to observe one another’s instructional performance and provide feedback (Showers & Joyce, 1996).

Other strategies engage the learning environment less directly. For example, in schools making use of reforms sponsored by the Coalition of Essential Schools, teachers volunteer to join “critical friends groups,” where they often use students’ work to prompt discussions of teaching; sometimes these groups also collaborate to solve instructional problems (Bambino, 2002). A model known as “working on the work” helps teachers analyze assignments given to students as a way to think about the meaningfulness of classroom work and the intellectual challenge it affords (Schlechty, 2002).

A recent addition to this family of strategies is Japanese “lesson study.” This approach, which has interested mathematics teachers in the United States, uses a systematic process in which changes to the delivery of a particular classroom lesson emerge from collaborative inquiry into its effectiveness (Stigler & Hiebert, 1999; Curio, 2002).

What About Knowledge of Subject Matter?

School boards and administrators typically assume that teachers arrive on the job with adequate knowledge of the content they aim to teach. But this may not be the case (Ball, 1988). One study, for example, found that secondary science teachers in rural schools had completed fewer subject-matter courses in science than their counterparts elsewhere (Carlsen & Monk, 1992). Another study found far more out-of-field teaching in schools that served poor and minority children (Jerald, 2002). Nevertheless, teachers’ knowledge of subject matter is associated with students’ learning (Ferguson & Womack, 1993; Monk, 1994). As a result, some reform efforts, particularly those in science and mathematics, have attempted to augment substantive knowledge via professional development. Often, however, the attempt fails because of limited time and resources (Jarvis, Pell & McKeon, 2003). Formal instruction is the logical alternative.

Graduate course work

In many states, teachers are required to renew their licenses through the completion of graduate course work (Council of Chief State School Officers, 2000). Most enroll in professional education courses. Many fewer teachers take graduate courses in the disciplines they teach. This situation is unlikely to improve the subject-matter knowledge of the teaching workforce very much (Regan-Smith, 1994; Howley & Spatig, 1998).

Preservice course work

Course work for undergraduates (often called “preservice education”) is one place where teachers’ knowledge of subject matter might be conveniently strengthened. But efforts to improve teacher preparation have tended to focus much more on professional education courses. Only a few universities have attempted to improve teacher preparation as a university-wide effort, involving departments other than education (Zeidler, 1999; Carnegie Corporation, 2001).

The Rural Circumstance and Professional Development for Teachers

Our interpretation of the differences posed by the rural circumstance is based principally on the broad insights from rural scholarship in fields other than education. This turn is necessary because no solid empirical work on effective rural professional development exists. The differences discussed here should not be seen as deficiencies, even though they can pose challenges.

Structure

Rural schools and districts tend to be smaller than urban or suburban districts. In many places, the small size of schools and districts promotes cooperation among teachers, enabling them to improve instruction in ways that develop naturally within the context of their daily practice (Howley, A. & Howley, C.B., 2004; Howley, C.B. & Howley, A.A., 2004).

In smaller schools and districts, teachers are drawn primarily from the local population; such teachers often have strong attachments to their communities. Such strong local attachments can sustain teachers’ and principals’ dedication to fostering an education that will contribute to the quality of local life (Schmuck, R.A. & Schmuck, P.A., 1992; Howley, A. & Howley, C.B., 2004). Arguably, the content and purposes of professional development would build on this dedication to locality, but current efforts seldom do this (Howley, C.B., 1997; Kannapel & DeYoung, 1999).

Recent recommendations, notably those focusing on professional learning communities, recommend that

educators support one another in addressing the problems of practice encountered in their own classrooms. Examples of the problems that rural educators might focus on are (a) difficulties that students encounter in code-switching between informal dialect and the formal language of schooling, (b) the lack of appreciation among some parents and community members for certain academic subjects of study, and (c) limited exposure by some rural students to a diverse group of peers.

A finance issue also bears on the challenge of providing professional development because rural districts tend to be property-poor in comparison to urban and suburban districts, and therefore local tax resources to fund high-quality professional development programs are unusually meager (Dayton, 1998). The development of *rural-responsive* professional development requires additional funding, but it remains a largely unaddressed challenge (Theobald, 1997; Smith, 2002; Gruenewald, 2003; Sobel, 2004).

Dynamics

Rural places differ from one another and as a result organizational dynamics can vary dramatically from place to place (Cook & Mizer, 1995). Nevertheless, the close-knit network of relationships in most rural districts fosters a characteristic set of organizational dynamics. The list for consideration is very long, but two prominent dynamics are examined next, merely to illustrate the sorts of issues they implicate. The two dynamics examined here involve professional isolation and a culturally instilled reluctance to criticize professional behaviors.

First, educators tend to experience professional isolation in rural schools because teaching specialties do not enjoy critical mass in any but the largest of these schools (Erlanson, 1994). A lone high school math teacher may constitute the entire mathematics faculty in some rural places, for instance. In such a case, a strategy for fostering professional learning communities, for example, might be to network faculty from several districts. Alternatively, leaders might seek to establish cross-disciplinary learning communities within a school, an approach of recognized difficulty in higher education (Lattuca, 2001). Some experimental programs in higher education, however, suggest that a more promising approach for K-12 educators might involve the establishment of virtual learning communities that foster collegial dialog among subject-matter specialists across the distances that physically separate them (Sherer, Shea & Kristensen, 2003).

Second, substantive professional development in rural districts will inevitably sponsor difficult discussions about teaching, and these could become sources of tension and even animosity. This poses a problem, given the dynamics of social interaction that often prevail in rural places. Rural places, in general, operate in less formal modes than other places. Impersonality and social distance, key features of

professional demeanor, are neither prized nor cultivated in the civic life of many rural communities (Flora, C., Flora, J., Spears, Swanson, Lapping & Weinberg, 1992). Despite their professional training, moreover, rural teachers understandably retain the social practices cultivated by their upbringing and reinforced by their everyday experience. These practices (e.g., non-confrontation and risk avoidance) tend to foster acceptance rather than critique of the behavior of others, and they lead many rural educators to prefer tradition over untested change.

Instead of denying the conventional practices that sustain life in rural communities, or overlooking them, rural-responsive professional development ought to engage them. After all, these conventions do enable rural people to interact with one another in meaningful ways throughout their entire lifetimes (Kemmis, 1990).

Cultural meanings

Because of the salience of context to learning (“situated learning”), the cultural meanings that pervade everyday life in rural places have relevance for the development of rural teachers. Such meanings, however, are not widely understood or appreciated outside the pale of rural scholarship, quite likely because such meanings are represented neither in preservice schooling nor in professional development (Theobald & Howley, C., 1998). These meanings include (a) attachment to place; (b) strong commitment to community well-being; (c) connection to outdoor pursuits and the natural environment; and (d) concern for the long-term endurance and stability of life-in-place (Howley, C.B., 1997; Theobald, 1997). The latter concern, which Raymond Williams characterizes as an unfulfilled concern for a *settled rural existence* is, in fact, culturally discordant with national values (William, 1973).

Some have argued that the strongest need for professional development anywhere is for high-quality programs. The clear difficulty in this instance is that such high-quality programs—ones that are very good *and* that actively engage rural meanings—rarely exist, even though 49 percent of American districts are located in rural places. Professional development on behalf of place, community, a land ethic, and sustainability would depend on a different view of what the education of educators entails. Rather than focusing primarily on the improvement of their technical competence, such initiatives might work on the arguably more worthy project of helping them grow as individuals and citizens. Engagement with professional development conceived in this way might entail conversations among teachers about the ethics of professional practice, the linkages between schooling and broader community purposes, or the creation of mechanisms for grounding curriculum and instruction in the civic and economic life of a rural place.

Conclusions

As the discussion above suggests, rural districts do face challenges with regard to the cultivation of a teaching force that possesses subject-matter expertise, willingness to undertake difficult professional work at the local level, and attentiveness to rural practices and meanings. Clearly, such districts need support.

At the same time, they harbor significant strengths—structural as well as dynamic and cultural. Professional development in many of these places is positioned to exploit the smallness of the school organizations, the personal character of the relationships among staff, and the active engagement of educators with the life of the community. Many rural districts, moreover, offer conditions that enable educators to draw on “situated” meanings and to engage in ongoing professional dialog.

References

- Baker, J.D., & Beisel, R.W. (2001). An experiment in three approaches to teaching average to elementary school children. *School Science and Mathematics*, 101(1), 23-31.
- Ball, D.L. (1988). *The subject matter preparation of prospective mathematics teachers: Challenging the myths*. East Lansing, MI; National Center for Research on Teacher Education. (ERIC Document Reproduction Service No. ED301468)
- Bambino, D. (2002). Critical friends. *Educational Leadership*, 59(6), 25-27.
- Bodone, F.M., & Addie, K.L. (1999, April). *Teaching in a standards-based system: How teachers' voices can influence policy, preparation, and professional development*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Quebec.
- Borko, R., Elliott, R., & Uchiyama, K. (2002). Professional development: A key to Kentucky's educational reform effort. *Teaching and Teacher Education*, 18(8), 969-987.
- Boyd, V., & Hord, S. (1994). *Principals and the new paradigm: Schools as learning communities*. Paper presented at the annual conference of the American Educational Research Association, New Orleans, LA.
- Burrowes, P.A. (2003). A student-centered approach to teaching general biology that really works: Lord's constructivist model put to a test. *American Biology Teacher*, 65(7), 491-502.
- Carlsen, W.S., & Monk, D.H. (1992). *Rural/nonrural differences among secondary science teachers: Evidence from the longitudinal study of American youth*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA. (ERIC Document Reproduction Service No. ED350133)
- Carnegie Corporation (2001). *Teachers for a new era: A national initiative to improve the quality of teaching*. New York. (ERIC Document Reproduction Service No. ED479720)
- Choo, C.W. (1998). *The knowing organization: How organizations use information to construct meaning, create knowledge, and make decisions*. New York: Oxford University Press.
- Cook, P.J., & Mizer, K.L. (1995). ERS typology revised and updated. *Rural Development Perspectives*, 9(3), 38-42.
- Council of Chief State School Officers (CCSSO) (2000). *Key state education policies on K-12 education: 2000*. Washington, DC. <http://www.ccsso.org/Publications/download.cfm?filename=keystate2000.pdf>.
- Curcio, F.R. (2002). *A user's guide to Japanese lesson study: Ideas for improving mathematics teaching*. Reston, VA: National Council of Teachers of Mathematics.
- Dayton, J. (1998). An examination of judicial treatment of rural schools in public school funding equity litigation. *Journal of Education Finance*, 24(2), 179-205.
- Erlandson, D.A. (1994). *Building a career: Fulfilling the lifetime professional needs of principals*. Fairfax, VA: National Policy Board for Educational Administration. (ERIC Reproduction Service No. ED385920)
- Feldman, J., & Tung, R. (2001). *Whole school reform: How schools use the data-based inquiry and decision-making process*. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.
- Ferguson, P., & Womack, S.T. (1993). The impact of subject matter and education course work on teaching performance. *Journal of Teacher Education*, 44(1), 55-63.
- Flora, C., Flora, J., Spears, J., Swanson, L., Lapping, M., & Weinberg, M. (1992). *Rural communities: Legacy and change*. Boulder, CO: Westview Press.
- Garet, M.S., Birman, B.F., Porter, A.C., Desimone, L., & Herman, R. (1999). *Designing effective professional development: Lessons from the Eisenhower Program*. Washington, DC.: U.S. Department of Education. (ERIC Document Reproduction Service No. ED442634)
- Goldhaber, D., & Brewer, D. (1997). Evaluating the effect of teacher degree level on educational performance. In W. Fowler (Ed.), *Developments in School Finance* (pp. 197-210). Collingdale, PA: Diane Publishing.
- Gruenewald, D.A. (2003). The best of both worlds: A critical pedagogy of place. *Educational Researcher*, 32(4), 3-12.
- Hord, S. (1997). *Professional learning communities: Communities of continuous inquiry and improvement*. Austin, TX: Southwest Educational Development Laboratory. (ERIC Document Reproduction Service No. ED410659)
- Hord, S.M. (1998). Creating a professional learning community: Cottonwood Creek School. *Issues about Change*, 6(2), 1-8.

- Howley, A., & Howley, C.B. (2004). *Small by default and the pressures to consolidate*. Paper presented at the annual conference of the International Society of Educational Planning, Washington, DC.
- Howley, A., & Spatig, L. (1998). When theory bumps into reality: The form and function of the popular culture of teaching. In T. Daspit & J. Weaver (Eds.), *Popular culture and critical pedagogy: Reading, constructing, connecting*. New York: Garland.
- Howley, C.B. (1997). How to make rural education research rural: An essay at practical advice. *Journal of Research in Rural Education*, 13(2), 131-138.
- Howley, C.B., & Howley, A.A. (2004). School size and the influence of socioeconomic status on student achievement: Confronting the threat of size bias in national data sets. *Education Policy Analysis Archives*, 12(52), <http://epaa.asu.edu/epaa/v12n52/>.
- Jarvis, T, Pell, A., & McKeon, R. (2003). Changes in primary teachers' science knowledge and understanding during a two-year in-service programme. *Research in Science and Technological Education*, 21(1), 17-42.
- Jerald, C.D. (2002). *All talk, no action: Putting an end to out-of-field teaching*. Washington, DC: Education Trust.
- Kannapel, P., & DeYoung, A. (1999). The rural school problem in 1999: A review and critique of the literature. *Journal of Research in Rural Education*, 15(2), 67-79.
- Kemmis, D. (1990). *Community and the politics of place*. Norman, OK: University of Oklahoma Press.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York: Cambridge University Press.
- Lattuca, L.R. (2001). *Creating interdisciplinarity, Interdisciplinary research and teaching among colleges ad university faculty*. Nashville, TN: Vanderbilt University Press.
- Monk, D.H. (1994). Subject preparation of secondary mathematics and science teachers and student achievement. *Economics of Education Review*, 13(2), 125-145.
- Nadolny, B. (1999). *Restructuring professional development as a collaborative practice: A case study of educational change in a rural school division*. Manitoba, Canada: Teacher Network.
- Regan-Smith, M.G. (1994). Graduate school as a professional development experience. *Journal of Staff Development*, 15(3), 54-57.
- Sandercock, L. (1996). *Supporting the increased effectiveness of teachers in a professional development program*. South Australia, Australia: Early Childhood Organization.
- Sanders, W.L., & Horn, S.P. (1998). Research findings from the Tennessee Value-Added Assessment System (TVAAS) database: Implications for educational evaluation and research. *Journal of Personnel Evaluation in Education*, 12(3), 247-256.
- Schlechty, P. (2002). *Working on the work: An action plan for teachers, principals, and superintendents*. San Francisco, CA: Jossey-Bass.
- Schmuck, R.A., & Schmuck, P.A. (1992). *Small districts, big problems: Making school everybody's house*. Newbury Park, CA: Corwin Press.
- Senge, P.M. (1994). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.
- Sherer, P.D., Shea, T.P., & Kristensen, E. (2003). Online communities of practice: A catalyst for faculty development. *Innovative Higher Education*, 27(3), 183-194.
- Showers, J., & Joyce, B. (1996). The evolution of peer coaching. *Educational Leadership*, 53(6), 12-16.
- Smith, G.A. (2002). Placed-based education: Learning to be where we are. *Phi Delta Kappan*, 83, 584-600.
- Sobel, D. (2004). *Placed-based education connection classrooms and communities*. Great Barrington, MA: The Orion Society.
- Stigler, J., & Hiebert, J. (1999). *The teaching gap: Best ideas from the world's teachers for improving education in the classroom*. New York: The Free Press.
- Theobald, P. (1997). *Teaching the commons: Place, pride, and the renewal of community*. Boulder, CO: Westview.
- Theobald, P., & Howley, C. (1998). Public purpose and the preparation of teachers for rural schools. *Teacher Educator*, 33(3), 150-164.
- Wald, P.J., & Castleberry, M.S. (Eds.), (2000). *Educators as learners: Creating a professional learning community in your school*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Walpole, M., & Noeth, R.J. (2002). *The promise of Baldrige for K-12 education* (ACT Policy Report). Iowa City, IA: American College Testing Program. (ERIC Document Reproduction Service No. ED481719)
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identify*. New York: Cambridge University Press.
- Williams, R. (1973). *The country and the city*. New York: Oxford University Press.
- Zeidler, D.L. (1999). *Dancing with maggots and saints: Past and future visions for subject matter knowledge, pedagogical knowledge, and pedagogical content knowledge in science teacher education reform*. Paper presented at the annual meeting of the Southeastern Association for Teachers in Science, Florida. (ERIC Document Reproduction Service No. ED434834)