# RESOURCES

The dollars and sense of comprehensive professional learning

# By Allan Odden

ery little of the professional development literature identifies its costs. Many say good professional development is expensive, but what is meant by expensive, and if so, expensive relative to what? This article shows that effective professional development is

not expensive relative to overall spending and that its key elements and their costs can be identified and afforded. Further, I have never had a legislative committee addressing school finance adequacy balk at resourcing a comprehensive professional development system (e.g. Odden, Picus, Goetz, et al., 2005). The systemic distribution of the most effective instructional practices is a core strategy in nearly all case studies of schools and districts that have dramatically moved the student achievement needle (Odden, 2009).

A more uniform distribution of effective teaching is the

underpinning for what schools can do to close the achievement gaps that plague American school systems. Collaborative teacher work on curriculum and instruction issues is the prime way to have such effective instruction more systemically deployed (Raudenbusch, 2009). Thus, collaborative teacher work using student data to collectively hone instructional practices is the cornerstone for improving instructional effectiveness. Moreover, comprehensive, ongoing, intensive professional development most effectively works through these collaborative teacher teams' work, and together they become the mechanisms through which highquality professional development penetrates classrooms in systematic rather than random or individualistic ways.

### **EFFECTIVE PROFESSIONAL DEVELOPMENT**

The emerging consensus on what characterizes effective professional development draws on empirical research



Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning.

studies that link program strategies to changes in teachers' instructional practice and subsequent increases in student achievement. These studies include, among others, research on professional development generally, studies of comprehensive professional development to improve reading, mathematics and science teaching, and a major, federal government-supported evaluation of a large-scale, national mathematics and science professional development program (Cohen & Hill, 2001; Darling-Hammond & Richardson, 2009; Elmore & Burney, 1999; Garet, Birman, Porter, Desimone & Herman, 1999; Joyce & Calhoun, 1996; Joyce & Showers, 2002; Loucks-Horsley, Love, Stiles, Mundry & Hewsen, 2003; Supovitz & Turner, 2000).

In summarizing the key features of effective professional development, my research group and others (e.g. Elmore, 2002; Garet et al., 1999; Joyce & Showers, 2002; Odden, Archibald, Fermanich, & Gallagher, 2002a, 2002b) have identified six structural features of such programs. These findings have been incorporated into several publications of Learning Forward (e.g., Hirsh & Killion, 2007, 2009) and are reflected in Learning Forward's Standards for Professional Learning.

Form, duration, and active learning together imply that effective professional development includes some initial learning in training sessions as well as considerable longerterm work in which teachers incorporate the new methodologies into their actual classroom practice. Active learning implies some degree of coaching during regular school hours to help collaborative groups use student data to hone instructional strategies, to help teachers incorporate new instructional strategies into their classroom instructional practices, and to help teachers debrief on the effectiveness of the unit after it is taught.

**Content focus** means that effective professional development focuses largely on subject matter knowledge, what is known about how students learn that subject, and content for the actual curriculum used in the school.

**Collective participation** implies that the best professional development includes groups of and, at some point, all teachers in a school or district, who then work in collaborative teams to implement the new instructional strategies, and in the process, build a professional school community.

**Coherence** suggests that the professional development is more effective when the signals from the policy environment (federal, state, district, and school) reinforce rather than contradict one another or send multiple, confusing messages. Coherence also implies that professional development is part of implementing new curriculum and instructional approaches.

Note that there is little support in this research for having individually oriented professional development plans be a primary element of a professional development system. Research implies a much more systemic approach that involves all teachers in the school focused on many of the same issues.

# A PROFESSIONAL DEVELOPMENT COST STRUCTURE

In previous research, my colleagues and I developed a cost structure for effective professional development

A COST STRUCTURE FOR PROFESSIONAL DEVELOPMENT		
Cost element	Ingredient	How cost is calculated
Teacher time used for professional development	<ul> <li>Time within the regular contract:</li> <li>When students are not present, before or after school, or on scheduled in-service days, half days or early release days.</li> <li>Planning and collaboration time.</li> <li>Time outside the regular day/year:</li> <li>Time after school, on weekends, or for summer institutes.</li> <li>Released time provided by substitutes.</li> </ul>	<ul> <li>Teachers' hourly salary times the number of student free hours used for professional development.</li> <li>Not included as a cost; coded as costs for elective teachers.</li> <li>Stipends or additional pay based on the hourly/daily rate that teachers receive to compensate them for their time.</li> <li>Substitute wages.</li> </ul>
Training and coaching	<ul> <li>Training:</li> <li>Salaries for district trainers.</li> <li>Outside consultants who provide training.</li> <li>Coaching:</li> <li>Salaries for district coaches, including on-site facilitators.</li> <li>Outside consultants who provide coaching.</li> </ul>	<ul> <li>Sum of trainer salaries, consultant fees, comprehensive school design contract fees, conference fees, and tuition reimbursement for university training.*</li> <li>Sum of instructional coach/facilitator salaries and benefits OR consult fees.</li> <li>Consultant fees or comprehensive/turnaround school design contract fees.</li> </ul>
Administration of professional development	Salaries for district or school level administrators of professional development programs.	Salary for administrators times the proportion of their time spent administering professional development programs.
Materials, equipment and facilities used for professional development	<ul> <li>Materials.</li> <li>Equipment.</li> <li>Facilities.</li> </ul>	<ul> <li>Materials for professional development.</li> <li>Equipment needed for professional development activities.</li> <li>Rental or other costs for facilities used for professional development.</li> </ul>
Travel and transportation for professional development	<ul><li>Travel.</li><li>Transportation.</li></ul>	<ul> <li>Costs of travel to off-site professional development activities.</li> <li>Costs of transportation within the district for professional development.</li> </ul>

\* Tuition and conference fees were a sixth cost element in the original structure. Because these are types of training, I placed them in the training category.

(Odden, Archibald, Fermanich, & Gallagher, 2002a, 2002b). The cost structure that we developed devolves directly from the six structural features mentioned above; an updated/revised version is displayed in the table above.

Form, duration, collective participation, and active learning require time of three types of individuals: teachers, coaches and mentors, and trainers, with various combinations of time for each of these three during the regular school day and year as well as outside of the regular day and year.

Principal time is also required, as it is the principal who structures the organization of teaching and learning, and the school's schedule, in ways that facilitate ongoing professional development. But the model does not include principal time as a professional development cost, as each school needs a principal and the principal performs multiple roles to make the school effective, one of which is supporting structures for effective professional development.

Time is the largest cost. The cost structure includes time

for teachers both for training and for ongoing collaborative and some individual — work on the curriculum and instructional program. Training time would be pupil-free time, which could be during intensive summer institutes or on various days through the school year. We resource these days above and beyond the regular 180 days of instruction for students, rather than using substitutes to take these days out of the 180-day student instructional year. In estimating these costs, Section 3 includes the cost for 10 pupil-free days for all teachers.

While the cost structure includes the time during the school day that is available for both individual planning and collaborative teacher work, our framework does not include these as professional development costs. Rather, we argue that those are costs of having elective classes and programs in schools. Core teachers are grade-level teachers in elementary schools, and English/reading/language arts, mathematics, science, history, and world language teachers in secondary schools; all other teachers are considered elective teachers. More specifically, in our school finance adequacy work (Odden & Picus, 2008), we staff elementary and middle schools with core teachers and then, assuming a six-period day, provide an extra 20% of core teachers for elective classes, with each teacher — core and elective — providing instruction for five periods. If schools need to create a seven-period day to provide for collaborative time, we recommend that class sizes be increased to provide the extra teachers needed for that additional period as well as to keep costs comparable to a six-period day. We staff high schools assuming a four 90-minute block schedule with teachers instructing for three blocks a day, thus needing elective teachers at a rate of 33% of core teachers. A pupil-free 90-minute block each day provides ample time during the day and week for individual planning time and time for teacher collaborative groups, for both core and elective teachers.

We code all these staff beyond core teachers as costs for elective teachers but NOT as professional development costs. This approach to staffing schools allows for all schools to provide a rich liberal arts curriculum and provides planning, collaborative time and professional development for all teachers. However, as Hord and Hirsh (2009) note, principals must design school schedules so teachers in collaborative groups have common pupil-free time so they can meet during the school day.

The second prime cost time element is instructional coaches, who are increasingly being identified as a critical element of professional development. Coaches help collaborative teams analyze student data, prepare standards-based curriculum units, and analyze unit impact after all teachers have taught the unit and used a common end-of-unit test. Coaches also can work with individual teachers providing individually focused assistance, as well as teaching model lessons.

Coaches can be mentors, and sometimes are called that. But I argue (Odden 2011) that organizing teachers into collaborative groups constitutes the most effective way to mentor new teachers. Such groups provide access to instructional materials and strategies that are part of curriculum units, expose the new teacher to the analytic expertise of experienced teachers assessing student data for refining curriculum units and analyzing impact of the units after they are taught. And instructional coaches can provide tailored help to new teachers as well. This obviates the need for a more costly new teacher mentoring program; the mentoring is built into the overall professional development structure.

The third prime time cost element, trainers, can be central office staff from categorical programs, from district professional development offices, outside consultants who are individuals or part of comprehensive school designs, presenters at conferences, or university professors. The costs related to the latter two are conference fees and tuition units. Since many teachers are required to earn graduate degrees and many teachers argue that university training too often does not really help them be more effective, states and districts should be more strategic about why graduate degrees and classes are required and provide tuition reimbursement or allow units to count on salary schedules only when programs and courses have proven to enhance teachers' instructional expertise.

Further, all professional development strategies require some amount of administration, materials and supplies, and miscellaneous financial support for travel. But these costs generally are quite low.

#### THE COSTS OF EFFECTIVE PROFESSIONAL DEVELOPMENT

Based on the above summary analysis, Odden and Picus (2008) concluded that the marginal resources (over and above that required to staff schools generally) needed to deploy effective, intensive professional development are:

1. Time during the summer for intensive training institutes. This training can most easily be accomplished by ensuring that approximately 10 days of the teacher's normal work year are dedicated to professional development, thus pupil-free. These days are in addition to the approximate 180 days for student instruction and in addition to about 10 days for opening and closing school and for parent conferences, which produces a teacher work year of about 200 days.

We also recommend that districts keep primary control over the use of these days so they are used for systemic training on the district's and school's approach to curriculum and instruction.

At an average teacher salary (\$50,000) and benefits (40% of salary) of \$70,000, and 200 typical workdays, this costs \$350 a day or \$3,500 for the 10 days. Since most teachers already have some professional development days, we have found that states generally need to add only about five days to the typical teacher work year to total 10 pupil-free days, so the incremental cost is often half of \$3,500.

2. On-site coaching for all teachers to help them incorporate new instructional practices into their instructional repertoire. The basic recommendation is for one instructional coach for every 200 students. This formula produces 2.5 FTE coach positions for a 500-student school, but does not mean there are 2.5 people doing coaching. The coaching configuration could vary across schools and, for example, could include a full-time reading coach, and half-time mathematics, science, and technology coaches, all totaling 2.5 FTE positions. Instructional coaches are generally paid on the teacher salary schedule. So if teachers average 25 students in their class, each teacher triggers one-eighth of an instructional coach, or \$8,750 per teacher (\$70,000 divided by 8).

3. Collaborative work with teachers in their schools during planning and collaborative time periods, thus reinforcing the strategic and instrumental need for these times, which can be provided if schools staffing includes elective teachers. This requires smart scheduling of core and elective teachers during the regular school day and week. However, as discussed above, we code elective teachers as elective and not professional development costs. **4. Funds for training** during the summer and for ongoing training during the school year, the cost of which is about \$100 per pupil, which is meant to cover any central office professional development staff, any outside consultants or school turnaround organizations, and spending for tuition reimbursement (Odden & Picus, 2008). This figure would also include miscellaneous administrative, materials and supplies, and travel.

Some analysts add the "lanes and columns" of teacher salary schedules to professional development costs (increases based additional education or degrees), as those salary dollars are provided on the basis of training provided by colleges and universities. I have never included those costs and argue that it is inappropriate to do so. Those variables are simply a way to allocate teacher salaries. If a different salary schedule were used that did not include lanes for units and degrees, which I have recommended for years (Odden & Wallace, 2007), those dollars would be kept in the salary budget and not reverted to the professional development budget.

In sum, assuming an average teacher salary and benefits of \$70,000, the specific costs of professional development, over and above staffing for schools generally, are:

- 1. \$3,500 per teacher for training time.
- **2.** \$8,750 per teacher for instructional coaches/mentors/instructional facilitators.
- **3.** \$100 per pupil for trainers and other administrative and miscellaneous costs. If each teacher averages 25 students, this cost item then is \$2,500 per teacher.

These *costs total* \$14,750 *per teacher*, or an extra 21% over a core teacher's salary and benefits. However, many districts already have substantial funds invested in professional development (e.g. Miles, Odden, Fermanich & Archibald, 2004), so the above figure should not be considered the extra cost of operating a systemic professional development.

Finally, if we converted the above per-teacher figures (excluding the elective teachers) to a per-pupil figure (assuming 25 students in a classroom), the costs of professional development would be \$590 per pupil (\$14,750 divided by 25). This figure for the *cost of professional development equals about 5.4% of an operating spending per pupil* figure of \$11,000, which is close to the national average. This is a reasonable figure and represents a robust and comprehensive approach to funding all the requirements for an intensive, ongoing, and systemic professional development program that would address all school training needs over time.

In conclusion, the costs of a comprehensive, effective, and ongoing professional development program for all teachers is not expensive. It is just about \$590 per pupil or 5.4% of a district's operating expenditure per pupil. And that figure includes 10 pupil-free days for training, instructional coaches at the rate of one for every 200 students (eight teachers), and sufficient funds for trainers and miscellaneous costs. These figures would change in any state or district depending on the average teacher salary, the benefit rate, and the current operating expenditure per pupil.

#### **GETTING FROM HERE TO THERE**

In order to deploy resources for an effective, ongoing professional development program linked to helping teachers be more effective, schools and districts will need to:

- Eliminate all current professional development, program improvement, and other training programs that are not focused on the strategic instructional and curriculum programs of the school or district and redeploy those dollars to the resources suggested above;
- Capture the bulk of current pupil-free days that have been given to teachers for their own use and use them and any additional that are provided for training for the more curriculum-based professional development core to the district's and school's goals; and
- Organize schools into multiple, appropriate collaborative teams so all teachers will have the time and team activities that are critical to helping all teachers incorporate new instructional practices into their normal classroom practice, thus making the overall professional development program work, leading to improved instructional practice that boosts student learning and helps close the achievement gaps.

#### REFERENCES

**Cohen, D.K. & Hill, H.C. (2001).** *Learning policy: When state education reform works.* New Haven, CT: Yale University Press.

**Darling-Hammond, L. & Richardson, N. (2009).** Teaching learning: What matters? *Educational Leadership*, *66*(5), 46-55.

**Elmore, R.F. (2002).** Bridging the gap between standards and achievement: The imperative for professional development in education. Washington, DC: Albert Shanker Institute.

**Elmore, R.F. & Burney, D. (1999).** Investing in teacher learning: Staff development and instructional improvement. In Linda Darling-Hammond & Gary Sykes (Eds.), *Teaching as the learning profession: Handbook of policy and practice.* San Francisco: Jossey-Bass.

Garet, M.S., Birman, B., Porter, A., Desimone, L., & Herman, R. (1999). Designing effective professional development: Lessons from the Eisenhower program. Washington, DC: United States Department of Education.

**Hirsh, S. & Killion, J. (2007).** *The learning educator: A new era for professional learning.* Oxford, OH: NSDC.

Hirsh, S. & Killion, J. (2009). When educators learn, students learn: Eight principles of professional learning. *Phi Delta Kappan*, *90*(7), 464-469.

Hord, S. & Hirsh, S. (2009). The principal's role in supporting learning communities. *Educational Leadership*, 66(5), 22-23.

Joyce, B. & Calhoun, E. (1996). Learning experiences in school renewal: An exploration of five successful programs. Eugene, OR: ERIC Clearinghouse on Educational Management.

Joyce, B. & Showers, B. (2002). Student achievement through staff development (3rd ed.). Alexandria, VA: ASCD.

Loucks-Horsley, S., Love, N., Stiles, K., Mundry, S., & Hewson, P. (2003). Designing professional development for teachers of science and mathematics (2nd ed.). Thousand Oaks, CA: Corwin Press.

Miles, K., Odden, A., Fermanich, M., & Archibald, S. (2004). Inside the black box of school district spending on professional development: Lessons from five urban districts. *Journal of Education Finance*, *30*(1), 1-26.

**Odden, A. (2009).** *10 strategies for doubling student performance.* Thousand Oaks, CA: Corwin Press.

**Odden, A. (2011).** *Strategic management of human capital in education.* New York: Routledge Press.

Odden, A., Archibald, S., Fermanich, M., & Gallagher, H.A. (2002a). How to figure the cost of professional development. *JSD*, 23(2), 53-58.

Odden, A., Archibald, S., Fermanich, M., & Gallagher, H.A. (2002b). A cost framework for professional

development. Journal of Education Finance, 28(1), 51-74.

**Odden, A. & Picus, L.O. (2008).** *School finance: A policy perspective* (4th ed.). New York: McGraw-Hill.

Odden, A., Picus, L.O., Goetz, M., Fermanich, M., Seder, R.C., Glenn, W., & Nelli, R. (2005). An evidencebased approach to recalibrating Wyoming's block grant school funding formula. Report prepared for the Wyoming Select Committee on Recalibration, Cheyenne, WY.

Odden, A. & Wallace, M. (2007). How to create world class teacher compensation. St. Paul, MN: Freeload Press.

**Raudenbusch, S. (2009).** The Brown legacy and the O'Connor challenge: Transforming schools in the images of children's potential. *Educational Researcher*, *38*(3),169-180.

**Supovitz, J. & Turner, H.M. (2000).** The effects of professional development on science teaching practices and classroom culture. *Journal of Research in Science Teaching, 37*(9), 963-980.

Allan Odden (arodden@wisc.edu) is professor of educational leadership and policy analysis in the School of Education at University of Wisconsin-Madison.

#### Leadership

# Continued from p. 25

contexts? Is leadership sufficiently distributed so that all stakeholders have the expectation, perceptions, and belief that it is only through collaboration that effective and successful change can be enacted? These are the essential questions that leaders of professional learning must address.

Learning leaders live the value of reflective practice. Where there is no reflection, there will be no learning. Supporting the continuous development of individual and collective expertise emerges from engaging with new ideas and from reflecting on daily practice. Reflective educators expand their repertoire, deepen their expertise, and remain energized in their work. Professional learning creates energy and enthusiasm for improving practices that build efficacy and result in improved outcomes, not only for students, but for the professionals as well.

#### REFERENCES

**Bandura, A. (1982, February).** Self-efficacy and mechanism in human agency. *American Psychologist, 37*(2), 122-147.

**Bandura, A. (1997).** *Self-efficacy: The exercise of control.* New York: Freeman.

Leithwood, K. & Riehl, C. (2005). What we know about successful school leadership. In W. Firestone & C. Riehl (Eds.), *A new agenda: Directions for research on educational leadership* (pp. 22-47). New York: Teachers College Press.

Louis, K.S. (2006, September). Changing the culture of

schools: Professional community, organizational learning, and trust. *Journal of School Leadership*, *16*(5), 477-489.

Louis, K.S., Leithwood, K., Wahlstrom, K., Anderson, S., Michlin, M., Mascall, B., et al. (2010). *Learning from leadership: Investigating the links to improved student learning. Final report of research.* St. Paul, MN: Center for Applied Research and Educational Improvement, University of Minnesota & Toronto: Ontario Institute for Studies in Education at The University of Toronto.

**Spillane, J.P. (2006).** *Distributed leadership.* San Francisco: Jossey-Bass.

Wahlstrom, K., Louis, K.S., Leithwood, K., & Anderson, S. (2010). Learning from leadership: Investigating the links to improved student learning. Executive summary of research findings. St. Paul, MN: Center for Applied Research and Educational Improvement, University of Minnesota & Toronto: Ontario Institute for Studies in Education at The University of Toronto.

York-Barr, J. & Duke, K. (2004, Fall). What do we know about teacher leadership? Findings from two decades of scholarship. *Review of Educational Research*, 74(3), 255-316.

Kyla L. Wahlstrom (wahls001@umn.edu ) is director of University of Minnesota's Center for Applied Research and Education Improvement. Jennifer York-Barr (yorkx001@umn.edu) is professor in the College of Education and Human Development at the University of Minnesota.