# Building a 21st Century U.S. Education System

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CHAPTER 5

# Teaching Teams in Professional Development Schools: A 21st Century Paradigm for Organizing America's Schools and Preparing the Teachers in Them

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The current organization of schooling—groups of 30 students with one teacher attempting to move them forward in lock-step pattern—is one of the remnants of the 19th century factory model of teaching and learning. The model was geared to efficiency of production. In an information economy, the use of teamwork in the production of new knowledge and technology has replaced the factory model. However, schools still operate mainly on the factory production model. Valiant attempts are being made to reorganize schools. The Gates Foundation initiated the small schools movement, and is at work 'reinventing' high schools. Professional associations, think tanks, and the federal government are issuing reports on these and similar efforts. None of the efforts, thus far, has directly addressed reallocating individual classroom instructional resources.

Schools of the 21st century must break away from their 19th century factory, or 'egg carton' organization. A new paradigm based on how professionals work in the 21st century is needed. The egg carton organization, with its identical cells, expects that every teacher will replicate the appropriate curriculum and instruction for 25 to 30 students each year, every year from the beginning to the end of a teaching career. The model, resilient as it is, has outlived its usefulness. Among its dysfunctional consequences are high teacher turnover, especially in hard-to-staff schools, a maldistribution of teaching talent, and the achievement gap.

It is time for a different approach. Many children in hard-to-staff schools are taught by enthusiastic but under prepared Teach for America graduates, career-changers who know their content but not how to teach, and novice teachers who have not been adequately prepared for the challenges they face. Meanwhile, in other classrooms, dedicated, well prepared new and accomplished teachers work successfully but, given the egg carton organization of the schools, are not easily able to share their expertise with novices. A growing number of university personnel are ready to bring their expertise to the schools, but find that the old fashioned organization of the schools makes it difficult.

The education and policy communities must think boldly. Schools cannot continue to operate using the now dysfunctional 19th century factory model. Schools must be redesigned around principles adapted from the organization of professional work in the 21st century. Professionals do not work alone; they work in teams. Professionals begin their preparation in the university but do not arrive in the workplace ready to practice. They continue their preparation on the job.

## Teaching Teams

In medical, legal, and architectural settings, the services are provided by experienced and novice professionals working together to accomplish the goal—to heal the patient, win the lawsuit, plan the building. The team delivers the services. The experienced professionals are accountable to the client for those services and are responsible for the performance of the novices. The novices do much, often most, of the work but do so under supervision. Experienced personnel create structure and are prepared to step in when necessary. The novices learn by doing, with feedback and correction by mentors. Different roles and responsibilities reflect different levels of knowledge, experience, preparation, and expertise. Compensation rises to reflect increasing levels of responsibility.

How would these principles apply to teaching? Imagine, for example, six elementary classrooms. With average compensation and benefits packages of $60,000, it would cost $360,000 to staff six classrooms serving 150 students. Is there a more productive way to spend $360,000? What would happen if a teaching team delivered services to 150 children? How might such a team be constituted? The key requirement is that the structure must afford accountability to students, while enabling persons new to teaching to serve while they learn. Many possibilities exist once the school is liberated from its antiquated design. The architecture of the egg carton needs to change as well.

One example involves a team of 17 members with a total cost of $360,000. An accomplished professional, such as a National Board Certified Teacher, would lead the team with the assistance of another senior teacher. Other members of the team would include two novice teachers who intend to commit themselves to teaching as a career; two under prepared teachers who want to serve but may not be committed to teaching as a career; and six half-time student teachers who are completing teacher preparation. In addition, the team would also include four interns who work half-time and for half-pay as they conclude their initial preparation to teach. Finally, a university faculty member works half-time with this team as a teacher with special responsibilities for overseeing the student teachers and interns. In this example, salaries would range from $90,000 for the team leader to $30,000 for novice teachers, with part-time compensation for interns and a university faculty member, in addition to the unpaid student teachers (see Figure 1).

### Figure 1

Senior team members would be responsible for instruction, but the planning and delivery of instruction would involve all team members. Instruction would be delivered by all team members using the full array of instructional methods such as large group, small group, tutorial, and computer-assisted learning. While senior personnel mentor and supervise less experienced personnel, they remain accountable for the performance of the students as well as the personnel in training. Less experienced personnel will assume progressively greater responsibilities as they gain knowledge and experience. (see Figure 1)

This approach would take the guess-work and anxiety out of instructional practice for the inexperienced personnel. Having to reinvent the wheel—including lesson planning, classroom management, student evaluation—as a first-year teacher, especially an unprepared or under prepared teacher, has overwhelmed beginners for years, and drives many from the classroom. The novice team members would experience less stress, gain more direction, and have time to reflect on their instruction under supervision. Planning, professional development, and conference time could be built into the day because not all 17 team members need to be engaged directly with students 100 percent of the time.

With teaching teams, work could be structured in such a way that a team member who is particularly strong in math and science could lead that area, while another team member could lead English/language arts/social studies. In fact, teams could be organized by grade (six first grades), multiple grades (first to third grades), subjects, or even multiple subjects (math and science).

Teaching teams could solve the major problem American education faces as it enters the 21st century—a dual education system—one system for the 'haves' and, another, vastly different, for the 'have nots.' These systems have two different teacher and student populations. New policies that require the disaggregation of student test scores on the state, national, and international levels have brought this fact into sharp focus. State tests, NAEP, and TIMMS regularly reveal disparities in the scores of students in well-staffed schools and students in hard-to-staff schools. It is a national scandal.

One major cause of this problem is the 19th century model of school organization and its assumption that all schools will hire a qualified teacher for every 25 or 30 students. Unfortunately, with today's teacher salaries and the challenges of teaching in hard-to-staff schools, that assumption is unfounded. Well-off suburban and urban schools hire the qualified teachers. Hard-to-staff schools are stuck with the unprepared and under prepared who struggle and then quit. Students in hard-to-staff schools are taught by a succession of would-be teachers, thus ensuring the creation and maintenance of the achievement gap.

The traditional proposal has been to increase teacher quality and supply by offering increased compensation and better working conditions. This now familiar refrain about the need to raise teachers' salaries and standards has been repeatedly sounded by reports, commissions, and polls over the past 15 or 20 years. Unfortunately, policymakers have shown no inclination to raise teacher salaries or to improve working conditions in hard-to-staff schools, so any meaningful progress is at a stand-still.

The new model creates incentives for accomplished teachers to elect to serve in hard-to-staff schools. It also makes productive use of their expertise in creating a system that supports novices as they learn how to increase student achievement. Teaching teams not only solve professional development and human resource problems, they also address other serious problems:

- The 'holy grail' for many educators has long been 'individualized instruction.' Teaching teams allow instruction to be organized so that some of it can be more effectively tailored to individual student differences.
- The shortage of mathematics and science expertise in elementary schools can be addressed by the expertise of some team members. Teaching teams overcome the unrealistic expectation that all elementary teachers will have mathematics and science expertise.
- In the egg carton model, the cost of technology is additive. Teaching teams allow for the more productive use of technology, as it is incorporated into the many instructional strategies made possible by team staffing.

## Professional Development Schools

How do more highly qualified teachers become a reality for all students—including underserved populations whose teachers are disproportionately unprepared or under prepared?

Teaching teams could operate especially effectively in professional development schools (PDSs), alliances of colleges of education and public schools, which strengthen initial teacher preparation and continuing professional development. PDSs, like teaching hospitals in medicine, serve as a bridge from the university to the world of practice. What are professional development schools and how can they help ameliorate the achievement gap? Professional development schools (PDSs) are innovative institutions formed through partnerships between professional education programs and P–12 schools. PDS partnerships have a four-fold mission:

- the preparation of new teachers:
- faculty development:
- inquiry directed at the improvement of practice; and
- enhanced student achievement.

Professional development schools are devoted to improving student learning. The preparation of teacher candidates, professional development for practicing teachers, and research, help all students learn. Students benefit because the knowledge, skills, and resources of both university and school are focused on meeting their needs. Students also benefit from teacher interns, mentor teachers, and university faculty who play active roles in the PDS setting. PDSs are extremely important in enhancing teacher quality and student achievement in urban schools with high needs populations.

PDSs, like teaching hospitals, are hybrid institutions. As practicing professions, both teaching and medicine require a sound academic program and intense clinical preparation. The teaching hospital was designed to provide such clinical preparation for medical students and interns; PDSs serve the same function for teacher candidates and in-service faculty. Both settings provide support for professional learning in a real-world setting in which practice takes place.

In the clinical setting of the hospital, physicians learn to put their eight years of academics to work and gain experience in diagnosing and treating patients in the real world—with real world consequences. They are under close supervision in the hospital, and are graded on their progress through the clinical curriculum. Only if they pass the numerous assessments during this period will they gain a license to practice medicine.

Like the training hospital setting, the professional development school becomes a clinical education site for teacher candidates. The personnel at the school make a formal commitment to the education of new teachers. The PDS brings a larger ratio of adults to children; a novice teacher is not left to his or her own devices and solitary struggle. The university agrees to teach some classes at the school site and to work with classroom teachers to improve P-12 student learning. University personnel, student teachers, interns, career teachers and master teachers all interact.

PDSs have been found to increase P-12 student achievement and improve outcomes for teacher candidates. The American Educational Research Association, which convened a blue-ribbon panel of scholars to examine the empirical evidence relevant to practices and policies in preservice teacher education in the United States, found that PDSs have a positive impact on P-12 student learning.  Another summary of the research on professional development schools shows positive outcomes for P-12 students and for educators.

We must find the will to break the egg-carton approach to P-12 schooling. “In order for PDSs to fulfill their potential, districts, states, and universities need to find ways to bring them to scale,” reports Marsha Levine, Senior Consultant, Professional Development Schools, for the National Council for Accreditation of Teacher Education (NCATE). Strong partnerships and restructuring of the way P-12 schools do business will be key elements in building effective professional development schools that improve student achievement.

NCATE has been lending support to the fledgling professional development school movement, begun in the 1980s and 1990s, with the Holmes Group’s conception of such an entity. NCATE has recognized the potential power of PDSs for improving the quality of teaching and enhancing student achievement.

Until now, PDSs have been an adjunct to traditional teacher preparation. Usually, only a minority of teacher candidates in a school of education are prepared in PDSs. In many cases, the PDSs have been initially supported by foundation grants. It takes time, effort, and renegotiation of traditional roles and responsibilities to bring professional development schools to scale. Instead of seeing PDSs as an ‘add-on’ to teacher education, states and school districts must now see professional development schools as a strategy—to increase the number of highly qualified teachers, narrow the achievement gap, and bring more highly qualified teachers into hard-to-staff schools.

Maryland is the first state that has committed to 'going to scale' and have every teacher candidate trained in a professional development school. The strategy is targeted at providing professional clinical preparation and induction for new teachers in order to increase teacher quality and raise retention rates, particularly in low performing schools. With the support of the Arthur Vining Davis Foundation, NCATE has worked with three PDS partnerships in urban areas—Denver, CO, Jacksonville, FL, and Waco, TX, to explore this concept and develop models for how it might be achieved.

## Meeting National Standards for Preparation

The United States currently has a 'two-tier' education system. One system—for well off suburban children—works fairly well. P-12 student performance is usually satisfactory to outstanding in these schools. These children, by and large, are taught by highly qualified teachers, the majority of whom graduate from college with a relevant subject matter degree and a recommendation for a license from the professionally accredited school of education where they have completed a program of study. The other system—serving many minority children in inner cities and children in rural areas—has been broken for many years. Disproportionately this group of students is taught by individuals with little or no teacher preparation, and often, no relevant degree. Not surprisingly, the failure cycle for P-12 students continues. This chapter has described a way to engage these unprepared individuals in a high quality training program in a professional development school, so that they, too, can become highly qualified teachers.

In conclusion, schools in the 21st century must break out of the factory, or 'egg carton' model. Existing resources must be organized differently to achieve better outcomes for students. Team teaching, coupled with professional development schools, provides a strategy and a structure for redeployment of instructional resources and the development of a teaching force to serve all children in the 21st century.

## Endnote

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