

FIX THE BROKEN SUPPLY CHAIN

EXECUTIVE SUMMARY: H451-S284

The central problem in education in the Commonwealth is a personnel problem: the supply chain for the teacher and leader workforce is disregarded, disconnected and dysfunctional. Thus we do not have enough teachers with enough teaching expertise to reach all our children or enough leaders with enough capacity to build high functioning teams. This is especially visible in schools serving urban and rural poor. Since teaching expertise is the *most significant variable in student achievement*, these personnel problems will endanger all other improvement efforts.

You can't fix a problem if you don't define it properly. The problems in our schools cannot be fixed by working on school structure, on school governance, on school accountability, on school privatization, or on school size.

The central issue is this: there is a common core of knowledge about teaching and learning for good professional practice that gets results for students. Large segments of it are missing in action from each of the ten subsystems that form the supply chain for our teacher workforce. No one is accountable for seeing the knowledge base show up in these sub-systems, much less in an integrated way. This is eminently fixable; but only if we redefine the problem and radically refocus our resources. (The same can be said for the knowledge and skills of school leadership.)

The ten sub-systems of the educator workforce supply chain are:

1. UNIVERSITY PREPARATION PROGRAMS
2. STATE LICENSING REQUIREMENTS
3. SCHOOL DISTRICT HIRING PROCESSES
4. SCHOOL DISTRICT INDUCTION PROGRAMS
5. SCHOOL DISTRICT SUPERVISION AND EVALUATION SYSTEMS
6. SCHOOL DISTRICT PROFESSIONAL DEVELOPMENT SYSTEMS
7. STATE RECERTIFICATION REQUIREMENTS
8. SCHOOL DISTRICT SALARY, PROMOTION AND ADVANCEMENT POLICIES
9. INDIVIDUAL SCHOOL WORKING CONDITIONS
10. INDIVIDUAL SCHOOL ORGANIZATION CULTURE

These ten operate collectively as a SYSTEM that produces the teacher and leader workforce we have today. They need to be integrated with one another. Since they aren't, the quality of the work force we have today is random. There's nothing wrong with the *people* we have. In fact, many of educators manage to function personally at a high professional level despite this flawed system. But there are also many who don't, and it's not their fault. They work in a broken system. Fix the system.

1. Teacher Education

Given the complexity of the knowledge and skill required for successful teaching, it would be as unrealistic to expect university graduates to be prepared to teach as it would to expect medical school graduates to commence independent practice of medicine. They simply don't know enough. In education it's even worse, because we expect candidates to be acquiring the rudiments of a liberal education at the same time as preparing for professional practice. Candidates for teaching need a minimum of a fifth year with intensive focus on planning and curriculum skills and a specialization in teaching their academic area. For example, the technology of teaching primary grade literacy is very sophisticated. And children in disadvantaged communities need beginning teachers who can land in the classroom running with these teaching skills. A liberal arts college education followed by an intensive year of preparation in content specific pedagogy is a bare minimum of preparation. Missing is the essential foundation of classroom management, which cannot be learned in the university classroom. One's first year of teaching should be an internship year in which one is placed with a team of teachers and paced through the formal steps of creating classroom climate, setting limits, learning the body language of meaning business, and creating meaningful school-home communication. Most important of all, graduation from such programs must be marked by successful passage through performance-based assessments where the candidates have to show by actual performance that they have competence at the relevant teaching skills.

The curriculum and assessments within teacher education institutions, both public and private, need to be congruent with the standards for knowledge based practiced referenced above. Currently they are not. There is no agreement across teacher education institutions about what graduates should know or be able to do to enter classrooms as competent novices. Hence there is no consistency across teacher education institutions about the experience candidates have. Upgraded certification for teacher training institutions is a force in this direction, but is meeting strong opposition from many institutions that wrongly see the teacher standards movement as a threat to their autonomy. The time has come for this to end. The voice of the state legislature can be brought to bear through the higher education approval process by which each teacher training institutions' charters are renewed. *Teacher training institutions can be required to make their programs reflect the common core of professional knowledge and be performance based.*

The requirement above is written into H451/S284. In addition for the bill would encourage the development of professional development schools where universities and districts partner to place beginning teachers in teams of expert teachers for one year of intensive internship before they more off to another regular school in the district or region. Finally, colleges receive an annual report card from school districts on the preparedness of their graduates.

2. Teacher Licensing and Certification

The process of teacher licensing, certification has begun to change in the U.S. – and it’s about time. The licensing process for any profession establishes standards for knowledge-based practice upon which public trust is ultimately based. Doctors must be board certified; lawyers must pass the bar; but teachers don’t need to demonstrate specific knowledge or skills to practice. Teacher licensing and certification in the U.S. has been based on passive criteria throughout this century – meaning one doesn’t have to prove one can do *anything* at the performance level to get a license. One has only to passively survive seat time and finish courses. The national movement for professionalization is seeing the creation of independent state licensing boards¹, national standards for beginning teachers (Interstate New Teacher Assessment and Support Consortium – INTASC) and accomplished teachers (National Board of Professional Teaching Standards – NBPTS.) We are also seeing legislated state performance standards that all districts must apply in their teacher evaluation systems (Massachusetts.) Of the ten processes described in H451/S284, this one is receiving the most attention and making slow but steady progress.

But we are far still from a standard that calls for performance based assessment to get a license to teach. Connecticut had the most developed program in the 90’s where external assessors operating with state funding visited the classes of beginning teachers and assessed their proficiency by actual observation of performance. The assessors were well trained and the assessment instrument was knowledge based and well structured to collect data on teacher decision making from repertoires of skills rather than implementation of “effective” behaviors. Observation by state assessors using the Connecticut model is not the only way, but it is certainly a rigorous way to structure licensure. And it is part of a 15 year commitment Connecticut has made to developing workforce excellence. The payoff, incidentally, has been among the best test score gains in the nation despite increases in the number of children living in poverty and the number of children from diverse language backgrounds.

As a starter toward more rigorous licensing standards, H451/S284 requires alternative certification programs, wherever they are housed, to train educators to high standards of performance at the same level as is demanded of colleges. Finally there is a requirement that DOE achieve a high standard of efficiency in processing licensing applications.

¹ 11 states now have independent licensing boards: California, Oregon, Minnesota, Nevada, Iowa, Kentucky, Georgia, Indiana, Wyoming, N. Dakota, W. Virginia. Source: National Council for Accreditation of Teacher Education, Washington, D.C..

3. Recruitment and Hiring

False starts abound for making the recruitment and hiring process more effective at attracting and retaining high quality teachers. Signing bonuses; TV ads that highlight the inspirational effects of good teachers; alternative (easier) certification programs that bring career changers into the classroom with minimum requirements (and minimum teaching skills.) These approaches fail because they do not address the two key issues: working conditions and support for developing expertise.

SUPPORT

Beginners flock to districts that can offer comprehensive induction programs; districts where they will not be overloaded with a stripped room, too many preps and the most problem laden students (a common experience); districts that can show they will provide on-going seminars, coaching, and problem solving help for novices; districts that can show they value mentoring by making the criteria selective and the training rigorous.

Better salaries are not irrelevant to this picture, as Dallas and New York both discovered when they eliminated their teacher shortages in a stroke with pay hikes. But as personnel directors are discovering, applicants are shopping for districts that will support them, and they know what to ask for.

WORKING CONDITIONS

The working conditions that attract quality candidates are working conditions that have true professional characteristics: joint work, shared responsibility, high opportunity for professional learning, and differentiated career options.

When we are attracting more qualified people to apply for teaching positions, then the hiring process can use technologies such as Haberman's (1995) for identifying beginners who are willing to persevere and believe in the capacity of all their children to learn despite disadvantages. This and other key beliefs can become part of hiring processes that are much more knowledge based and tied to demonstration of performance.

H451/S284 does include funds that districts can use as supports in their efforts to recruit teachers in subject areas of highest need, including but not limited to math, science, special education, and the education of limited English proficient students , and for positions in hard-to-staff schools and districts. But the long term solution to recruitment problems lies in other areas addressed in the bill – good induction, good school leadership, opportunities for teachers to be promoted, and strong, satisfying workplace culture.

4. Teacher Induction

Quality and effective induction programs for new teachers are rare in the United States. We still plunge novice teachers into the water without adequate preparation or adequate support. Thus we lose 50 to 60% of new people in urban districts within five years. Results from the California Beginning Teacher Program and from Lawrence MA show that retention can go above 90% and student learning is positively impacted immediately when induction programs with consistent support are thoughtful and long term. Given the documented savings of approximately \$15,000 per teacher retained, millions of dollars consumed annually in recruitment and hiring in the Commonwealth could be saved.

Elements of a complete teacher induction program would include screening and hiring procedures, rigorous mentor and administrator training, and placement of newly hired teachers in high functioning teams where the newcomers become acculturated to professional norms of collegiality, collaboration, accountability, and constant learning. Comprehensive induction programs would include far more than mentoring and enlist the whole faculty in having a stake in the beginning teacher's success, along with a belief that they all had something to offer. State law would require comprehensive induction programs in each district and state Departments of Education would provide technical assistance on how to design and staff such programs. Since there are few investments with more leverage to secure and retain quality teachers than good induction programs, these funding packages would remain intact even in hard budget times when other cuts had to be made.

H451/S284 would allow school districts to implement these guidelines fully.

5. Professional Development

Professional development is random, individualistic, and sadly inequitable across the state. Actual expenditure per teacher on professional development is far below the \$125 originally prescribed by the 1993 Education Reform Law; in many districts, funds reported as expended on professional development go for indirect services that do not directly impact teachers.

H451/S284 provides funds to restore 1993's level of funding and requires that it be spent on direct services to teachers and administrators.

Adequate and equitable teacher and administrator development is based in part on a common map of professional knowledge held in common by school districts, institutions of higher learning and other professional development providers. Using this map as an organizer, districts can collaborate to pool funds and make available to teachers and administrators the resources for professional study and individual skill development that individual districts, especially small and poor districts, cannot and do not offer today. Under the impetus of H451/S284 , a culture of continuous learning could exist in every district in the Commonwealth.

6. Supervision and Evaluation of Teachers and Administrators

Processes can be designed to either foster or impede learning and capacity building for professional educators. In many districts they are at best neutral, that is, they have no great effect either positive or negative on teacher and administrator learning: they are pro forma processes that absorb time and consume forest products. In some districts teacher evaluation systems clearly obstruct teacher learning. They devalue teaching by paying scant attention to evaluation. They attempt to quantify teaching with checklists and scores. Poorly designed evaluation systems create a culture of suspicion and mistrust.

Evaluators need to be trained rigorously and to show by performance that they are proficient at evaluating. Then they need to have a reasonable number of people to evaluate so they can do a thorough job. Then evaluation systems can be constructed to actively foster teacher and administrator learning. They also can do so in a way that does not dodge the need for organizations to be able to identify and respond decisively to unsatisfactory performance. Such processes emphasize multiple year Professional Growth Cycles where traditional “evaluation” is done only once every three or four years, though an administrator can put a particular teacher into the evaluation year at any time if there are concerns. All teachers should be visited and monitored every year, but formal paper and pencil documentation should be done only once every four years as long as the evaluation loads and spans of control are so far from industry standards (often 40 to 1 in schools vs. 8 of 12 to one in industry). In such an evaluation system there are no “years off.” In years when formal evaluation by administrators is not done, teachers are required to choose from a menu of rigorous options for professional growth, do goal setting, plan projects, and report on their learning progress at the end of the year. In some districts these reports go to panels of peers, not to administrators. Some districts have chosen to do this through frequent peer observation that is required in years between evaluations.

During the evaluation year itself, a growth oriented process produces detailed data oriented observation notes and narrative write-ups, no ratings, rankings, or points that add up to a teacher “grade.” And administrators, who now will have far fewer teachers to evaluate in a given year, can observe more frequently and use good coaching skills where appropriate – which is most of the time – to assist teachers in analyzing their lessons and making plans based on data about how the lessons went. All the same principles should be applied to processes for evaluation of administrators. To be certified as an administrator an individual should have to show by performance that they have proficiency at the skills above. This is, once again, a key lever of the state on influencing teacher quality.

Finally, student progress should be included in teacher evaluations as measured through teacher developed assessments and other instruments that meet state standards. H451/S284 requires all of the provisions described above.

7. Re-certification

No provisions regarding recertification are contained in H451/S284.

We make the case for performance-based certification tied to the main categories of the professional knowledge. Recertification is a process carried out by true professions in which members must show they have maintained their skills (airline pilots) or have updated and expanded their knowledge and skill (medical doctors.) Either approach would be appropriate for teachers. We recommend considering a distribution requirement every 5 years.

8. Teacher Leadership and Career Advancement

“Advancement” should mean more than pay raises. The absence of positions to aspire toward in teaching, i.e. positions of increased responsibility requiring experience, judgment and high levels of specialized skills saps the initiative of many senior people in education and causes others to leave. This is the place to bring back creative proposals of the 80s for positions such as Lead Teacher and to add others: for example Mentors with high levels of training and significant responsibility in new teacher induction programs; or Team Leaders who have superior skills in student data analysis or curriculum design and development. In this role individuals would be responsible for identifying struggling students, zeroing in on skills that needed to be re-taught, and facilitating team planning to improve student results. They would meet regularly with teachers who teach the same content and/or courses.

H451/S284 challenges districts, if they wish to obtain the supplementary funds it provides, to create positions of teacher leadership that change the current flat career structure of the workforce. We will thus keep more of the best people and attract ambitious and able young people if they see they can move up in a career path by demonstrated teaching expertise and leadership capacity with adults. This career path doesn't exist now. H451/S284 creates it in such a way as to directly impact student achievement.

9. Workplace Structure -- particularly schedules and groupings of teachers and students

Teachers must have frequent time to review student performance and look at student work together. Common planning time is necessary to identify what the patterns are in student misconceptions and learning gaps. Then teachers must invent alternate ways to re-teach these items to certain students didn't learn them the first time around. This work requires data analysis and colleagues using each others as resources.

Teachers' opportunity for learning is significantly influenced by working closely and collaboratively with colleagues to deliver daily instruction. Physical proximity doesn't do it; doing joint work with colleagues does. This joint work can take the form of side-by-side team teaching. It can take the form of co-development of assessment tasks and rubrics to use in common with students. It can take the form of designing and implementing integrated curriculum for a joint group of students. But for any of this to happen, the organization of time and the grouping of students and teachers into teams jointly responsible for the progress of the youngsters is essential.

Time and meeting structures must provide for both horizontal and vertical time where teachers of the same content can articulate curriculum and standards across grade levels.

H451/S284 provides funds for schools to alter their structure and schedules for the kind of collaborative work that is essential, and, indeed, built-in for other professions such as architecture, law, or engineering.

10. Culture of the Workplace

H451/S284 requires that school administrators be trained, certified, and evaluated on their ability to build strong work place culture. Here is why that is important.

“Overall, if we compared two average students, one in a school with low professional community [synonymous with strong workplace culture], and the other in a school with high professional community, the students in the high community would score about 27% higher on the SRS measure. The difference would represent a gain of 31 percentile points.”

Newmann and Wehlage 1995

In the 1990s powerful research showed beyond question that schools that succeeded for children, especially poor urban children, had strong organizational cultures (see bibliography). As more and more work was done to understand these cultures, they came to be called Professional Learning Communities. The reason Professional Learning Communities (PLC) increase student learning is that they produce more good teaching by more teachers more of the time. Put simply, PLC improves teaching, which improves student results, especially for the least advantaged students.

It is therefore particularly important to understand what these cultures are like and how they are created. Their prime characteristic is powerful relationships with honest open communication where conflict can happen in healthy ways, out in the open, and where the undiscussable can be made discussable.

The type of collaboration found in strong professional communities means a lot more than working cooperatively with others on committees or at meetings. It means five specific observable norms among staff members:

- *High frequency of teacher talk about teaching in increasingly concrete and precise language*
- *High frequency of teachers observing one another*
- *High frequency of teachers making materials and planning lessons together*
- *Teachers teaching each other about the practice of teaching.*

(Little 1982)

- *Teachers willing to ask for and provide one another with assistance*

(Rosenholtz 1989)

Together these five observable patterns define “Collegiality,” now a word in our professional vocabulary with precise meaning.

Professional isolation carries profound consequences for teachers' opportunities to learn and solve classroom problems. "However, to the extent that teachers believe that anyone, even the most capable colleague, might need help in a similar situation, it

becomes unnecessary for them to draw causal inferences about their own teaching inadequacy. That is, if teaching is collectively viewed as an inherently difficult undertaking, it is both necessary and legitimate to seek and to offer professional assistance. This is exactly what occurs in instructionally successful schools, where, because of strong administrative or faculty leadership, *teaching is considered a collective rather than an individual enterprise* (italics not in original); requests and offers of assistance among colleagues are frequent, and reasoned intentions, informed choices, and collective actions set the conditions under which teachers improve instructionally." (op.cit.)

High stakes tests have invited, if not forced another behavior into the domain of collaborative work: systematic examination of data about student performance, and further, systematic examination of student work itself. The analysis is done together by teachers of common academic content. It should become the starting point for the concrete talk about teaching, the planning and making of materials together, and the peer observation that comprise Little's definition of "collegiality."

Rosenholtz's findings challenge leaders to invent structures, reserve time on agendas of existing structures, and build a behavioral norm of asking for help and of taking the risk of giving it too. Contemplating what such a norm would be like brings us to the final point about PLC: how comfortable do staff members feel being honest with one another about feelings, about doubts, and about disagreements? Do relationships allow them to make the undiscussable discussable?

We already know that schools with strong Professional Learning Communities improve instruction rapidly and thus get better student results. Building and strengthening these features of the school organization and its human environment constitutes the main job of leadership. Therefore the education, certification, and evaluation of leaders must be designed around how to lead in this way – the knowledge and skills of cultural leadership. And that is the point of the administrative requirements in H451/S284.

Little, J.W. "Norms of Collegiality and Experimentation: Workplace Conditions for School Success." *American Educational Research Journal*, Fall 1982. EJ 275-511.

Newmann, Fred M. and Gary G. Wehlage. *Successful School Restructuring*. Madison WI: Center on Organization and Restructuring of Schools, 1995.

Rosenholtz, S.J. "Workplace Conditions That Affect Quality and Commitment; Implications for Teacher Induction Programs," *Elementary School Journal*, 89/4, 421-449 (March 1989).

Math and Science Focus in H451/S284

H451/S284 provides a comprehensive approach to improving math and science teaching beyond the piecemeal efforts of other initiatives.

Districts may allocate H451/S284 implementation funds to target and attract highly qualified math and science teachers.

Improved induction processes enables district to retain their new math/science hires.

Professional development funds allow districts to deliver content training to elementary and middle math/science teachers to deepen their content knowledge and ability to make math and science concepts more accessible to students.

Teacher leadership provisions enable districts to hire and train expert building-based instructional coaches for math and science.

Provisions for improved supervision and evaluation allow districts to develop supervisors' ability to observe and provide feedback on high quality math and science instruction.

H451/S284 approaches the improvement of the workforce systematically through all the processes that effect teacher skill; and it offers districts flexibility to target the weakest processes first, but it requires districts to bring all the processes to a high functional level. Thus H451/S284 is the most powerful vehicle the legislature has for improving math and science teaching and learning across the board because it improves the capacity of the people who do it.