

Toward a Coherent Kentucky Teacher Career Ladder

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... within the culture of each profession there is the expectation that all of its practitioners will be accomplished and that they will arrive at that level of skill and knowledge by following essentially the same path that their colleagues followed. In many ways, the path is not a neutral agent of the profession, it is an integral part of the preparation and what it means to be a member of the profession. Such universality is necessary because the authority of any professional comes not from what the individual knows and is able to do but from what the collective knows and is able to do. (Thorpe, 2014, p. 3)

Introduction

“It is one of the happy incidents of the federal system that a single courageous state may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country.”

-- Louis Brandeis, Dissent to *New State Ice Co. v. Liebmann*, 285 U.S. 262 (1932)

Although Louis Brandeis’ well-known “laboratories of democracy” maxim was issued in a dissent, it has become, in the public mind, a doctrine of the benefits of American federalism (Greve, 2001). The States, according to Brandeis, benefit the country as a whole by experimenting with public policy, limiting the potential damage that might accrue from a miscast federal initiative. If a State attempts a policy that fails, other States – and the federal government – can avoid the consequences of the failure; if it succeeds, the policy can provide guidance in framing beneficial initiatives for other States, and for the nation.

Few policies have been more subject to recent experimentation by the States than have those relating to the education, certification, and careers of public school teachers. Teachers comprise the largest group of public employees (McNichol, 2012), and perform work of immense significance. They are widely regarded as the greatest influence on student achievement amenable to policy manipulation (Hanushek, 2011; Nye, Konstantopoulos & Hedges, 2004; Pianta & Hamre 2008), a view that is supported by numerous research studies in recent years (Ladd, 2008). Teacher effects have been found to persist far beyond the years of schooling (Bauer & Vorell, 2010; Chetty et al., 2010, 2011). Since 1986, when the Carnegie Foundation for the Advancement of Teaching¹ released its report on the status of teacher quality in the United States (Carnegie Corporation, 1986), attempts to improve the quality of teaching have been made by numerous States and public school districts. These efforts have attempted to influence the quality of teachers primarily by altering the requirements for teacher training, and by altering the incentives for teachers’ work.

Of most importance to us here are the numerous efforts to improve teacher quality by changing teacher pay and career advancement. Since the mid-1980’s, a number of States and public school districts have planned or implemented career ladder changes and pay-for-performance schemes in the hope that in so doing, the quality of teaching – and *a fortiori*, the achievement of children – would improve. While some of these efforts arguably did produce modest improvements in teacher performance, almost all have been failures, at least in the sense that they were eventually abandoned. Of all the systems implemented in the era following the Carnegie Foundation report, the only long-standing teacher career ladder in existence is that in Missouri. An Arizona program implemented within the same era as the Missouri project was recently discontinued because of a court ruling that it was administered inequitably (Booker & Glazerman 2008; Natale et al., 2013).²

When these experimental programs have failed, it was usually because of two features that nearly all of them share. In almost all cases, the programs were imposed on top of existing teacher career

¹ It is particularly apt that it was the Carnegie Commission that issued this report calling for professionalization of teaching. It was an earlier report of the Carnegie Commission in 1910 (Flexner, 1910) that is widely credited with the transformation of medicine from a chaotic collection of diverse practitioners with widely varying levels of training and competence to the profession of consistently highly-skilled practitioners with which we are familiar.

² The Arizona Supreme Court invalidated the program because funding was limited, and the state was unwilling to extend the program to all school systems. This the court ruled a violation of the 14th Amendment. Since making the program available to all districts would have raised its cost to unsustainable levels, Arizona ended the program.

advancement systems, without modification of the existing system (Cornett & Gaines 2002); and programs usually require special funding (Cornett & Gaines, 2002; Natale et al., 2016).

Since 1921, when the Denver and Des Moines public school systems first adopted it (Hassel, 2002) the standard teacher compensation approach for the United States has been the “single salary schedule,” also known as “step and lane” compensation (Boston Teaching Policy Fellows, 2011). Since the middle of the 20th century, more than 90% of US teachers have been subject to this model (Booker & Glazerman, 2008; Pham et al., 2017). Teachers subject to the single salary schedule are paid primarily on the basis of years of experience and education level (Figlio & Kenny, 2006; Podgursky & Springer, 2006), two characteristics of teachers that have at best a weak relationship with student achievement. At the time of its initial implementation, the single salary schedule was seen as a more equitable compensation scheme, since it paid women fairly, and reduced the effects of nepotism. The single salary schedule has the advantage, at least, of objectivity, which previous teacher compensation schemes had not had.

Since the mid-1980’s, States have experimented with alternative teacher compensation approaches primarily through attempts to encourage student achievement by paying teacher bonuses for better-than-average performance (Briggs et al, 2014; Figlio & Kenny, 2006; Pham et al., 2017; Podgursky & Springer, 2006). The assumption behind these schemes is that teachers have control over their activities, and will direct them to greater student achievement if they are rewarded for so doing (Hassel, 2002). A hidden assumption is that there are elements of performance that teachers are capable of, but will not exhibit unless incentives are in place.

The results of pay-for-performance systems have been mixed, with some studies showing no detectable effects and some showing modest improvements in student achievement (Booker & Glazerman, 2008; ; Briggs et al., 2014; Eckert, 2013; Goodman & Turner, 2013; Glazerman & Seifullah, 2012; Ohio Educator Standards Board & Ohio Department of Education, 2006; Razo, 2014; Rothstein, 2015; Springer et al., 2010; Yuan et al, 2012).³ When effects have been found, they have generally been so small as to be negligible.

Aside from the general ineffectiveness of performance pay systems as an engine of educational excellence, though, is the greater problem that they have almost always been superimposed on existing compensation systems. Research over the past few decades has made it clear that piecemeal implementation of such changes is unlikely to result in much effect (Burns & Gardner, 2010; Eckert, 2013; Natale et al., 2013). Career decisions by individuals involve motivations related to long-term compensation, but pay-for-performance programs usually involve only short-term gains (Briggs et al., 2014; Rothstein, 2015). Such short-term gains subject teachers to considerable uncertainty about the magnitude of their compensation from year to year (Briggs et al, 2014), greatly reducing the incentive effect.

Performance pay systems assume that a teacher knows how to perform better, and will do so if provided with sufficient incentives (Podgursky & Springer, 2006). This assumption may not be true.

An additional problem with pay-for-performance systems has been the difficulty of implementing accurate measures of teacher performance (Kellor, 2005; Podgursky & Springer, 2006). Two methods are generally used, separately or together: personnel rating systems and measures of student achievement. In the latter case, measures might be summarized at the school level, with teachers rewarded as a group

³ That pay-for-performance has limited usefulness as a productivity tool has been found in other industries as well (Goldstein, 2014).

for exemplary school performance⁴; or some measure of individual teacher performance⁵ might determine whether particular teachers receive bonuses.

The difficulty arises because of three limitations of measuring teacher performance:

- 1) Only a subset of teachers (around 30%) teach subjects for which States routinely assess student achievement (Corcoran, 2010);
- 2) Measures of teacher performance based on student achievement are notoriously unstable and unreliable, and not suitable for high-stakes use (Briggs & Dominigue 2011; Amrein-Beardsley & Collins, 2012);
- 3) Personnel rating systems usually suffer from a halo effect, where the vast majority of teachers are rated at the top or nearly at the top of the rating scale (Toch & Rothman 2008).⁶

The other weakness of efforts at reform of teacher compensation systems over the past few decades has been that they usually required funding in addition to the normal teacher compensation schedule (Cornett & Gaines 2002; Humphrey, Koppich & Hough 2005; Natale et al., 2016). Pay-for-performance systems tend to be unsustainable when budgets must be cut. This was the experience in Kentucky, where the School Rewards Trust Fund was de-funded in 2004 (Kentucky Department of Education, 2004).

Numerous State experiments have demonstrated that reform of a teacher career ladder is difficult and should not be done lightly, because reform of any part of these systems requires reform or alignment of all elements of teacher compensation (Burns & Gardner, 2010; Cornett & Gaines 2002). We argue here that the difficulties of a comprehensive change in Kentucky's existing teacher compensation system notwithstanding, we have sufficient reason to make such a change. The reasons for making a change at this time are:

- 1) The high and increasing cost of graduate education makes continuation of the existing step and lane system untenable.
- 2) Recent advances in what is known about teacher competencies imply a much more attractive approach to teacher compensation.
- 3) The results of teacher compensation experiments in other States provide considerable guidance both in avoiding known hazards, and identifying likely benefits, of teacher compensation policy options.

Kentucky's existing teacher compensation system

As is true of more than 90% of all teachers nationally, Kentucky teachers are paid based on a single salary schedule. This does not mean, however, that every teacher in every district with identical number of years' experience and education receives the same salary. The Kentucky Department of Education maintains a "minimum salary schedule" for Kentucky teachers, but each district maintains its own salary schedule based on these minimums (Kentucky Department of Education, 2017). These district schedules differ considerably in both their minimum and maximum allowable salaries, as demonstrated in Table 1. The lowest salary for any teacher at Rank III (i.e., a beginning teacher fresh out of a bachelor's-level

⁴ This was the approach introduced by the Kentucky Education Reform Act (KERA).

⁵ Usually so-called "value-added" analysis.

⁶ This has proven to be a problem with the PGES developed by the Kentucky Department of Education.

preparation program) is \$32,429 in Bell County, and the highest is \$42,070 in Jefferson County⁷. The trajectory of salary increases also differs considerably from one district to another, with some districts reaching a plateau much earlier than do others.⁸ These differences notwithstanding, it is true that a teacher in any given district at any given level of experience and education can expect the same base salary as any other teacher in the same district with the same experience and education. From time to time, cost of living increases are made by the Kentucky General Assembly, and these are reflected in the KDE minimum salary schedule and in district salary schedules.

In addition to the base salary defined by district schedules, a teacher may receive salary enhancements for special duties such as teaching beyond the 185-day school year. These extra duty elements are not germane to our purpose here. Two salary enhancements determined by the State are of interest, National Board Certification, and Teacher Leadership preparation.

We will have a great deal more to say about National Board (NBPTS) certification later. For the present we note that Kentucky, like all of the other States, has established an incentive program to encourage teachers to undertake NBPTS certification, providing assistance with the cost of certification, and a salary enhancement for those who achieve it (Kentucky Legislative Research Commission b, n.d.). The roughly 2000 persons per year (see Table 2) who request NBPTS support represent about 4% of teachers employed in Kentucky in any year. The Kentucky General Assembly established a goal (KRS 161.131 (2)) of having at least one National Board certified teacher in every public school by 2020 (Kentucky Legislative Research Commission b, n.d.), a goal that is now recognized as unattainable (Graves, 2017).

The relationship of teacher leadership to teacher compensation in Kentucky is murkier. Prior to 2010, achievement of Rank II usually required that a teacher complete a master's degree or equivalent, but placed few constraints on the content of the master's degree programs.⁹ In 2010, all existing teacher master's programs approved by EPSB lost approval, and EPP's were required to redesign master's programs to include, *inter alia*, core component courses designed to prepare teachers to be leaders in their schools (Kentucky Legislative Research Commission f, n.d). Thus, although teacher leadership does not by itself result in salary improvement, some preparation to be a teacher leader is seen as an essential feature of teacher career progression, and results indirectly in enhanced remuneration. Since the Rank II requirement is still in force, then *mutatis mutandis*, persons who achieve Rank II via completion of a master's degree will have had their salary improved in part as a consequence of teacher leader training. While most approved master's degrees do not necessarily confer recognition as a teacher leader, teachers may optionally acquire a "teacher leader" endorsement (Graves, 2017). This latter endorsement confers no additional remuneration beyond what might be conferred by acquisition of a master's degree, although a teacher who acquired a teacher leader endorsement after achieving Rank II might be eligible for Rank I (Adams, 2017).

⁷ With almost no exceptions, the Jefferson County schedule provides for the most highly-paid teachers in Kentucky for all ranks and years of experience.

⁸ All district salary schedules for Rank III plateau at about 10 years.

⁹ A few persons every year achieve Rank II status by completing the "continuing education route."

Kentucky's rank system has been in existence since at least the 1960's¹⁰. There are a number of ranks, beginning with Rank V, but for our purposes only Ranks III, II, and I are germane.¹¹ A teacher who completes preparation at the bachelor's level is normally hired at Rank III, and is expected to acquire, within 10 years of initial certification, a master's degree or its equivalent. Acquisition of the master's degree will usually result in eligibility for Rank II. Teachers who have achieved Rank II and complete at least an additional 30 college credit hours are then eligible for Rank I. Both Rank II and Rank I result in salary enhancements. Districts maintain separate salary schedules for ranks III, II, and I. The magnitude of the salary enhancement for each rank change is established by individual districts, but amounts to a median improvement for Rank II of \$4168 in annual salary (Adams, 2017). National Board certification generally makes a teacher eligible for Rank I.

Although a requirement exists for teachers to achieve Rank II within 10 years of initial certification, there is no corresponding requirement for Rank I. The salary improvement associated with Rank I, then, serves as an incentive only for those persons who wish to achieve recognition beyond the minimum requirements. Achievement of Rank I, as with Rank II, requires that a teacher undertake additional graduate work, in effect the equivalent of at least a one-year master's degree. Teachers who achieve Rank II are allowed to teach from that point to the end of their careers without further advancement on the career ladder.

Tenure, a related issue not directly affecting compensation, has to be considered. All States have teacher tenure statutes. In Kentucky, a teacher receives tenure if rehired by a district after four years of teaching in that district (Kentucky Legislative Research Commission a). Although tenure does not directly affect a teacher's compensation, it influences longevity, which does. Once tenured, teachers are very difficult to remove regardless of how ineffective they might be (Goldhaber & Walch, 2016; Weisberg et al., 2009). Although some researchers suggest that loosening tenure protections might improve the overall quality of teaching (Goldhaber & Hansen, 2010), the consensus generally is that it would be better to change the standards for achieving tenure (Rothstein, 2015). An effort to reduce the protections due to tenure in California failed when their supreme court ruled that tenure has benefits to schools and districts and the public generally, and that children taught by ineffective teachers could not qualify as a protected class (*Vergara v California Teachers Association et al.*, 2016).¹²

A final consideration is teacher standards. Kentucky established its own teacher standards for beginning teachers in 1992, and for experienced teachers in 1994 (Hibpshman, 2005), at a time when no national standards were available. The new teacher standards were incorporated into the Internship Performance Record (IPR), a measurement system used to evaluate the performance of teacher interns. The experienced teacher standards were never the basis for any statewide teacher performance system, although anecdotally, they were reported to have been used by individual districts in their performance rating systems. Subsequently, the Interstate Teacher Assessment and Support Consortium (InTASC) developed national standards, which were incorporated by EPSB, beginning in 2018. The InTASC standards were also recently incorporated by NBPTS, which had originally developed its own standards.

¹⁰ It is difficult to find documentary evidence for when exactly this system was enacted, but the earliest dates for which Rank II and Rank I credentials can be found in the EPSB certification database are from the mid-60's. Clements & Hibpshman (2004) identified 1967 as the year that Kentucky began to require a master's degree for teacher advancement.

¹¹ Ranks IV and V are generally reserved for persons – such as emergency-certified teachers – who are in some sense less than fully qualified.

¹² The children could not be a protected class because identifying them as a group by their assignment to an ineffective teacher is tautological.

The problem with master's degrees

The single salary schedule was implemented nation-wide at a time when little was known about factors associated with exemplary teaching. At that time, the operative assumption was that teachers are more or less interchangeable (Hess, 2009; Weisberg et al, 2009), and the only question at issue was how to pay them equitably. Pay scales based on years of experience were common at the time. Additional education was assumed without proof to be evidence of greater competence. At the time that the single salary schedule was implemented, many teachers did not even have bachelor's degrees (Hakel et al., 2008; Loeb & Béteille, 2008).¹³ Experience and education level were thus proxies for what we would have really liked to measure, the capabilities of the individual teacher.

Over time, the expectations for teacher education levels have evolved, with States making efforts to assure that teachers have education beyond the most basic level. In recent years, the proportion of teachers nationally who have master's degrees has risen to more than half (Hakel et al., 2008). In Kentucky, more than half of teachers have master's degrees, and the requirement for a master's degree or equivalent within ten years of initial certification is enshrined in both statute and regulation (Kentucky Legislative Research Commission d, n.d).

The difficulty with master's degrees is that research has given us little reason to continue to require them for career advancement (Goldhaber & Brewer, 1996). Although a few authors have found small effects on student achievement for teachers with master's degrees (Ladd, 2008), the effects are generally negligibly small, and are consistent across studies only for high school mathematics (Goe, 2007; Loeb & Béteille, 2008). Some studies have even found that a master's degree in some cases can make a teacher less effective than a teacher with a bachelor's degree (Clotfelter et al., 2007). When positive effects have been found, even for mathematics, the magnitude of the effects has been small relative to those associated with other possible policy initiatives.

Master's degree requirements have increasingly come into question as the cost of higher education has risen in recent years. Since 1985, the Consumer Price Index has risen by about 115%, while inflation in the cost of college has been at about 500% (Odland, 2012). Concurrent with the rapidly-increasing cost of college, the most common means of paying the cost has become student loans (Amromin & Eberly, 2016; Avery & Turner, 2012). Thus, both at the undergraduate and graduate levels, college-educated persons increasingly accumulate large debts by the time they complete programs. These debt loads can have substantial effects on the further life choices of graduates, including the decision to marry, buy a house, or work in a lower-paid occupation such as teaching (Avery & Turner, 2012).

For persons already employed as teachers who are pursuing the master's degree requirement, the cost – usually defrayed by student loans – can be considerable. Estimates of the cost of a master's degree vary from one author to another, and depend on the higher education institution, method of delivery, length of program, and other factors (Chingos, 2014; Hakel et al., 2008). Depending on the author and these other factors, the cost of a master's degree nationally ranges from about \$30,000 to about \$85,000. The cost of a master's degree in Kentucky is somewhat lower¹⁴, but is still substantial.

¹³ In 1935, only about 10% of elementary teachers had bachelor's degrees, and nearly half of middle school teachers did not have a bachelor's degree. As late as 1961, 15% of teachers nationally lacked a bachelor's degree. In Kentucky in 1949, fewer than half of all teachers had a bachelor's degree (Ellis, 2011).

¹⁴ We estimated the cost of a one-year master's degree using published tuition rates at various Kentucky institutions, producing estimates ranging from \$ 10,000 to \$30,000. These are tuition costs only; it is certain that there are other costs that were not easily estimable.

Kentucky also offers a “continuing education option” for Rank II acquisition (Kentucky Legislative Research Commission e, n.d) which minimizes the amount of time spent taking college courses.¹⁵ Our estimate of the candidate cost of this program is around \$ 8,000, based on the requirements of the program, and using tuition costs for graduate study at the University of Kentucky.

The median salary improvement due to achievement of Rank II is \$4,168 (Adams, 2017). For a teacher who already has college debt when she begins teaching, the addition of significant debt as she acquires a Rank II represents a significant burden, and may guarantee that she will not be college-debt-free until late in her career. The master’s degree requirement thus limits the economic advantage of achieving Rank II for individual teachers, while not providing the State with much in the way of better teaching.

The National Board for Professional Teaching Standards

The 1986 Carnegie task force, recognizing that the competencies of teachers varied widely and that there seemed no generally-accepted mechanism for the professionalization of teaching, recommended the development of a standard-setting board, much like those used by the medical profession to certify the competence of physicians (Hakel et al., 2008). The development of medical board certification has been widely viewed as the engine of professionalization of the medical profession (Starr, 1982), and the Carnegie task force hoped to accomplish a similar result in the field of education.

The result was the development of the National Board for Professional Teaching Standards (NBPTS), which began in 1987 with a grant from the Carnegie Corporation (Lustick & Sykes, 2006), and became operational in 1994. Subsequently, the federal government and others have also provided significant funding (Humphrey et al., 2005). Over its history, NBPTS has established standards and assessment procedures in numerous teacher specialties, and has certified about 3% of current teachers (National Conference of State Legislatures, 2011). NBPTS believes that there is a continuum of teacher competency from the early teaching career to the accomplished level represented by NBPTS certification (NBPTS, 2017), and provides extensive resources via their ATLAS system to assist individuals and employers in the development of teacher competency (Thorpe, 2014). All 50 States have support programs for NBPTS certification (Humphrey et al., 2005), although recension of these programs has been proposed in some states because, as more teachers have sought NBPTS certification, the cost the program has grown to potentially unsustainable levels.

Numerous researchers over the past few years have evaluated whether NBPTS-certified teachers are more effective than others, and the general consensus is that NBPTS-certified teachers are more effective (Cavalluzzo, 2004; Chingos & Peterson 2011; Clotfelter et al., 2007; Goldhaber & Anthony, 2005; Hakel et al., 2008; Harris & Sass, 2009; Ladd, 2008; Vandervoort et al, 2004). Some researchers, such as Goldhaber and Anthony (2004), suggest that NBPTS certification does little to improve the skills of teachers who undergo the certification process, serving only to identify the most capable teachers, but others have found developmental effects from the certification process itself (Kowalski et al., 1997; Lustick & Sykes, 2006; Sato et al., 2008). For our purposes, as suggested by Lustick and Sykes (2006), the issue of whether NBPTS produces better teachers or just identifies accomplished teachers is moot.

NBPTS-certified teachers have been found to affect the overall quality of teaching in the schools where they work, by serving as mentors to other teachers (Frank et al., 2008, Sun et al., 2013). Teachers

¹⁵ But does not eliminate them altogether. Continuing education option candidates are required to complete 6 hours of college graduate study.

who score better on measures of standards-based competency have been shown to be more effective (Borman & Kimball, 2005).

What seems clear is that NBPTS certification represents a pretty good standard for what constitutes an effective teacher. Its real advantage is that it is a single, widely accepted standard, which can be expected to be subject to further refinement in the future.¹⁶ NBPTS has done a great deal of work on the continuum of teaching, which can be applied to teacher career development. That is, based on NBPTS work, we can define levels of teacher capabilities intermediate between first (State) certification and achievement of NBPTS certification. Because NBPTS has demonstrated the measurability of the standards they administer, these intermediate levels should also be measurable.¹⁷ This is the foundation of our proposed modification of Kentucky's teacher career advancement system.

A proposed modification of Kentucky's approach to teacher career advancement

We would be justified in changing our approach to career advancement merely on the basis of the published research on the ineffectiveness of graduate education as a determiner of teacher quality. Master's degree requirements were implemented at a time when we knew little about correlates of teacher performance, and served then, as they do now, as a proxy for teacher accomplishment. The master's degree is such a poor proxy that we would be justified in eliminating the requirement for that reason alone.

As noted above, however, changing any one aspect of a teacher compensation system requires changing or realigning all elements of the system, as numerous states and public school districts have found to their dismay. For this reason, while we might be justified in eliminating the master's degree requirement on the basis of its ineffectiveness as a determiner of teacher performance, we should not do so without a sufficiently compelling reason.

We argue here that the rapidly escalating cost of higher education is such a compelling reason. It is one thing to ask teachers to undertake additional college training when the cost is modest; with costs having reached unsustainably high levels, requiring a master's degree that has little proven benefit is quite another. Aside from the burden of large debt loads carried by the individuals who teach in Kentucky schools, we face the potential problem of diminishing enrollments in initial training programs, as college students seek more highly remunerative college majors. Hemelt and Marcotte (2011) estimated in their study that a \$100 increase in college tuition results in a mean reduction in college enrollment of 0.25%, with greater values for large research universities. To the extent that college students seek more highly remunerative majors, these numbers may well be greater for teacher education programs generally. Interest in teaching among college students is declining at present (Brown, 2016) and might decline further if there is no relief from this difficulty.

We could simply remove the requirement that teachers achieve Rank II in 10 years, but this would have negative consequences:

- 1) There would probably be greater attrition from teaching, as teachers would have less investment in their careers;

¹⁶ Medical Board examinations, when first made available in the 1920's, were less valid than now, and attracted a much smaller proportion of practitioners. The professionalization of medicine and the quality of board assessments proceeded in parallel (Starr, 1982; Thorpe, 2014).

¹⁷ Especially since we already have demonstrated our ability to measure such things, via the continuing education Rank II program.

- 2) We would have no established mechanism for encouraging career development among early-career teachers;
- 3) We would institutionalize the problem of making transition into administration the most viable option for teacher career advancement.

Solutions to all of these consequences are known, but require that changes be made in other elements of the compensation system. We specifically propose a statewide teacher career development plan that:

1. Defines intermediate levels of capability between initial (State) certification and NBPTS certification, using the NBPTS ATLAS system and other relevant sources of information. The internship year would be the least accomplished level of the system, NBPTS certification would be the most accomplished.
2. Continues the existing internship system, but to the extent possible, provides continuing support for teachers in their first three years of certification.
3. Develops assessments for determining when a teacher has achieved the levels described in 1 above.
4. Retains the 10 year Rank II requirement, but makes its achievement dependent upon assessment as in 3 above.
5. Does not specify the mechanism whereby individual teachers acquire the capabilities necessary to succeed on the assessments in 3 above. Allows EPP's, districts, schools, educational cooperatives, and others, to provide programs designed to improve the capabilities of early-career teachers.
6. Retains the Rank I, but makes its achievement dependent upon passing an assessment indicating greater capability than that of Rank II. As with Rank II, allows a variety of interested parties to provide programming to develop the capabilities of teachers.
7. As now, does not require, but encourages, teachers to undertake NBPTS certification.
8. Merges the Continuing Education option with the new approach in 1 and 3 above.
9. Gives the responsibility for administering the assessments in 3 above to persons identified as teacher leaders. Provides training for these persons, either by educator preparation programs, or by EPSB.
10. Alters the tenure statute to require that persons must achieve the first intermediate level in order to be granted tenure. Places teachers on probation if they fail the assessment.
11. Allows districts to dismiss teachers who fail to achieve tenure on some number of retries.

Discussion and conclusions

A number of States, public school districts, individual schools, and foundations – as well as the federal government – have conducted experiments in teacher career policy. For the interested reader, the results of these experiments have been recounted in a number of research reports. The appendix gives a list of some of these reports.

Although some of the initiatives in this area are of too-recent origin to have been evaluated, most of the teacher career ladder efforts over the years have been discontinued. Programs were discontinued for a variety of reasons, but in our view, two predominate:

- 1) Career ladder elements imposed on existing systems with little effort to integrate them with existing elements;

- 2) The use of special funding, rather than redirection of existing funding, making them vulnerable to rescission in times of austerity.

These two factors leave aside the question of whether the career ladder programs were effective in promoting better teaching. As noted above, pay-for-performance – which is a central element of many of these systems – has generally been shown to be of only limited effect, as has the master’s degree requirement.

Kentucky has to some extent recapitulated the errors of these experimental systems, to equally unimpressive effect. National Board certification and teacher leadership have been imposed on the existing single salary schedule with no obvious attempt to reengineer the system to accommodate these initiatives, and Kentucky’s one attempt at pay-for-performance, the School Rewards Trust Fund, required special funding that was rescinded in 2004.

There is a lot we can learn from these experiments, but the one thing that seems to characterize most of them is that they are *incoherent*. As happens so often in educational reform, the authors of these approaches to teacher career reform seem to be searching for a single initiative that will, when enacted, result in profound improvement in system performance. This search for the “silver bullet” (Kain, 2011) that will fix the education system never works. Improving the performance of an educational system requires attention to all of the relevant elements that affect whatever educational function is at issue. An effort to improve the status of teacher proficiency requires more than addition of new initiatives: it requires development of a coherent approach to teacher development and compensation.

We propose here a new approach to teacher career development that takes advantage of the lessons of these many experiments. Rather than proposing the addition of new elements in addition to existing requirements, or the rescission of others, it redirects existing elements (National Board certification, rank, tenure, and teacher leadership) to conform to the new model of teacher capability development based on a coherent model of teacher competency. It calls for no new sources of funding, but instead redirects existing sources of funding (the salary schedules and NBPTS incentives) to recognize accomplishment along the continuum of the new teacher effectiveness model. It uses a model of teacher capability of proven value in place of the old master’s degree proxy, and takes advantage of continuing refinements in the model. It links achievement of tenure to demonstrated capability, making it easier to dismiss ineffective teachers, without reducing the protections of those who have achieved tenure.

Development of a new career ladder will require a great deal of work. Numerous system elements will have to be specified and developed, and we emphasize that none of them will require a trivial effort. It will be necessary to specify the intermediate competency levels in detail, and to develop the associated assessments; to train the administrators of the assessments; to develop due process procedures; and to develop a host of other system elements. Some additional thorny issues will have to be resolved. In particular, consideration will have to be given to the status of persons who become teachers via alternative routes. Development of these things will require collaboration by stakeholders of many types. Despite the amount of work involved, however, we believe it is possible to accomplish these changes.

Table 1
Salaries by Selected Years of Experience, 2017

Experience Year		Rank III	Rank II	Rank I
0	Minimum	32429	36048	38928
	Median	36400	40231	44373
	Maximum	42070	47742	53409
5	Minimum	36807	40091	43775
	Median	40525	44551	48582
	Maximum	47742	52274	57943
10	Minimum	39575	43649	47656
	Median	45367	49590	53836
	Maximum	54162	59831	65496
15	Minimum	40872	46123	49819
	Median	47625	51874	56188
	Maximum	63231	68903	74566
20	Minimum	40872	46955	50734
	Median	48844	53448	57871
	Maximum	70036	75702	81371
25	Minimum	40872	47593	51351
	Median	49950	54655	59243
	Maximum	71166	76835	82502
30	Minimum	40872	47593	51351
	Median	50455	55215	59533
	Maximum	72290	77315	82688

Table 2
Number of National Board Supplement Applicants
2014-2017

Year	Number
2014	2192
2015	2267
2016	2212
2017	2095

Appendix
Reviews of teacher career ladder experiments

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