APPENDIX 5 – Salary Allocation Model Supplemental Information

Certification

In Washington State, the Professional Educator Standards Board (PESB) has defined two levels of certification for new teachers- residency and professional certification. The two tiered system was designed to follow a career progression from entry or novice levels of skills to career or advanced levels. The ProTeach Portfolio was developed to provide teachers holding a residency certificate with an evidence-based, uniform assessment through which to demonstrate the required knowledge and skills that demonstrate a positive impact on student learning in order to attain a professional certificate. The Washington Administrative Code (WAC) further clarifies that such a teacher is defined as a "teacher, through instruction and assessment, who has been able to document students' increased knowledge and/or demonstration of a skill or skills related to the state goals and/or essential academic learning requirements." 1

The knowledge and skills that teachers are expected to know and demonstrate are part of the PESB's Program Approval Standards and are based on the national Interstate Teacher Assessment and Support Consortium (InTASC) standards.

Knowledge and skills-based pay is additional compensation for the attainment and continual development of specific skills, knowledge and competence in effective teaching practices that leads to increased student achievement. Many knowledge and skills-based pay structures are tied to well-established national standards for educator practice, like the Interstate New Teacher Assessment and Support Consortium (InTASC)² or National Board for Professional Teaching Standards (NBPTS)³, while others have been directly linked to school or district defined needs for professional development.

Knowledge and skills-based pay in public education is based on the concept of competency pay from the private sector. Initially called "skills-based pay", it has been used "as a generic term to describe compensation for individuals for the skills they demonstrate, rather than for the particular job they occupy". ⁴ "Competency pay" is a more recent term used to describe pay for the development of "more abstract knowledge or for behaviors that are less easily observable than most skills in skill pay". ⁵ Competency pay in the school setting can support the development of "a culture of concern for personal growth and development of a highly talented work force," ⁶ which is the basis for knowledge and skills-based pay structures. In public education settings, such a pay structure could be used "to provide incentives for teachers to develop their knowledge, skills and competencies in new and more effective forms of pedagogy, deeper and more conceptual subject matter knowledge needed to teach consistently with the ways children learn advanced cognitive expertise, and the leadership and

management skills needed to engage in effective school-site management and decision making."⁷

In a single salary schedule, a teacher receives additional pay increases related to the number of years of service and additional degrees or college credits acquired. In a knowledge and skills-based pay structure, teachers are provided additional pay increases through demonstration "that they have acquired and can apply classroom-relevant knowledge and skills that represent higher levels of expertise or higher levels of teaching practice." The proposed salary allocation model by the Compensation Technical Working Group (TWG) provides pay increases through the levels of certification. The certification process involves multiple objective measures of the knowledge and skills of a teacher.

In most of the sample salary allocation models reviewed by the Compensation TWG, the models were aligned to the levels of certification for a teacher and modeled on the amount of years a teacher would spend in each level. Several models included a third level for a master teacher which led to discussion on how a master teacher would be defined and distributed. The Compensation TWG concurred with the master teacher recommendation by the Professional Educator Standards Board (PESB) that found a third level Washington certificate for master teacher would be duplicative of National Board for Professional Teaching Standards certification and would not be portable from state to state.⁹

Arguments For Including Certification Level in the SAM

- The authorizing statute for the Compensation TWG clearly states that the salary allocation model should be aligned to certification expectations.
- The certification process is designed to allow teachers to gain additional knowledge and skills and demonstrate them in an objective assessment.
- The continuum of teacher knowledge and development is recognized in the certification levels, with an entry level residency certificate, a middle level professional certificate and an optional advanced National Board for Professional Teaching Standards (NBPTS) certificate.
- Research indicates that the InTASC standards that the residency and professional certification are aligned to have a significant influence on teacher effectiveness.
- Increases in pay should be tied to both the attainment of additional professional development, but also the demonstration of professional competencies through the certification assessments, ProTeach Portfolio and the NBPTS certification process.

Arguments Against Including Certification Level in the SAM

- Research has not been completed on the effect of the ProTeach Portfolio and professional certification attainment on student achievement and teacher effectiveness.
- Additional resources will be needed to track the status of teacher certification in order for certification steps on the salary allocation model to be paid.
- Additional guidance from PESB is needed to define how teachers with historical licenses or out of state licenses will be placed on the salary allocation model.

 Allowing a certificate to lapse or not be renewed would result in no movement on the salary allocation model.

Certification Recommendation

The Compensation Technical Working Group recommends that the salary allocation model be aligned to the residency and professional certification levels. Additionally, National Board for Professional Teaching Standards certification is embedded in the salary allocation model, rather than being paid as a separate bonus. The additional increases in compensation identified in the salary allocation model occur for the professional certificate level and a minimum of four years of experience and as a proxy for the first renewal of the professional certificate at nine years of experience.

Years of Experience

In the teaching profession, experience is highly valued with a majority of states paying for increased experience. Experience is a common factor in many human resource policies: "the idea is that experience, gained over time, enhances the knowledge, skills and productivity of workers." ¹¹

It is difficult to measure the effect of experience on teacher effectiveness; however some broad conclusions can be made about the relationship between educator experience and effectiveness. In general, it appears some experience does have an impact on student achievement, although less than other measurable teacher attributes. The impact of experience on teacher effectiveness is the most pronounced in approximately the first six years of teaching, with the increased effectiveness leveling off over time. Other research indicates that teachers with more than 20 years of experience are more effective than teachers with no experience, but are not much more effective than those with five years of experience. The Compensation Technical Working Group discussed the value of years of experience, including references to the Washington State Institute for Public Policy (WSIPP) meta-analysis (Exhibit 1-Estimates of the Effect of Years of Teaching Experience on Student Outcomes) that found the effect of teacher experience on student learning being the most pronounced in the first five years. After this initial period of rapid growth and improvement, the gains in effectiveness become smaller.

Some members believed delaying an increase in compensation until after the fourth year of experience will incentivize the retention of certificated instructional staff. National research indicates a relationship between turnover and experience, "with the least and most experienced teachers most likely to depart their schools." According to the Professional Educator Standards Board (PESB), in Washington this pattern holds true with, "most of the teachers who leave a district do so earlier in their careers. There is also a bump for those who leave at about 30 years of experience, presumably to retire." ¹⁷

However, some members did not believe that the increase should be delayed until after the fourth year of experience. The Washington State Legislature and PESB designed a continuum of teacher development that encourages teachers to pursue professional certification post-induction with achievement of the certification by the end of their third year of teaching. The concern is that a delay in the percentage increase until the fifth year of teaching, after the individual has attained four years of experience, will cause educators to delay gaining the knowledge and skills competencies represented by the professional certificate one year. Thus the recommendation from some members was a smaller increase for teachers attaining the professional certificate at year four, after three years of experience, which would join with the 20 percent retention-related increase at year five, after four years of experience.

Arguments For Including Years of Experience in the SAM

- Some believe that providing increased pay after a certain number of years of experience will improve teacher retention.
- As teacher effectiveness increases the most dramatically in the first five years, additional compensation should be directed to that period.
- By virtue of remaining current on certification expectations and receiving successful evaluations, more experienced teachers are usually the more effective teachers.
- Additional increments for years of experience is a model teachers are familiar with nationwide.

Arguments Against Including Years of Experience in the SAM

- Experience serves as a proxy for effectiveness; it is not a direct measurement of teacher effectiveness.
- Default longevity compensation increases do not incentivize behavior and some ineffective teachers could continue to receive increased compensation.
- The rate of effectiveness declines with more years of experience, at some point teachers may not be as effective and should not receive additional compensation.

Experience Recommendation

The Compensation Technical Working Group (TWG) recommends that experience be tied with the progression from the residency certification to the professional certification or the NBPTS certification with bumps after four and nine years of experience. The first increase after four years of experience is contingent with attainment of the professional certificate. The proposed salary allocation model reduces the number of annual increments from the current model, allowing employees to maximize their compensation earlier in their career and increase the recruitment of additional employees into public education. The Compensation TWG recommends that an annual cost of living adjustment (COLA) be applied to all salary allocations. It is important to note that this COLA will be provided every year, regardless of the employees' placement on the salary allocation model.

National Board for Professional Teaching Practices (NBPTS)

The Compensation Technical Working Group (TWG) reviewed several methods of defining an accomplished teacher for the purpose of providing additional compensation for such teachers on the salary allocation model. Part of their analysis included the discussion of a "master teacher" definition in the report, "Strengthening The Continuum of Teacher Development: Professional Educator Standard's Board Response to the Charges in ESHB 2261". In this report, the PESB concluded that a separate license for a "Master" teacher would be cost prohibitive and duplicative of National Board for Professional Teaching Standards certification, which has national prestige and reciprocity with many states. The Compensation TWG concluded that National Board for Professional Teaching Standards (NBPTS) certification would be the process through which to recognize accomplished teachers in the salary allocation model.

The Washington State Institute of Public Policy (WSIPP) (Exhibit 4-Estimates of the Effect of Having a NBPTS Certified Teacher on Student Outcomes) reviewed studies on the effect of NBPTS-certified teachers on student achievement outcomes, with the research question "Are NBPTS-certified teachers more effective than non-NBPTS certified teachers?" The WSIPP meta-analysis of previous research found that "a teacher with NBPTS-certification can boost student test scores from 0 to .06 standard deviation units per year; best estimate= .026 standard deviations."

While the WSIPP meta-analysis of the effect NBPTS-certified teachers have on student achievement found that students taught by a NBPTS-certified teacher outperform those taught by a non-certified teacher, it should be noted that no research focused on the effect of National Board certification on student learning within Washington state has been conducted to date.

Additional areas of research have been identified to further understand the NBPTS certification effect:

- The majority of research has found that the process of attaining a NBPTS
 certification leads to increased teacher knowledge and effectiveness as well as the
 fact that the NBPTS process is an effective means of recognizing teachers who are
 already highly effective.
- The use of NBPTS-certified teachers in additional roles and responsibilities within schools and school districts, such as instructional coaches, mentor teachers and teacher leaders has been studied. The majority of research has found that NBPTScertified teachers are more involved in leadership opportunities following attainment of the certificate.
- Research has found that NBPTS-certified teachers have the same or lower rates of exiting the public education system compared to other teachers.

Arguments For Including NBPTS Certification in the SAM

- Effective, highly trained and certificated teachers should receive additional compensation based on their ability to greatly affect student achievement.
- NBPTS-certified teachers benefit other teachers within their school and school district, serving as a resource on best teaching practices.
- Teachers are motivated by the idea that there is a career continuum where additional knowledge and skills is recognized with additional compensation.
- By embedding compensation for NBPTS in the salary allocation model, the funding will be guaranteed and not subject to reductions by the Legislature. The existing bonuses are a part of an NBPTS certified teacher's planned annual income and therefore should be stabilized in our state funding system.

Arguments Against Including NBPTS Certification in the SAM

- Some teachers feel that providing additional compensation for "accomplished" teachers could negatively impact the collaborative relationship between teacher colleagues.
- The NBPTS certification process is costly, time consuming and largely dependent on an individual teacher's capacity to assume the cost and time obligations. There are conditional loans available from the state that depends on successful completion and awarding of the NBPTS certification.
- The proportion of NBPTS-certified teachers within a district is inequitable around the state and within school districts, leading to unequal access to accomplished teachers.
- Many schools and districts have not yet identified the leadership potential of NBPTScertified teachers to assist with school improvement efforts and other education reforms.

NBPTS Certification Recommendation

The Compensation TWG recommends that an accomplished teacher distinction should be included in the salary allocation model; the group believes that NBPTS certification is an objective measure of accomplished teaching and should be embedded in the salary allocation model. As such, the group recommends that compensation for NBPTS certification be included in the definition of basic education.

Levels of Education

Earning advanced levels of education beyond the entry degree (Bachelor's degree) required to join the teaching profession is currently part of the salary allocation model, with increased compensation for a Master's degree or Ph.D. and additional clock hours or credit hours. Nationally, half of all teachers hold Master's degrees and the number of teachers in the United States with Master's degrees has nearly doubled in the last 50 years. States and school districts have viewed an advanced degree as a proxy for teacher quality and many financially

incentivize the movement from a Bachelor's to Master's degree through an increased compensation, often called the "master's bump." The research on graduate degrees and teacher effectiveness is limited to studies that measure the effect on student achievement in only a few subjects and grade levels. The studies have found mixed results. The Washington State Institute for Public Policy (WSIPP) (Exhibit 2- Estimates of the Effect of Teacher Graduate Degrees on Student Outcomes) conducted a meta-analysis on graduate degrees, in general, and found that the effect of general graduate degrees on student achievement gains is minimal. The WSIPP meta-analysis on in-subject Master's degrees (i.e. a Master's in Math for a teacher teaching math) shows some association with higher student scores on tests.

Educational levels, including Master's degrees in general and Master's degree in the subject a teacher is teaching were discussed by the Compensation Technical Working Group, with division on whether education levels should be included in the base allocation model. Requiring that the degree match the assignment of a teacher could have unintended consequences, with some teachers being asked to work out of subject area and no longer being eligible for the increased pay. Some members felt that degrees should only be recognized if they are part of an educator's professional growth plan. Other members felt it should not be included because the research indicated that it does not have an effect on student achievement, as measured by student test scores. Targeting continuing education for specific competencies or outcomes was preferred, not awarding just any type of credits or clock hours. The discussion also included how to incorporate a beginning teacher who enters the profession with a Master's degree.

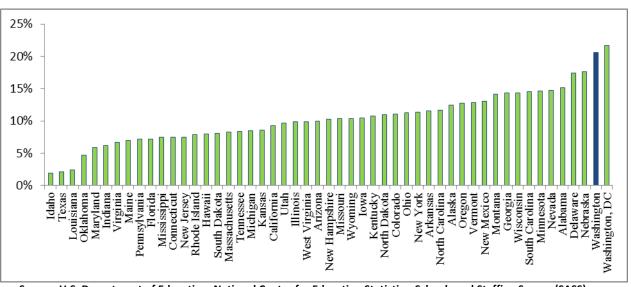


Exhibit 1: The Base Salary Premium for a Master's Degree, by State, 2007-08

Source: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School District Data File," 2007-08. The degree premium is the salary for a teacher with an MA and zero years of experience divided by the salary for a teacher with a BA and zero years of experience.

As displayed in Exhibit 71, the premium that states have invested in Master's Degrees or the "master's bump" varies greatly. Washington State currently pays the highest differential between a Master's degree with zero years of experience and a Bachelor's degree with zero years of experience at 21 percent.

Arguments For Including Levels of Education in the SAM

- Public education is dedicated to educational attainment; in line with that value, teachers should be compensated for additional graduate degrees and clock hours/credits obtained.
- Master's degrees, whether in subject area endorsements or in general elementary or secondary education, result in a more educated employee and such professional development should be compensated.

Arguments Against Including Levels of Education in the SAM

- Research seems to indicate that Master's degrees, in general, are not associated with increased student achievement.
- The current salary allocation model Master's degree bump is 21 percent, while the national average is 9 percent. Washington should not continue to financially reward a course of study that is not associated with increased effectiveness.

Levels of Education Recommendation

The Compensation Technical Working Group recommends that educational levels be included in the salary allocation model. The group believes that advanced degrees should be approved by the school district and related to current or future teaching assignments in order to receive additional compensation.

ENDNOTES

¹ Washington ProTeach Portfolio. Standards & Criteria Retrieved 3/19/2012 from http://www.waproteach.org/overview/standards criteria.html

² Interstate New Teacher Assessment and Support Consortium (INTASC) Standards Retrieved 8/09/2011: http://www.wresa.org/Pbl/The%20INTASC%20Standards%20overheads.htm

³ National Board for Professional Teaching Standards (NBPTS)- By Certificate Area Retrieved 8/09/2011: http://www.nbpts.org/the_standards/standards by_cert

⁴ Odden, A. & Kelley, C. (2002). *Paying teachers for what they know and do: new and smarter compensation strategies to improve schools* (2nd ed.). Thousand Oaks, CA. Corwin Press. p.50.

⁵ Zingheim, P. & Schuster, J.R. (1995). How are the new pay tools being deployed? *Compensation and Benefits Review*, 27 (4), p. 10-13.

⁶ Lawler, E.E., III. (1995). The new pay: A strategic approach. *Compensation and Benefits Review*, 27 (4), p. 14-22.

⁷ Odden, A. & Kelley, C. (2002). *Paying teachers for what they know and do: new and smarter compensation strategies to improve schools* (2nd ed.). Thousand Oaks, CA. Corwin Press p. 51.

⁸ Milanowski, p. 2

⁹ Professional Educator Standards Board. State of Washington (January 2010) Strengthening the Continuum of Teacher Development: Professional Educator Standards Board Response to the Charges in ESHB 2261. Retrieved June 1, 2012 from http://www.pesb.wa.gov/publications/reports

¹⁰ InTASC Research Synthesis, Council of Chief State Officials. Retrieved June 20, 2012 from http://www.ccsso.org/Resources/Publications/InTASC_Research_Synthesis.html

¹¹ Rice, J. (2010) The impact of teacher experience: Examining the evidence and policy implications. Center for Analysis of Longitudinal Data in Education Research (CALDER).

¹² Hanushek, E. (1996) A more complete picture of school resource policies. *Review of Educational Research 66*: 397-409; Rowan, Correnti and Miller 2002.

¹³ Hanushek, Rivkin and Kain (1998), Rivkin, S., and Hanuskey, E. (2003) How to improve the supply of high quality teachers, in Diane Ravitch (ed), *Brookings Papers on Education Policy* 2004, Washington D.C. Brookings Institute Press.

¹⁴ Ladd, H. (2008) Value added modeling of teacher credentials: Policy implications. Paper presented at CALDER research conference. Washington, D.C.

¹⁵ Pennucci, A. (2012) *Teacher compensation and training policies: Impacts on student outcomes*. (Document No. 12-05-2201). Olympia: Washington State Institute for Public Policy. P.3

¹⁶ Johnson, Susan Moore, Jill Harrison Berg, and Morgaen L. Donaldson. "Who Stays in Teaching and Why: A Review of the Literature on Teacher Retention." (February 2005). Page 8. Retrieved from http://assets.aarp.org/www.aarp.org/articles/NRTA/Harvard_report.pdf

¹⁷ Experience Level-Teachers. Professional Educator Standards Board (PESB) Workforce Data. Retrieved June 26, 2012 from http://data.pesb.wa.gov/workforce/demographic/experience/teacher

¹⁸ National Center for Education Statistics. (2003) Digest of Education Statistics 2002. Washington D.C. U.S. Department of Education, Table 85 http://nces.ed.gov/programs/digest/d02/tables/dt085.asp