



WASHINGTON STATE BOARD OF EDUCATION

OLD CAPITOL BUILDING • ROOM 253 • P.O. Box 47206 • 600 S.E. WASHINGTON • OLYMPIA, WA 98504-7206

October 28, 2008

Dear Board Members:

I had my yellow fever shot and am taking typhoid pills to get ready for November. No not because of the election or our Board meeting, but because I am going to Argentina and Uruguay right after our Board meeting November 8-22. That means Kathe and Loy are in charge of the office in my absence. Now it is their chance to straighten things out! Thanks to all of you and our staff for all you have done this fall!

This Board meeting is a big one for several reasons. You will be discussing and making some decisions on the CORE 24 Implementation Charter, the Tribal MOA, Math Curricular Recommendations, and the draft Policy Framework for Accountability. Many people have been watching how the Board will approach these issues and I expect a number of them will want to talk with you during public comment. I want you all to be comfortable with our proposals. WE are providing some options for several of them. If you disagree with any of them, please speak up and offer alternatives. We are here to serve all of you. Thanks to those of you who have been able to come to our work sessions, as well as the Executive Committee for the face to face conversation last Friday. There is a lot of complex material, and it is really important for you to have time to dig in and understand it.

In addition to the great content discussions we have had, I also think we will need to talk a bit more about some of our process issues. There are times when your staff is feeling very stretched by lots of attention to content and not enough attention to process. We (staff and Board members) need both, to be successful in our work. **Board work is a journey, not a race.** Our work is very important and will require a sustained effort for a number of years. I also need to make sure we are all committed to our plans for action, on the same page for Board direction, and working as a team. With the New Year in January, some potential changes from the fall elections, and the fiscal situation in the state, it will be an important time to reflect about where we are headed in terms of working as a strong team. I appreciate the work that Warren and Amy will be doing on the bylaws, with Brad, as one important step in addressing some process issues.

And now to our Board meeting! We will be at Highline Community College. That means go early to get a parking spot! Ask Jeff!

Wednesday, November 5, 2008 (yes the day after the election!)

Charter for CORE 24 Implementation Task Force

Steve Dal Porto and Jack Schuster, our co-leads, have been working with Kathe to create a charter for the CORE 24 Implementation Task Force based on the Board's direction from the July meeting. Issues to be addressed include: phasing, flexibility, out of the box ideas on competencies, scheduling, components of the career concentration, and how to address the High School and Beyond Plan in middle school. They have also drafted an application for people who are interested in serving on the Task Force. It will be on our Web site by November 1.

Tribal Memorandum of Agreement

Bernal Baca, Board Lead, has been working with Kathe and Steve Dal Porto, Linda Lamb and Mary Jean Ryan on the Tribal Memorandum of Agreement. As you will recall two years ago, the Board was asked formally through a Memorandum of Agreement with the Tribal Leader Congress on Education (TLC) to reach a decision on including Tribal history, culture, and government as a graduation requirement. Rather than adopting another graduation requirement, the MOA committee suggests encouraging the use of a sovereignty curriculum developed by OSPI and the tribes to help students understand sovereignty—the right to rule and govern your own people and territory—from the perspective of native peoples. Kathe has drafted two resolutions for your consideration, to encourage at a state level the use of this curriculum. Please look the resolutions over carefully. This is an issue where we need to be sensitive and respectful to the tribes and also to understand what is doable in districts to help our students understand the unique status of tribes in our state.

High School Transcript Study Findings

The BERC Group was hired last spring to conduct a transcript analysis on 100 sample high schools in our state. While smaller studies have been done on what high school students are taking, this is the biggest data collection piece that has been done. This information will be very helpful in better understanding the CORE 24 implementation issues. While a final report will not be done until December 1, the BERC group will share their initial findings with you at the November Board meeting.

Highline Big Picture High School's Request for a Waiver from Credit-Based Graduation Requirements

The Big Picture High School, an alternative high school in Highline School District, is requesting a waiver from credit-based high school graduation requirements for the maximum four years that are allowed. The waiver request meets Washington State's school reform vision as stated in the State Board of Education's rules, specifically "shifting from a time and credit-based system of education to a standards and performance-based education system." In place of traditional credits, the Big Picture High School has "developed an array of competencies based on college admission criteria adapted from work in other states and in collaboration with admissions staff from major colleges and universities in Washington. This will be the second high school (Truman was the first) where the Board has approved a competency based high school.

Since this is the direction that the Board wants to encourage under CORE 24, we thought it valuable to copy its full application (sorry it is a bit long).

Report from Strategic Teaching on OSPI Math Curricular Menu Findings and Board Draft Recommendation

Steve Floyd, our Math Lead, Edie, and the SBE Math Panel have been working with Strategic Teaching on its review of the OSPI Math Curricular Menu for K-8 standards. Linda Plattner will present its findings to the State Board of Education (SBE) on the four top ranked OSPI programs in both elementary and middle school that best align with the new K-8 math standards. Linda did a content alignment between these eight programs and the new K-8 math standards as well as some additional analysis on mathematical soundness (which was not a part of the OSPI review process) and has come up with some differences in her findings based on that review. The Board will decide whether to accept her report and what comments and recommendations to make to OSPI. I have drafted a memo on recommendations you may want to make to OSPI. It is up to OSPI to decide what to do with the SBE recommendations. You will probably hear from some publishers and Where's the Math people. In January, we will look at the high school curricular menu.

A Draft Policy Framework for Accountability Concepts: An Accountability Index and State/Local Partnership Proposed Accountability Concepts

Kris Mayer is on vacation in Africa, so Edie will take the lead here on presenting and facilitating a discussion with our consultants, Pete Bylsma and Mass Insight, and the Board on the proposed framework, which includes an accountability index, different levels of assistance to districts and schools, with a more intensive level for districts with Priority schools and some proposed ultimate consequences under an "Academic Watch." While much work has been done, there are many details to work out on this concept proposal, thus the need for a follow up outlined in proposed actions to you. Please review the two options under Academic Watch the final step – one is more locally controlled than the other which requires state binding conditions on the locals. We want to know which you prefer or do you want something else. There remain significant concerns from many of our education stakeholders on this topic. Mass Insight is providing a short concept paper at the meeting. The final paper will be provided after the Board meeting.

Dinner will be at Anthony's Homeport at 7:00 p.m.

Thursday, November 6, 2008

Update on Bylaws Review

Warren Smith and Amy Bragdon are our Co-leads on the bylaws revisions. Brad will be working with them. They are asking for your input and will create revisions for you to consider at your Board meeting in January.

Joint Math (and Science) Action Plan Update

Steve Floyd, Board Lead for Math, and Jeff Vincent, Board Lead for Science, will discuss the different components needed to make sure that our new standards in math and science have all the support needed to ensure success from aligned curriculum and assessments to finding more teachers with endorsements to teach these subjects. Jeff has been doing some work on a public/private initiative with the Partnership for Learning and others to support funding for these efforts.

Update on Science Standards Review and Science End of Course Assessment Study

Heil and Associates will discuss their role in the science standards review and a piece they have recently completed on the pros and cons of the use of science end of course assessments with the new Washington Science standards. While the Board will not take action on this item, this information should be of interest to the Board in light of the upcoming change in math assessments from WASL to end of course assessments.

Executive Session for Annual Evaluation of Executive Director

You will complete your discussion of the Executive Director's performance during this Executive Session.

Business Items

You will have a draft motion sheet for the items on your business action agenda. In the meantime, each policy paper has a final section on proposed or expected action you should read. Some (MOA and SPA) include several options for your consideration.

Funding Proposals for Basic Education and K-12 Funding

The Joint Basic Education Finance Task Force will continue to meet in November to craft a proposal by December 1. Brad will go over the current comprehensive proposals with you, and Edie will discuss draft parameters of K-12 funding topics the Board may want to comment on during the upcoming legislative session. At this point, we do not anticipate writing a letter with specific dollar amounts requested in these areas, although Jennifer Priddy, from OSPI, has costed out these items based on different assumptions.

Cheers,



State Board of Education Meeting

Highline Community College

2400 S. 240th Street

Building 2

Des Moines, Washington 98198

206-870-3777

November 5 9:00 a.m.-5:00 p.m.

November 6 8:30 a.m.-3:00 p.m.

AGENDA

Wednesday, November 5, 2008

9:00 a.m. Call to Order

Pledge of Allegiance

Agenda Overview

Approval of Minutes from the September 24-25 Meeting (**Action Item**)

9:10 a.m. Charter for CORE 24 Implementation Task Force

Dr. Steve Dal Porto, Co-lead

Mr. Jack Schuster, Co-lead

Dr. Kathe Taylor, Policy Director

10:00 a.m. Tribal Memorandum of Agreement

Dr. Bernal Baca, Board Lead

Dr. Kathe Taylor, Policy Director

10:30 a.m. Break

10:45 a.m. High School Transcript Study Findings

Dr. Duane B. Baker, BERC Group, Inc.

Dr. Candace A. Gratama, BERC Group, Inc.

Board discussion

11:45 a.m. Highline Big Picture High School's Request for a Waiver from Credit-Based Graduation Requirements

Mr. Jeff Petty, Big Picture High School

12:00 p.m. Public Comment

12:30 p.m. Lunch

Mary Jean Ryan, *Chair* • Warren T. Smith Sr., *Vice Chair* • Dr. Terry Bergeson, *Superintendent of Public Instruction*
Dr. Bernal Baca • Amy Bragdon • Dr. Steve Dal Porto • Steve Floyd • Dr. Sheila Fox • Phyllis Bunker Frank • Austianna Quick
Linda W. Lamb • Eric Liu • Dr. Kristina Mayer • John C. "Jack" Schuster • Lorilyn Roller • Jeff Vincent • Edie Harding, *Executive Director* (360) 725-6025 • TTY (360) 664-3631 • FAX (360) 586-2357 • Email: sbe@k12.wa.us • www:sbe.wa.gov.

1:15 p.m. Report from Strategic Teaching on OSPI Math Curricular Menu Findings and Board Draft Recommendation

Mr. Steve Floyd, Math Lead

Ms. Edie Harding, Executive Director

Ms. Linda Plattner, Consultant, Strategic Teaching

2:00 p.m. Public Comment

2:20 p.m. Break

2:30 p.m. A Draft Policy Framework for Accountability Concepts: An Accountability Index and State/Local Partnership Proposed Accountability Concepts

Ms. Edie Harding, Executive Director

Dr. Pete Bylsma, Consultant to SBE

Mr. Andy Calkins, Mass Insight

Ms. Meghan O'Keefe, Mass Insight

Board Discussion

4:30 p.m. Public Comment

5:00 p.m. Adjourn

Thursday, November 6, 2008

9:00 a.m. Update on Bylaws Review

Mr. Warren Smith, Board Co-lead
Ms. Amy Bragdon, Board Co-lead
Mr. Brad Burnham, Policy and Legislative Specialist

9:15 a.m. Joint Math (and Science) Action Plan Update

Mr. Steve Floyd, Board Lead for Math
Mr. Jeff Vincent, Board Lead for Science

10:15 a.m. Break

10:30 a.m. Update on Science Standards Review and Science End of Course Assessment Study

Mr. Jeff Vincent, Board Lead for Science
Dr. Kathe Taylor, Policy Director
Dr. Rodger Bybee, Heil and Associates
Ms. Kasey McCracken, Heil and Associates

11:00 a.m. Public Comment

11:30 a.m. Executive Session for Annual Evaluation of Executive Director

12:30 p.m. Lunch

1:00 p.m. Business Items

- Approval of Policy Framework for Accountability (**Action Item**)
- Approval of Implementation Task Force Charter (**Action Item**)
- Approval of Tribal Memorandum of Agreement Resolution (**Action Item**)
- Approval of Strategic Teaching Report on OSPI Mathematics Curricular Menu and Board Recommendations (**Action Item**)
- Approval of Application for Waiver from Credit-Based High School Graduation Requirements (**Action Item**)

Consent Agenda

The purpose of the Consent Agenda is to act upon routine matters in an expeditious manner. Items placed on the Consent Agenda are determined by the Chair, in cooperation with the Executive Director, and are those that are considered common to the operation of the Board and normally require no special Board discussion or debate. A Board member; however, may request that any item on the Consent Agenda be removed and inserted at an appropriate place on the regular agenda.

Items on the Consent Agenda for this meeting include:

Mary Jean Ryan, *Chair* • Warren T. Smith Sr., *Vice Chair* • Dr. Terry Bergeson, *Superintendent of Public Instruction*
Dr. Bernal Baca • Amy Bragdon • Dr. Steve Dal Porto • Steve Floyd • Dr. Sheila Fox • Phyllis Bunker Frank • Austianna Quick
Linda W. Lamb • Eric Liu • Dr. Kristina Mayer • John C. "Jack" Schuster • Lorilyn Roller • Jeff Vincent • Edie Harding, *Executive Director* (360) 725-6025 • TTY (360) 664-3631 • FAX (360) 586-2357 • Email: sbe@k12.wa.us • www:sbe.wa.gov.

- Approval of REVISED 2009 and 2010 Board Meeting Dates (**Action Item**)
- 180 Waiver Days (**Action Item**)
- Private School Approval (**Action Item**)

2:00 p.m. Funding Proposals for Basic Education and K-12 Funding

Ms. Edie Harding, Executive Director

Mr. Brad Burnham, Policy and Legislative Specialist

Board Discussion

2:50 p.m. Reflections and Next Steps from the Board Meeting

3:00 p.m. Adjourn

PLEASE NOTE: Times above are estimates only. The Board reserves the right to alter the order of the agenda. For information regarding testimony, handouts, other questions, or for people needing special accommodation, please contact Loy McColm at the Board office (360-725-6027). This meeting site is barrier free. **Contact during the meeting is: Kathleen Roemer 206-878-3710.**



Washington State
Board of Education



Working to Raise Student Achievement Dramatically

CHARTER FOR CORE 24 IMPLEMENTATION TASK FORCE

Project Purpose

The purpose of the CORE 24 Implementation Task Force (ITF) is to examine the implementation issues associated with the CORE 24 High School Graduation Requirements Framework, passed by the State Board of Education (SBE) in July 2008. The ITF will advise the SBE on strategies needed to implement the requirements, including a phase-in process that would begin with the graduating class of 2013. Although it is the SBE's intent for the CORE 24 requirements to be fully implemented by the graduating class of 2016, assuming funding by the legislature, the ITF should take into consideration ways to move the system forward *toward* CORE 24 requirements in the event only partial funding is attained.

Background

At the July 2008 SBE meeting, the SBE approved the CORE 24 High School Graduation Requirements Framework through the following motions, which included specific direction to staff to establish an Implementation Task Force. The motions reference the Meaningful High School Diploma (MHSD) memorandum (the "larger paper") approved by the Board on July 24, 2008.

1. Establish the CORE 24 Graduation Requirements Policy Framework, per the attached Adoption Document, consisting of subject area requirements, Culminating Project, and High School and Beyond Plan to be phased in over four years, beginning with the class of 2013 and becoming fully implemented with the class of 2016, contingent upon funding approved by the legislature.
2. Maintain the Culminating Project and High School and Beyond Plan as graduation requirements, with modifications developed in consultation with the Board's implementation advisors. Begin the High School and Beyond Plan in middle school.
3. Direct staff to establish an Implementation Task Force to make recommendations to the Board by June 2009, to address implementation issues identified through (prior) public outreach and cited in the larger (July 2008 MHSD memorandum) paper. These include, but are not limited to:
 - An implementation schedule that prioritizes phase-in of new credit requirements.
 - Ways to operationalize competency-based methods of meeting graduation requirements.

- Ways to assist struggling students with credit retrieval and advancing their skills to grade level.
 - Phasing in CORE 24 to address issues such as teacher supply, facility infrastructure, etc.
 - Ways to provide appropriate career preparation courses, as well as career concentration options.
 - Scheduling approaches to 24 credits that can meet the required 150 instructional hours.
4. Affirm the intention of the Board to advocate for a comprehensive funding package and revision to the Basic Education Funding formula, which among other necessary investments, should link the implementation of CORE 24 directly to sufficient funding to local school districts for a six-period high school day¹, a comprehensive education and career guidance system, and support for students who need additional help to meet the requirements. The Board directed staff to prepare a funding request for the 2009-2011 biennium to begin implementation of CORE 24.

Connection to the Board's Mission, Goals, and Work Plan

One key strategy to meet the SBE's goal to improve student preparation for post-secondary education and the 21st century world of work and citizenship is to create a coherent and rigorous set of graduation requirements that keeps all options open for all students. With the actions taken in July 2008, the SBE established the CORE 24 High School Graduation Requirements Framework. The CORE 24 Implementation Task Force, part of the SBE's September 2008-August 2009 work plan, is an integral step in moving the work forward.

Board Role

The SBE's role is to receive the recommendations of the Implementation Task Force (ITF), consider them in the context of the larger policy environment, and ask for further clarification if needed. The SBE will formulate policy for CORE 24 implementation.

ITF Co-leads

Jack Schuster and Steve Dal Porto will serve as Co-leads for the ITF. The Co-leads will oversee the work of the ITF, including:

- Helping to select the membership.
- Attending all meetings of the Task Force, bringing forward questions from the Board.
- Identifying policy questions to be considered by the SBE.
- Reporting back to the Board on the progress of the Task Force.
- Attending meetings (AWSP, WSSDA, WASA, etc.) with staff, as possible, to discuss CORE 24 and its implementation.
- Being a "sounding board" for staff as questions arise.

¹ The Board's intent is not to require all school districts to implement a six-period day, but rather to advocate for funding up to the level of six periods.

Relationship of Implementation Task Force and Meaningful High School Diploma (MHSD)

Eric Liu will continue to serve as the Board lead on the Meaningful High School Diploma project. He will provide strategic guidance needed to advocate for CORE 24, and will continue to carry the unfinished MHSD work forward, leading the policy development of the Board's approaches to the Culminating Project, High School and Beyond Plan, essential skills, and middle school/high school connections.

As appropriate, the ITF will consider the issues of the Culminating Project, High School and Beyond Plan, essential skills, and middle school/high school connections and make recommendations to the MHSD Lead, Eric Liu.

Scope of Work

The CORE 24 Implementation Task Force (ITF) will be comprised of a central leadership group that will consider the systems issues that need to be addressed in order to implement the CORE 24 framework, as approved by the Board. Individuals wishing to serve on the ITF must express their interest formally. The ITF will:

- Develop a strategy for addressing the implementation issues identified in the Board's motion approval language and any other issues the Board and/or Task Force deems important (see list of implementation issues below).
- Provide options for a phase-in process within the 2013-2016 parameters established by the Board.
- Help identify people to serve on practitioner-based work groups, if needed.
- Analyze the advantages and disadvantages of recommendations, in order to provide the Board with different options to consider.
- Consult informally with colleagues to provide ongoing feedback from the field.

The central leadership group of approximately 15 people will include working or recently retired practitioners well-respected by their peers for their deep and wide understanding of systems issues, depth of expertise, and ability to think systemically and creatively.

This group of leaders *collectively* will bring expertise in:

- Rural, suburban, and urban districts.
- Districts of different sizes and from eastern and western areas of the state.
- Districts with different levels of career and technical education involvement, including skills centers.
- Districts with Navigation 101.
- Comprehensive and alternative high schools.
- Middle and high school perspectives.
- Curricular issues spanning an array of subjects.
- Counseling.
- Struggling and gifted students.
- English Language Learner (ELL) perspectives.
- Private schools.

The ITF will seek people in different leadership roles who serve, or have recently served, in the K-12 system. Practitioner-based, issue-specific, and ad-hoc work groups, coordinated by staff will support the work of the Implementation Task Force, as needed.

Implementation Questions and Issues

This list represents the issues identified in the Board's motion, as well as other issues that have been raised during the SBE discussions of CORE 24 with stakeholders. The list, with any additions the SBE might make, is intended to be a starting place for discussion with the Implementation Task Force.

- 1. What is the optimal strategy for phasing in the CORE 24 requirements, beginning with the graduating class of 2013 and becoming fully implemented with the graduating class of 2016?**
The ITF will advise the SBE on strategies needed to implement the requirements, including a phase-in process that would begin with the graduating class of 2013. Although it is the SBE's intent for the CORE 24 requirements to be fully implemented by the graduating class of 2016, assuming funding by the legislature, the ITF should take into consideration ways to move the system forward toward CORE 24 requirements, in the event only partial funding is attained.
 - 2. What flexibility, if any, is needed to make CORE 24 requirements work for all students, e.g., ELL learners, IB diploma candidates, struggling students, etc.?**
The ITF should consider, at a minimum, the advantages, disadvantages, and optimal use of competency-based credit, credit "plus" approaches that allow students to earn one credit but satisfy two requirements, credit earned in middle school, and limited credit waiver authority for local administrators.
 - 3. What conventional and out-of-the-box ideas should the SBE consider to implement CORE 24?**
The ITF should recommend creative, practical, and doable ways (e.g., the role of online learning, collaborative arrangements across districts, etc.) to address the capacity issues that CORE 24 will inevitably raise.
 - 4. What scheduling approaches assure sufficient opportunities for students to earn 24 credits and meet the definition of instructional hour credit, established in rule?**
The ITF should outline different scheduling scenarios to identify the challenges and solutions districts might consider to satisfy the requirements of CORE 24.
 - 5. What should the career concentration requirement look like in practice?**
The ITF should recommend ways to assure that the career concentration requirement incorporates the expectations of the current occupational education requirement, and considerations for the relationship of the Culminating Project and High School and Beyond Plan to the career concentration requirement.
 - 6. What issues need to be addressed in order for the High School and Beyond Plan to begin in middle school?**
The ITF should recommend ways to build connections between high school and middle school.
-

Deliverables

The Implementation Task Force will produce:

- Recommendations with analyses of advantages and disadvantages related to the issues itemized in Motion #3, passed in July 2008 (see details in background section of this paper).
- Recommendations with analyses of advantages and disadvantages related to other relevant issues the ITF identifies.
- Regular feedback from the field on CORE 24 perceptions, concerns, and support.

Suggested Timeline

Although the original motion language specified June 2009 as the deadline “to address implementation issues identified through (prior) public outreach and cited in the larger paper,” this suggested timeline is probably a more realistic approximation of the extended time that will be needed to think carefully through the different issues. Specific dates are included only for the first two meetings; later dates will be established in consultation with the ITF.

Meetings	Dates
First meeting of Task Force	February 2, 2009
Second meeting of Task Force	March 2, 2009
Third meeting of Task Force	May 2009
Fourth meeting of Task Force	June or August 2009
Fifth meeting of Task Force	October 2009
Sixth meeting of Task Force	December 2009

Communication Plan

Updates from the Implementation Task Force will be provided at regularly-scheduled meetings of the Board. Board members and SBE staff will be making formal presentations in a variety of venues in order to provide information about CORE 24 and seek input on implementation issues from stakeholders. The SBE will work with OSPI, legislative staff, and the Governor’s staff to keep them informed of the work and share progress with key stakeholders, including the legislature.

Staff Project Manager

Kathe Taylor, Policy Director

Expected Action

Motion to approve the charter for the Implementation Task Force and extend the timeline from June 2009 to the suggested schedule outlined above.



WASHINGTON STATE BOARD OF EDUCATION

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MEMORANDUM OF AGREEMENT WITH TRIBAL LEADER CONGRESS ON EDUCATION

SUMMARY OF POLICY ISSUE /STATE BOARD OF EDUCATION (SBE) STRATEGIC PLAN GOALS

The Board was asked formally through a Memorandum of Agreement¹ with the Tribal Leader Congress on Education (TLC) to reach a decision on including Tribal history, culture, and government as a graduation requirement by December 1, 2007. In November 2007, the Board extended the deadline to December 2008 in order to allow sufficient time for the Board to develop a comprehensive graduation requirements policy framework.

BACKGROUND

The inclusion of Native American tribal culture, history, and government in the education of K-12 students has been the focus of several initiatives undertaken by the legislature, the Office of Superintendent of Public Instruction (OSPI), and the State Board of Education (SBE) in the last five years.

Legislative and SBE action: In 2005, the legislature introduced SHB 1495² on tribal culture, history, and government that amended a statute³ pertaining to the SBE's authority. The new language (*in italics*) read:

- (a) Any course in Washington state history and government used to fulfill high school graduation requirements ***shall consider including*** information on the culture, history, and government of the American Indian peoples who were the first inhabitants of the state.

That language is now incorporated in the SBE's high school graduation requirement rules.⁴

OSPI social studies standards: Washington has four learning goals that serve as the foundation for the Essential Academic Learning Requirements (EALRs)—what all students should know and be able to do. The EALRs (also known as standards) focus on big concepts and ideas. Grade Level Expectations (GLEs) provide details on what students should know and be able to do at each grade level. Together, the EALRs and GLEs define what students should learn in designated grades.

¹ See Appendix A

² The language formerly read: Any course in Washington state history and government used to fulfill high school graduation requirements is encouraged to include information on the culture, history, and government of the American Indian peoples who were the first inhabitants of the state.

³ RCW 28A.230.090

⁴ WAC 180-51-061

Goal Two of the Washington State Learning Goals identifies the subjects students will study:

Know and apply the core concepts and principles of mathematics; social, physical, and life sciences; **civics and history, including different cultures and participation in representative government**; geography; arts; and health and fitness.

Civics and history are part of the social studies standards (EALRs), revised in 2008 by OSPI. The new social studies standards focus on big concepts and ideas that apply universally; that said Tribes are referenced explicitly, in large part due to their unique status as sovereign entities. See Appendix B for specific social studies EALRs and GLEs that reference Native American tribal issues.

OSPI sovereignty curriculum: OSPI has invested in the development of a sovereignty curriculum that would help students understand sovereignty—the right to rule and govern your own people and territory—from the perspective of native peoples. A 15-member sovereignty curriculum advisory committee has guided the initiative from the beginning (see Appendix C for a list of sovereignty committee members). The curriculum is aligned with state social studies standards and grade level expectations (GLEs) and is designed to be infused into existing content and delivered at all three levels of school: social studies (elementary), Washington State History (middle), and US History (high). Units of the curriculum will be pilot-tested by teachers in ten schools in fall 2008.⁵ Once completed, the curriculum will be made available to districts and teachers who will be encouraged to use it; it will not be a mandatory requirement.

SBE Memorandum of Agreement: A Memorandum of Agreement (MOA) with the Tribal Leader Congress on Education (TLC) and SBE, OSPI, and the Washington State School Directors Association (WSSDA), was signed in 2006. The SBE agreed to:

- initiate the process to formally consider the inclusion of Tribal history, culture, and government as a graduation requirement by December 1, 2006;
- begin meetings and active consultation with the TLC on Education and the WSSDA on the inclusion of Tribal history, culture, and government as a graduation requirement; and
- reach a decision to include Tribal history, culture, and government as a graduation requirement by December 1, 2007.

Board members met with Tribal representatives in 2006 to initiate discussion. When the Board decided to review and revise high school graduation requirements, a decision on whether to include Tribal history, culture, and government was folded into that comprehensive review. In November, 2007, the Board extended the deadline for reaching a decision on including Tribal history, culture, and government as a graduation requirement to December 2008. The Meaningful High School Diploma (MHSD) work was in process, and additional time was needed to develop the graduation requirements policy framework.

The Board has actively consulted with members of the TLC on several occasions. Dr. Bernal Baca attended the August 2007 TLC meeting. The Honorable Karen Condon, Councilwoman of the Confederated Tribes of the Colville Reservation, spoke to the Board at its November 2007 meeting. At that time, Councilwoman Condon signaled that the TLC would soon formally submit a resolution to the SBE calling for .5 credit of local Tribal History to be required for graduation.

⁵ The ten schools piloting sovereignty curriculum units in fall 2008 are: Hood Canal Elementary—Skokomish Tribe, Lincoln Elementary/Olympia S.D., Fife High School – Puyallup Tribe, Heritage High School/Marysville S.D. – Tulalip Tribes, Kingston Middle School/North Kitsap S.D. – Pt. Gamble S’Klallam Tribe, Neah Bay High School/Cape Flattery S.D. – Makah Tribe, Enumclaw H.S. & Thunder Mt. M.S./Enumclaw S.D. – Muckleshoot Tribe, Ridgeline Middle School/Yelm S.D. – Nisqually Tribe, Port Angeles High School – Lower Elwha Klallam Tribe, Suquamish High School (“XeZusede”)/Suquamish Tribe

(The resolution was submitted to the SBE in December 2007).⁶ In addition, staff met with Tribal representatives in October 2007.⁷

Chair Mary Jean Ryan and Tribal Board Lead Bernal Baca initiated a meeting with TLC representatives in spring 2008, followed by a second meeting in June, attended by Chair Ryan and MHSD Board Lead Eric Liu. (Tribal Board Lead Bernal Baca was unable to be present for the meeting). Attending the June 2008 meeting were Leonard Forsman, Suquamish Tribal Chair and member of the TLC; Michael Felts, Suquamish Tribal Foundation CEO; and Suzi Wright, Policy Analyst for the Tulalip Tribes. SBE staff member Kathe Taylor was also present.

At its September 24-25, 2008 meeting, the Board heard a report on the social studies standards pertaining to tribal history, culture, and government and on the development of the sovereignty curriculum. After discussing possible responses to the Memorandum of Agreement, the Board asked Tribal Lead Bernal Baca and members Linda Lamb and Steve Dal Porto to bring a draft response to the November 2008 meeting. The Tribal MOA committee is putting forward two draft versions of a resolution for the Board to consider.

EXPECTED ACTION

The Board will adopt a resolution.

⁶ See Appendix C

⁷ Attending were Suzi Wright (Policy Analyst for the Tulalip Tribes); Keri Acker-Peltier (Director of Education, Suquamish Tribe, and MHSD Advisory Committee member; Rob Purser (Suquamish Educational Liaison); and Darlene Peters (Educational Specialist, Suquamish).



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Tribal History and Government DRAFT Resolution – GREEN Version November 5, 2008

A Response to the Memorandum of Agreement with the Tribal Leader Congress on Education

WHEREAS, the State Board of Education (SBE) entered into a Memorandum of Agreement with the Tribal Leaders Congress on Education to reach a decision on including Tribal history, culture, and government as a graduation requirement; and,

WHEREAS, the State Board of Education has reviewed the state law that encourages the inclusion of information on the culture, history, and government of the American Indian peoples; and,

WHEREAS, the State Board of Education has reviewed the state's social studies education standards (essential academic learning requirements and grade level expectations) that specify that students should understand tribal treaties, treaty-making, government, territories, sovereignty, and growth prior to, and after, encounter; and,

WHEREAS, the State Board of Education rule (180-51-061) requires minimum graduation social studies credit requirements to align with grade level expectations at grade ten or above and stipulates that any course in Washington state history and government used to fulfill high school graduation requirements shall consider including information on the culture, history, and government of the American Indian peoples who were the first inhabitants of the state; and,

WHEREAS, the State Board of Education has reviewed the sovereignty curriculum being developed by the Office of State Superintendent of Public Instruction (OSPI) that teachers can incorporate voluntarily into the social studies curriculum; and,

WHEREAS, the State Board of Education recognizes that school districts, with the assistance of the Washington State School Directors' Association, are engaged in the development of effective government to government relations to identify and adopt curriculum regarding Tribal history, culture and government; and

WHEREAS, the State Board of Education has consulted extensively with representatives of the Tribal Leader Congress on Education to determine ways the SBE can most effectively support the teaching and learning of tribal history and government;

THEREFORE, BE IT RESOLVED, That the State Board of Education supports the Tribes in their advocacy that the legislature provide funding to support curriculum and instruction of the sovereignty curriculum developed by OSPI that would include funding for materials, teacher professional development around the curriculum, and evaluation; and,

BE IT FURTHER RESOLVED That the State Board of Education encourages OSPI to build upon the current social studies essential academic learning requirements and grade level expectations to include tribal sovereignty, and take positive steps to ensure that schools are assessing students' opportunities to learn tribal sovereignty; and,

BE IT FURTHER RESOLVED That the State Board of Education commits to work with the Professional Educator Standards Board and the Higher Education Coordinating Board to encourage teacher education preparation programs to introduce pre-service teachers to the sovereignty curriculum.

Adopted: (date)

Attest:

Mary Jean Ryan, Chair



WASHINGTON STATE BOARD OF EDUCATION

OLD CAPITOL BUILDING. • ROOM 253. • P.O. Box 47206. • 600 S.E. WASHINGTON. • OLYMPIA, WA 98504-7206

Tribal History and Government DRAFT Resolution – PURPLE VERSION November 5, 2008

A Response to the Memorandum of Agreement with the Tribal Leaders Congress on Education

WHEREAS, the State Board of Education (SBE) entered into a Memorandum of Agreement with the Tribal Leaders Congress on Education (TLC) for the purpose of enhancing the government-to-government relationship between the participating tribes and the State Board of Education on issues related to education; and,

WHEREAS, the State Board of Education has consulted with representatives of the Tribal Leaders Congress on Education to determine ways the State Board of Education can most effectively support the teaching and learning of tribal history and government; and,

WHEREAS, the State Board of Education has reviewed the state law that encourages the inclusion of information on the culture, history and government of the American Indian peoples; and,

WHEREAS, the State Board of Education has reviewed the state's social studies education standards (essential academic learning requirements and grade level expectations) that specify that students should understand tribal treaties, treaty-making, government, territories, sovereignty, and growth prior to, and after, encounter; and,

WHEREAS, the State Board of Education has reviewed the sovereignty curriculum being developed by the Office of State Superintendent of Public Instruction (OSPI) and members of the Tribal Leaders Congress on Education; and,

THEREFORE, BE IT RESOLVED, That the State Board of Education will join with the Tribal Leaders Congress on Education in advocating that the legislature provide funding to support the broad implementation of the sovereignty curriculum that would include, for districts interested in implementing the curriculum, funding for materials, professional development on the curriculum, and evaluation; and,

BE IT FURTHER RESOLVED That the State Board of Education encourages the Office of Superintendent of Public Instruction to build upon the current social studies essential academic learning requirements and grade level expectations to include tribal sovereignty, and take positive steps to ensure that schools are assessing students' opportunities to learn tribal sovereignty; and,

BE IT FURTHER RESOLVED That the State Board of Education commits to work with the Professional Educator Standards Board and the Higher Education Coordinating Board to encourage teacher education preparation programs to introduce pre-service teachers to the sovereignty curriculum.

Adopted: (date)

Attest:

Mary Jean Ryan, Chair



Washington State School
Directors' Association



Memorandum of Agreement Between
The Tribal Leader Congress on Education, Washington State School
Directors Association, the State Board of Education, and the Office of the
Superintendent of Public Instruction

It is the intent of the legislature to promote the full success of the centennial accord, which was signed by state and tribal government leaders in 1989. As those leaders declared in the subsequent millennial accord in 1999, this will require "educating the citizens of our state, particularly the youth who are our future leaders, about tribal history, culture, treaty rights, contemporary tribal and state government institutions and contribution of Indian nations to the state of Washington." HB 1495 Sec. 1.

The Parties are entering into this Memorandum of Agreement for the purpose of enhancing the government-to-government relationship between the participating tribes and the state agency parties on issues related to education in the areas of tribal history and culture, and to help further the legislature's stated intent in enacting HB1495.

The Tribal Leader Congress on Education, by authority vested through their respective Tribal Governments as sovereign nations, the Washington State School Directors' Association, the Washington State Board of Education and the Washington State Office of the Superintendent of Public Instruction agree in the spirit of mutual interest and good faith effort to the following duties and responsibilities.

The Washington State School Directors' Association agrees to:

- Submit by Dec. 1, 2008, in collaboration with the Tribal Leader Congress on Education, a biennial report which will include the progress made in the development of effective government to government relations, the narrowing of the achievement gap, and the identification and adoption of curriculum regarding Tribal history, culture and government to the education committees of the legislature.
- Provide time at regional WSSDA/tribal meetings and WSSDA's annual conference to discuss the intent and substantive provisions of HB 1495.

- Provide time at regional WSSDA/tribal meetings and WSSDA's annual conference meetings for state-tribal government-to-government training.
- Develop guidelines and resources for local school boards to assist in implementing HB 1495; such as guidelines for creating and successfully implementing government-to-government relationships, agreements promoting board liaison positions to enhance school board-Tribal relationships, and other resources aimed at fostering cooperative relationships with Tribes on education.
- Encourage school board members to meet with Tribal leaders to identify the extent and nature of the achievement gap and strategies necessary to close it.
- Increase school board's awareness and understanding of the importance of accurate high quality curricular materials about the history, culture and government of local Tribes
- Actively encourage school boards to identify and adopt curriculum that includes Tribal experiences and perspectives.

The Tribal Leader Congress on Education agrees to:

- Encourage individual TLC tribes to agree to host at least one local school board meeting yearly.
- Encourage and support Tribes in providing authentic training opportunities to local school district staff on tribal history and culture.
- Beginning in 2008, collaborate with the Washington State School Director's Association in preparing and submitting a biennial report which will include the progress made in the development of effective government to government relations, the narrowing of the achievement gap, and the identification and adoption of Tribally approved curriculum regarding Tribal history, culture and government.
- Provide information to the Office of Superintendent of Public Instruction identifying which school districts are on or near the reservations or ceded areas of each tribe.

The Washington State Board of Education agrees to: (This section will be negotiated upon completion of the reorganization of the Washington State Board of Education.)

- Initiate the process to formally consider the inclusion of Tribal history, culture and government as a graduation requirement by Dec. 1, 2006.
- On or before December 1, 2006, begin meetings and active consultation with the Tribal Leader Congress on Education and the Washington State School Directors Association on the inclusion of Tribal history, culture and government as a graduation requirement.
- Reach a decision on including Tribal history, culture and government as a graduation requirement by Dec. 1, 2007.

The Washington State Office of the Superintendent Public Instruction agrees to:

- Collaborate with school districts and Tribes on curricular areas and projects that are statewide in nature and contribute to the overall accomplishment of the intent of HB 1495.
- Help local districts identify federally recognized Indian Tribes whose reservations are in whole or in part within the boundaries of the district and/or those that are nearest to the school district.
- Report annually to the Tribes, TLC, the WSSDA, and the State Board of Education on how OSPI is assisting school districts to close the Native American student achievement gap.
- Provide accurate data on Native American student achievement and completion rate statistics to the Tribes, TLC, the WSSDA, the State Board of Education, including information on the reasons Native students are dropping out and ways to overcome barriers.
- Seek funding and other resources in participation with TLC, WSSDA, and others to develop curriculum resources and develop a Clearing House of existing authentic resources.

DEFINITIONS

Sovereign Nation – American Indian Tribes are recognized in federal law as possessing sovereignty over their members and their territory. Sovereignty means that tribes have the power to make and enforce laws, and to establish courts and other forums for resolution of disputes. The sovereignty that American Indian Tribes possess is inherent which means that it comes from within the tribe itself and existed before the establishment of the United States government. Tribal sovereignty is further defined by the unique relationship of the tribes to the United States. In addition to inherent sovereignty, tribal governments may also exercise authority delegated to them by Congress.

Collaboration – Any cooperative effort between and among governmental entities (as well as with private partners) through which partners work together to achieve common goals. Collaboration can range from very informal, ad hoc activities, to more planned organized and formalized ways of working together. Such collaboration should occur when any proposed policies, programs or actions are identified as having a direct effect on an Indian Tribe.

Government-to-Government – Federally Recognized Indian Tribes have a special *government-to- government* relationship with the U.S. government. *Government to government* is also used to describe the relationship and protocols between tribes and other governments such as states. Key Concepts:

- States/Tribes work directly with each other in a government-to-government fashion, rather than as subdivisions of other governments.

- Take appropriate steps to remove legal and procedural impediments to working directly and effectively with each other's governments and programs.
- Encourage cooperation between tribes, the state and local governments to resolve problems of mutual concern.
- Incorporate these Principles into planning and management activities, including budget, program development and implementation, legislative initiatives, and ongoing policy and regulation development processes.
- Coordinate and provide mutual assistance as the governments assume new regulatory and program management responsibilities.

Achievement Gap – The achievement gap is a race and poverty gap in education achievement.

Federally Recognized Indian Tribe – “Federally Recognized” means these tribes and groups have a special, legal relationship with the U.S. government. There are more than 550 federally recognized tribes in the United States, including 223 village groups in Alaska.

Guidelines – Documents published by various compliance agencies (tribal or non-tribal) for the purpose of clarifying provisions of a law or regulation and indicating how an agency will interpret its law or regulation.

Oral Histories – The practice or tradition of passing cultural or familial information to further generations by storytelling, word of mouth or songs. Oral histories shall be respected as Tribal intellectual and cultural property.

Tribal Intellectual and Cultural Property Rights - Cultural property includes not only land and other tangible property, but ideas, traditions, and other "intangibles". Tribes do not generally make this distinction, as all things, including knowledge, are gifts of the Creator and have real existence, power and life. Respect for tribal intellectual and cultural property rights is fundamental for the cultural survival and cultural sustainability of Tribes. Unlike individually-based intellectual property rights, cultural property belongs to the cultural group, rather than to an individual. As an individual has the right to control use or sale of his/her property, the cultural group has the right to control the use or sale of its property. Although individual tribal members may have exclusive rights to tell certain stories, sing certain songs or dance certain dances, and under customary law they may have the right to transfer these rights to others, the cultural property still remains under the customary laws of the Tribe as a collective right. This cultural property belongs to an Indian Tribe as a whole and not an individual, which has the ultimate authority to regulate conditions of access, transfer and use. Tribal intellectual and cultural property is entitled to protection in perpetuity and its protected status is not lost when it enters the public domain.

The State agency parties further agree to respect Tribal intellectual and cultural property rights and customary law in Tribally-created materials, Tribal stories and oral histories that are used in school curriculum. Access and use of Tribal intellectual and cultural property can only be made through the prior informed consent of Tribal authorities based on mutually agreeable terms.

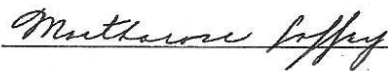
The parties to this Memorandum of Agreement further agree to meet in good faith to resolve any issues of disagreement in implementing this Agreement and HB1495. Such dispute resolution meeting shall occur within 30 days of notice being provided requesting a dispute resolution meeting and identifying the parts of the agreement and issues that are in dispute.

This Memorandum of Agreement will become effective upon the signatures of the parties. The parties shall meet and review progress under this agreement on an annual basis. The Memorandum of Agreement may be amended by written agreement of the parties at any time. Any party may withdraw from this Memorandum of Agreement by giving the other parties 30 days written notice of its intent to withdraw.

Nothing in this agreement is intended to preclude or affect in any way the authority of individual Tribal governments, whether they are participating in the TLC or not, to work independently with State agencies and school districts on implementation of HB 1495.

IN WITNESS WHEREOF this signed Agreement becomes effective on the dates attested to below.

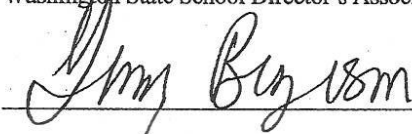
**Signatures and Dates
State Agency Parties**



Washington State School Director's Association

May 25, 2006

Date



Washington State Office of Superintendent of Public Instruction

5/25/06

Date

Washington State Board of Education

Date

5/23/2006

Signatures and Dates
Tribal Leader Congress on Education by participating Tribes

Samuel King *SW/Ke* *5/25/06*
Tribal Chairman/Delegate Tribe Date

Mariom Zuchner *Lulalip Tribe* *5/25/06*
Tribal Chairman/Delegate Tribe Date

Leonard Furr *Squamish Tribe* *5/25/06*
Tribal Chairman/Delegate Tribe Date

Candace R Kelly *Nooksack Indian Tribe* *5-25-06*
Tribal Chairman/Delegate Tribe Date

Anno Bluff-Pope Kalispel Tribe *5-25-2006*
Tribal Chairman/Delegate Tribe Date

Norm Cooper *Squawm Island Tribe* *5-25-2006*
Tribal Chairman/Delegate Tribe Date

Winton M. Lee *Hoh Tribe* *6-13-06*
Tribal Chairman/Delegate Tribe Date

John Barnett *Cowlitz Indian Tribe* *6-13-06*
Tribal Chairman/Delegate Tribe Date

W. For Allen *Jameson S'Klallam* *6-13-06*
Tribal Chairman/Delegate Tribe Date

Glenn Green South-Siattle 6/13/06

Tribal Chairman/Delegate

Tribe

Date

Buttner Snogahmie 6/13/06

Tribal Chairman/Delegate

Tribe

Date

Mad Rude Spokane 6/13/06

Tribal Chairman/Delegate

Tribe

Date

Jim S. S. S. Squaxin Island 6-13-06

Tribal Chairman/Delegate

Tribe

Date

Shat Stillaguamish 6-13-06

Tribal Chairman/Delegate

Tribe

Date

Mar. M. Scott Upper Skagit Indian Tribe 6-13-06

Tribal Chairman/Delegate

Tribe

Date

Ralph A. Simpson Jr. Yakama Nation 6-13-06

Tribal Chairman/Delegate

Tribe

Date

Stanley H. Jones Chairman Tulalup Tribes 6-13-06

Tribal Chairman/Delegate

Tribe

Date

Ken Robert Boyd Tulalup Tribes 6-13-06

Tribal Chairman/Delegate

Tribe

Date

Marie Backus Boyd Tulalup Tribes 6-13-06

Tribal Chairman/Delegate

Tribe

Date

5/23/2006

7

Appendix B

Social Studies Essential Academic Learning Requirements (EALRs) and Grade Level Expectations (GLEs) Pertaining to Native Americans

Social Studies EALR 4: HISTORY: "The student understands and applies knowledge of historical thinking, chronology, eras, turning points, major ideas, individuals, and themes of local, Washington State, **tribal**, United States, and world history in order to evaluate how history shapes the present and future."

Social Studies Grade Level Expectations

The history of Native Americans is introduced in the third grade, as per this description⁸ of the third grade learner:

"In third grade, students begin to explore more complex concepts and ideas from civics, economics, geography, and history as they study the varied backgrounds of people living in Washington and the rest of the United States. Emphasis is on cultures in the United States, **including the study of American Indians**. Students examine these cultures from the past and in the present and the impact they have had in shaping our contemporary society. They begin to look at issues and events from more than one perspective."

The fourth grade is when study begins to deepen in civics and history:

4th Grade CIVICS GLE 1.2.1 - Understands that governments are organized into local, state, **tribal**, and national levels.

4th Grade CIVICS GLE 1.2.2 - Understands how and why state and **tribal** governments make, interpret, and carry out policies, rules, and laws.

4th Grade HISTORY GLE 4.1.2 - Understands how the following themes and developments help to define eras in Washington State history from time immemorial to 1889:

- **Growth of northwest coastal and plateau tribes prior to treaties (time immemorial to 1854).**
- Maritime and overland exploration, **encounter**, and trade (1774-1849).
- Immigration and settlement (1811-1889).
- **Territory and treaty-making (1854-1889).**

Study is revisited in seventh grade civics and history:

7th Grade CIVICS GLE 1.1.1 - Understands how key ideals set forth in fundamental documents, including the Washington State Constitution and **tribal treaties**, define the goals of our state.

7th Grade CIVICS GLE 1.2.1 - Understands and analyzes the structure, organization, and powers of government at the local, state, and **tribal levels** including the concept of tribal sovereignty.

⁸ *Social Studies Essential Academic Learning Requirements: A Recommended Grade-by-Grade Level Sequence for Grade Level Expectations—Grades K-12*. Office of Superintendent of Public Instruction. June 2008.

7th Grade HISTORY GLE 4.1.2 - Understands how the following themes and developments help to define eras in Washington State history from 1854 to the present:

- **Territory and treaty-making (1854-1889).**
- Railroads, reform, immigration, and labor (1889-1930).
- The Great Depression and World War II (1930-1945).
- New technologies and industries (1945-1980).
- Contemporary Washington State (1980-present).

Study is revisited in twelfth grade civics:

12th Grade CIVICS GLE 1.2.3 - Analyzes and evaluates the structures of state, **tribal**, and federal forms of governments by comparing them to those of other governments.

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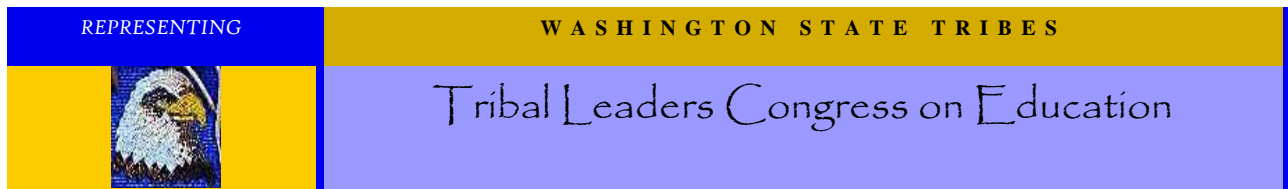
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Tribal Leader Congress on Education Resolution# 07-01

Title: A Call for Washington State Board of Education to make Washington Tribal History a Graduation Requirement

We, the members of the Tribal Leader Congress on Education of Washington State, invoking the divine blessing of the Creator upon our efforts and purposes, in order to preserve for ourselves and our descendants the inherent sovereign rights of our Indian nations, rights secured under Indian treaties and agreements with the United States, and all other rights and benefits to which we are entitled under the laws and Constitution of the United States, to enlighten the public toward a better understanding of the Indian people, to preserve Indian cultural values, and otherwise promote the health, safety and welfare of the Indian people, do hereby establish and submit the following resolution:

WHEREAS, the Tribal Leader Congress on Education (TLC) is a partnership of Tribal Nations that proactively initiates and implements policy change in Indian Education, ensures trust responsibility in education is upheld, advocates for sovereignty in education, and advocates at the State and Federal levels for the education needs of Washington Tribes; and

WHEREAS, in creating the Tribal Leader Congress on Education, Washington State Tribal Nations have come together to transform the education system to support each Indian child and student in knowing where they come from, having the opportunity to dream of who they are as members of the Tribe and in becoming a good relative; and

WHEREAS, the mission of the Tribal Leader Congress on Education is to create Tribal co-governance in education that will honor sovereignty and drive policy so that each Indian child and student learns in a way that is congruent with their cultural learning style, feels a sense of self-empowerment, and affirms and recognizes their cultural identity in a system that encourages their own personal concept of success and perpetuates their cultural world-view; and

WHEREAS, twenty seven Tribal Nations, the Washington State School Directors Association, the Washington State Office of the Superintendent of Public Instruction and the Washington State Board of Education (SBE) have all signed and agreed to the provisions of the Memorandum of Agreement on the Implementation of HB 1495, signed May 25, June 13 and December 13, 2006, including the State Board of Education agrees to “reach a decision on including Tribal history, culture and government as a graduation requirement by December 1, 2007;” and

WHEREAS, the history of the sovereign Nations of Washington State extends thousands of years prior to the establishment of Washington as a state; and

WHEREAS, the State Board of Education has invited the Tribal Leader Congress on Education to make recommendations on Tribal History as a graduation requirement to the board during their November 1 and 2 meeting at Highline Community College; and

WHEREAS, the Tribal Leader Congress on Education recommended .5 credits of local Tribal history be required for graduation and that the curriculum be co-developed with the state at their September 20, 2007 (Quinault) and October 8, 2007 (Tulalip) meetings.

NOW THEREFORE BE IT RESOLVED, that the Tribal Leader Congress on Education calls for .5 credits of local Tribal History be required in Washington State Schools; and

BE IT FURTHER RESOLVED, that the Tribal Leader Congress on Education agrees to participate with the State of Washington to create the local Tribal History curricula by 2012; and

BE IT FINALLY RESOLVED, that the Tribal Leader Congress calls on the Washington State Board of Education, the Washington State Office of Indian Education, the Washington State Superintendent of Public Instruction, the Washington State Legislature and Governor of Washington State to support the recommendations of the Tribal Leader Congress and make Tribal History a graduation requirement in Washington State public schools.

CERTIFICATION

The foregoing resolution was adopted at the 2007 December meeting of the Tribal Leader Congress on Education, held at the Quil Ceda Village Conference Center December 7, 2007

ATTEST:

December 7, 2007

Honorable Evelyn Jefferson, Chair Lummi Nation, Co-Chair Tribal Leader Congress on Education

Honorable Leonard Forsman, Chair Suquamish Tribe, Co-Chair Tribal Leader Congress on Education



WASHINGTON STATE BOARD OF EDUCATION

OLD CAPITOL BUILDING • ROOM 253 • P.O. Box 47206 • 600 S.E. WASHINGTON • OLYMPIA, WA 98504-7206

TRANSCRIPT STUDY

SUMMARY OF POLICY ISSUE /STATE BOARD OF EDUCATION (SBE) STRATEGIC PLAN GOALS

The SBE contracted with THE BERC GROUP, INC. to perform an analysis of transcripts from 2008 graduates in order to better understand the course-taking patterns of Washington students. This information, together with the SBE's 2007 study of district graduation requirements, will inform the SBE's Meaningful High School Diploma work by providing a rich picture of current practice.

BACKGROUND

The SBE conducted a study in spring 2007 to determine the 2007-2008 graduation requirements by district. With that information in hand, the SBE posed a second question: "Now that we know what students are required to do, what are they actually taking?"

The SBE selected THE BERC GROUP, INC. from three vendors who responded to the Request for Proposals, and contracted with BERC to conduct a transcript analysis of 2008 graduates, drawn from a representative sample of approximately 100 school districts. The sample included at least one district (and thus one high school) from every county, and was drawn from a list that included any school where the grade span extended through 12th grade. The sample did not include schools identified as home-based schools, learning centers, special education schools, technical skills centers, parent partnership schools, night schools, and schools located in justice centers.

The following research questions were posed:

1. What percentage of Washington students are taking courses that meet the minimum, public four-year Washington college admissions standards set by the Higher Education Coordinating Board?
 - a. What is the relationship between districts that require more than the state minimum requirements in math and science, and the number of students who take courses that meet the minimum, public four-year Washington college admissions standards?

- b. What is the relationship between districts that require only the state minimum credits in math and science, and the number of students who take courses that meet the minimum, public four-year Washington college admissions standards?
 - c. What required college admissions courses are most frequently not taken?
2. What does a typical senior schedule look like—how many credits are seniors taking, and what types of courses?
3. How do course-taking patterns differ for students who meet standard on the math, reading, writing, and science Washington Assessment of Student Learning (WASL) and those who don't?
4. How many students earn high school credits in math and world language prior to entering ninth grade?
5. How many credits in each subject area required for high school graduation (e.g., English, mathematics, science, social studies, arts, occupational education) are students actually taking?
6. What is the relationship between the number of credits required for graduation at the district level and the number of credits students actually take?
7. What courses are students taking in each subject area?
8. What percentage of honors courses (Advanced Placement, IB) are students taking, and in what types of districts are these courses likely to be available?
9. What differences emerge if the response to each of these questions is cross-referenced by gender and race?

The BERC GROUP is in the process of completing the full report, which will be submitted to the SBE by December 1, 2008. Findings will be presented at the meeting, and copies of the PowerPoint presentation will be distributed.

POLICY CONSIDERATION

The scope and representativeness of this sample should enable the SBE to generalize about the course-taking patterns of Washington State high school students. This information will inform the SBE's Meaningful High School Diploma work by providing a rich picture of current practice.

EXPECTED ACTION

None; information only



WASHINGTON STATE BOARD OF EDUCATION

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BASIC EDUCATION PROGRAM REQUIREMENT WAIVERS

SUMMARY OF POLICY ISSUE /STATE BOARD OF EDUCATION (SBE) STRATEGIC PLAN GOALS

The Big Picture High School, in Highline School District, is requesting a waiver from credit-based high school graduation requirements for the maximum four years that are allowed. The waiver request meets Washington State's school reform vision as stated in the State Board of Education's rules, specifically "shifting from a time and credit-based system of education to a standards and performance-based education system."¹ In place of traditional credits, the Big Picture High School has "developed an array of competencies based on college admission criteria adapted from work in other states and in collaboration with admissions staff from major colleges and universities in Washington."² The school believes that the waiver is an essential part of its work to "engage students at risk of dropping out as well as to provide increased rigor for all students."³ The school's vision is aligned with the Board's goals of improving student achievement and improving graduation rates. It also aligns with the purposes of a waiver, to provide an exceptional opportunity to be innovative in order to enhance the educational program for the school's students.

BACKGROUND

Highline Big Picture High School is in SeaTac and opened in 2005-06. This year the school has about 120 students in grades nine through twelve. Big Picture is one of 12 high schools in the Highline School District, which serves students in Burien, Des Moines, Normandy Park, SeaTac, Boulevard Park, and White Center.

The District is requesting a waiver for Big Picture High School from credit-based high school graduation requirements. This is a new application. The school requests to be permitted to graduate students based on successful demonstration of competencies through its curriculum, which is "both integrated and vocationally immersed, such that students acquire and demonstrate academic proficiencies through school-based work and also through internships in adult workplaces under the supervision of mentors who collaborate closely with school staff."⁴

¹ WAC 180-51-001

² Highline School District Application

³ Highline School District Application

⁴ Big Picture High School application

The proposed competencies are closely aligned to the Proficiency-based Admission Standards System (PASS), which was developed in Oregon in the 1990's, as part of an effort to create a seamless and aligned K-16 system of education. The competencies were created in consultation with admissions directors from major public and private colleges and universities in Washington and were built upon graduation requirements of other schools in the national Big Picture Learning Network.

Big Picture High School is based on four interrelated principles: 1) multiple, meaningful, and extended adult relationships; 2) a small learning community; 3) academics in the context of real work outside the school; and 4) a school culture pervaded by the expectation of higher education for all students. The move to competency-based graduation requirements, at Big Picture High School, is aligned with the District's vision, as outlined by Superintendent John P. Welch in the application's cover letter:

"The vision of Highline is that all students leave high school prepared for college, career and citizenship, and that no door is closed to them that limits their postsecondary choice."⁵

POLICY CONSIDERATION

The Waiver meets the State Board of Education's criteria for the purpose and use of a waiver. Therefore, approval of the application should not have any policy implications.

EXPECTED ACTION

Approval of the Highline Big Picture High School Waiver Application

⁵ Big Picture High School application



Highline Big Picture 9th grader Amanda Hopkins (left), assisting in surgery at her internship at Banfield Veterinary Clinic, Tukwila.

Proposal for Waiver from WAC 180-51-061: Minimum subject areas for high school graduation.

October 2008

**Highline Big Picture High School
2450 South 142nd Street
Seatac, WA 98168**

Highline School District #401



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Highline Public Schools

District 401

Educational Resource and Administrative Center
15675 Ambaum Boulevard Southwest
Burien, Washington 98166
www.hsd401.org • 206.433.0111

October 3, 2008

Board of Directors

Bernie Dorsey

Susan Goding

Sili Savusa

Julie Burr Spani

Michael D. Spear

Superintendent

John P. Welch

Brad Burnham
State Board of Education
P. O. Box 47206
Olympia, WA 98504-7206

Dear Mr. Burnham,

Highline Public Schools is submitting a request to waive the traditional credit and seat time high school graduation requirements for Big Picture high school. I appreciate how forward thinking the State Board was in developing an option for local districts and schools that keeps rigor high, but allows a different approach for meeting high school completion requirements. This language states that, "The shift from a time and credit based system of education to a standards and performance based education system will be a multiyear transition. In order to facilitate the transition and encourage local innovation, the state board of education finds that current credit-based graduation requirements may be a limitation upon the ability of high schools and districts to make the transition with the least amount of difficulty." (WAC 180-18-055 (1).)

The vision of Highline is that all students leave high school prepared for college, career and citizenship, and that no door is closed to them that limits their postsecondary choice. I believe that Big Picture's application for this waiver provides students a pathway based on competency and performance that will allow them to take full advantage of our vision. Our Board resolution is attached and reflects some of the specific wording from the WAC that most aligns to our vision. Also attached is an application package from Big Picture that gives examples of competencies, rubrics and related data that I hope is helpful in your deliberations.

Thank you again for this opportunity to support our students.

Sincerely,

John P. Welch
Superintendent

**SCHOOL DISTRICT NO. 401
HIGHLINE PUBLIC SCHOOLS
KING COUNTY, WA
RESOLUTION NO. 2353**

A RESOLUTION of the Board of Directors of the Highline School District No. 401, King County, Washington, multi-year transition from time and credit-based system of education to a standards and performance education system for Big Picture High School with the transition referenced in WAC 180-18-055 in order to encourage local innovation and pursuant to RCW 28A.630.885; and

WHEREAS, the school district is a duly organized political subdivision of the State of Washington; and

WHEREAS, WAC 180-51-060 outlines the minimum subject areas for high school graduation credits; and

WHEREAS, WAC 180-18-055 outlines a process for alternative high school graduation requirements; and


WHEREAS, the Highline School District Board of Directors has established a vision for college and career preparation for all high school students in a context of rigorous standards; and

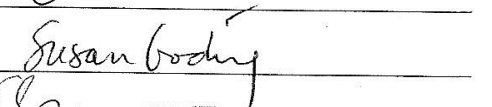
WHEREAS, the Highline School District Board of Directors believes that students require a variety of approaches to reach that vision, and therefore innovation is critical;

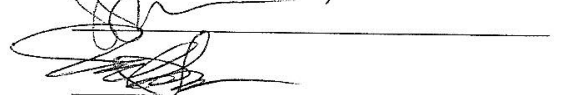
NOW THEREFORE, BE IT RESOLVED that the Highline School District Board of Directors hereby approves the restructuring plan of Big Picture High School as proposed to the State Board of Education.

ADOPTED at a regular meeting of the Board of Directors on September 24, 2008.

HIGHLINE SCHOOL DISTRICT NO. 401

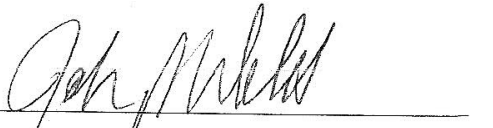






Board of Directors

I, John P. Welch, Secretary to the Board of Directors of Highline School District No. 401, do hereby certify that the attached is a true and accurate copy of Resolution No. 2353 for the use and purpose intended.



John P. Welch
Secretary to the Board of Directors

HIGHLINE BIG PICTURE HIGH SCHOOL

2450 SOUTH 142ND STREET, SEATAC, WA 98168

206.444.7726

WWW.BIGPICTURE.ORG

WWW.HSD401.ORG

October 2, 2008

Dear Members of the State Board of Education:

This waiver proposal represents the culmination of several years of work in the context of the State's vision of reform for Washington public schools. For me this project came into focus during three years of work with the Truman Center in Federal Way, the first school to receive such a waiver in 2001. In 2004 began the present collaboration between the Highline School District and the Big Picture Company (now Big Picture Learning) to design and launch Highline Big Picture High School.

As described in more detail in the attached documents, this school is designed around the concepts of relevance, relationships, and rigor. We now serve about 120 students in grades nine through twelve, and this year we have our first cohort of graduating seniors. 75% of these students receive free or reduced meals, and about 30% receive special education services. Our WASL scores are strengthening, our student and parent survey data are the strongest of all high schools in our district, and all of our students are required to apply to multiple colleges or post-secondary programs as a condition of graduation.

For reasons we look forward to discussing further when we present to you in person, we believe the waiver from credit-based graduation requirements to be an essential component of our work to engage students at risk of dropping out as well as to provide increased rigor for all students. Core components of our school include integrating curriculum across subject areas, performance-based assessments such as exhibitions and portfolios, and learning through extended internships with adult mentors in their workplaces. Each of these is hindered by a system that tracks learning in terms of subject area credits based on class time.

I have included at the beginning of this packet some excerpts from students and parent letters of application to our school. I believe these speak to what we are doing and also to the some of the possibilities when learning is liberated from a credit-based approach.

In lieu of credits, we have developed an array of competencies based on college admission criteria adapted from work in other states and in collaboration with admissions staff from major colleges and universities here in Washington.

The core staff of the school remains the same as when we opened in 2005-06, and throughout this time we have worked closely with the same leaders in the Highline School District and at Big Picture Learning. We hope to present to you both a unified vision as well as a clear commitment to continue working together to improve what we have started in the service of the families enrolled with us and our shared vision for school reform in Washington.

The following pages present the components specified in WAC 180-18-055 as required for alternative graduation requirements. These are:

- Identification of the requirements of chapter 180-51 WAC to be waived;
- Specific standards for increased student learning that the district or school expects to achieve;
- How the district or school plans to achieve the higher standards, including timelines for implementation;
- How the district or school plans to determine if the higher standards are met;
- Evidence that the board of directors, teachers, administrators, and classified employees are committed to working cooperatively in implementing the plan;
- Identification of the school years subject to the waiver.

Additional documents attest to the success of the school so far, and our ongoing commitment to improvement.

Thank you for your consideration.

Jeff Petty
Principal

WHY DO STUDENTS AND PARENTS COME TO HIGHLINE BIG PICTURE HIGH SCHOOL?

Each excerpt below is from the Student Essay portion of an eighth grader's application to our school, with alternating italics to indicate a new writer. At the end are several excerpts from the Parent Essay portion of the application.

From students -

The more I think about Highline Big Picture High School, the better and better it gets. In school, I never truly feel like I get to do anything that interests me personally. I know that if I am accepted into Big Picture I would have so many opportunities to be in the kinds of career tracks that I really enjoy. I also like the fact that I would not only be doing beneficial things for myself but also for the people that I intern with.

In middle school I always wished that I could connect with my teachers better and now at Big Picture I would have that chance. I know that I would feel a lot more comfortable challenging myself if I had teachers that would be there for support. I will still be aware that self responsibility is the key to advancing in my learning.

I don't want my intelligence to be based on just grades and test scores. I am excited to learn new skills and I know that I can be mature and work hard to match your high standards. I am ready to do things in my community and get out there. Please accept me into Big Picture High School. I guarantee that if you do, you will see fantastic work and endless effort come out of me in all stages of my learning.

Middle school has been a weary experience for me because watching my peers, I realized I was caught in a crowd that didn't have dreams or goals. This made me crave for something more. I wanted diversity and dreams. About the time I realized that, I discovered my passion: photography. This put everything into perspective. I had something to strive for now, and it made me work harder in school. I felt powerful with the knowledge that I could do something amazing when I worked hard for it. Big Picture is the perfect school for me because I feel as if it treats every student as an individual and not just a general audience. I believe this school will help me pursue my career and expand my horizons. I plan to take complete advantage of the internships. Big Picture will change me as a person also. It will make me a person who can handle responsibilities and become more outgoing... I have a dream, and Big Picture would help me accomplish anything I dream of.

I want to go to the Highline Big Picture School because I want to learn how to be a mechanic, and I don't do good on spelling but I do better at hands-on stuff. It is hard to do stuff on paper like reading because I am dyslexic and that makes it hard in school. I've been to so many schools trying to find one that would best fit me, and I think Big Picture would be the best. I want to take over my Dad's business as a mechanic. Maybe if I go to Big Picture I can do something I love to do and it will help me be better at what I want to do.

The reason I want to attend Highline Big Picture School is to have a more challenging education. When I grow up I want to know how it feels to do more advanced work. Another reason I want to get into this school is it would help me get a good career so I can have a good salary. I would learn from my mistakes in my work if I attended this school. My parents would be so proud that I made it in a great high school.

I would like to attend your school because I feel that this school will really teach me the true things of subjects, but not only teach me but show me the fascinations of things, and how it's all worked out. Your school is not just some ordinary, boring school. It has values, and I want to learn and cherish those values. I really want to attend this school, and if I were to get accepted I would start screaming, that's how much I want it so bad. Anyways, to be able to share your work with others who are interested in the same thing would be awesome. I really hope that you do accept me into your school, because I'm interested.

I highly believe in this tactic of education. Although this new learning environment may be different and limited to a small amount of students, I think that this form of learning may include a lot of exclusive experiences that may help me in the near future, in and outside school. I think the most appealing curriculum in Big Picture is the LTI program, or Learning Through Internships... As I keep advancing toward college, I have to know about what my passion is in life, and with the LTI program it may give me a better impression in some specific field of jobs. In conclusion, I would like to say that it would be a great opportunity for me to attend Big Picture. I enjoy reading about this school and I can connect some aspect of my life to your curriculum.

I want to attend Highline Big Picture School because I want to learn about and focus on the career I want to be in. Right now I want to work in forestry; I really love the outdoors. I also want to be in the filming business because I have a great imagination and I love filming my ideas. In the school I'm attending now it feels like I'm not really learning anything. It's like a big daycare because some of the teachers don't control the kids so it's really distracting, and I want to be in an environment where people want to learn and are kind to each other... I'm great with working with groups and I'm very kind, I'm a leader when I need to be a leader and I listen to my teammates when they suggest their thoughts or ideas....

I would like to go to Big Picture because I really want to be an architectural designer. I think if I go to Big Picture I could really see what it's like to be an architect and that could help me choose if that's what I really want to do or if I want to be something else. In this process I could really get close to the work, and I like the educational plan....

I would like to go to Highline Big Picture because I believe Big Picture will help me to take responsibility for my own learning and prepare me for my future career, college, and beyond...

I would like to attend Highline Big Picture because Big Picture has opportunities that will help me become what I want to be when I'm older. I also want to go to Big Picture because you get to live like the real world. Another reason why I want to go Big Picture is because at Big Picture there are a small amount of people in classes which means you can be a family with everyone in the class and not worry about being left out.

I'm moving from California to Washington and from middle school into high school, so I find myself at a crossroads. After inspecting school systems on the internet, and eliminating most of them, Big Picture High School stood out. The 17:1 student-teacher ratio means supportive academics, and school hours are workable, and an internship 2 days a week means hands-on education in my chosen career. Big Picture is a dream for my parents and me. For about a year or two now, cooking has been my passion. Instead of reading teen magazines I read recipes; instead of shopping, I'd rather cook. My dream is to become a chef when I grow up. Nutrition is what we are and everyone has to eat, so the sky's the limit and the possibilities are endless. Big Picture's internships would help me understand the

restaurant scene hands-on – with the rush of pans sautéing and flambéing – it's my dream come true. What I learn in school would actually help me later in my life.

After learning about Big Picture (when they came to my school), I became very very interested in the school and how it works. Why am I interested? I am interested in the Tuesday and Thursday internship that can help me get ready and experience what it would be like to work in the career I want to pursue. To be honest, I don't have a career in mind that I want to pursue but that is why I want to go to Big Picture, I know I will be able to experiment and find a career that I will enjoy. I also like the fact that you have a maximum of 17 kids per class. I think less students will help me understand and collaborate more with others. Last but not least is the fact that you choose the students who want a better future and work hard for it. That's the environment I want to be in.

I think the idea of interning is a very cool idea and will help me to learn even more about what I want to be. It also gives me hands-on experience while I'm still learning during school. I love to learn and I believe this is the best way to help me gain knowledge and maybe even change my mind about my career if I need to. I really want to be a part of this school.

I want to attend Highline Big Picture because it opens up a better future for me. Since I want to study business marketing, it can help me get ready. Other schools don't offer a class like that. Also I will get to get out of school to interview a business person about what they do and it will give me a better perspective... Something you should know about me is I like to play basketball. Also I'm a very nice and funny person at times and I like to try new things. Also I'm determined to get what I want if I really work for it.

I would like to attend the Highline Big Picture School because over the years in various schools I haven't done the best of my abilities and I believe this school will help me in the challenges that I have come to face in a normal school. In my understanding you really take the time to help out the students and make them really understand what is going on with what you are speaking of. In my eyes you guys are my only hope for me getting right back on the road and helping me succeed in my learning abilities. My reasons come in very different ways but I can assure you that I will do my best if the teachers do their best to help me.

Thank you for your time and attention.

From parents:

What appealed to us is that the student is a part of directing their education and the focus is on what they will need in real life, from preparing them for college to daily problem solving.

Internships based on her specific interests (exposing her to real life experiences now rather than later), will accelerate her awareness of jobs, further motivating her to stay on track with her goals. This is crucial since, like many, they're often unable to see the relevance between school and career.

When _____ came home from school the other day, she was so excited to tell me about the Highline Big Picture High School. The kids who came to present your school at Pacific Middle School really hit a chord with her and she knew this was the school she wanted to attend.... It is important to her to have a diverse group of students, and I am so glad to see that your student body has a mix of kids that are so close.

I am very impressed with the Big Picture model school which gives students the opportunity to explore various careers by participating in the working environment... I am surprised my son is interested in this model as it will require him to allocate his time and set his own timelines. I willingly support him if he desires to perform to this level of maturity.

I would like my son to be a part of this program because I feel that conventional high school education does not adequately prepare kids for the real world or the full onset of college. I would like my child to get an opportunity that I wish that I had at his age.

_____ and I have talked for hours about why it is important for her to get a college education, and the initiative she took to get more details about the school for me alone lets me know as a parent she has been listening to the guidance I have been providing her in early years.

It is quite possible that the Big Picture model may be the future of public education, especially considering the LTI (Learning Through Internship) aspect of it.

We truly believe that your program has been offered to us not by chance but an answer to his and our hopes for his future. A light not at the end of the tunnel but hopefully just his beginning. Your school is a much needed and welcomed beacon of hope for _____.

I am sorry for the wrinkled state of this application. This morning I informed _____ on the way to school that his father and I had not finished his application because we didn't have any information about Highline Big Picture High School and couldn't write our essay. _____, who never really gets upset about anything, crumpled up his paper and stuffed it between the console and the seat. He murmured, "It's OK. It doesn't really matter anyway."

Obviously it did. The mere fact that he brought the form home speaks volumes about his interest in the program. His persistence in filling it out and his attempt to bring it to school unfinished by us, on the due date, tells me this is one of the few things he is committed to right now.

So I hope you don't hold the crumpled-ness of his application against him. Once I realized the importance and significance of this opportunity for _____, I rescued his form and brought it to work with me. I just finished calling his father and explaining the school to him from the information on your website. From that, we have written our essay.

Required Components of Proposal as Specified in WAC

IDENTIFICATION OF THE REQUIREMENTS OF CHAPTER 180-51 TO BE WAIVED.

Specifically, this proposal requests a waiver from *WAC 180-51-061: Minimum requirements for high school graduation*. In lieu of the credits specified in WAC 180-51-061, Highline Big Picture proposes to graduate students based on successful demonstration of competencies outlined in the following section. This proposal and the Big Picture school design are consistent with the State's school reform vision as defined in WAC 180-51, which states:

(1) The state is shifting from a time and credit-based system of education to a standards and performance-based education system. Certain ways of thinking about time must shift in order to support the ongoing implementation of school reform. The board's long-term vision of a performance-based education system includes:

(a) No references to grade levels or linking a student's educational progress to a particular age. Instead, learning is viewed in terms of developmental progress, academically and vocationally, so that while the curriculum may be sequential the student moves through it at her or his developmental pace, regardless of age;

(b) An understanding that in the absence of other important information, a student's grade point average and performance on the Washington assessment of student learning do not provide a complete picture of the student's abilities and accomplishments;

(c) An understanding that our concept of school needs to expand and take into account that education and learning are about connected learning experiences, which can and do occur inside and outside the physical boundaries of a school building; and

(d) An understanding that students do not all learn in the same way (there are multiple learning styles), that teachers do not all instruct in the same way (there are multiple teaching styles and strategies), and these facts suggest that it should be possible to assess students' performance and achievement in multiple ways while maintaining common, high expectations and standards for learning.

The Big Picture curriculum through which students will develop and demonstrate the proposed competencies is both integrated and vocationally immersed, such that students acquire and demonstrate academic proficiencies through school-based work and also through internships in adult workplaces under the supervision of mentors who collaborate closely with school staff. They not only meet academic requirements for graduation from high school and admission to college, they also develop workplace skills. This is consistent with the State's reform vision outlined in *WAC 180-51-003: Intent of graduation requirements*, which highlights the importance of career exploration and integrating academic and vocational learning.

The proposed competencies are consistent with college admissions requirements in that they (1) are closely aligned with the PASS (Proficiency-based Admission Standards System) requirements developed by Oregon colleges and universities; (2) were developed in consultation with admissions directors and senior admissions staff from the major public and private colleges and universities in Washington; and (3) build upon the graduation requirements of other schools in the Big Picture Learning network, which has demonstrated in other states an exceptional track record of college acceptance and retention for all students, particularly students of color and low-income students.

SPECIFIC STANDARDS FOR INCREASED STUDENT LEARNING THAT THE DISTRICT OR SCHOOL EXPECTS TO ACHIEVE.

Ultimately the goals this proposal expects to achieve include increased graduation rates and college placement and retention of graduates, with a particular focus on populations not well-served by traditional comprehensive high schools. Big Picture Learning is currently in the early years of a longitudinal study that is tracking graduates until the age of 30 and collecting various data on quality of life indicators, including post high school education and employment. Highline Big Picture graduates will be part of this study, and early study data from other schools in the network is already being incorporated at Highline Big Picture to make improvements in preparing students for college and career.

The **specific proposed competencies** for increased student learning to be used in place of accumulation of credits are outlined in the following pages, and are adapted from the Big Picture Learning Goals; the Performance-based Assessment System (PASS) developed by Oregon colleges and universities; input from Washington college and university admissions directors; and the learning from other schools in the Big Picture Learning network. Included in this section are notes from a forum of Washington admissions directors hosted by Highline Big Picture in January of 2008.

Please see also the following supplemental document:

- Highline Big Picture High School sample transcript.

COMPETENCY OVERVIEW for QUANTITATIVE REASONING LEARNING GOAL

Quantitative Reasoning (QR): Students are active and capable users of mathematics and Quantitative Reasoning. Students utilize both in multiple contexts, including reflection and planning. Students effectively present and communicate mathematical and Quantitative Reasoning concepts using a variety of tools and representations.		
Competency	Includes	Evidentiary Work
Solve Mathematical Problems: Apply mathematical problem solving strategies to problems from within and outside mathematics.	Formulating and understanding mathematical problems, selecting or generating relevant information; using mathematical concepts, models, and representations; considering and choosing among various strategies, algorithms, models, and concepts to devise and carry out solutions; evaluating processes, strategies, calculations, and solutions to verify reasonableness; exploring alternative approaches, extensions, and generalizations; representing and communicating reasoning processes, solutions, ideas, and conclusions; using appropriate mathematical technologies, terminology, symbols, and notation.	Ongoing: Reasonable/Unreasonable problems; ALEKS/Cognitive Tutor/Plato Web work; internship- and school-based projects, including time, budget and materials calculations in planning, evaluating and reflecting upon projects. Advisory based QR work; Math 500 classes; community college classes. Culminating: Evaluated advisory based QR work; project reports; exhibition demonstrations and teaching; QR notebook; ALEKS,/CT/Plato Web reports; community college exams; math WASL; Compass tests; level-up exhibitions and portfolios.
Perform Algebraic Operations.	Solving equations and inequalities numerically, graphically and/or algebraically; using computation, estimation, and mathematical properties to solve problems; estimating and checking the reasonableness of results, including those obtained by technology.	Same as above.
Use Geometric Concepts and Models.	Representing and solving problems with two- and three-dimensional geometric models; measuring directly and indirectly using geometry and right-angle trigonometry.	Same as above.
Use Probability and Statistics to Collect and Study Data: Use probability and statistics in the study of various disciplines, situations, and problems.	Understanding and applying concepts of probability; collecting, organizing and displaying data using charts, tables and graphs, and using these to draw inferences, make predictions, and solve problems; developing and evaluating inferences and predictions based on data; designing, conducting, and critiquing statistical experiments, simulations, or surveys.	Same as above plus junior research paper and senior thesis project.
Use Functions to Understand Mathematical Relationships.	Representing functions using and translating among words, tables, graphs, and symbols; recognizing and distinguishing a various classes of functions; using a variety of functions to model situations and solve problems.	Same as above plus junior research paper and senior thesis project.

COMPETENCY OVERVIEW for EMPIRICAL REASONING LEARNING GOAL

Empirical Reasoning: Students are active and capable empirical reasoners, versed in the language of scientific inquiry and discerning readers of scientific content. They have investigated a field of science in sufficient depth to learn how to learn in the scientific realm, and they have designed and conducted a scientific inquiry.		
Competency	Includes	Evidentiary Work
Design and conduct scientific inquiry.	Determining scope and focus of inquiry; forming questions and hypotheses involving scientific relationships; designing investigations using appropriate methodology and tools to address questions and test hypotheses; collecting and presenting data; analyzing data and developing	Ongoing: School- and internship-based projects; Senior Institute science curriculum; community college classes. Culminating: Senior Institute science presentations; junior research paper; senior thesis project; level-up portfolios and exhibitions, science WASL; community college final assessments.
Know fundamental concepts of the sciences.	Learning and applying fundamental unifying concepts of science as well as concepts of the physical, life, and earth and space sciences.	Ongoing: School- and internship-based projects; Socratic seminars in science; Senior Institute science curriculum; community college classes. Culminating: Senior Institute science presentations; level-up portfolios and exhibitions, science WASL; community college final assessments.
Analyze scientific knowledge, theories, and research.	Analyzing scientific theories and arguments to understand the nature of scientific knowledge and the context in which it develops; evaluating the scientific, social, and ethical implications of scientific research and writings.	Ongoing: School- and internship-based projects; Socratic seminars in science; Senior Institute science curriculum; community college classes. Culminating: Senior Institute science presentations; junior research paper; senior thesis project; level-up portfolios and exhibitions; science WASL; community college final assessments.
Understand, use, and investigate a field of science.	Understanding and correctly applying essential concepts, theories, relationships, and experimental processes specific to a particular field of science; investigating, through research and inquiry, important principles, theories, and relationships from a field of science.	Ongoing: School- and internship-based projects; Socratic seminars in science and social implications; Senior Institute science curriculum; community college classes. Culminating: Senior Institute science presentations; junior research paper; senior thesis project; level-up portfolios and exhibitions; community college final assessments.

COMPETENCY OVERVIEW for COMMUNICATION LEARNING GOAL

Communication: Students are active and capable readers; skilled writers in multiple contexts, including reflection and planning; effective presenters; able to use various media to communicate ideas; responsible and purposeful communicators.		
Competency	Includes	Evidentiary Work
Write for varied purposes.	Reflection; summarizing and analyzing articles, literature, poetry, etc.; using an effective writing process; writing to persuade, explain, inform, etc.; creative and artistic writing; etc.	Ongoing: Journals, reflections, letters, essays in response to articles and discussions, book reports and analyses, creative writing, college admissions essays and letters, community college class work, etc. Culminating: <i>Who Am I</i> Project, end-of-year personal narratives, Gateway essay, autobiography, junior research paper, senior thesis project, writing WASL, level-up exhibitions and portfolios, Compass tests, community college final assessments.
Read and interpret from a variety of genres and periods.	Reading to learn about topics of interest; reading articles and essays for discussion; reading for research; reading and interpreting creative works; etc.	Ongoing: Articles for seminar discussion, internship-based reading, assigned and interest-based books, community college class work, etc. Culminating: Reading WASL, level-up exhibitions and portfolios, Compass tests, community college final assessments.
Conduct inquiry and research.	Conducting research to address questions and problems of interest in various contexts; using and citing primary and secondary sources to gather and synthesize information and to create and communicate new knowledge.	Ongoing: Journals, reflections, letters, essays in response to articles and discussions, book reports and analyses, planning and leading Socratic seminars, community college class work, creative writing, etc. Culminating: <i>Who Am I</i> Project, autobiography, junior research paper, senior thesis project, internship and interest-based projects, level-up exhibitions and portfolios, community college final assessments.
Communicate and analyze in various forms.	Developing fluency in multiple communications media; choosing and implementing most effective media for purpose, audience, and context.	Ongoing: Audio and video productions associated with internship and other projects, powerpoint and other presentation media, creative expression, community college class work, etc. Culminating: <i>Who Am I</i> Project, end-of-year personal narratives, autobiography, junior research paper, senior thesis project, level-up exhibitions and portfolios, Writing WASL, Compass tests, community college final assessments.
Present to groups in various contexts.	Public speaking, public displays and defenses of work, meeting and seminar facilitation, teaching, etc.	Ongoing: Advisory presentations, PMU (school assemblies), seminar discussions, internship work, artistic presentations, independent project work (e.g. auction project), internship-based presentations. Culminating: Gallery Walks, exhibitions, Artistic Revolution, Mentor Appreciation Night, community college class presentations, graduation, etc.

COMPETENCY OVERVIEW for SOCIAL REASONING LEARNING GOAL

Social Reasoning: Students are active and capable social reasoners, able to apply an understanding of historical patterns to thinking about current political, social, ethical, economic, and cultural issues.		
Competency	Includes	Evidentiary Work
Analyze issues and events.	Defining and analyzing past and current events of social significance; analyzing causes and effects of local and international events and issues; interpreting and proposing solutions using supportable data and defensible criteria.	Ongoing: Socratic seminars; school- and internship-based projects; advisory-based investigations; community college classes. Culminating: Level-up exhibitions and portfolios; junior research paper; senior thesis project; community college final assessments.
Reflect on patterns of human history.	Understanding significant concepts and relationships in world and U.S. history; analyzing patterns of change or continuity in history; employing historical thinking and inquiry to understand events, developments, relationships, and perspectives in history.	Same as above.
Know and use geographic information.	Using and applying geographic information to interpret events and relationships in history; analyzing interrelationships among the characteristics of places and the various forces (e.g. social, cultural, etc.) that shape them; understanding processes of cultural distribution, migration, assimilation, conflict, etc.; reflecting on the interaction and interdependence of physical and human systems.	Same as above.
Examine aspects of human behavior.	Examining social influences, beliefs, and behavior; examining and reflecting on group dynamics and effects on individuals; examining cultural dynamics; reflecting on issues of ethics and social responsibility.	Same as above plus work referenced in Personal Qualities competencies related to collaboration and problem-solving in diverse contexts.
Understand structures and systems of U.S. government.	Understanding the principles, structures, and functions of government in the United States and the rights and responsibilities of citizens.	Same as above.

COMPETENCY OVERVIEW for PERSONAL QUALITIES LEARNING GOAL

NOTE: Per Washington State law, personal attributes may not be used as graduation requirements. While we hope and expect that our students will develop the attributes below, these are expectations and not requirements.

Personal Qualities: Students are respectful, responsible, persevering, resourceful, well-spoken, and organized. They are reflective about their goals and abilities, and they contribute effectively in diverse interpersonal contexts.		
Competency	Includes	Evidentiary Work
Work effectively in diverse teams.	Understanding and honoring different perspectives and experiences; recognizing one's own views as a product of personal history and experience; using appropriate strategies of listening and discussion.	Ongoing: Daily advisory work; Socratic seminars; internships; school- and internship-based projects; school committees; PMU (school assembly) planning and leadership; etc. Culminating: <i>Who Am I</i> Project; autobiography; level-up exhibitions and portfolios; senior thesis project.
Organize, plan, and manage time effectively.	Defining work in complex and varied contexts; visioning and goal-setting, individually and in groups; reflecting individually and in groups; effectively translating goals into tasks; managing workflow in context of conflicting priorities; applying effective technologies of managing workflow.	Ongoing: Independent work time management; school- and internship-based projects; Learning Plan development and maintenance; project planning; calendaring and task-listing; <i>Getting Things Done</i> curriculum; etc. Culminating: Level-up exhibitions and portfolios; junior research paper and senior thesis project.
Reflect and plan about life and learning.	Exploring personal history and how current perspectives originated; reflecting on strengths and weaknesses and addressing these in personal learning plans; accessing resources to get help when needed; establishing and maintaining clarity of purpose; persevering.	Ongoing: Learning plan development and maintenance; college planning; interest exploration; college essays; etc. Culminating: Application to Big Picture; <i>Who Am I</i> Project; autobiography; level-up exhibitions and portfolios; Gateway essay.
Collaborate in varied contexts.	Recognizing and co-creating the essential work of the group; overcoming differences; applying an understanding of group dynamics; working with small and large groups; accepting responsibility.	Ongoing: Daily advisory work; Socratic seminars; internships; school- and internship-based projects; school committees; etc. Culminating: Level-up exhibitions and portfolios; Gateway essay; senior thesis project.
Mediate conflicts.	Being proactive to foster positive community relations in school and other contexts; mentoring new members of the community; active listening; empathizing; being open to other perspectives; knowing and using conflict mediation strategies.	Ongoing: Daily advisory work; acculturation of new students; etc. Culminating: Level-up exhibitions and portfolios; Gateway essay.
Think and act as a leader.	Applying the above with awareness of group goals and one's potential to influence others; recognizing the importance of relationships and community; applying appropriate strategies of facilitation, collaboration, and public speaking.	Ongoing: ASB; school- and internship-based projects; PMU facilitation; Socratic seminar facilitation; school committees; etc. Culminating: Level-up exhibitions and portfolios; Gateway essay; senior thesis project.

Embedded Competencies in the Arts and Health and Fitness

Listed below are the Essential Academic Learning Requirements in the Arts and Health and Fitness. At Big Picture we understand these to be embedded within the five Big Picture Learning Goals. Below are listed some of the ways students address and demonstrate these competencies within our program.

The student...	At Highline Big Picture...
Understands and applies arts knowledge and skills.	Students complete an extensive <i>Who Am I</i> project in 9 th grade that includes an Artist's Statement and creative expressions of personal and family history; students engage in poetry and creative writing through the Writer's In Schools Program; music and video production lab supports students with individual and internship-based projects; Socratic seminars use works of visual art as text; students exhibit their work four times each year; Artistic Revolution annual arts night with student dance, singing, poetry, and other performances; students participate in theater productions at other high schools in district; artistic expression in required autobiography; etc.
Demonstrates thinking skills using artistic processes.	
Communicates through the arts.	
Makes connections within and across the arts to other disciplines, life, cultures, and work.	

The student...	At Highline Big Picture...
Acquires the knowledge and skills necessary to maintain an active life: movement, physical fitness, and nutrition.	Individual projects focus on how personal decision-making affects health and wellness; students reflect on personal and family health as part of <i>Who Am I</i> project; advisories develop close family-like relationships, discuss health in relationships and other life choices; advisory curriculum includes wellness, nutrition awareness, reducing health risks, etc.; visiting instructors work with all groups on healthy choices, sexuality and relationships, etc; many students participate in sports programs at their home high school; Big Picture students have gym access and can participate in PE activities multiple days/week.
Acquires the knowledge and skills necessary to maintain a healthy life: recognize patterns of growth and development, reduce health risks, and live safely.	
Analyzes and evaluates the impact of real-life influences on health.	
Effectively analyzes health and safety information to develop health and fitness plans based on life goals.	

Big Picture Learning Goals

1. EMPIRICAL REASONING

How do I prove it?

This goal is to think like a scientist: to use empirical evidence and a logical process to make decisions and to evaluate hypotheses. It does not reflect specific science content material, but instead can incorporate ideas from physics to sociology to art theory.

What idea do I want to test? (essential question)

What has other research shown?

What is my hypothesis? How can I test it?

What information (data) do I need to collect?

How will I collect the information?

What will I use as a control in my research?

How good is my information?

What are the results of my research?

What error do I have?

What conclusions can I draw from my research?

How will I present my results?

2. QUANTITATIVE REASONING

How do I measure, compare or represent it?

This goal is to think like a mathematician: to understand numbers, to analyze uncertainty, to comprehend the properties of shapes, and to study how things change over time.

How can I use numbers to evaluate my hypothesis?

What numerical information can I collect about this?

Can I estimate this quantity?

How can I represent this information as a formula or diagram?

How can I interpret this formula or graph?

How can I measure its shape or structure?

What trends do I see? How does this change over time?

What predictions can I make?

Can I show a correlation?

3. COMMUNICATION

How do I take in and express ideas?

This goal is to be a great communicator: to understand your audience, to write, read, speak and listen well, to use technology and artistic expression to communicate, and to be exposed to another language.

How can I write about it?

What is the main idea I want to get across (thesis)?

Who is my audience?

What can I read about it?

Who can I listen to about it?
How can I speak about it?
How can technology help me to express it?
How can I express it creatively?
How can I express it in another language?

4. SOCIAL REASONING

What are other people's perspectives on this?

This goal is to think like an historian or anthropologist: to see diverse perspectives, to understand social issues, to explore ethics, and to look at issues historically.

How do diverse communities view this?
How does this issue affect different communities?
Who cares about this? To whom is it important?
What is the history of this? How has this issue changed over time?
Who benefits and who is harmed through this issue?
What do people believe about this?
What social systems are in place around this?
What are the ethical questions behind this?
What do I think should be done about this?
What can I do?

5. PERSONAL QUALITIES

What do I bring to this process?

This goal is to be the best you can be: to demonstrate respect, responsibility, organization, leadership, time management, and to reflect on your abilities and strive for improvement.

How can I demonstrate respect?
How can I empathize more with others?
How can I strengthen my health and well-being?
How can I communicate honestly about this?
How can I be responsible for this?
How can I persevere at this?
How can I better organize my work?
How can I better manage my time?
How can I be more self-aware?
How can I take on more of a leadership role?
How can I work cooperatively with others?
How can I enhance my community through this?

College Forum Notes.

Senior Admissions Staff from Evergreen, Pacific Lutheran University, University of Puget Sound, Seattle Pacific University, the University of Washington, Washington State University, Smith College, DeVry University, St. Martin's University, and Highline Community College discuss what students need to succeed in college and what causes them to drop out.

Highline Big Picture High School forum, January 2008

Group 1 (w/ Loren Demeroutis facilitating)

- Sense of why they are there
- Attitude toward success
- Social skills/get voice heard
- Able to seek out and use faculty and staff/adults as resources
- Prioritization and time management skills
- Collaborative skills
- Self-disciplined/self challenger
- Reading/writing proficiencies
- Knowing how to learn (or absorb)
- Math proficiency
- Have something to work for
- Participation/attendance
- Self confidence
- Leadership skills
- Adaptability
- Test scores
- Able to self-assess/self advocate

Top 5, organized from left

- Interpersonal qualities
- Internal qualities
- Knowing how to learn/adapt
- Reading/writing
- Goal-oriented
- General academic proficiencies

Why don't succeed:

- Don't connect with faculty/staff
- Lack of the 5 priorities
- Not connecting with the student community
- First generation
- Socioeconomics
- Lack of initiative and confidence to take advantage of resources
- Lack of cultural connection/diversity
- Lack of management skills
- Financial aid
- Home life/family/peers/\$\$
- Don't know what to do.... it's unclear to them why they are there

Group 2 (w/ Jude Garnier facilitating)

- Manage their time (balance between life and study) to meet class expectations
- Write a research paper w/ footnotes
- Critical reading – understand why author chose; question the author
- Ability to focus on topic/subject not interested in – stepping outside comfort zone – be able to persevere when don't like it
- Do quantitative analysis as it relates to their field – in general, in all areas
- Have a deep (enough) understanding of scientific concepts to think critically about research (political...) presented
- Applying theory in daily practice – deep enough understanding of theory

Why we lose students:

- Time management: prioritize what need to do; not procrastinate
- Personal issues: “Life happens”, family, finances
- Being self-directed, able to make the transition into college
- (Especially in 1st year) lack of academic preparation
- Not using campus services
- Lack of focus/purpose – what they want to do
- College not the right choice (family chooses, friends, etc.)

Group 3 (w/ Kari Thierer facilitating)

- Writing skills (research papers, critiques, responses to text or discussion)
- Have a purpose and/or drive to be there/self motivation
- Think critically
 - Being able to go beyond the writing prompt
 - Defend your thought process
 - Connect two or more different ideas
- Think spatially, being comfortable with math and statistics, thinking about math and science
- Manage their time!!!
- Organize/prioritize/take notes/study skills
- Navigate “systems” – know yourself well enough to navigate systems and build resources, know the language of college
- Know themselves, their learning style, how they learn, know when they need help and how to get help

Most common reasons not successful

- Don't feel like they fit in
- Don't have the support system
- Not finding your own place
- Have not made connections
- Overwhelmed, can't handle the workload
- Lack of time management – can't handle multiple classes/multiple projects at once
- Have to be able to handle high-stakes tests/projects – there's not much flexibility
- Finances are a problem
- Lack of self motivation/purpose/drive
- Lack of preparation, academic skills not where they need to be

HOW THE DISTRICT OR SCHOOL PLANS TO ACHIEVE THE HIGHER STANDARDS, INCLUDING TIMELINES FOR IMPLEMENTATION.

The district plans to achieve the standards described above through continued implementation of the Big Picture high school design. Following is a summary of the structure and rationale of this design presented to the Highline School District Board of Directors in 2004, one year prior to the opening of the school.

Highline Big Picture High School enrolls academically, economically, and culturally diverse students and prepares them for higher education and responsible participation in communities. HBPHS immerses students in caring and challenging adult cultures, both on and off the school site, that link students' interests to rigorous and clearly articulated academic standards and real work in the greater Highline and Seattle area. HBPHS graduates are adept readers, writers, speakers, listeners, thinkers, planners, researchers, and facilitators, and they have the skills and personal qualities to be leaders in diverse communities.

what it looks like (structures)

- *The school is made up of grade-level "advisories" consisting of 17 students and one generalist teacher (advisor).*
- *Students remain with the same advisor throughout their high school career.*
- *Each student has an Individualized Learning Plan (ILP), which he or she develops in collaboration with the advisor and parent(s).*
- *Students spend three days/week at the school site and two days off-site working in internships with adult mentors who share their interests.*
- *In lieu of a traditional schedule of classes, advisors teach and otherwise facilitate learning one-on-one and in various configurations according to the needs of the advisory group and students' Individualized Learning Plans.*
- *Apart from advisors, additional adult staff include an administrator, an internship coordinator, and an office manager.*
- *Students complete academic requirements through school-based projects and activities and a series of increasingly complex projects developed through their internships.*
- *Students "level-up" from one level to the next by demonstrating, through exhibitions and portfolios, their competence in various learning goals aligned with state standards.*

why (design principles)

HBPHS is based on four interrelated principles, each indispensable to the integrity of the model. These include multiple, meaningful, and extended adult relationships; a small learning community; academics in the context of real work outside the school; and a school culture pervaded by the expectation of higher education for all students.

Chronically unsuccessful students need trust in adults to overcome fear and frustration associated with schoolwork or schools generally (or adults generally). Traditionally successful students need adults who know them well to effectively push them to excel beyond grade level expectations and into intellectual terrain they might otherwise avoid. Also, one of the best ways to learn how to be an adult is to get to know adults and spend time with them. HBPHS students work with the same advisor for four years, and the school is small enough to facilitate long-term connections with other staff. Through their internships, students work closely with several adult mentors who share their interests.

The small size of HBPHS is essential to students' learning about how to interact effectively and responsibly in groups of various sizes and purposes. A sense of belonging and being known well is integral to the transitions HBPHS students will make between enrolling and graduating.

Through their internships, students develop and complete projects that serve real needs in adult workplaces among adult colleagues. The relevance, ownership, and accountability inherent in such work are difficult to simulate in the classroom. Internships motivate and provide context for students' academic pursuits.

Finally, social and academic expectations are raised throughout the program by the assumption from the time of enrollment that each student will pursue higher education. Steps to ensure this outcome begin in the first year with visits to higher education programs and culminate with required applications to colleges and scholarships.

Implementation Timeline

The school opened in September of 2005 with 34 9th graders and has added a new cohort of 9th graders in each of the last three years. The proposed competencies have been developed over the last three years, and these will be refined in response to increased capacity of the school to implement rigorous curriculum and our ongoing dialogue with colleges about the preparedness of our graduates.

HOW THE DISTRICT OR SCHOOL PLANS TO DETERMINE IF THE HIGHER STANDARDS ARE MET.


At the district level, the school is subject to the accountability of the yearly School Improvement Planning process. For the current year our School Improvement Plan is still in development, but a portion of it is provided on the following page.

Please see the following supplemental documents:

- Exhibition rubric (this is one of several in use at the school)
- Project assessment rubric


Highline Big Picture School Improvement, 2008-09

Reflections, refinements
for 2009-2010.



STAR goal: To increase the number of students completing rigorous projects, as defined by score of higher than 2.0 on rubric adapted from "6 A's of Quality Project-based Learning."

Theory of action: Based on data from Met schools in Providence and our own evidence, we believe consistent well-structured 1:1 meetings between advisors and students are essential to good project scaffolding; and that in-person meetings between advisors and mentors support relationships leading to more effective collaboration among adults in support of student project planning and implementation.



Spring 2009

Measuring project number and rigor and assessing impact of supporting strategies.

- Continued counting of 1:1 meetings, advisor/student and advisor/mentor.
- Refinement of 1:1 meeting practices through sharing and scale-up of best practices identified by advisors.
- Examination of connections between project rigor and advisor/student meetings and advisor/mentor collaboration.
- Continued 2-of-4 staff meetings on project scaffolding and refining 1:1 Learning Plan meeting practices.
- Project rubric data collected during exhibitions and spring Gallery Walk.
- May and June staff retreats to assess progress on STAR goal and reflect on correlation w/ strategies.

Fall 2008

Monitoring implementation and collecting baseline data on project numbers and rigor.

- Advisor/Student 1:1 meetings and Advisor/Mentor meetings defined and counted.
- Admin/Advisor meetings model same Learning Plan format as Advisor/Student meetings.
- Two staff meetings (of 4 per month) devoted to project scaffolding, Learning Plans, and 1:1 meeting refinement.
- Share goal and strategies with parents October 2nd.
- October 9-10 staff retreat: use rubric to generate 07-08 baseline data and refine expectations for implementation measures.
- Nov/Dec: collect 08-09 baseline data during Nov/Dec exhibitions and BP network principal's visit Dec 12.

Supporting Resources

- "How to Analyze a Curriculum Unit or Project and Provide the Scaffolding Students Need to Succeed." From *Horace*. Vol. 15, #2. Nov. 1998.
- *Getting Things Done* and related resources by and adapted from David Allen.
- Materials from Big Picture Project Rigor study group, 2006-2007.

Winter 2008-09

Continued monitoring of implementation strategies; initial impact assessment w/ project number and rigor.

- Continued counting of 1:1 meetings, advisor/student and advisor/mentor.
- Refinement of 1:1 meeting practices through sharing and scale-up of best practices identified by advisors.
- Examination and reflection on connections between project rigor and advisor/student meetings and advisor/mentor collaboration.
- Continued 2-of-4 staff meetings on project scaffolding and refining 1:1 Learning Plan meeting practices.
- Increased use of project rubric to inform project development.
- Two-day staff retreat to collect and review implementation data, refine practice, and specify June growth target for impact.



EVIDENCE THAT THE BOARD OF DIRECTORS, TEACHERS, ADMINISTRATORS, AND CLASSIFIED EMPLOYEES ARE COMMITTED TO WORKING COOPERATIVELY IN IMPLEMENTING THE PLAN.

The Highline Board of Directors, district leadership, school staff, and Big Picture Learning have cooperated in implementing this plan since its inception in 2003-2004. That year the school's founding principal, Jeff Petty, met with then Deputy Superintendent John Welch and Big Picture Learning co-founder Elliot Washor to begin developing the proposal for a new school that was later adopted by the Highline Board of Directors.

School staff have presented to the Highline District Board of Directors many times over the last three years to update the Board on the progress of the school and to develop this competency proposal. Most of these presentations have involved students and parents from the school. The unanimous passage of this proposal at the local Board level is evidence of the cooperation between the school and district leadership. The letter on the following page attests to the school staff's shared commitment to this proposal.

HIGHLINE BIG PICTURE HIGH SCHOOL

2450 SOUTH 142ND STREET, SEATAC, WA 98168

206.444.7726

WWW.BIGPICTURE.ORG

WWW.HSD401.ORG

September 30, 2008

To the Washington State Board of Education:

We the undersigned staff members of Highline Big Picture High School are committed to working cooperatively with our enrolled students and families, with each other, and with the Highline School District leadership and Board of Directors to implement our plans of graduation by demonstration of proficiency rather than accumulation of credits.

We believe these plans to be consistent with the State's education reform vision (WAC 180-51-001) that involves "shifting from a time and credit-based system to a standards and performance-based education system."

The WAC further states that "our concept of school needs to expand and take into account that education and learning are about connected learning experiences, which can and do occur inside and outside the physical boundaries of a school building."

We believe that we are implementing a school that contributes to this expanded concept of schooling and furthers not only the State's reform vision, but also the Highline School District's vision of preparing every student for college, career, and citizenship. We appreciate your support and urge your passage of our waiver proposal.

Daniel Pasel

INTERNSHIP PROGRAM DIRECTOR

Hi Bann

201 Advisor

Drew C. S.

301 ADVISOR

Holly Sheehan

Internship Coordinator

Joe James

ASSISTANT PRINCIPAL

Terrie Kenneth-Hay

Office Mgr.

Maral McCorkle

Internship Coordinator

GPR

101 ADVISOR

Joyce M. Pitts

Principal

Daniel J. Gordon

ER/QR Specialist

Bonnie Letman

301 Advisor

Stacye

401 Advisor

Douglas M. Judge

SPECIAL EDUCATION ADVISOR

M. J. S.

201 ADVISOR

IDENTIFICATION OF THE SCHOOL YEARS SUBJECT TO THE WAIVER.

The proposed waiver would take effect for the 2008-2009 school year, including the school’s first graduating class in 2009, and our intent is that this would continue for all subsequent classes. WAC 180-18-055 specifies that the local district will monitor successful implementation of the proposed program and will present yearly updates to the State Board of Education regarding progress.

INDICATORS OF SUCCESS OF THE SCHOOL.

Overview WASL Data

Our best indicators of success will be what happens to our graduates as they matriculate to colleges, other post secondary opportunities, and careers. Early indicators that we are on the right track include WASL data, various parent and student survey data, and the success of other schools in the Big Picture network.

To date we have had only two cohorts take the WASL. Scores are improving with each cohort, and the school is meeting AYP. This Spring Big Picture appeared in a *Seattle Times* article for being one of the top 5 high schools in King and Snohomish counties for growth on the reading WASL between 2007 and 2008. A more accurate indicator of the improvements we are making is longitudinal WASL growth for students either repeating the 10th grade WASL or gains from 7th to 10th grade.

The three charts below show growth between 7th grade and 10th grade for the two Big Picture cohorts who have taken the 10th grade WASL.

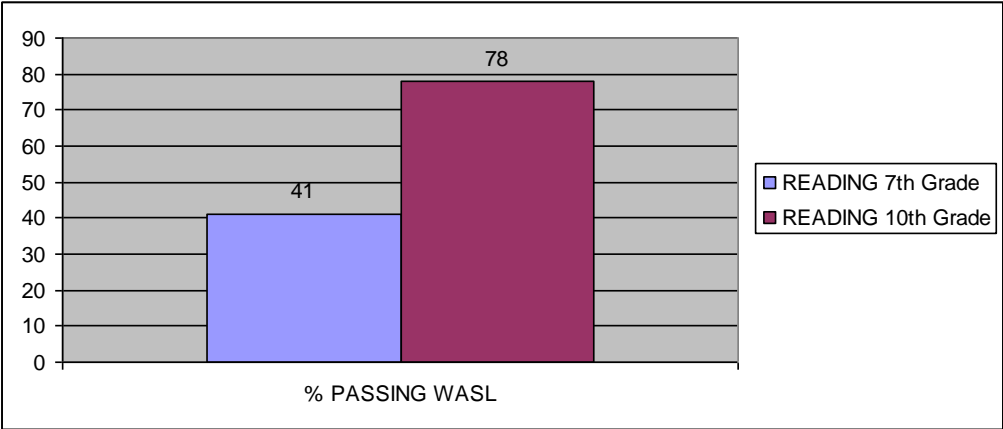


Table 1. Big Picture students with 7th and 10th grade Reading WASL scores show a 37 point increase in passage rates between the two tests. The 10th grade passing figures represent Level 3 and 4 scores *only*, even though more than ten of the students who have passed at Level 3 are special education students who qualify to “pass” at Level 2.

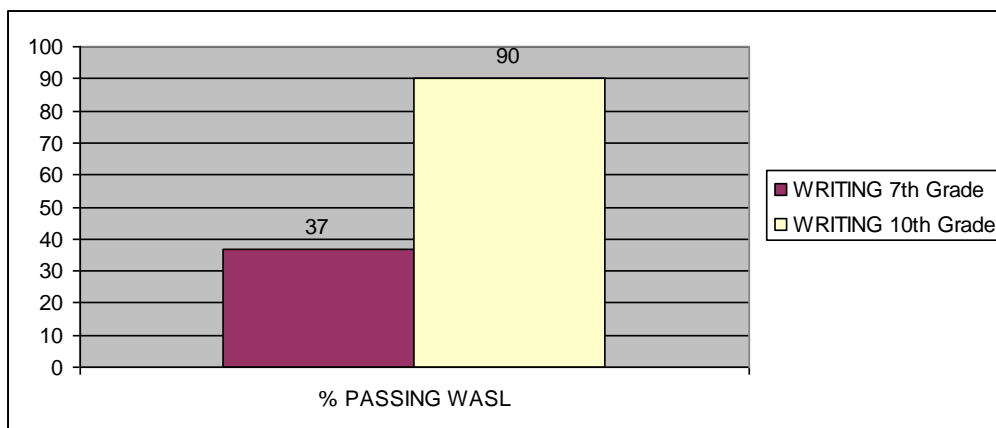


Table 2. As of June 2008, Big Picture students with 7th and 10th grade Writing WASL scores show a 43 point increase in passage rates between the two tests. Again, the 10th grade passing figures represent Level 3 and 4 scores *only*, even though more than ten of the students who have passed at Level 3 are special education students who qualify to “pass” at Level 2.

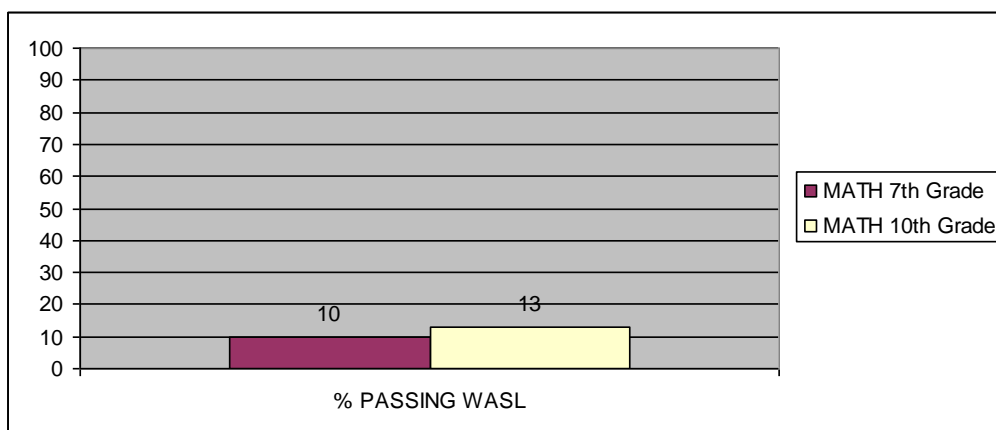


Table 3. Big Picture students with 7th and 10th grade Math WASL scores show a 3 point increase in passage rates between the two tests. See brief discussion below regarding math school improvement goals for 2008-09.

While we are pleased with the gains over time, math is a significant area of concern and a major focus of this year’s school improvement plan. We have just completed Fall MAP testing of all cohorts at Big Picture, and we anticipate a significant gain in Math WASL scores (greater than or equal to 10 percentage points) this year in response to a focused effort by all staff in this area. It is also worth noting that because of the unique and non-linear progression of our curriculum, we expect to see stronger gains in math and science later in our students’ high school careers because of the focus on other learning goals in the first two years. Longitudinal data from California Big Picture schools are somewhat indicative of this trend and are included later in this proposal.

**Selected Longitudinal Growth on Math WASL,
7th grade to 2008**

STUDENT (GRADE)	2008	7TH GR	DIFF
CK (10)	418	415	3
TB (10)	371	368	3
SM* (10)	355	334	21
LS (9)	408	384	24
ST* (9)	355	326	29
SL* (11)	359	329	30
AK* (11)	384	345	39
SS (10)	320	259	61
AP* (11)	365	296	69
SV* (11)	371	302	69

* indicates students w/ IEPs.

Big Picture Students and Compass Test

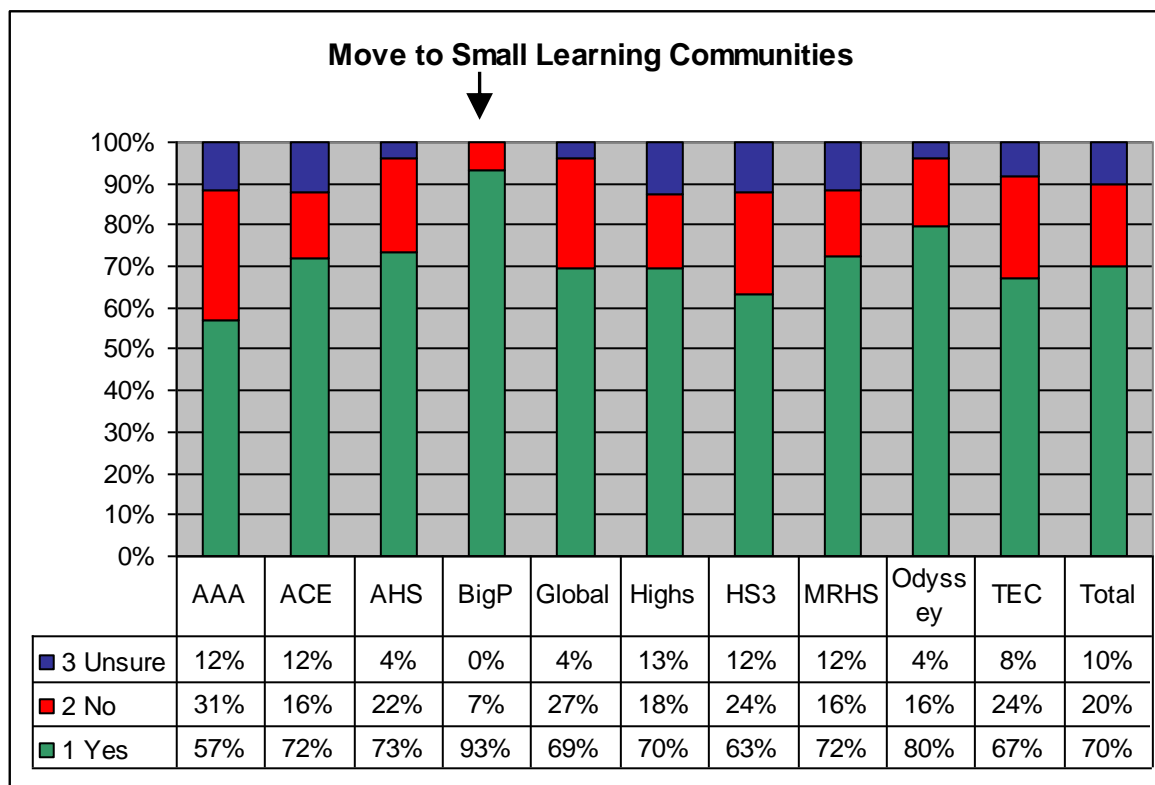
All of our students are encouraged to take Running Start classes at Highline or South Seattle Community Colleges. The table below indicates that most of our seniors (21 in class) and juniors (about 30 in class) have already passed sections of the Compass test or have plans to take it this fall.

GRADE LEVEL	PASSED TO DATE	PLANNED FALL 2008
12	7(R); 6(W); 2(M)	13(R/W/M)
11	3(R); 4(W)	17(R/W/M)
10		5(R/W/M)

RESEARCH FINDINGS FROM DISTRICT PARENT SURVEY, 2007-08

This survey was conducted by phone in English and Spanish. Questions and comments below are reprinted here as received in an in-district report from the Communications office. The arrows indicate Big Picture, which leads all high schools in positive responses on all but one question.

1. Highline's large traditional high schools have converted to small learning communities on each campus. In small learning communities, students stay with the same teachers and students, giving them a more personalized education. Is this move to small learning communities a good thing?
 - a) Yes
 - b) No
 - c) Unsure

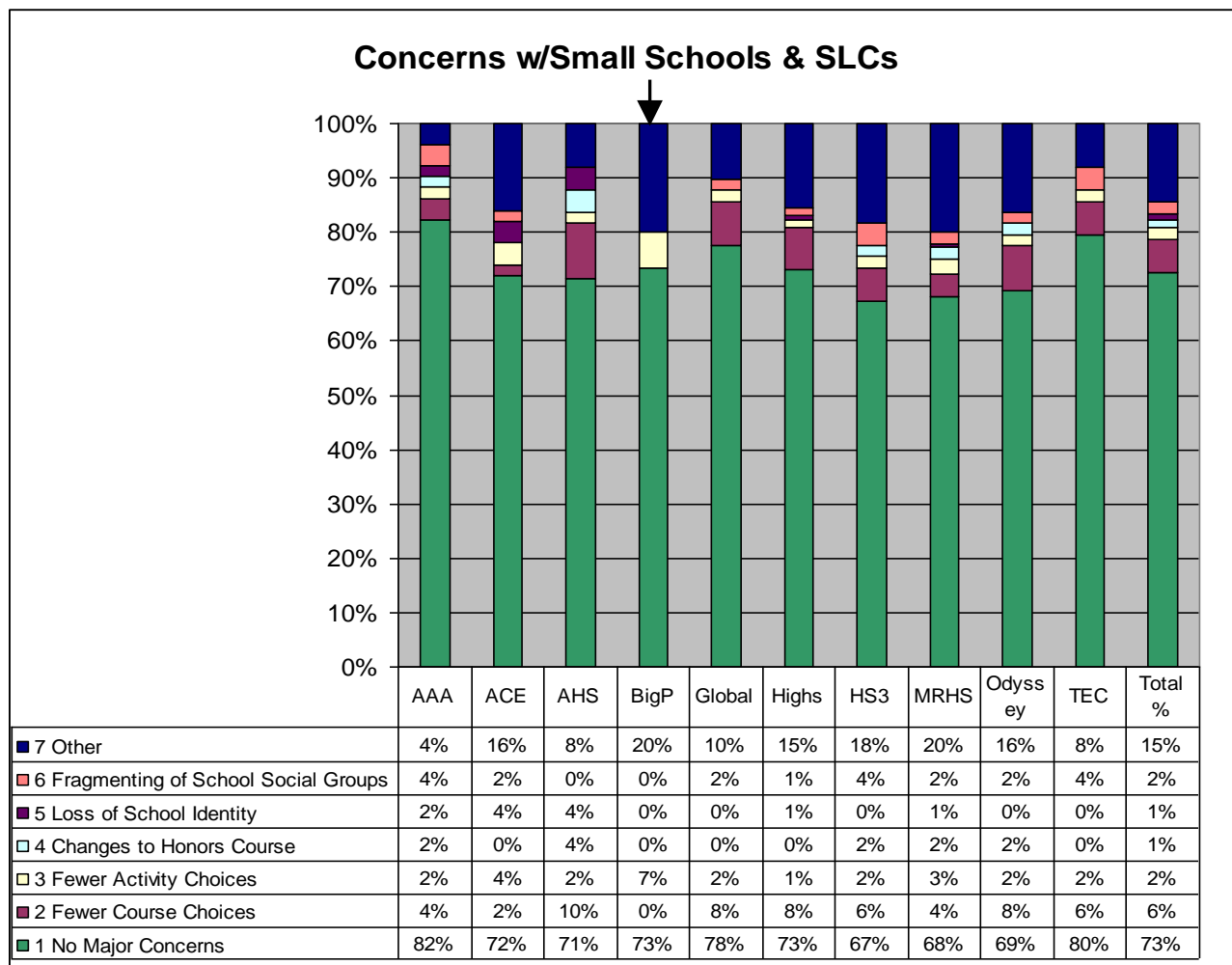


In general, the move to small learning communities and small schools has been very well received by parents. However, within the schools, there is a range of how positive parents are feeling. Arts & Academics Academy had the lowest approval rate at 53% while Big Picture had the highest at 93%.

It is important to note that Highline High School and Mount Rainier High School, both using small learning communities within a larger school, were very much in the middle of the approval ratings (70% and 72% respectively). The small schools tended to have a greater level of fluctuation in approval ratings, perhaps due to the autonomy each school has in setting its own priorities, etc.

2. Do you have any concerns with small learning communities/small schools? Please choose one option

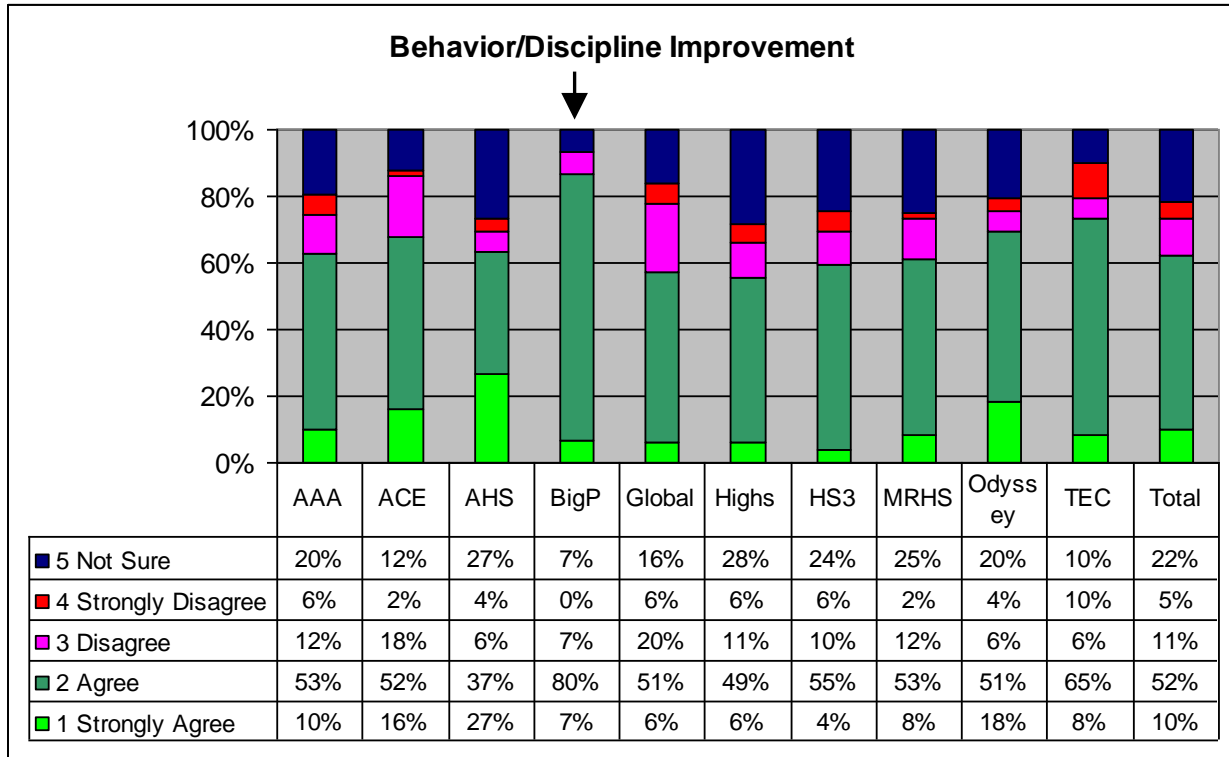
- a) No major concerns [always read first, rotate remaining options]
- b) Fewer course choices
- c) Fewer activity choices
- d) Changes to Honors courses.
- e) Loss of school identity
- f) Fragmenting of students' social groups
- g) Other (please specify)



Again, this question shows an overwhelming support of small learning communities and small schools. With nearly three out of four of all respondents indicating 'No Major Concerns', it is evident that parents are generally pleased with the schools their children are attending. Of the concerns listed, 'Fewer Course Choices' was the most prevalent response at 6% overall. However, 'Other' was the most common concern at 15% of total responses, indicating that there are concerns among parents that HSD has not anticipated (these concerns are itemized in Appendix I). 'Fragmenting of School Social Groups' and 'Fewer Activity Choices' showed low levels of concern at 2%, followed by 'Loss of School Identity' and 'Changes to Honors Courses' at 1% each.

Mount Rainier, Odyssey, and HS3 showed the highest levels of concern, with over 30% of parents indicating that they had a major concern. As with the average, 'Other' and 'Fewer Course Choices' were rated as the highest concerns.

3. Since the change to small learning communities, student behavior and discipline have improved.
- a) Strongly agree
 - b) Agree
 - c) Disagree
 - d) Strongly disagree
 - e) Not sure

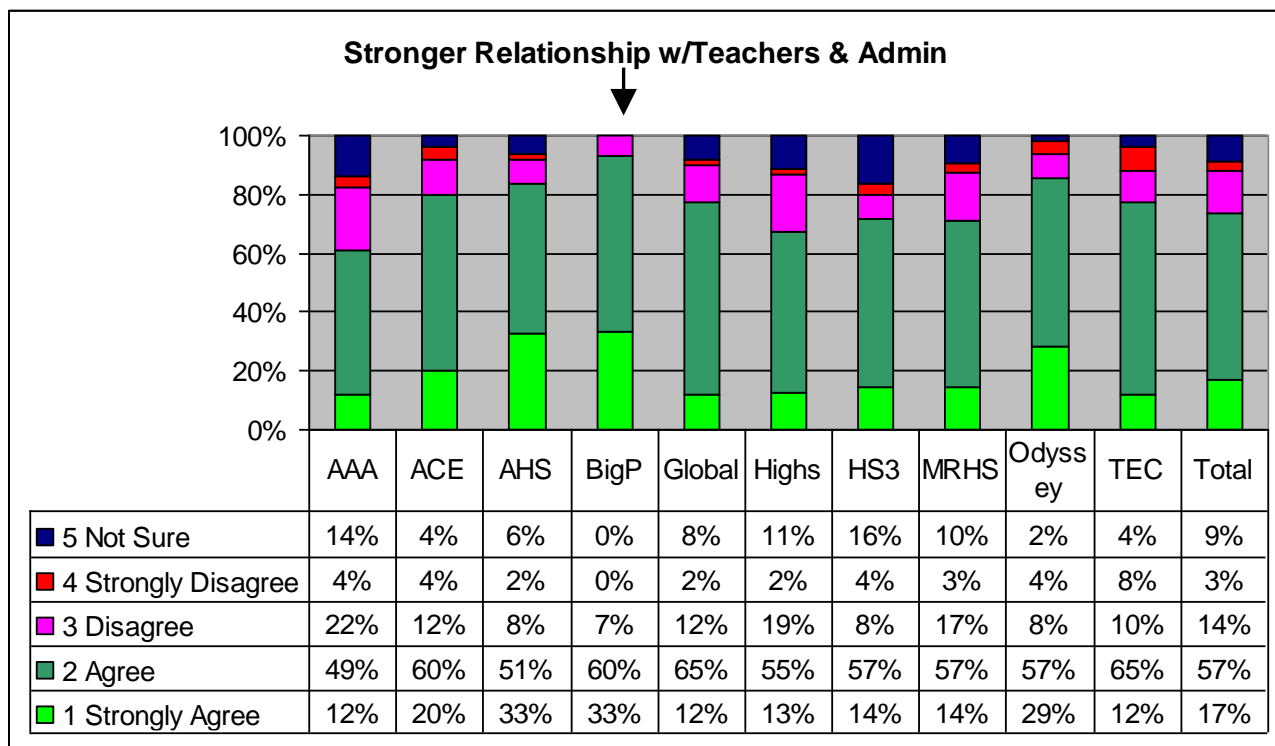


When asked with behavior and discipline had improved in small schools or small learning communities, parents generally felt that the change had had a positive impact. Combined, 'Strongly Agree' and 'Agree' were above 55% for every single school with the average being 62%.

Aviation had the highest percent of parents who 'Strongly Agree' that discipline has improved while Big Picture had the highest overall positives for this question. It is interesting to note that these two schools are perhaps the most unique of the small schools and differ the most from traditional high schools.

4. In a small learning community, my child has stronger relationships with his/her teachers and administrators.

- a) Strongly agree
- b) Agree
- c) Disagree
- d) Strongly disagree
- e) Not sure

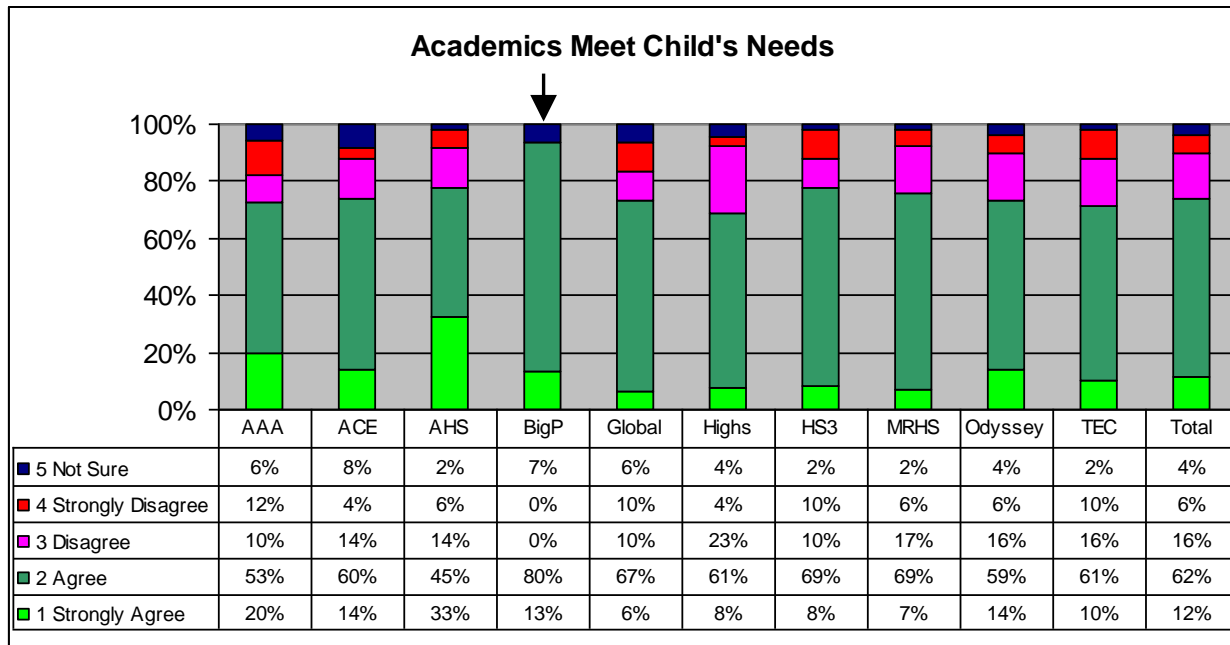


Parents felt very positively about their children's relationships with teachers and administrators, with 74% indicating that they felt these relationships had improved in a small school or small learning community. However, Highline and Mount Rainier were both slightly below the average, indicating that parents of children in small learning communities felt less positively than parents with children in small schools.

Strong disagreement to the question was minimal at just 3% overall. While showing above average positives with 77% of parents agreeing or strongly agreeing, Technology, Engineering & Communications School also had the highest percentage of strongly disagree at 8% - more than double the average. It is important to identify why these parents believe their children are disconnected from teachers and administrators to remedy this situation.

5. The school's academic program meets my child's needs.

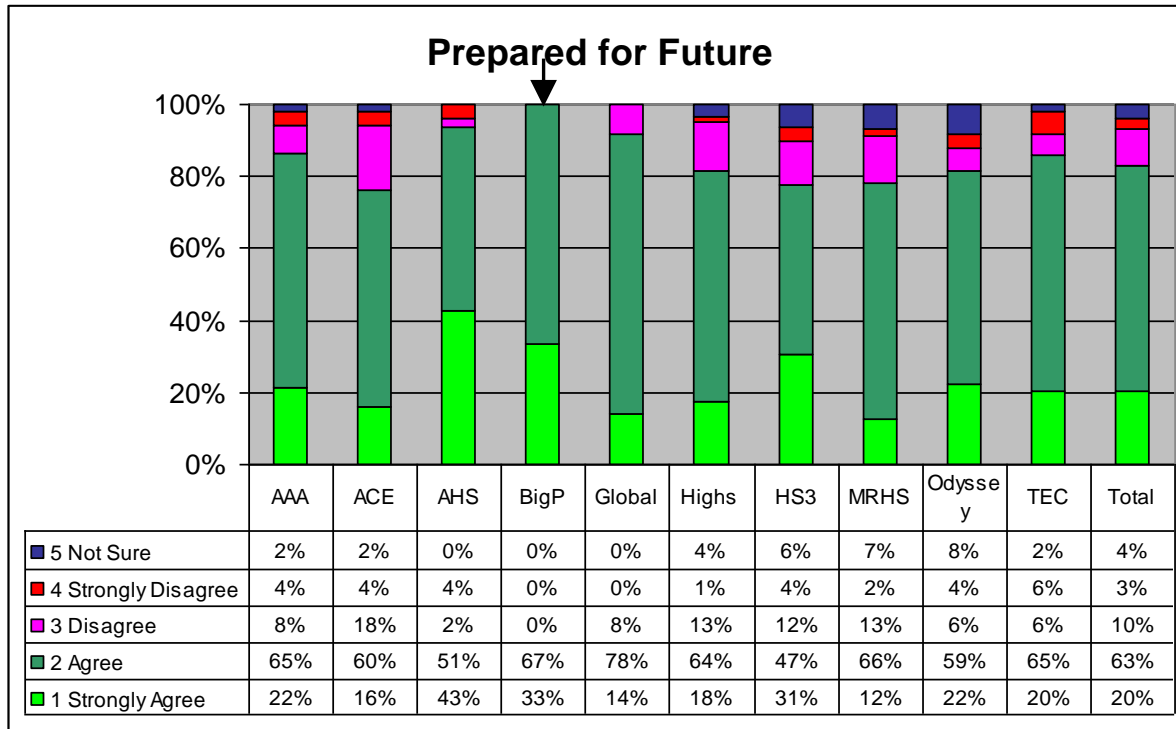
- a) Strongly agree
- b) Agree
- c) Disagree
- d) Strongly disagree
- e) Not sure



Responding to whether the small school or small learning community is meeting student's needs, parents continued to answer very positively. 'Strongly Agree' and 'Agree' garnered 74% of responses with just 22% believing that academic needs were not being met. These responses were more positive than questions about relationship with teachers and behavior improvements. It's a very positive sign that academic instruction, what many consider to be the primary role of a school, are rating so highly.

However, cause for concern again arises with the larger high school currently using a small learning community approach. Both Mount Rainier and Highline have above average negative responses to this question, with 23% and 27% respectively. Technology, Engineering & Communications School also shows up again (as it did with the teacher relationship question) with above average negatives at 26% disagreeing or strongly disagreeing.

6. My child is encouraged to prepare for his/her future and pursue further education after high school.
- a) Strongly agree
 - b) Agree
 - c) Disagree
 - d) Strongly disagree
 - e) Not sure



Overall, parents overwhelmingly believed their children were being prepared for their future with 83% answering positively. Academy of Citizenship and Empowerment was at the lowest level, with 76% feeling positively while **Big Picture led with 100% of parents indicating agreement or strong agreement**. Mount Rainier, Highline and HS3 were also slightly below average. Aviation had the highest ‘strongly agree’ rate with an impressive 43%.

School-based Parent Survey, 2006

Highline Big Picture High School Parent Survey, April 2006

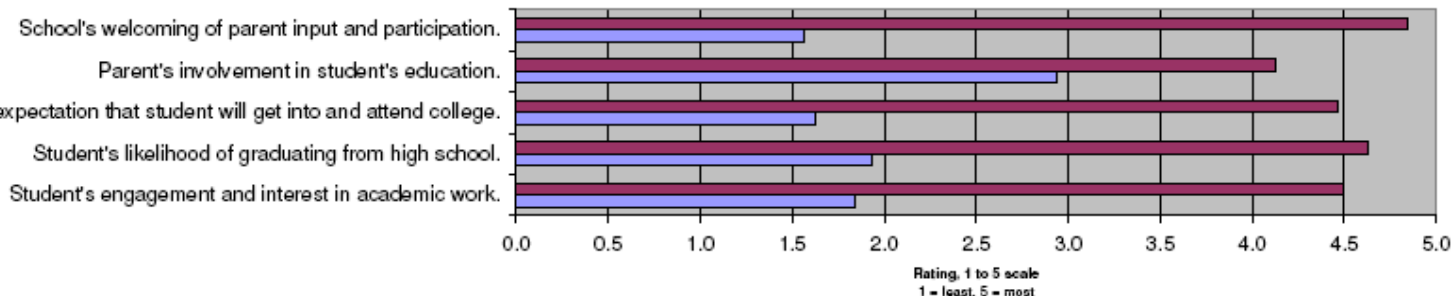
In April 2006, parents of Highline Big Picture students, all of whom are 9th graders in the school's first year, were surveyed in person and by phone about their impressions of Highline Big Picture in comparison to their experience with their student's previous school. All except one parent responded. Parents were asked to rate the schools on a scale from 1 to 5 in response to five (5) questions. Data are summarized below on this page. The following pages show exact wording of questions, each parent's response to each question, and additional information such as school attended last year.

Topic

	previous schools	HBP
Student's engagement and interest in academic work.	1.8	4.5
Student's likelihood of graduating from high school.	1.9	4.6
Student and parent's expectation that student will get into and attend college.	1.6	4.5
Parent's involvement in student's education.	2.9	4.1
School's welcoming of parent input and participation.	1.6	4.8

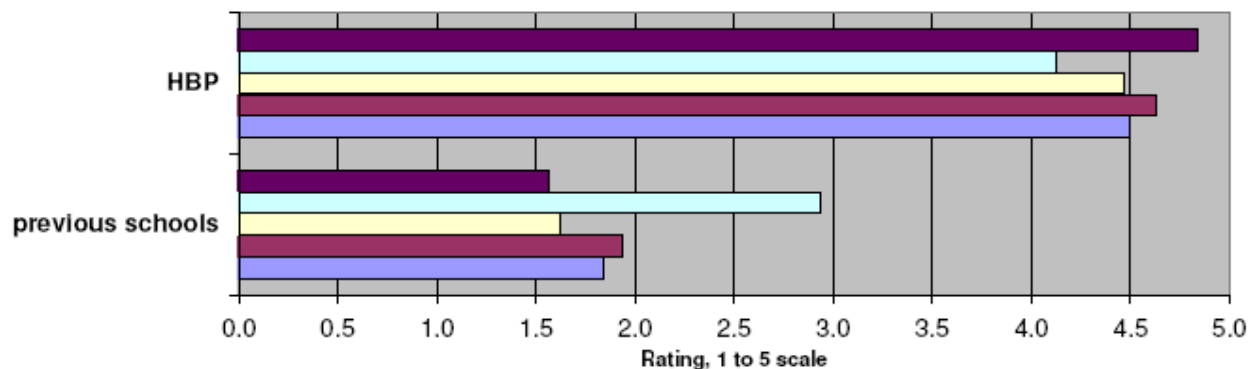
Response Summary by Question

■ Highline Big Picture
■ Previous schools



Response Summary by School

■ School's welcoming of parent input and participation.
■ Parent's involvement in student's education.
■ Student and parent's expectation that student will get into and attend college.
■ Student's likelihood of graduating from high school.
■ Student's engagement and interest in academic work.



Results from District-wide High School Student Survey. Green highlighting indicates highest positive response for Big Picture HS.

Highline Public Schools High School Student Survey
Multi-Year Trend Results

Percent of Students who "Somewhat Agree" or "Strongly Agree"	District		Aviation		BP		AAA	HS3	TEC	Highline		MRHS		NewSt	ACE		Global		Odyssey	
	2007	2008	2007	2008	2007	2008	2008	2008	2008	2007	2008	2007	2008	2008	2007	2008	2007	2008	2007	2008
My teachers ask me to connect what I'm learning with the real world.	75	75	89	84	80	100	81	71	82	72	68	65	73	75	72	77	84	83	78	79
The things I learn at school prepare me for post-high school education or training	NA	80	NA	92	NA	91	83	85	81	NA	80	NA	75	54	NA	81	NA	86	NA	76
The things I learn at school are useful.	82	NA	87	NA	85	NA	NA	NA	NA	80	NA	77	NA	NA	90	NA	82	NA	86	NA
My school helps me make plans for continuing my education (college, career planning, etc.).	84	82	92	82	84	94	89	88	86	80	83	80	78	71	88	84	85	91	71	77
I receive prompt feedback from teachers on assignments or other classwork.	71	67	81	74	86	93	75	69	74	69	65	60	58	54	80	76	76	82	78	76
I feel supported and respected by teachers and staff	78	79	86	84	82	98	85	76	92	78	79	71	75	58	82	78	79	84	86	79
I feel supported and respected by administrators (principal, assistant principal).	68	72	83	78	89	98	78	69	73	63	73	62	64	42	71	78	85	85	75	82
I feel supported and respected by other students	76	76	87	83	64	87	70	89	79	76	73	71	75	58	82	71	73	79	78	67
The support I get at school encourages me to learn more.	68	NA	78	NA	77	NA	NA	NA	NA	67	NA	58	NA	NA	77	NA	73	NA	72	NA
There is at least one adult in my school who cares about me and knows me well.	77	76	78	74	90	91	85	81	84	83	77	69	74	25	86	80	76	77	63	71
My culture and ethnicity are respected at this school	NA	81	NA	88	NA	98	75	93	80	NA	79	NA	82	75	NA	76	NA	79	NA	73
I try my best at school	NA	83	NA	83	NA	91	81	85	90	NA	83	NA	81	75	NA	84	NA	89	NA	85
My school treats students fairly and with respect.	79	NA	90	NA	86	NA	NA	NA	NA	80	NA	74	NA	NA	83	NA	80	NA	84	NA
It is important to me to make good grades.	93	NA	92	NA	95	NA	NA	NA	NA	94	NA	93	NA	NA	95	NA	92	NA	88	NA
My teachers really care about what they are teaching.	80	80	90	92	91	98	87	77	88	81	78	68	76	67	91	85	82	85	84	76
I place a high value on learning.	88	NA	92	NA	88	NA	NA	NA	NA	88	NA	86	NA	NA	90	NA	86	NA	81	NA
I put forth a great deal of effort when doing my school work.	83	NA	86	NA	83	NA	NA	NA	NA	81	NA	82	NA	NA	86	NA	84	NA	85	NA
I know what is expected of me academically at school	NA	89	NA	93	NA	96	91	93	83	NA	88	NA	89	78	NA	86	NA	93	NA	88
I know the learning expectations in my classes.	89	NA	93	NA	86	NA	NA	NA	NA	88	NA	87	NA	NA	94	NA	88	NA	86	NA

Highline Public Schools High School Student Survey
Multi-Year Trend Results

Percent of Students who "Somewhat Agree" or "Strongly Agree"	District		Aviation		BP		AAA	HS3	TEC	Highline		MRHS		NewSt	ACE		Global		Odyssey	
	2007	2008	2007	2008	2007	2008	2008	2008	2008	2007	2008	2007	2008	2008	2007	2008	2007	2008	2007	2008
I have a voice in school decisions	NA	47	NA	32	NA	85	50	53	53	NA	45	NA	41	39	NA	70	NA	64	NA	53
I get to make choices about what I will study at school.	58	NA	65	NA	83	NA	NA	NA	NA	62	NA	47	NA	NA	57	NA	52	NA	64	NA
My teachers treat me as an intellectual person.	76	NA	86	NA	89	NA	NA	NA	NA	78	NA	66	NA	NA	81	NA	79	NA	69	NA
I have a voice in classroom decisions.	68	NA	79	NA	68	NA	NA	NA	NA	72	NA	60	NA	NA	75	NA	70	NA	76	NA
I have opportunities to be creative in my school assignments.	77	79	86	75	85	96	84	82	86	78	78	72	77	63	80	82	79	85	77	79
I often feel successful in my classes.	76	NA	76	NA	75	NA	NA	NA	NA	81	NA	73	NA	NA	82	NA	80	NA	77	NA
I am challenged in my classes*.	67	79	75	88	63	85	81	81	80	67	76	59	78	33	70	78	72	89	81	68
I have a voice in student governance.	43	NA	46	NA	58	NA	NA	NA	NA	49	NA	35	NA	NA	51	NA	44	NA	62	NA
I really like to come to my classes.	60	NA	67	NA	75	NA	NA	NA	NA	65	NA	51	NA	NA	59	NA	64	NA	64	NA
The homework I am assigned helps me improve academically	NA	66	NA	66	NA	67	69	79	72	NA	63	NA	63	43	NA	71	NA	82	NA	62
I feel safe at school.	70	80	92	91	70	89	70	81	71	70	80	66	81	71	78	79	72	79	70	67
Overall, people at school accept me for who I am.	81	85	88	86	61	87	88	91	88	83	87	81	84	75	85	83	78	88	83	86
My teachers give me extra help when I need it.	NA	79	NA	82	NA	93	83	77	82	NA	81	NA	75	71	NA	84	NA	89	NA	80
My teachers have high expectations of me.	NA	84	NA	91	NA	94	86	84	85	NA	83	NA	81	67	NA	87	NA	89	NA	89
I am bored in my classes.	NA	70	NA	62	NA	39	66	73	66	NA	74	NA	73	88	NA	58	NA	69	NA	64
My school offers extracurricular activities (sports, clubs, etc.) in which I am interested	NA	75	NA	35	NA	44	81	86	85	NA	80	NA	84	25	NA	75	NA	79	NA	70
Percent of Students Responding "Twice" or "Three or More Times"	District		Aviation		BP		AAA	HS3	TEC	Highline		MRHS		NewSt	ACE		Global		Odyssey	
	2007	2008	2007	2008	2007	2008	2008	2008	2008	2007	2008	2007	2008	2008	2007	2008	2007	2008	2007	2008
How many times have you visited a college or university as part of a school activity or field trip?	NA	38	NA	42	NA	44	49	65	39	NA	45	NA	26	39	NA	59	NA	59	NA	30

Highline Public Schools High School Student Survey
Multi-Year Trend Results

Percent of Students Responding "Often" or "Always"	District		Aviation		BP		AAA	HS3	TEC	Highline		MRHS		NewSt	ACE		Global		Odyssey	
	2007	2008	2007	2008	2007	2008	2008	2008	2008	2007	2008	2007	2008	2008	2007	2008	2007	2008	2007	2008
My teachers give me extra help when I need it.	61	NA	72	NA	67	NA	NA	NA	NA	64	NA	51	NA	NA	71	NA	76	NA	74	NA
My classes set high expectations for my learning.	66	NA	86	NA	78	NA	NA	NA	NA	62	NA	59	NA	NA	78	NA	73	NA	83	NA
I am bored in my classes.	47	NA	32	NA	24	NA	NA	NA	NA	49	NA	56	NA	NA	38	NA	41	NA	37	NA
How often do you do assigned reading (textbooks or other course materials) outside of school?	46	NA	50	NA	14	NA	NA	NA	NA	45	NA	48	NA	NA	44	NA	45	NA	43	NA
How often do you do personal reading (books, magazines, newspapers, etc.) outside of school?	51	NA	56	NA	54	NA	NA	NA	NA	51	NA	44	NA	NA	61	NA	48	NA	50	NA
How often do you spend time on busy work that is meaningless?*	35	40	29	44	15	15	34	32	34	40	38	46	45	46	20	35	29	32	24	35
How often do you consider views of different races, religions, genders, or political beliefs in class discussions or assignments?	49	48	65	53	65	74	50	38	52	52	46	44	45	42	56	55	55	51	56	56
How often do you work in small groups of students on classroom assignments?	63	65	87	82	40	46	63	69	64	60	59	59	62	63	80	73	73	64	75	71
How often do you help set learning goals in my classes?	39	38	35	30	68	68	54	41	59	36	37	31	30	13	59	66	62	59	47	41
How often do you use technology to do class assignments and projects?*	61	66	98	90	79	78	49	61	78	57	62	56	63	42	66	65	66	74	73	59
How often do you use the internet to discuss or complete an assignment?	54	NA	90	NA	83	NA	NA	NA	NA	47	NA	47	NA	NA	57	NA	66	NA	76	NA
How much has your class work emphasized memorizing facts or concepts?*	51	51	50	53	71	56	53	52	49	57	49	56	54	29	36	37	48	49	63	44
How much has your class work emphasized understanding, talking, and writing about ideas and their meaning?	67	68	79	80	91	78	62	67	72	67	64	59	65	50	81	72	76	79	79	67
How much has your class work emphasized applying information to solve real-world problems?	48	50	71	74	88	84	52	49	64	44	47	42	39	38	55	60	59	53	65	53
How much has your class work emphasized examining new ideas and experiences in depth?	48	NA	66	NA	83	NA	NA	NA	NA	47	NA	38	NA	NA	62	NA	57	NA	77	NA
How much has your class work emphasized speaking in front of the class or others?	48	52	67	74	58	56	48	51	45	50	49	40	46	29	54	66	53	58	70	65

Highline Public Schools High School Student Survey
Multi-Year Trend Results

Percent of Students Responding "Yes"	District		Aviation		BP		AAA	HS3	TEC	Highline		MRHS		NewSt	ACE		Global		Odyssey	
	2007	2008	2007	2008	2007	2008	2008	2008	2008	2007	2008	2007	2008	2008	2007	2008	2007	2008	2007	2008
Do you have a computer with internet access at home?	86	85	94	97	89	76	75	81	88	87	85	88	89	67	83	86	86	75	78	67
What is the primary language spoken in your home? (Percent of students listing English as primary)	NA	68	NA	78	NA	89	45	56	56	NA	67	NA	78	88	NA	42	NA	42	NA	44
Is English the primary language in your home?	71	NA	84	NA	90	NA	NA	NA	NA	74	NA	85	NA	NA	69	NA	60	NA	73	NA
My school offers at least one extracurricular activity (sports, clubs, etc.) in which I am interested?	78	NA	56	NA	42	NA	NA	NA	NA	80	NA	86	NA	NA	83	NA	87	NA	81	NA
My culture and ethnicity are respected at this school?	84	NA	87	NA	81	NA	NA	NA	NA	83	NA	85	NA	NA	88	NA	85	NA	86	NA
If you could select your high school, would you go to the same school again?	67	71	79	71	90	82	63	62	78	66	66	75	76	50	73	68	69	70	77	55
While in high school, have you participated in community-based project as part of a regular class?	49	44	63	50	67	67	54	44	40	42	42	42	35	29	70	72	57	48	60	61
While in high school, have you received credits as part of a work experience or internship outside of school?	31	28	26	25	75	91	39	36	28	27	24	35	21	21	36	37	21	38	32	29
While in high school, have you prepared a personal study plan with a teacher or counselor?	35	35	28	25	82	82	40	41	28	34	36	25	28	38	53	53	38	42	54	50
While in high school, have you taken the PSAT, SAT, or ACT?	43	NA	31	NA	9	NA	NA	NA	NA	49	NA	30	NA	NA	78	NA	43	NA	43	NA
While in high school, have you taken one or more courses at a college or university?	14	NA	17	NA	13	NA	NA	NA	NA	9	NA	16	NA	NA	17	NA	12	NA	22	NA
While in high school, have you taken one of more advance placement or IB course?	21	34	19	39	24	9	35	35	16	23	31	28	41	4	12	23	17	19	23	14
While in high school, have you taken one or more tech-prep or college-credit course?	27	NA	41	NA	13	NA	NA	NA	NA	28	NA	24	NA	NA	18	NA	13	NA	34	NA
While in high school, have you reviewed your after high school "13th year plan" and senior culminating project with a teacher or counselor?	NA	39	NA	22	NA	27	60	48	37	NA	37	NA	38	33	NA	60	NA	34	NA	48

Highline Public Schools High School Student Survey
Multi-Year Trend Results

Percent of Students Responding "Yes"	District		Aviation		BP		AAA	HS3	TEC	Highline		MRHS		NewSt	ACE		Global		Odyssey	
	2007	2008	2007	2008	2007	2008	2008	2008	2008	2007	2008	2007	2008	2008	2007	2008	2007	2008	2007	2008
While in high school, have you reviewed the graduation requirements with a teacher or counselor?	NA	72	NA	71	NA	77	72	80	60	NA	73	NA	69	54	NA	80	NA	82	NA	65
While in high school, have you reviewed the state graduation requirements with a teacher or counselor?	70	NA	81	NA	19	NA	NA	NA	NA	69	NA	73	NA	NA	83	NA	67	NA	64	NA
While in high school, have you participated in at least one school sport or club?	64	NA	69	NA	32	NA	NA	NA	NA	68	NA	65	NA	NA	71	NA	68	NA	41	NA
Number of students	2035**	2118**	214	206	30	47	109	75	68	537	422	306	801	24	131	101	140	118	65	66
May enrollment	4853	#####	270	365	58	83	311	326	273	1285	1119	1231	1394	78	361	324	323	286	311	295
Percent of students who participated in survey	42%	#####	79%	56%	52%	57%	35%	23%	25%	42%	38%	25%	57%	31%	36%	31%	43%	41%	21%	22%

* Slight wording change from previous years

** Includes students who did not specify a school and, in 2008, students at Choice (which did not have enough responses to report)

California Big Picture Schools – Academic Growth over time

This is included in part to indicate successful academic trends in new Big Picture high schools, and also to show the non-linear academic trajectory of a school program that focuses first on engagement through personalization and relevance. Whereas a comprehensive high school places students in all subject areas each day and each year, which might lead to a linear improvement in skills if successful, Big Picture students might engage fewer topics in more depth at a given time. As students discover more interests and develop their skills as learners and their ownership of their learning, the rigor increases exponentially. This may explain why some Big Picture schools show strongest longitudinal growth later in the students' high school career.

There are five California schools in the Big Picture network that can be used to demonstrate academic growth over time. One exciting point about the academic achievement of our California schools is that in 2008, all five schools met the Adequate Yearly Progress (AYP) benchmark. Comparatively, only 37% of high schools in California met their AYP targets during the 2007-2008 testing window.

Below are some specific academic growth areas for three of the five Big Picture schools in California that most closely match the demographics of the Fresno Big Picture High School. Because our schools are small, the testing sample in each grade level is statistically very small. This means that one or two students not taking the test or not passing the test has a very large impact on the % reported. At Big Picture, we try to use the standardized test data as one data point that we utilize, looking also at college acceptance data and college success data in addition to assessment data collected by the individual advisors.

We are also in year three of a long-term longitudinal study to track our graduates until they are 30 years old – to measure the long-term impact of the educational design on our students through college and work.

Frida Kahlo High School, Los Angeles (Continuation/Alternative School)

Frida Kahlo High School in the Los Angeles School District joined the Big Picture network in 2005. The school is 100% economically disadvantaged and 80% Hispanic. It most closely matches the demographics of the future Fresno Big Picture school.

Because they have only been in the network for 2 years, the performance data over time is limited. However, based on their 2008 test scores, Frida Kahlo had a 93 point growth (over 2007 test data) in the Academic Performance Index while also meeting all AYP criteria.

The other performance data, STAR data, is limited. In 2005, 18% of 9th graders met standard by performing at proficiency or above proficiency on the ELA test and 0% met standard at proficiency or above proficiency on the math test. The same class of students, tested on the STAR exam in 2007 showed slight improvement – with 4% meeting standard (proficiency or above proficiency) in math, and little to no change in ELA.

Met West High School, Oakland

Met West opened as a Big Picture School in 2002, and has successfully graduated three classes of students. 50% of the MetWest students are considered economically disadvantaged, and 45% of the student population is Hispanic and 30% are African American. The class of 2008 has three years of academic performance data available for comparison.

In 2006, 24% of the 10th grade class met standard on the ELA standardized test (scoring at proficiency or above proficiency). In 2008, 93% of the same class, now seniors, met standard on the ELA standardized test – a performance gain of almost 70%. In 2006, 10% of the 10th grade class met standard on the Math standardized test (scoring at proficiency or above proficiency). In 2008, 81% of the same class, now seniors, met standard on the Math standardized test – a performance gain of about 70%. MetWest met their AYP targets with a 55 point increase in their API. 100% of the class of 2008 were accepted to college.

San Diego Met

The San Diego Met opened in 2004, and graduated their first class in 2008. 58% of the students are economically disadvantaged, 45% are Hispanic and 31% are African American. The class of 2008 has three years of academic performance data available for comparison.

In 2006, 34% of the 10th grade class met standard on the ELA standardized test (scoring at proficiency or above proficiency). In 2008, 100% of the same class, now seniors, met standard on the ELA standardized test – a performance gain of 66%. In 2006, 29% of the 10th grade class met standard on the Math standardized test (scoring at proficiency or above proficiency). In 2008, 100% of the same class, now seniors, met standard on the Math standardized test – a performance gain of 71%. 100% of the class of 2008 graduated and 100% were accepted to college. San Diego Met also met their AYP targets with an 88 point increase in their API.

These three schools are representative of our network in age of implementation. They were selected based on the demographic data of the Fresno Big Picture school, hoping to match as closely as possible for some good comparisons. If you require additional data or more information about our schools in general, please do not hesitate to contact me.

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Colleges Big Picture Students Attend

NOTE: Highline Big Picture has its first senior class in 2008-09. The colleges and universities listed below are attended by students from other schools in the Big Picture network, and are shown here to represent the academic preparedness of Big Picture graduates and the receptiveness of a diverse array of colleges to Big Picture students with non-traditional transcripts and non-credit-based high school programs.

**Indicates where we have 2 or more students*

Johnson & Wales University (Denver)*
North Central College
University of Colorado, Denver
Colorado State University, Pueblo
Art Institute of Indianapolis
Florida A & M, FL
Malcolm X College of Chicago
Benedict College
Augustana College
Ferris State University
Southern Illinois State University (Carbondale)
Truman College*
Northeastern University
Henry Ford Community College*
Washtenaw Community College*
Alabama A & M University
Aquinas University*
Bowling Green State University
Eastern Michigan University*
Grand Valley State University*
Michigan State University*
Oakland University*
University of Michigan, Ann Arbor*
Wayne State University*
New School of Architecture
California Maritime Academy
San Francisco City College*
CSU Los Angeles (CA)*
Clark Atlanta University*
Mills College*
Prairie View A & M University
San Jose State University*
UC, Santa Cruz (CA)*
California Polytechnic University, Luis Obispo*
California College of the Arts
CSU Chico (CA)*
CSU Northridge (CA)*
Hampshire College
Community College of Rhode Island*
Lincoln Technical Institute*
American International College*

Mesa State College*
Colorado College*
Trinidad Junior College
Indiana University, Bloomington
Ivy Technical College*
Lincoln College*
Parsons School of Design (NY)*
Chicago State University*
Eastern Illinois State University
Illinois State University*
Xavier University
Trifton College
Dominican University
Macomb Community College
Schoolcraft Community College*
Alabama State University
Ball State University*
Central State University (OH)
College for Creative Studies
Marygrove College
Northwood University*
Specs Howard School of Broadcasting
University of Michigan, Dearborn*
Folsom Lake College*
Western Career College*
Merritt College*
CSU East Bay (CA)*
CSU Sonoma (CA)*
Dominican University
New England Conservatory of Music
San Francisco State University
UC, Berkeley (CA)*
Sacramento City College*
CSU Fresno (CA)*
Community College of Santa Cruz
CSU Dominguez (CA)*
Howard University
Dean College*
Delaware College of Art & Design
Albertus Magnus College
Becker College*

American Musical & Dramatic Academy (NY)
College of Mount St. Vincent
Connecticut College
Emerson College*
Johnson & Wales University (RI)*
Livingston College
Massachusetts Maritime Academy
Massachusetts College of Liberal Arts*
Mount Ida College*
Pine Manor College*
Rhode Island College
Sarah Lawrence College
Talladega College
Unity College of Maine
University of Rhode Island*
Wheelock College*
Brown University*

Benedict College
College of St. Joseph*
Curry College*
Johnson & Wales University (NC)
Lesley University*
Massachusetts College of Art
Mitchell College*
Morgan State University*
Newbury College*
Quinnipiac University*
Salve Regina University*
Simmons College (MA)
Temple University
University of Bridgeport*
Vaughn College of Aeronautics
University of New Haven



Washington State
Board of Education



Working to Raise Student Achievement Dramatically

MATH K-8 CURRICULAR MENU RECOMMENDATIONS

SUMMARY OF POLICY ISSUE/SBE STRATEGIC PLAN GOAL

Strategic Teaching, the Board's math consultant, will present its findings to the State Board of Education (SBE) on the four top ranked OSPI programs that best align with the new K-8 math standards. The Board will consider accepting the report and what action they wish to recommend to the Superintendent of Public Instruction. This work is related to the Board's goal of improving achievement for all students.

BACKGROUND

The legislature requires the Superintendent of Public Instruction to present to the SBE "no more than three basic mathematics curricular each for elementary, middle, and high school grade spans" (2SHB 2598 section 7 (a) from the 2008 legislative session) within six months of the adoption of the math standards. Within two months after the presentation of the recommended curricula, the SBE "shall provide official comment and recommendations to the Superintendent of Public Instruction regarding the recommended mathematics curricula. The Superintendent of Public Instruction shall make any changes based on the comments and recommendations from the State Board of Education and adopt the recommended curricula" (2SHB 2598 section 7 (b)). The Superintendent of Public Instruction (SPI) adopted the new K-8 math standards, after SBE approval, in April 2008. In the summer of 2008, the staff at the Office of Superintendent of Public Instruction hired Relevant Strategies to assist them with their instructional materials review of 25 math programs at the K-8 level. The OSPI solicited feedback from the SBE Math Panel at the beginning of its process, included several SBE Math Panel members in its review, and reconvened the SBE Math Panel to discuss their findings prior to release of their draft report. At that time OSPI identified the four programs at the elementary school level (grades K-5) and four programs at the middle school level (grades 6-8) that received the highest rankings.

Using a nationally competitive process, in August 2008, the SBE retained its consultant, Strategic Teaching, to assist with a review of the OSPI recommendations. SBE staff directed Strategic Teaching to review the top four programs for both elementary and middle school. The SBE staff, and its consultant, met with the Math Panel in late August 2008 to discuss the process that Strategic Teaching would use for its review.

At the September 2008 Board meeting, the Superintendent of Public Instruction recommended two programs each of the top four ranked programs for elementary grades K-5 (Bridges to Mathematics and Math Connects) and middle grades 6-8 (Holt, Math Connects).

Table 1: OSPI Initial Recommended Programs Selected from the Top Ranked Math Programs Best Aligned to the Revised K-8 Math Standards

Bold indicates OSPI initial recommendations

Elementary Level	Middle Level
Bridges in Mathematics	Holt
Math Connects	Math Connects
Investigations	Math Thematics
Math Expressions	Prentice Hall

The OSPI rationale for its recommendations for two elementary programs, Math Connects and Bridges in Mathematics, was that these were most closely aligned with state standards, Math Connects is fully available on line, these were the highest scoring programs overall, and both exceeded the minimum content threshold. The OSPI rationale for its recommendation of two middle programs, Holt Mathematics and Math Connects, was that Holt is a clear leader, based on analysis, the selection of Math Connects from the pool of tied programs gives districts a K-8 system, and both programs are fully available online.

Strategic Teaching will present its findings to the Board at the November 2008 Board meeting. Strategic Teaching shared an initial draft report with the SBE Math Panel in October 2008 to receive feedback. Strategic Teaching used a slightly different approach to the review of the top four programs, which is outlined in full in its report, which is also included in the Board's packet.

Some of the key differences included that Strategic Teaching:

- Reviewed fewer programs (8 vs. 25 for OSPI).
- Reviewed fewer grades for content match.
- Reviewed every lesson for content match.
- Spent more time on the review.
- Conducted a mathematical review across key topics.
- Used fewer reviewers (4 vs. 42 for OSPI).
- Used a different scoring rubric (4 point vs. 3 point used by OSPI).
- Reviewed content, but not other areas such as assessment, program organization and design, equity and access, etc. that OSPI also included.

Some of Strategic Teaching's findings were:

- OSPI's review process was rigorous and fair to publishers.
- OSPI should have used a process to examine mathematical soundness of key topic areas.
- OSPI and Strategic Teaching findings are similar enough to give Strategic

Teaching confidence that OSPI identified the programs with the best possible content match to Washington's standards.

- Strategic Teaching found that Math Expressions and Math Connects are the best programs for elementary school and Math Connects, Holt and Prentice Hall were the best programs for middle school.

Table 2: Strategic Teaching Final Recommended Programs Selected from the Top Ranked Math Programs Best Aligned to the Revised K-8 Math Standards

Bold indicates Strategic Teaching's final recommendations

Elementary Level	Middle Level
Math Connects	Holt
Math Expressions	Math Connects
Bridges in Mathematics	Prentice Hall
Investigations	Math Thematics

Strategic Teaching's findings support recommending Math Connects and Math Expressions at the elementary level (grades K-5). Strategic Teaching's rationale for the elementary programs was that Math Expressions is a rare find that includes the conceptual underpinnings and the procedural knowledge, with clear explanations between the two. Math Connects offers an acceptable choice because its shortcomings are easily remedied. Strategic Teaching found problems in the presentation of some of the mathematics core concepts in both Bridges and Investigations. While no program can be perfect for Washington, these two programs will need more support and supplementation.

Strategic Teaching's findings support recommending Holt, Math Connects, and Prentice Hall at the middle level (grades 6-8). Strategic Teaching's rationale for the middle programs was that Math Connects is the strongest program because it is better aligned to the state's standards than others reviewed. Math Connects will need only a small amount of supplementation. Holt and Prentice Hall are acceptable choices because they, too, include most of the content on the standards. Math Thematics is mathematically problematic in its treatment of proportionality.

The SBE Math Panel supported Strategic Teaching's findings. It appreciated the mathematical soundness review and expressed concern with the difficulty teachers may have trying to work with a variety of supplemental materials. They posed the following questions

- How will OSPI deal with Bridges to Mathematics based on Strategic Teaching's findings?
- How do we help districts do as well as they can when they have curricula that are not aligned?
- How do we think about doing future curricular reviews?
- How do we build incentives for publishers to align their curriculum with our standards?

POLICY CONSIDERATION

The Board needs to listen to the Strategic Teaching report and public feedback to determine what official comment and recommendations it wants to make to OSPI on the K-8 Math Curriculum.

PROPOSED ACTION

At this point, staff would recommend that the Board accept the Strategic Teaching report and recommend to OSPI:

- 1) Recommend for the elementary grade level (K-5): Math Connects and add Math Expressions on the elementary menu and revisit the decision on Bridges in Mathematics in light of information provided by Strategic Teaching in their final draft report to the Board.
- 2) Recommend for middle grade level (6-8): Holt and Math Connects and add Prentice Hall, in light of the additional information provided by Strategic Teaching in their final draft report to the Board.
- 3) Brief the Board, at the January SBE Board meeting, on the OSPI review for the supplemental K-8 materials, in particular what will be done for those programs that 70-80% of the schools are using now; findings from the district curriculum survey; actions OSPI plans to take to help districts with unaligned curriculum; and the results of the Request for Information for an online curriculum.
- 4) Brief the Board on suggestions for how to improve future curricular and instructional materials reviews at the SBE March 2009 meeting.
- 5) Brief the Board on how OSPI could provide incentives to publishers to align their curriculum with the new math standards.

Independent Study of Washington State

K-8 Curriculum Review

Final Report
October 27, 2008

Prepared by:





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Introduction

With the *Washington State K – 12 Mathematics Standards* firmly in place, Washington has turned its attention to finding instructional programs and materials that align with those standards. To a large degree, curriculum controls what is learned and how it is learned. Sound programs can help guide new teachers and can shore up the skills of teachers who lack a strong background in mathematics. Good curricula also provide top-notch teachers the materials they need to do their best work.

The Office of the Superintendent of Public Instruction, OSPI, was tasked by the legislature to identify programs for elementary and middle school. After a thorough curriculum review, OSPI presented its initial recommendations, *Math Connects* (K–5) and *Bridges in Mathematic* for elementary schools and *Holt Mathematics* and *Math Connects* (6–8) for middle schools, to the Washington State Board of Education, SBE, during the October SBE Board meeting.

The SBE recognizes the importance of choosing wisely since the mathematics programs that school districts implement drive instruction. With so much at stake, SBE requested that Strategic Teaching, ST, work with the SBE Math Panel to study the OSPI review. The purpose is to ensure that OSPI's highest-ranked programs offer students the best possible opportunity to meet the state's mathematics standards.

Executive Summary

During June of 2008, OSPI reviewed twelve elementary and thirteen middle school mathematics programs in order to determine which best align to Washington's standards. While no one expects that a single set of instructional materials will match perfectly to Washington's content, OSPI wants to identify those programs that come closest. OSPI will also identify supplemental programs that fill content gaps.

OSPI's curriculum review process involved four independent examinations of each program and a statistical analysis of the results. This produced two separate rank orderings of programs: one for grades K–5 and one for grades 6–8. The final report also includes detailed information for every program that was examined, down to the standard level.



At the request of the SBE, with guidance from the SBE Math Panel, ST reviewed OSPI's work. ST's work included four components. Specifically, ST:

- Reviewed the approach used by OSPI;
- Judged the degree to which the content in OSPI's top-ranked programs match the Washington's standards and compared its findings to those of OSPI;
- Provided an analysis, by an internationally recognized mathematician, of core mathematics topics in each program to determine the mathematical soundness of each program; and
- Summarized the key characteristics of each program.

ST found the approach OSPI used to review curriculum rigorous and similar in many ways to those used in most jurisdictions. OSPI's contractor, Relevant Strategies, was professional and thorough at each stage of the process. There are other methods of statistical analysis that might have been employed, but there is no reason to believe the outcomes would have been different. Most importantly, the curriculum review was designed to be fair to all publishers.

ST reviewed *Bridges in Mathematics*, *Investigations*, *Math Connects*, and *Math Expressions* for elementary school. *Holt Mathematics*, *Math Connects*, *Math Thematics*, and *Prentice Hall Mathematics* were reviewed at the middle school level. These are OSPI's highest-scoring programs. Other programs, such as the *Connected Math Project* that is widely used in Washington schools, were not reviewed because they did not meet OSPI's minimum threshold for content.

The comparison between OSPI's results and ST's results regarding how well the content in particular programs match to the state's standards is complex. ST's average scores were as high or higher than OSPI's average scores in all but two programs. However, there is a great deal of variation between the average scores of the two groups at the standard level and even at the topic level.

Many factors contribute to the variation in scores. OSPI and ST used rubrics with different numbers of points, OSPI conducted twice as many independent reviews of each program as did ST, and ST didn't give credit for off-grade level content. Also, ST looked at every lesson in every program while OSPI looked at the lessons identified in the publisher's alignment. This means ST looked at more material for some standards, causing higher scores.



Another important consideration is that rubric-based scoring involves applying professional judgment. The reason one has multiple reviewers is that reasonable people can look at the same materials and draw different conclusions about sufficiency of practice for a standard, for example.

ST believes that all of these factors contributed, in varying degrees, to the scores for each standard. Still, they converge meaning that ST's results verify OSPI's work.

ST included a mathematician's review of core topics—whole number multiplication, area of triangle, addition, subtraction, multiplication, and division with fractions and proportionality—to see how each is developed across grade levels in the programs under review. This is an examination of whether or not the instructional materials accurately represent the field of mathematics and whether or not errors related to the topics exist. To be clear, a mathematician is someone who studies the field of mathematics and is not an expert on teaching mathematics to students or on preparing teachers to do so.

ST's findings support using *Math Expressions* and *Math Connects* at the elementary level.

ST determined *Math Expressions* to be a rare find because it includes the conceptual underpinnings and the procedural knowledge, with clear explanations between the two, for each of the core topics examined by the mathematician. *Math Connects* offers an acceptable choice, because its few shortcomings are easily remedied.

ST found problems in the presentation of some of the mathematics in both *Bridges* and *Investigations*. While no program can be expected to be a perfect fit for Washington, these programs will need more support and supplementation than the other two programs under consideration.

ST's findings support using *Math Connects*, *Holt Mathematics*, and *Prentice Hall Mathematics* at the middle school level.

At the middle school level, *Math Connects* is the strongest program, because it is better aligned to the state's standards than the other reviewed programs and because it needs only a small amount of supplementation to be mathematically complete for the examined topics. *Holt Mathematics* and *Prentice Hall Mathematics* are acceptable choices because they, too, include most of the content in the standards. Student success with these two programs is more dependent on knowledgeable teachers to make connections among mathematical topics and to explain why procedures work.

Math Thematics, which has many characteristics ST liked, is mathematically problematic in its treatment of proportionality.



Charge to Strategic Teaching

SBE asked ST to do three tasks.

First, SBE asked ST to evaluate the process used by OSPI. A detailed discussion of OSPI's methods, including a comparison to those used by ST, begins on page 7 of this report. What is most important to know is that OSPI rigorously applied practices commonly used to review curriculum. The process afforded every program an equal opportunity to be selected.

Second, SBE asked ST to determine how well the content in OSPI's highest-ranking programs matches the content in Washington's standards in grades two, four, and seven. At the elementary school level, *Bridges in Mathematics*, *Investigations*, *Math Connects*, and *Math Expressions* were examined. At the middle school level *Holt Mathematics*, *Math Connects*, *Math Thematics*, and *Prentice Hall* were reviewed.

The relationship between the amount of matching content OSPI found in a program and the amount of matching content ST found in a matching program is complicated. In general the results converge, but scores for individual standards and for grade level topics often differ. Even when the total content for a program is similar, the content is often found in different standards.

More details about the comparison can be found in the sections for "Elementary School Findings" and "Middle School Findings."

Third, SBE requested that a mathematician review the programs to determine whether or not each is mathematically sound. To do this, ST identified core topics and examined their development across grade levels, from introduction to consolidation. ST looked at both the conceptual and the procedural sides of the topics, as well as how thoroughly procedures are explained. The topics of whole number multiplication, area of a triangle, arithmetic of fractions, and proportionality were examined.

Results can be found in the sections for "Elementary School Findings," "Middle School Findings," and "Individual Mathematics Programs." Organizing the information this way does cause duplication but hopefully increases the report's usefulness to the reader.

In addition to SBE's charge, the SBE Math Panel expressed concerns for ST to investigate.

One concern was that OSPI's statistical analysis eliminated two programs at the elementary school level and two programs at the middle school level that should be included in ST's review. A strong case can be made that these

programs are statistical ties to programs that are included in the top four ranked programs. ST appreciates this concern, noting that ST would also have taken a different approach to the analysis. However, OSPI's methods are both sound and common, so ST was only tasked with the job of revising the four programs identified by OSPI.

Another concern centered around the weighting of some standards or strands. There was a discussion about some standards being more important than others and that important standards should be accorded more weight in the scoring process. Given the difficulty of finding consensus about which standards are most important, ST believes that reporting information by strand will at least provide information about where strong content matches exist.

ST looked at the differences in alignment scores in topics across grade levels to see if any troublesome patterns or inconsistencies appeared. This does not seem to be the case: there are no patterns to the discrepancies between OSPI and ST scores. The chart in Appendix C summarizes the differences by topics and grade levels.

The Panel also had questions about how OSPI and ST score standards that receive middle scores. A detailed discussion can be found in Appendix D, but broadly speaking, standards that receive a low total score from OSPI tend to receive a low total score from ST. Standards that receive a high total score from OSPI, tend to receive a high total score from ST.

One last point about the curriculum review should be noted. New programs and updated editions are published every year. Washington needs to establish a system of regularly and methodically considering new instructional materials for all subject areas.

Evaluation of OSPI's Curriculum Review

OSPI contracted with Relevant Strategies to conduct a review of all comprehensive elementary and middle school mathematics programs. Relevant Strategies applied the highest standards of professionalism to complete this task. It is clear that the review was designed to answer an open question, "Which sets of instructional materials meet the Washington State standards?" and not to support a foregone conclusion.

Meticulous attention to details throughout the process minimized the possibility that unconsidered factors would influence outcomes. For example, each publisher had the same amount of square footage to display its materials. Serious effort was made to eliminate or at least minimize bias from usual sources. In particular, each reviewer was asked if he or she could review a specific program fairly—without bias—before he or she was given that program to evaluate.

It is clear that the review was designed to answer an open question, "Which sets of instructional materials meet Washington's standards?" and not to support a foregone conclusion.

OSPI convened a group of forty-two people between June 22 and June 27, 2008, to review the instructional materials. During that time the reviewers received training on the standards and training related to scoring. The work was supported with daily meetings to discuss issues related to scoring and continuous on-

site access to expertise. Almost every program had four reviews, but time constraints meant that one program at one grade level was reviewed by three, rather than four, reviewers.

Reviewers used a three-point rubric to match and score every standard for every program at every grade level, kindergarten through eight. The points on OSPI's rubric for content ranged from zero, meaning the standard is not met, to two, meaning the standard is fully met.

Reviewers who scored the same standard zero and two—a difference of two points—were given the opportunity to discuss their rationale and change their scores. The reviewers were systematically assigned and reassigned in ways that reduced the possibility of "scorer drift," the tendency of a group that works together for an extended period of time to begin to think⁷ and score alike in ways that may be different than the main group.

A total of 12 elementary programs and 13 middle school programs were evaluated.



OSPI scored and ranked the programs on multiple components. Specifically it examined the degree to which each program aligns with the content in *Washington's K – 8 Mathematics Standards* and 1) quality of the program's organization and design, 2) balance of student experience, 3) assessment, 4) instructional planning and professional support, and 5) equity and access.

The scores were used to compute scaled composite scores¹ that weighted content 70 percent of the overall score. There is some variation in the weights given to the other attributes, but the total contribution of the non-content factors is 30 percent. The average of all of the scaled composite scores of the standards across all of the grade levels produced a rank ordering of elementary school programs and another rank ordering of middle school programs.

Particularly commendable aspects of OSPI's review are 1) the amount of input and feedback from stakeholder groups, 2) the rigorous attention to detail in inventory, training, and scoring, and 3) the specificity of the results and their usefulness to school districts.

OSPI applied a particularly formal and systematic approach to its process—the type often associated with assessment events. Given the interest and tension around curriculum in Washington, the exceptional attention to detail was probably wise.

There is probably no best way for a jurisdiction to review curriculum. OSPI's methods are well within the typical range and meet the most critical criteria: the process was inclusive and it fairly considered all viable programs.

Particularly commendable aspects of OSPI's review are 1) the amount of input and feedback from stakeholder groups, 2) the rigorous attention to detail in inventory, training, and scoring, and 3) the specificity of the results and their usefulness to school districts.

All this said there are three areas that ST would have approached differently.

First, mathematicians should have been involved in reviewing the instructional materials. Content can be included but presented in ways that build long-term misunderstandings among students. While mathematicians do not necessarily understand the pedagogical issues related to teaching mathematics, they bring a knowledge of the discipline of mathematics that most mathematics educators lack.

Second, a four-point rubric has inherent advantages over a three-point rubric. The additional score point forces more refined decisions and the even number of levels forces the reviewer to make a decision about whether the standard is closer to “completely met” or “completely missing.” Last, the

¹ The score that is given divided by the maximum possible score, which converts the score to a scale of “1”. This means a standard judged fully met all the points gets “1” no matter how many actual points are awarded and allows comparisons to be made because the scale is the same.



middle level in odd-numbered rubric tends to become a catchall and to receive a disproportionate number of scores.²

Third, there are two questions about the statistical analysis. To be clear, ST is not suggesting that the results would be different from those produced by OSPI because of the data analysis.

ST questions how well the data set stands up to the amount of analysis that has been done. The simplest example can be seen in the scaled score. This is the average of four scores that range from zero to two translated to a one-point scale. To take the scaled average of these professional judgments, opinions really, out beyond one or two decimal places gives a false impression about precision of the data.

To take the scaled average of these professional judgments, opinions really, out beyond one or two decimal places gives a false impression about the precision of the data.

ST also questions the method employed by OSPI to look at reviewer bias. OSPI chose to use t-test and adjust for multiple comparisons, which is a sound educational statistics method. ST believes that a more appropriate approach would have been to apply the generalizability theory, a methodology designed for situations exactly like curriculum review. That being said, OSPI's approach is able to identify programs that align to Washington's standards and other methods most likely would not have altered on these results.

² Wiggins, Grant P. *Educative Assessment: Designing Assessment to Inform and Improve Student Performance* (San Francisco: Jossey-Bass, 1998), VI-5:1. Retrieved from Knowledge Quest on the Web on October 4, 2008 <http://www.ala.org/ala/mgrps/divs/aasl/aaslpubsandjournals/kqweb/kqarchives/volume31/312philip.cfm#Ref6>



Differences in Scoring Methods

There are differences—important differences—between the approaches of OPSI and ST that are largely driven by the differences in project goals. OPSI had the task of reviewing all viable comprehensive mathematics programs in order to recommend up to three programs for the elementary schools and up to three programs for middle schools. ST has the task of reviewing OPSI's work and so has only to sample and verify OPSI's results. These differences are summarized in the following chart.

	OPSI	ST
Reviewed Programs	12 Elementary 13 Middle	4 top-ranked elementary 4 top-ranked middle
Content Identification	Publisher's alignment is used to locate matching lessons. Reviewers examine lessons to determine if the content matches the standard. After content is scored, reviewers make overall judgments about the other attributes that are evaluated.	Every lesson is reviewed and the content in the lesson mapped to the standards. After the scoring is complete, the publisher's alignment is used to double check that all identified lessons are considered. Notes about the program are taken throughout the process and then used to discuss the non-scored attributes at the end.
Scored Attributes	Content Program organization and design Balance of student experience Assessment Instructional planning and professional support Equity and access	Content
Mathematician Review		ST mathematician, W. Stephen Wilson, Ph.D., reviews key topics and their development across grade levels. For this review, grade placement is not important
Non-Scored Analysis		Program organization and design Instructional approaches Presence of extra content in the program and not in the standards General program usability
Number of Reviews	4 independent reviews	2 independent reviews
Number of Reviewers	42	4*
Time Spent on Review	An average of 3.5 hours is spent per review.	This time was not carefully monitored, but reviewers report spending between 6 and 18 hours on a program at a grade level. The majority of the reviews, including discussion time between reviewers, range from 9 to 12 hours.
Non-matching Scores	Reviewers who have scores with 2-point spreads, discuss those differences and make changes based on their own discretion.	Reviewers discuss all non-matching scores (1-point spread) and make changes based on their own discretion.
Grade Levels	All grades, K – 8	2, 4, 7
Training	Extensive training on standards; training on rubric and review process; daily calibration meetings	Reviewers had intimate knowledge of standards; collaborative rubric development; calibration training using curriculum materials from project
Rubric	3-point rubric	4-point rubric

*Biographical information on ST reviewers can be found in Appendix E



There are some differences that cannot be mitigated. While there is the additional detail that naturally travels with additional score points in ST's rubric, there is one missing element that should be noted. OSPI considers content that is above or below grade level by a year to be partially meeting the standard and deserving of a "one" score. Since ST only reviewed selected grade levels and reviewers did not have access to off-grade materials, it did not do this. Such standards would receive a zero from ST. Appendix B offers a side-by-side comparison of the score points that match to each other on the OSPI and ST rubrics.

The effects of some of the differences in scoring approaches can be minimized. For example, as previously discussed, using scaled scores allows comparisons between three-point rubrics and four-point rubrics.

Focusing ST's work to look at OSPI's scores related to the content match also helps. This defines the work as an apples-to-apples comparison by creating a common core—content—that both groups examine. Fortunately, OSPI maintained separate data for its content scores.

In both reviews, trained and skilled adults apply a rubric to determine the degree to which the content in a standard is covered in a particular mathematics program.

The effects of some of the differences, such as the additional time spent by ST, are hard to determine. It seems reasonable there will be an effect, and that this effect will vary. Publishers should have identified the important content matches for OSPI reviewers to examine, but this is not the same as ST having unlimited time to examine every lesson in detail.

Some of the differences, such as the mathematician's review, will have no effect on the numerical scores. This is a separate analysis and the results are not co-mingled.

Despite these differences, the reviews are more similar than not. In both reviews, trained and skilled adults apply a rubric to determine the degree to which the content in a standard is covered in a particular mathematics program. Both OSPI and ST are interested in identifying programs that make it likely the typical student in an ordinary classroom will meet the standard.

While it is not reasonable to expect the numbers to match exactly, it is reasonable to expect ST's process to verify OSPI's results.



Elementary School Findings Comparison of Content Alignment

The major purpose of this study is to determine whether or not ST agrees with OSPI's findings related to how well the content in selected mathematics programs aligns to Washington's standards.

In order to compare ST's results to those of OSPI, the average scaled score is computed for each standard for both groups. To do this all of the scores are added together and divided by the total possible points. This puts each group's average score on a scale of one, making comparison much easier.

For example, if four OSPI reviewers scored a particular standard 0-1-1-1, the scaled score would be $3 \div 8 = 0.38$, since 8 is the maximum number of points

There is danger in reading too much into these numbers, particularly at the standard level.

possible based on the OSPI rubric that was used. Supposing that two ST reviewers gave this hypothetical standard the scores of 1-2, the corresponding scaled score would be $3 \div 6 = 0.50$, since ST uses a rubric with three at the highest score. This allows the results to be compared on the same scale and shows a difference of 0.12.

There is danger in reading too much into these numbers, particularly at the standard level. At first glance, in the example above, one might think that ST found a better content alignment in the particular standard than did OSPI. Actually, OSPI and ST agree that the program is missing content and/or key teaching strategies. The difference is due to the combination of OSPI having more reviews of the program and ST having more score points on its rubric. The point is, there will frequently be differences in scores, even when reviewers agree.

As scores are aggregated, the artificial differences related to scoring methodology should disappear. For that reason, ST is comparing results at the mathematical topic and at the grade level, rather than at the individual standard level.

In an attempt to make sense of the differences, ST is using the percent form. It is easier to talk and think about a 12 percent difference, than one of 0.12. Another word of caution is in order. Even with a literal interpretation, a difference of 12 percent means that ST found 12 percent more total alignment between the content and the program than OSPI. It does not mean ST found 12 percent more content alignment than did OSPI, which would be an increase of 0.12 over 0.38 or an increase in alignment of 32%.



A false sense of precision can be implied when averages are calculated to multiple decimal places. For this reason, ST will use only two decimal places in its tables.

Another danger associated with over analysis of this data is that rubric-based evaluation is not a precise science. Reasonable people, making every attempt to make fair decisions, can draw rational conclusions that differ.

All that said, quantifying the numbers offers precious insight into reviewer thinking and allows systematic evaluation and comparison that wouldn't otherwise be possible. With the limits of the methodology clearly in mind, ST will assume that differences at the mathematical topic and grade level represent real differences in the evaluation of content alignment, even if those differences are not perfectly captured by the numbers.

Grade 2	OSPI Scores by Section	ST Scores by Section	Difference*
Bridges in Mathematics			
2.1. Place value and the base ten system	0.88	0.67	-21%
2.2. Addition and subtraction	0.83	0.72	-11%
2.3. Measurement	0.90	0.83	-7%
2.4. Additional key content	0.78	0.27	-51%
2.5. Reasoning, problem solving, and communication	0.93	0.69	-24%
Bridges Grade 2 Average Scale Score	0.86	0.65	-21%
Investigations			
2.1. Place value and the base ten system	0.31	0.42	10%
2.2. Addition and subtraction	0.74	0.69	-5%
2.3. Measurement	0.68	0.57	-11%
2.4. Additional key content	0.65	0.77	12%
2.5. Reasoning, problem solving, and communication	0.63	0.69	7%
Investigations Grade 2 Average Scale Score	0.61	0.63	2%
Math Connects			
2.1. Place value and the base ten system	0.77	0.75	-2%
2.2. Addition and subtraction	0.74	0.70	-3%
2.3. Measurement	0.55	0.73	18%
2.4. Additional key content	0.80	0.93	13%
2.5. Reasoning, problem solving, and communication	0.89	0.83	-6%
Math Connects Grade 2 Average Scale Score	0.76	0.78	2%
Math Expressions			
2.1. Place value and the base ten system	0.56	0.81	24%
2.2. Addition and subtraction	0.79	0.85	6%
2.3. Measurement	0.58	0.73	16%
2.4. Additional key content	0.80	0.73	-7%
2.5. Reasoning, problem solving, and communication	0.80	0.81	1%
Math Expressions Grade 2 Average Scale Score	0.69	0.80	11%

* Apparent discrepancies in the difference are the result of rounding



Grade 4	OSPI Scores by Section	ST Scores by Section	Difference
Bridges in Mathematics			
4.1 Multi-digit Multiplication	0.58	0.88	31%
4.2 Fractions, decimals, and mixed numbers	0.57	0.89	32%
4.3 Concept of area	0.65	0.94	30%
4.4 Additional key content	0.72	0.79	7%
4.5 Reasoning, problem solving, and communication	0.61	0.88	27%
Bridges Grade 4 Average Scale Score	0.62	0.85	26%
Investigations			
4.1 Multi-digit Multiplication	0.68	0.58	-9%
4.2 Fractions, decimals, and mixed numbers	0.34	0.35	1%
4.3 Concept of area	0.44	0.61	17%
4.4 Additional key content	0.41	0.54	14%
4.5 Reasoning, problem solving, and communication	0.60	0.48	-12%
Investigations Grade 4 Average Scale Score	0.50	0.51	1%
Math Connects			
4.1 Multi-digit Multiplication	0.83	0.85	3%
4.2 Fractions, decimals, and mixed numbers	0.81	0.74	-6%
4.3 Concept of area	0.63	0.58	-4%
4.4 Additional key content	0.81	0.79	-2%
4.5 Reasoning, problem solving, and communication	0.69	0.77	8%
Math Connects Grade 4 Average Scale Score	0.76	0.76	0%
Math Expressions			
4.1 Multi-digit Multiplication	0.69	0.92	23%
4.2 Fractions, decimals, and mixed numbers	0.64	0.87	23%
4.3 Concept of area	0.60	0.97	37%
4.4 Additional key content	0.38	0.94	56%
4.5 Reasoning, problem solving, and communication	0.35	0.77	42%
Math Expressions Grade 4 Average Scale Score	0.53	0.90	37%

There is a lot to say about how ST's results compare to OSPI's results.

In a perfect world, there would be a more consistent relationship between ST's results and OSPI's results. Sometimes, as in grade 2 *Investigations* and *Math Connects* ST virtually matches OSPI's scores. Other times, as in grade 2 *Bridges*, ST scored a much weaker content match. And still other times ST finds the content alignment between a program and Washington's standards to be stronger than OSPI does.

There are reasons beyond those related to the number of reviews and score points on the rubric that could cause these differences. Some factors



—unlimited time, examination of every lesson—might cause ST’s scores to be higher. There are other reasons—not considering off-grade level content, reviewer discussions about every different score point—that might cause ST to have lower scores. Apparently the effects of these variables fluctuate.

Grade two *Bridges*, illustrates both kinds of variability within the same program.

	OSPI	ST	Difference
Bridges Grade 2 Average Scale Score	0.86	0.65	-21%
Bridges Grade 4 Average Scale Score	0.62	0.88	26%

In Grade two, OSPI finds that 86 percent of the possible content is present, but that only 62 percent of the possible content is present in grade four. ST has almost opposite findings, seeing a much stronger alignment at grade four, but if one thinks about the aggregate of both grade levels, the differences almost disappear.

To shed light on the inconsistencies, ST looked first at grade two *Bridges*, where OSPI has higher scores and then at grade four *Expressions*, where ST has higher scores. ST then selected three standards from each program with disparate scale scores and looked at its reviewer’s notes to better understand why those standards were given particular scores.

One of two situations seems likely:

- ST had the opportunity to look at more of the program material because it had the luxury of reviewing every lesson and taking as much time as needed.
- Different reviewers looked at the same material and drew different conclusions. Reasonable people, making every attempt to make fair decisions, can draw rational conclusions that differ.

2.4.B Collect, organize, represent, and interpret data in bar graphs and picture graphs.

(OSPI score = 1.00; ST score = 0.33)



ST Comments:

While there is an emphasis on collecting data (Volume 2, Unit 5 and Volume 3, Unit 7), the other performances are also amply represented as they pertain to bar graphs although more emphasis on interpretation is needed. Probability is considered along with data analysis – at this age would be better to separate the two. Pie graphs are also introduced which may be too much at this age since they have little understanding of fractions. Did not see pictographs.

While not likely, it is possible that both ST reviewers overlooked lessons about pictographs that OSPI reviewers noticed. It is more likely that OSPI included lessons that should have been excluded because the *Bridges'* publishers identified them to be replaced with supplemental lessons designed especially for Washington. There were several lessons on “glyphs” that could easily have been reviewed if one didn’t notice or remember to keep referencing *Bridges'* directions on which lessons should be replaced with which supplemental lessons.

Or it may be that OSPI have scored the content alignment higher because the reviewers felt “pictographs” were not the critical part of the standard. In this case it would be an example of reasonable people drawing different conclusions from the same evidence.

2.2.C Add and subtract two-digit numbers efficiently and accurately using a procedure that works with all two-digit numbers and explain why the procedure works.

(OSPI score = .75; ST score = 0.17)

ST Comments:

The standard algorithm for addition and subtraction is shown in Supplement A5 with the caveat to “be sure they understand that it is not a replacement for all the strategies they have already invented; it is just another option,” (**Sup A5.16 to A5.19**). While mastery of the standard algorithm is not expected in second grade, neither should it be a black sheep. Students share their mental strategies (counting on, making tens, etc.) but strategies for working with numerals on paper seems to be missing. There is no reason to believe that students are being led to use “efficient and accurate methods that work every time” beyond manipulatives. **Work Place 9** “Key Chain Charms” has students doing 2-digit subtract with renaming “using methods that make sense to them,”



(TE 631 to 632). **A.5-4** is about place value as applied in addition and subtraction. There are a few pages of practice, which are often homework (TE 753) but it is not clear what students are practicing. Publisher cites 7-9, which is a class discussion of mental strategies and 5-23 to 5-25, which depends on models.

While there is a good amount of practice for adding and subtracting two-digit numbers (teachers told to include every week) not clear that a procedure that “works with all two-digit numbers” is singled out or privileged nor that students are asked to explain why that procedure works. Standard algorithm that involves place value is included although student innovations are encouraged from beginning to end. In May, e.g., student-invented strategies are still being solicited in Activity 4, Set A5. All in all, there is too much emphasis on game playing and too much emphasis on methods other than the standard algorithm.

2.4.D Model and describe division situations in which sets are separated into equal parts.

(OSPI score = 0.63; ST score = 0.17)

ST Comments

A score of “1” is given because of the lesson at the very beginning of the year about ants dividing into columns. It is unusual placement and by itself is not enough. The publisher’s reference to Workplace 10B is not a good fit because that lesson is about dividing a whole into halves.

There is an occasional reference to division but it pops up without a lot of direct instruction. It is briefly mentioned but never developed. Volume 3, Unit 7 does get to dividing candy bars between and among students but the focus is on fractions.

Since ST does not have access to OSPI rationale, it is not possible to know whether reviewers looked at the same material and came to different conclusions or did not see the same material.

Standard 2.2.C illustrates the point of people looking at the same material and drawing different conclusions. While ST reviewers saw a very weak content match—0.17—between *Bridges* and the standards, OSPI reviewers saw a strong—0.75—content match. The rationale for OSPI’s score isn’t



available, but we do know that reasonable people can look at the same evidence and draw different conclusions, since it appears that is what OSPI and ST reviewers did.

In some instances it is also possible that ST looked at more material than did OSPI. Both groups looked at the materials in the publisher's alignment. Additionally, ST reviewed every lesson, including those in the supplementary materials, which was not possible for OSPI reviewers. Also, in the particular case of *Bridges*, materials that should have been excluded, because they were replaced by supplemental units, might inadvertently have been included by OSPI reviewers.

To understand better what happens when ST identifies more content than OSPI, disparate scores for grade four *Expressions* are examined more carefully. This program and grade level were chosen because that is where the largest discrepancy lies.

ST judged *Expressions* to have 88 percent of the content related to multi-digit multiplication versus the 58 percent of content OSPI scored present. While generally the difference for this topic is an accumulation of slightly higher ST scores, there are some glaring exceptions.

4.1.E Compare the values represented by digits in whole numbers using place value.

(OSPI score = 0.000; ST score = 1.000)

ST Comments:

"Understand the value of the digit" is emphasized when decimals are taught in unit 3. Beginning on page 1047 to 1086 decimals are thoroughly taught. This is a place value based unit, that includes modeling, comparing, impact of zeros, and lots of practice via decimal secret code cards. There is optional extension into thousandths. In addition to inclusion in the spiral review, there is a follow-up lesson on pg. 1139.

Using place value with numbers is a focus of Unit 3 and lays a strong foundation for comparisons. Understanding the value of the digits and how they compare in later units (Unit 11) as they relate to decimals along with the decimal Secret Code Cards makes this content fully covered.



4.3.E Demonstrate that rectangles with the same area can have different perimeters, and that rectangles with the same perimeter can have different areas.

(OSPI score = 0.125; ST score = 1.000)

ST Comments:

This is really how the program introduces area, but the non-relationship is explicitly taught on 245 & 246

This content is explicitly addressed on p. 245-246.

4.4.F Describe and compare the likelihood of events.

(OSPI score = 0.000; ST score = 0.833)

ST Comments:

Unit 9 focuses on probability and the likelihood of events. There are two pages of practice for students—more is needed as this can be a difficult concept for students.

Unit 9 is about probability and covers equally likely, probability, sample space, and outcomes with typical activities like penny tosses and drawing marbles. It includes area probability using spinners. It ends with students designing a fair game. Although no single lesson focuses on comparing the likelihood of events, it is embedded and questions are sprinkled throughout. TE 945 to 956

Since the content is clearly present, one has to believe that ST reviewers saw lessons and units that OSPI reviewers did not see.

If it were possible for everyone who reviewed a program to discuss their scores and to share his or her rationale, ST believes the scores would be much more similar.

The point of this discussion is to examine instances where ST and OSPI disagree. As is clear, there are discrepancies in many places, but there seems to be feasible explanations for those situations. The two groups agree more often than not and there are logical reasons when discrepancies do occur. It is not necessary to have perfectly coordinated scores for ST to be able to corroborate OSPI's work.



Elementary School Programs Mathematical Soundness

The majority of the attention during OSPI's curriculum review and ST's subsequent study of curriculum review is focused on matching the program content to the standards.

The mathematical analysis is an additional review of the material that looks carefully at selected topics across grade levels. It goes beyond the simple content match to determine whether central topics are correct from a mathematical viewpoint.

The analysis is not about how the mathematics is taught—a question better answered by mathematics educators—but about how accurately mathematics is represented in the program. A mathematician is best prepared to make judgments about the mathematical soundness of representations of concepts and the accuracy of definitions. He or she notices when critical explanations are missing.

ST selected three topics at the elementary school and two at middle school to be thoroughly analyzed from their introduction through closure of the topic. Grade placement, while noted, was not of particular import.

For elementary school, the topics of whole number multiplication, area of the triangle, and the arithmetic of fractions were selected. A detailed discussion of each is found in Appendix A.

The following chart offers a visual overview of the results of ST's examination. It is based on the Mathematical Soundness Report available for download at the website of SBE and ST. Please note it does not reflect or relate to a summary of scores—no rubric was used for this component of ST'S work. Detailed analysis of each of the programs can be found beginning on page 31.

	Whole Number Multiplication	Area of Triangle	Adding and Subtracting Fractions	
Bridges In Mathematics	+	–	–	<ul style="list-style-type: none">+ All necessary concepts and skills related to the topic are introduced, developed, represented, and consolidated using correct mathematics.√ The topic is introduced and consolidated without mathematical errors, but some aspect is not thoroughly developed.– The typical student would not master the content or be ready for the next level of mathematics.
Investigations	√	√	√	
Math Connects	+	–	+	
Math Expressions	+	+	+	



Math Expressions

Of the four programs, *Math Expressions* is mathematically the strongest. With great clarity and simplicity the program goes from a geometric representation of multiplication using place value through a sequence of notations to end up with the standard algorithm for whole number multiplication.

The thread related to areas of triangles is completely covered. The formulas for the areas of triangles, parallelograms, and rectangles are each thoroughly developed. The area of the triangle is related to that of the parallelogram and this to the area of a rectangle. All of this is done with clarity.

The content in Math Expressions is not just present and correct, it is elegantly done.

The program also does an excellent job of developing the addition and subtraction of fractions. Fractions are defined as numbers by using fraction strips and the number line. Addition and subtraction are represented on the number line as well. There are good problems.

With *Math Expressions*, students should be prepared for the next levels of mathematics.

Math Connects

Math Connects covers the thread related to multiplication with a minor exception. It lacks a numerical model for multiplication that contains place value and demonstrates commutativity and distributivity all in one place.

The definition and the formula for the area of a rectangle are well done, but the formula for the area of a parallelogram is not given. Students are shown how to compute the area, but the formula is not made explicit. The real failure of *Math Connects* is the lack of content about the area of a triangle. This thread is mathematically sound, but incomplete.

Fractions and the arithmetic of fractions are thoroughly covered. A minor weakness is the emphasis on a least common denominator for adding and subtracting fractions. The easily accessible common denominator is covered, but its value is downplayed.

In all, with the exception of areas of triangles, students should be prepared for further mathematics when coming from *Math Connects*.



Bridges in Mathematics

Bridges in Mathematics covers most of the whole number multiplication thread in Grade five of the original program and finished it in the *Bridges Washington State Supplement*. The transitions from representations to partial products to the standard algorithm are handled nicely. *Bridges* lacks a numerical model that demonstrates the use of commutativity and distributivity and work with three-digit numbers.

It should be mentioned that the program does not celebrate the standard algorithm, but seems to always be looking for alternative ways to do things. Giving students the opportunity to develop and learn a variety of procedures does not require devaluing the standard algorithm.

The representation of fractions and their addition and subtraction, through representations, is nicely done in Investigations with their clock model and their rectangular grid model.

In its *Washington Supplement*, *Bridges* properly defines area and derives the formula for the area of a rectangle. Unfortunately, the derivation of the formula for parallelograms is mathematically problematic and the derivation of the formula for the area of a triangle is inadequate because it is based on the very limited examples of Geoboard triangles. There are no word problems.

Bridges' grade-three supplement explains well what it means to put fractions on the number line, but falls short with representing adding and subtracting fractions as numbers. There is inadequate opportunity for students to understand addition and subtraction, partly because the concepts and skills associated with common denominators are not developed and partly because there are no word problems for fractions or area after the concepts are developed.

In its Washington Supplement, Bridges properly defines area and derives the formula for the area of a rectangle.

In the grade five *Washington Supplement* materials reviewed by ST, there is a mathematical error in the primary explanatory example of fraction addition. ST understands this error has now been corrected and applauds the publisher's responsiveness.

While *Bridges* provides the necessary foundational skills and concepts for whole-number multiplication it does not do so for fractions or area of a triangle. The materials need more supplementation before ST believes the typical student would meet Washington's standards in these two threads.



Investigations

The strength of *Investigations* in the multiplication thread is the development of strategies for single-digit multiplication leading to fluency. The primary weakness is that the program does not lead to fluency with the standard algorithm. Although a supplementary activity does a nice introduction to the standard algorithm, relating it to the partial products algorithm and the place value area representation for multiplication, it is a standalone activity that is not mathematically incorporated into the program. The main program continues to develop multiple strategies, unaware that the standard algorithm has been developed, without providing the concentration necessary to provide fluency.

With the help of a one-page supplement, the formulas for the areas of rectangles, parallelograms, and triangles are developed. The work with triangles is weak: the height of a triangle is not defined. There are an inadequate number of good problems.

The representation of fractions and their addition and subtraction, through representations, is nicely done in *Investigations* with their clock model and their rectangular grid model. However, this follows weak and confusing work in grades three and four that fails to give students a solid start. Work in *Investigations* is limited to fractions with sums of less than 2 and there is very limited work with mixed numbers, leaving students unprepared to deal with fractions as simple as $1\frac{1}{3}$. Most importantly, common denominators are not well-developed, leaving students ill-prepared to add arbitrary fractions with what they are taught. Students using this program will be not be well prepared to go on in mathematics.



Middle School Findings Comparison of Content Alignment

The following chart provides a comparison of the OSPI and ST results related to the amount of content match identified by the reviewers.

Grade 7	OSPI Scores by Section	ST Scores by Section	Difference
Holt			
7.1 Rational numbers and linear equations	0.93	0.79	-14%
7.2 Proportionality and similarity	0.57	0.78	21%
7.3 Surface area and volume	0.94	1.00	6%
7.4 Probability and data	0.94	1.00	6%
7.5 Additional key content	0.94	1.00	6%
7.6 Reasoning, problem solving, and communication	0.95	0.94	-2%
Holt Grade 7 Average Scale Score	0.85	0.89	4%
Math Connects			
7.1 Rational numbers and linear equations	0.71	0.74	2%
7.2 Proportionality and similarity	0.64	0.80	16%
7.3 Surface area and volume	0.59	0.50	-9%
7.4 Probability and data	0.93	0.77	-16%
7.5 Additional key content	0.88	1.00	13%
7.6 Reasoning, problem solving, and communication	0.86	0.60	-26%
Math Connects Grade 7 Average Scale Score	0.75	0.71	-4%
Math Thematics			
7.1 Rational numbers and linear equations	0.81	0.74	-7%
7.2 Proportionality and similarity	0.43	0.74	31%
7.3 Surface area and volume	0.63	0.58	-4%
7.4 Probability and data	0.80	0.87	7%
7.5 Additional key content	0.92	1.00	8%
7.6 Reasoning, problem solving, and communication	0.98	0.81	-17%
Math Thematics 7 Average Scale Score	0.73	0.77	4%
Prentice Hall			
7.1 Rational numbers and linear equations	0.82	0.81	-1%
7.2 Proportionality and similarity	0.63	0.72	10%
7.3 Surface area and volume	0.31	0.58	27%
7.4 Probability and data	0.65	0.93	28%
7.5 Additional key content	0.88	1.00	13%
7.6 Reasoning, problem solving, and communication	0.59	0.79	20%
Prentice Hall Grade 7 Average Scale Score	0.64	0.78	14%



ST and OSPI results were very similar for grade seven. The two groups differed by less than four percent for *Holt*, *Math Connects*, and, *Math Thematics*. While there was more of a difference, OSPI and ST were still relatively close (0.64 vs 0.78, respectively) in their judgments related to the content match in *Prentice Hall*.

At the topic level, there are many more differences. For some topics in some programs OSPI found a stronger content alignment than did ST. For other topics, ST saw a better match. The only consistency ST notes is that ST found a better—it ranges from 10% to 31%—content alignment related to the topic of proportionality and similarity than did OSPI.

In order to investigate more fully whether different reviewers looked at different materials or whether they looked at the same materials and came to different conclusions, ST compared reviewer notes and publisher alignments. ST reviewers were under no compunction to record all supporting lessons, but the details in the scoring sheets suggest they often did so. The following table compares *Holt's* and *Prentice Hall's* alignments and ST citations for the topic of proportionality.

Nothing is certain, but the following table which compares the materials likely seen by each group of reviewers seems to indicate that for the topic of proportions, the higher scores granted by ST relate to both the review of extra material and to different judgments about the same materials.

There are several instances, such as in standard 7.2.C for both *Holt* and *Prentice Hall*, when ST looked at material beyond what is listed in the publisher's alignment and awarded a higher score. Sometimes this material was completely omitted by the publisher, as was the case for *Prentice Hall* and standard 7.2.H, but more often ST found related material in the lessons leading up to and away from those cited by the publisher.

There are also times, such as in standard 7.2.F for *Holt*, that both groups appear to have reviewed the same material and ST reviewers granted higher scores.



Curriculum Review

	Holt Alignment	ST Citations for Holt	Prentice Hall Alignment	ST Citations for Prentice Hall
7.2.C	<ul style="list-style-type: none"> Lab 5.7 pp. 298-299 Lesson 5.7 pp. 300-307 	<ul style="list-style-type: none"> 5-7 with lab 5-8 Reteach, practice, challenge, and problem solving resources. 	<ul style="list-style-type: none"> 5.5a 5.6a Pg. 270 - 271 	<ul style="list-style-type: none"> 5-5a 5-5b 5-6a Practice sheets, adapted practice sheets, reteaching sheets, and guided problem solving
	OSPI score = 0.88	ST score = 1.00	OSPI score = 0.50	ST score = 0.83
7.2.D	<ul style="list-style-type: none"> Lesson 5.9 pp. 308-311 	<ul style="list-style-type: none"> 5-9 Chapter 8 extension 	<ul style="list-style-type: none"> 5.5b 5.6a Pg 270 - 271 	<ul style="list-style-type: none"> 5-6 Practice sheets, adapted practice sheets, reteaching sheets, and guided problem solving
	OSPI score = 0.63	ST score = 0.67	OSPI score = 0.75	ST score = 1.00
7.2.E	<ul style="list-style-type: none"> Lesson 12.5 pp. 650-654 	<ul style="list-style-type: none"> 5-6 lab 4-4 4-5 4-6 5-3 	<ul style="list-style-type: none"> 9-1 10-1 Problem Solving Application 	<ul style="list-style-type: none"> 9-1 9-1a 9-2 9-3 9-4 9-5 9-6 9-7 9-8
	OSPI score = 0.50	ST score = 0.67	OSPI score = 0.88	ST score = 0.83
7.2.F	<ul style="list-style-type: none"> Lesson 5.3 pp. 278-282 	<ul style="list-style-type: none"> 5-3 	<ul style="list-style-type: none"> 9-1 9-4a 	<ul style="list-style-type: none"> 10-2 10-2b 10-3 10-3a Practice sheets, adapted practice sheets, reteaching sheets, and guided problem solving
	OSPI score = 0.250	ST score = 0.667	OSPI score = 0.50	ST score = 0.50
7.2.G	<ul style="list-style-type: none"> Lesson 5.3 pp. 278-282 	<ul style="list-style-type: none"> 5-2 5-3 	<ul style="list-style-type: none"> 5-2 5-4 Guided Problem Solving 	<ul style="list-style-type: none"> 5-2 5-2 Extension 5-3 5-3b 5-4a 5-4b 5-5
	OSPI score = 0.50	ST score = 0.667	OSPI score = 0.38	ST score = 0.33
7.2.H	<ul style="list-style-type: none"> Lesson 5.4 pp. 283-286 Lesson 12.5 pp. 650-654 	<ul style="list-style-type: none"> 5-4 5-7 	<ul style="list-style-type: none"> 9-2 10-2 	<ul style="list-style-type: none"> 5-1 5-2 5-3 5-3b 5-4a 5-5 5-5b
	OSPI score = 0.750	ST score = 1.00	OSPI score = 0.50	ST score = 1.00



Middle School Findings Mathematical Soundness

	Multiplication and Division of Fractions	Proportions	<ul style="list-style-type: none">+ All necessary concepts and skills related to the topic are introduced, developed, represented, and consolidated using correct mathematics.✓ The topic is introduced and consolidated without mathematical errors, but some aspect is not thoroughly developed.- The typical student would not master the content or be ready for the next level of mathematics.
Holt	✓	✓	
Math Connects	—	+	
Math Thematics	—	—	
Prentice Hall	✓	✓	

Overall, *Math Connects* is strongest, with *Prentice Hall* and *Holt* tying for the middle place.

It is disappointing to see the treatment of multiplication and division of fractions across the four texts chosen for examination. While all four programs make a good start on the topic, in the end, the rules for the multiplication and division of fractions are just stated and not explained. Students need the opportunity to learn to understand the procedures they are asked to apply. As they stand none of these programs completely does this, although *Holt* and *Prentice Hall* come closest by solving equations of the form $BX = A$ where B is a fraction. None of the programs use the inverse nature of multiplication and division. The good news is that this topic is relatively easy to address with supplementation.

Ratios, rates, proportions and proportionality reach into all corners of middle school mathematics. Helping students see and use the connections among scale and slope and similarity is a complex task. It cannot be amended with a few supplemental lessons and added definitions. This is a topic that must be well developed within the chosen mathematics program.

Holt

In *Holt*, the multiplication of simple fractions is nicely modeled, but the text gives no explanation for the general rule for multiplying fractions. The only attempt to explain the division of fractions is for the cases where the answer is a whole number. The rule for dividing fractions is given without explanation, as a rule to be memorized. One section on solving simple equations could be turned into an explanation of division. It contains



equations of the sort $A = BX$ that are solved by multiplying both sides by the reciprocal of B . This could easily be tied to the inverse nature of multiplication and division, but it is not taken advantage of in this way. The section could also be extended by replacing A , which is usually a whole number, with a fraction.

Holt does not properly define “rates” when they are first introduced. There are a lot of proportion problems, but they are of mixed quality and some are mathematically inappropriate. Cross products are taught, but the underlying logic is not included in the student text. Linear equations, their graphs, and slopes are included, but underdeveloped.

Proportions, slopes, and graphs are also included but the program does not establish well enough the connections that should be made through similar triangles and the proportionality constant. Direct variation is included.

Overall, the content is present, but the concepts and the connections among the concepts need further development to really prepare a student to go on in mathematics.

Math Connects

Multiplication of simple fractions is nicely modeled in *Math Connects*, but there is no explanation for the general rule for multiplying fractions. The only attempt to explain the division of fractions is for the cases where the answer is a whole number. It does not include problems like $A = BX$, which are solved by multiplying both sides by the reciprocal of B , and at least implicitly make the connection to the inverse relationship of multiplication and division. There is no explanation given for the rule for dividing fractions, when it could, again, be done with an explicit connection to the inverse operations of multiplication and division.

Math Connects thoroughly develops ratios, rates, and proportion, including proper definitions in the text each year of the middle school program. Proportion problems are numerous, of varying types, and such problems are present in all three years of the material. Cross products are appropriately and correctly explained. The connection to a proportionality constant and a graph is not emphasized, but it is there and the connection between slope and similar triangles is also present, although it is even weaker.



Math Thematics

Math Thematics includes solid modeling of multiplication of simple fractions, but again, without explaining the general rule for multiplying fractions. Similar to other programs that ST reviewed, the only attempt to explain the division of fractions is with examples in which the answer is a whole number. The text gives no explanation for the rule for dividing fractions.

Math Thematics 1 sets up a confusing foundation for ratios, rates and proportions by not giving a definition of “ratio”. This is corrected in Book 2, a year later, but that delay puts students in the position of having built misconceptions. Cross products are taught, but how and why they work is not explained. There are proportion problems in limited number throughout the three years, but many of them are scattered throughout the text, meaning there is never any intensive practice.

There is a minimal connection of graphs to ratios and rates, but there is nothing explicit about how they connect to proportions, such as the constant of proportionality. Linear equations are not shown to produce graphs that are lines, and no reason is given for slopes of lines to be independent of points chosen to compute them. This series’ presentation of proportions would not develop the foundational understanding students need.

Prentice Hall

Prentice Hall includes good models of multiplication of simple fractions, but it does not provide an explanation for the general rule for multiplying fractions. Similar to the other reviewed programs, the only attempt to explain the division of fractions is by using examples that have a whole number for an answer. No explanation is given for the rule for dividing fractions. There is a missed opportunity in a section on solving simple equations that could have easily been turned into an explanation of division. This is a place that the skilled teacher can add to the explanation and make the connections that are missing. Information in the teacher’s edition indicates an awareness that these procedures can be explained, but the explanations are not included. The teacher’s edition does make the statement that multiplication and division are inverse operations, but this information is not reflected in the lessons.



The definitions for ratios, rates, and proportions are included and correct. Cross products are not explained in grade six, when they are first taught, but they are in subsequent grade levels. There are a variety of word problems, although they are not particularly challenging. The slope is not well developed and defined, nor are equations shown to give lines as graphs, but the real weakness in *Prentice Hall* comes from the lack of connection between proportions and graphs.



Individual Mathematics Programs

Bridges in Mathematics (K-5)

With the help of the supplemental materials, *Bridges* generally covers the thread of whole number multiplication. This is not true for the topic of area. The supplemental materials include the formulas for area missing from the main program, but the derivation of the formula for the area of a parallelogram is mathematically problematic and the derivation of the formula for the area of a triangle is inadequate. The supplemental material address the addition and subtraction of fractions, but common denominators are not developed. There are three sample problems that each illustrate a central point in a different type of fraction problem. One of these contained an error, demonstrating the weight each example bears when a program has a limited number of examples. The typical student would only be prepared for the thread of whole number multiplication and would need more support for the other two topics.

OSPI Grade 2 Average Scale Score	0.86
ST Grade 2 Average Scale Score	0.65
OSPI Grade 4 Average Scale Score	0.62
ST Grade 4 Average Scale Score	0.88

Bridges is a program structured around eight units each year. Units are organized by mathematical strands like fractions and data, rather than themes or problem contexts. Typical lessons begin with a problem or investigation that small groups of students tackle at their desks. While students share their thinking, strategies, and solutions in the classroom discussion that follows, there does not appear to be a systematic emphasis on bringing closure to or consolidating the mathematical ideas being studied.

Direct instruction is rarely used in the main *Bridges* program and occasionally used in the supplemental *Bridges* materials. Most days include time for students to work at centers that have games and activities related to the mathematical content under investigation in order to practice skills and explore ideas.



Bridges offers its users a lot of information, beginning with its program overview. The teacher's edition contains a well-developed unit overviews that precede each unit and that teachers can draw upon daily. There is information about lesson-specific classroom management and assessment tips embedded throughout. Most lessons include examples of the types of classrooms discussions that should be generated during class. Because the classroom discussions are a mainstay of the program, these are important examples.

ST was most impressed by the publisher's creating lessons that exactly match to Washington's standards.

On the negative side, ST reviewers found the materials hard to navigate. The program exists in multiple books—1) number corner activities, 2) main materials, 3) practice workbook, 4) home connections, and 5) the supplemental materials— and lacks both a comprehensive table of contents and an index. It would be difficult for a teacher to isolate topics for review or extension and to remember that some lessons in the main program must be replaced with lessons from the extensive supplemental materials.

Bridges sometimes failed to include explanations of the mathematics in the teacher's edition. Explanations and worked examples were almost always missing from the student materials.



Holt (6-8)

Holt begins by modeling well multiplication of simple fractions, but it does not bridge from the model to the general rule. Division of fractions is only explained for those problems with whole number answers, leaving students to assume that if it works for these numbers it must work for all numbers. Although the paper folding model is included and teachers are reminded that division is multiplication by the reciprocal, there is no explanation for dividing fractions included. There is a section on solving simple equations that could be turned into an explanation of division and in some ways comes close, but *Holt* does not make this connection. Both multiplication and division are broken down into small bits for easier digestion, making it the best of the four programs in this respect.

Rates are not properly defined when they are introduced. There are a lot of proportion problems, of mixed quality. Cross product is not explained in the student text, but it is in the teacher edition. Linear equations, their graphs, and slopes are done, but not done thoroughly. Proportions, slopes, and graphs are not linked up well through similar triangles and the proportionality constant, but the concept of direct variation is included. Students would be prepared to go on, assuming teachers made explicit the implicit content.

OSPI Grade 7 Average Scale Score	0.85
ST Grade 7 Average Scale Score	0.89

Lessons usually begin with a warm up activity that activates prior knowledge and includes a short problem of the day. Using direct instruction, the teacher demonstrates and guides students through a set of about three example problems, each one related to a different sub-topic, that illustrate how to solve a problem type. For example, the lesson on customary measurements has a sample problem for 1) choosing the appropriate customary unit, 2) converting customary units, and 3) adding or subtracting mixed units of measure. This is followed by guided practice, independent practice and then practice problems and spiral review.



There is a dependence on direct instruction with guided and independent practice, although the program includes some games to solidify skills. Units are by topic and each lesson stands alone. It usually builds on the lesson from the previous day, but sometimes the effect can be a bit jumbled. Chapter five includes lessons about ratios, rates, slope and rates of change, identifying and writing proportions, solving proportions, generating formulas to convert units, customary measurements, similar figures and proportions, scale drawings and scale models, and proportional relationships. The connections among and between these topics are not as clear as they should be.

This program appears easy to implement. The teacher's edition is rich with calls-outs related to math background, interdisciplinary connections, ongoing assessment, student intervention, and teaching tips. There is a well-developed section on test-prep including various types of problems and tools to aid teachers such as student work samples for extended response items.

A fair amount of content is included in *Holt* that does not map to Washington standards. This includes a lot of chapter five, which is about angles, circles and polygons, congruent figures, translations, reflections, rotations, and symmetry; most of chapter six, which is about percent, percent of change, and interest; and most of chapter nine, which is about measurement of two-dimensional figures. However, the program is designed in such a way that it is relatively easy for a teacher to skip chapters, as long as they know to do so, meaning the content does not have to take time away from teaching Washington's standards. The student texts do not always contain enough explanations of the mathematics and worked example problems to enable the determined student to teach him or herself.



Investigations (K-5)

Investigations receives the lowest scaled score given for content from both OSPI and ST of the four top-ranked middle school programs. Fluency with the standard algorithm is not developed, although all of the necessary components of whole number multiplication are there. *Investigations* handles the topic of the standard algorithm in a one-page supplementation in grade four and one class period in grade five. Foundational concepts for area are well-developed in the main program. Supplemental activities provide practice with formulas for the areas of rectangles, but fail to properly develop the formulas for areas of parallelograms and triangles. In particular, the height of the triangle is not defined. Addition and subtraction of fractions has a good start with strong models, but this foundation is not brought to closure with good development of common denominators. A typical student would not be well prepared for the next level of Washington mathematics using this program.

OSPI Grade 2 Average Scale Score	0.61
ST Grade 2 Average Scale Score	0.63
OSPI Grade 4 Average Scale Score	0.50
ST Grade 4 Average Scale Score	0.51

A typical day begins with “10 Minute Math” which gives students the opportunity to maintain and practice learned skills and numerical fluency. Most of the remainder of the day is spent with students working in groups to investigate a mathematical situation or problem, which is different than applying mathematics they know to solve word problems or a problem based on a realistic context.

Investigations, as the name suggests favors an approach to learning that is exploratory in nature. There is an emphasis on students discussing their strategies and solutions and skilled, knowledgeable teachers are critical to guide discussions and consolidate student understanding. Explanations of the mathematics and worked sample problems are rarely included in the student materials.



The strength of the program is in the suggestions for conceptual development of key concepts. It is hard to stress how well this is done in *Investigations*. Students develop strong visual models for challenging concepts such as fractions, multi-digit multiplication, and area. However, the transition to abstract fluency or generalization is not always developed or evident. For example, students develop good number sense, but may not develop efficiency in operations.

Two other issues should be mentioned. Pacing may prove challenging. While each lesson is appropriately designed for a class period, the teacher is frequently asked to identify additional problems and to provide enough time for struggling students to understand the concept. At the same time, there are insufficient extensions or enrichments to engage adept students who may have already learned the concepts.

Also, at some grade levels *Investigations* includes a great deal of content that does not align to Washington's standards. For example, as much as half of the content in grade four *Investigations* matches to standards at other, usually lower, grade levels, suggesting *Investigations* teaches content later in a student's career than the state's standards require.



Math Connects (K-8)

Math Connects is the only program ranked in the top four for both the elementary and middle school levels.

At the elementary level, the thread related to multiplication is covered except it lacks a numerical model for multiplication that contains place value and demonstrates commutativity and distributivity all in one place. The definition and the formula for the area of a rectangle are well done, but it doesn't build to finding the area of a triangle. Students are shown how to compute the area of a parallelogram, but the formula is not made explicit. How to find the area of a triangle is not taught, making this thread mathematically sound but incomplete. Fractions and the arithmetic of fractions are thoroughly covered. One minor flaw is that *Math Connects* emphasizes the least common denominator for adding and subtracting fractions at the expense of the easily accessible common denominator.

In middle school, *Math Connects* makes a good start with excellent modeling of multiplication of simple fractions but it lacks an explanation for how this extends to the general rule for multiplying fractions. Ratios, rates, and proportion are properly defined every year and proportion problems are numerous, of varying types, and in all three years of the middle school program. Other topics related to proportionality need slightly more explanation or development. Cross products are used and explained properly. The connection to a proportionality constant and a graph is made, but not emphasized enough and the connection to slope and similar triangles is there with even less development.

Math Connect needs a touch of supplementation to be fully mathematically developed, but the areas it is missing are easy to supplement.

OSPI Grade 2 Average Scale Score	0.76
ST Grade 2 Average Scale Score	0.78
OSPI Grade 4 Average Scale Score	0.76
ST Grade 4 Average Scale Score	0.76
OSPI Grade 7 Average Scale Score	0.75
ST Grade 7 Average Scale Score	0.71

With *Math Connects*, lessons have a similar structure in the elementary and middle schools. On a typical day, the teacher begins with some scaffolding questions that activate prior learning. Next the teacher works some examples, asks the class a few questions to check for understanding, students work some problems to be sure they know what to do, and then the students work practice problems which include some spiral review problems. While every program has a predictability to its structure, this one seems to suffer from adherence to its format.

This program depends on direct instruction, even at the elementary level. Hands-on activities are included in the teacher's edition but identified as appropriate for use with below grade students. At the middle school level, students participate in approximately six mini-labs per year, designed to last about one-half hour, scheduled before a new major concept is introduced. With the exception of the mini-labs, students spend much of their time on the procedural side of mathematics.

The program appears relatively easy to use, although the teacher's edition has so much information—not all of it helpful—that a teacher might be overwhelmed. The directions to the teacher are often very general, and often not specific to the problem or concept. While there is a good deal of information about differentiation—some useful, some not - there is not enough good information about the whole group instruction. The additional worksheets provide plenty of additional material for teachers to use to reteach and enrich.



Math Expressions (K-5)

Math Expressions develops whole number multiplication completely and elegantly. The area thread is done extremely well. Adding and subtracting fractions, both the conceptual and procedural sides as well as the connections between the two, is explicitly developed. With the exception of the work on common denominators, all of the mathematics is in the student materials. This program provides a solid foundation to move ahead in mathematics.

OSPI Grade 2 Average Scale Score	0.69
ST Grade 2 Average Scale Score	0.80
OSPI Grade 4 Average Scale Score	0.53
ST Grade 4 Average Scale Score	0.90

A typical day starts with a short skills building or practice and homework review. The actual lesson usually starts with a problem that students work on, in groups, at their desk. This is followed by “math talk,” *Expressions*’ version of student discourse, during which the teacher pulls out student thinking and summarizes and consolidates the important mathematical ideas for the day. Teachers sometimes use direct instruction during this time to teach specific skills or concepts. Students are then led through some guided practice or group work and on to independent practice or a group task. Every lesson has a homework worksheet and a spiral review worksheet.

The teacher’s edition is very strong. Although the front material is a bit overwhelming, there is a complete table of contents and index, so content is very easy to find. The goal for each lesson is clearly identified, as is a suggested time frame and a list of specific materials that will be needed. “Best practice” ideas, such as the main points that should be included in the class discussion, are woven into the teacher’s edition. Sometimes it alerts the teacher to commonly held student misconceptions and ideas to support the student. Sometimes it offers general guidance on how to teach a lesson like, “Students will also probably say that both arrays have six dots; accept this answer because it works for these specific arrays. But it cannot be the basis for a general argument for all arrays asked for in the next exercise.”

Math Thematics (6-8)

Math Thematics does a good job of modeling multiplication of simple fractions and giving students the opportunity to practice doing so in a meaningful context. What is missing is the bridge between the model for the simple case and the explanation for the general rule. The only attempt to explain the division of fractions is for the cases where the answer is a whole number. No explanation is given for the rule for dividing fractions.

Book 1 sets up a confusing foundation for ratios, rates and proportions by not giving a definition of ratio. This is corrected in Book 2, but by then students are working from a shaky foundation. Why and how cross products work is not explained. There are proportion word problems, but they are limited in number and scattered throughout the material.

A minimal connection of graphs to ratios and rates is made, but nothing explicit is done about proportions, such as the constant of proportionality. Linear equations are not shown to produce graphs that are lines and there is no explanation given for slopes of lines to be independent of points chosen to compute them.

A student would be unprepared to go on in mathematics, although multiplication and division of fractions could be easily supplemented.

OSPI Grade 7 Average Scale Score 0.73

ST Grade 7 Average Scale Score 0.77

Math Thematics takes traditional content and organizes it into themes or modules. For example, the first module, “Search and rescue” uses an excerpt from a book, Hachet, in which a young man is stranded after his plane crashes. The unit relates the math in the unit—including angles and rays, coordinate grids, order of operations, adding and subtracting integers, modeling functions, writing equations to model situations, and using inverse operations to solve one-step equations—to search and rescue situations. In the second module, “Bright ideas,” the text bundles many important mathematical discoveries along with the key information about the person



who developed the mathematics, thereby at least exposing students to some math history. The remaining modules are: Codes, The Art of Motion, Recreation, Flights of Fancy, Math-Thematical Mix, and Heart of the City. Every section includes "Reflecting" and "Spiral Review." Reflecting has questions and problems that push and check student understanding. Each unit ends with a series of application problems that requires students to apply the mathematics learned in the unit in a realistic context. For example, the first problem in unit one requires the student to develop a rescue plan with limited daylight and gas for the rescue plane. In this way concepts and skills are put into realistic contexts.

The lessons are highly engaging, but the mathematics gets a bit chopped up and the later units seem fragmented. Also, the organization means that it is difficult to omit the mathematics that is not included in Washington's standards and there is quite a lot of that.

The program is easy to use, with a table of contents and index. There is a lot of help for teachers. The margin in the TE include "Tips from Teachers," "Developing math concepts," which are ideas for how to introduce and teach a topic; "Teaching notes," which are mathematical content background notes for teachers; "common errors," (example: "when substituting a value for a variable in a multiplication expression, students will sometimes forget to perform the multiplication and simply write the number....Remind students to write the multiplication symbol or to use parentheses." which describe not only errors students commonly make, but also ways to address them; "About Key Concepts" gives more information about the mathematics; "Absent Students," which identifies materials to use that compress the missed lesson(s); "Classroom Management" has teaching tips that are germane to the specific lesson; "Differentiated Instruction" provides suggestions for that topic, and "Closure question," which ensures students leave the lesson with the main idea. Unfortunately, not all of the important mathematics is included in the teacher help and not all of it is explained when it is included.



Prentice Hall (6-8)

Multiplication of simple fractions is nicely modeled but no explanation for the general rule for multiplying fractions is given meaning students would not understand why the rules work. Division of fractions is explained only for the cases where the answer is a whole number. No explanation is given for the rule for dividing fractions. There is a section on solving simple equations that comes very close and could easily be turned into an explanation of division. There is an indication, in the teacher's edition, that these formulas can be explained, even though the explanations are missing. Similarly, the teacher's edition makes the statement that multiplication and division are inverse operations, but this information is not included in the student text nor used in the lessons.

Correct definitions are included for ratios, proportions, and rates when a concept is introduced. Cross products are not explained the first year they are taught, but are in the year two. There are a variety of problems but none are particularly difficult. It is left to the teacher to fill in the connections between proportions, slopes, and graphs. Generally, slope is not well defined and equations are not explicitly shown to give lines as graphs. While the material is present, the teacher must do the teaching.

OSPI Grade 7 Average Scale Score 0.64

ST Grade 7 Average Scale Score 0.78

Prentice Hall is a solid mathematics text that contains appropriate mathematics. Activity labs are used prior to the majority of lessons to develop conceptual understanding of mathematical procedures. These are an essential component of the text; it is during these labs that the conceptual base for students' understanding of specific mathematical procedures occurs. Good models exist in the labs; however the "bridge" between the models and the rules are not made explicit in the teaching notes or in the actual lesson. Since fluency may not be certain without conceptual understanding, teachers will need to know to do this.

The actual lessons begin with a summary of "what" will be learned and "why" it is needed, a list of essential skills and vocabulary, and multiple



examples where key concepts are highlighted. In addition to labs, the program uses a mix of direct instruction and student group work that leads to guided and independent practice. Homework exercises offer “Go for Help” and “Go Online” notes to assist students with finding appropriate examples and tutoring help.

The TE includes a “Mathematics Teacher Handbook” at the beginning of the text that explains how to use the teacher text effectively. This section provides information on where to find real-world applications, activity labs, chapter projects, and specific problem solving strategies throughout the text. Support is provided for lesson differentiation, formative and summative assessment, technology use, and additional professional development opportunities. A “Math Background” summary precedes each chapter. This includes essential math understandings for successfully teaching the concepts in the chapter; teachers that by-pass reading these two-page summaries risk omitting important connections between procedures and the conceptual understanding of those procedures. Included in the margins of each lesson are additional math backgrounds relevant to the individual lesson, guided instruction notes to deepen student understanding, differentiated instruction suggestions, lesson openers and closers, common error alerts, additional examples, and assessment tools.

Even with all of this, the teacher’s edition often does not make explicit why procedures work nor the connections between various strands of mathematics. The student edition does not stand alone. Among other things, it does not explain what a student should learn in the labs and how that information would be applied in specific lessons. For example, in 2-4a Activity Lab Comparing Fractions, students model comparing fractions with paper strips. The lab includes a discussion of why it is easier to compare fractions with common denominators. In the lesson 2-4, students compare fractions by writing the fractions with common denominators and comparing the numerators. No reference to the lab is made and no alternate strategies are included; the teacher is needed to make the connection.



Appendix A

Whole Number Multiplication

The standard algorithm for multiplication has particular importance in mathematics for several reasons. First, it is fairly easy to link it to the all-important place value system. Second, it is necessary in order to extend multiplication to decimals; the same algorithm is used, it is just the decimal place that has to be understood. Third, whole number multiplication is used for all four arithmetic operations with fractions:

$$\frac{a}{b} \pm \frac{c}{d} = \frac{ad \pm bc}{bd}, \quad \frac{a}{b} \times \frac{c}{d} = \frac{ac}{bd} \quad \text{and} \quad \frac{a}{b} \div \frac{c}{d} = \frac{ad}{bc}.$$

Fourth, multiplication is used throughout all of mathematics.

The standard algorithm solves the universal problem of whole number multiplication, taking the *ad hoc* out of multiplication. As such, it is one of the truly beautiful and powerful mathematical theorems that students can learn about in elementary school. Learning the algorithm is much more than just learning a way to multiply, it is learning a major mathematical structure.

The thread we consider starts with the following:

3.2.D *Apply and explain strategies to compute multiplication facts to 10x10 and the related division facts.*

This is an important preliminary, as is indicated in the Washington standards, to the following:

4.1.A *Quickly recall multiplication facts through 10x10 and the related division facts.*

The standard algorithm is based on distributivity, commutativity, and these single digit multiplications. Knowing all without hesitation is important for fluency with the standard algorithm. Once these are all under control it is possible to connect multiplication with place value, as is expected in this standard:

4.1.C *Represent multiplication of a two-digit number by a two-digit number with place value models.*

The usual representation is to break up numbers using expanded notation and to use the area model of multiplication, thus connecting multiplication to its foundation in the place value system. There are certainly other acceptable models, but it is essential these include a numerical model to make the step from a representation to numbers.



In the numerical model we need this standard:

4.1.D *Multiply by 10, 100, and 1,000.*

Then, multiplication, as it is represented using place value, must be connected to the notation for the standard algorithm so that we can achieve the standard below:

4.1.F *Fluently and accurately multiply up to a three-digit number by one- and two-digit numbers using the standard algorithm.*

There is a lot that is important here. The notation for the standard algorithm must be connected to a place value representation so that the notation makes sense to students. Obviously, learning this standard by rote is inadequate. This standard will be emphasized as the goal, because without it, even with the foundation of good developmental standards, a student is unprepared to go on in the study of mathematics. Once fluent, multiplication should cease to be a problem but should just be a skill that can be used in problem solving. Thus, ultimately, we need the standard below:

4.1.I *Solve single- and multi-step word problems involving multi-digit multiplication and verify the solutions.*

The point of this thread is to develop an understanding of and a facility with the standard algorithm for multiplication so that it can be readily used as a tool for problem solving. This is of fundamental mathematical importance, and this is reflected by its place in the Washington State standards.

Area of a Triangle

Area is a fundamental concept in mathematics. The area of a triangle is derived from that for a parallelogram (by taking two copies of the triangle and making a parallelogram) and the area for that is, in turn, derived from the area of a rectangle (by cutting up the parallelogram and rearranging the pieces to make a rectangle). The area of a rectangle follows from multiplication and the area of a square, which essentially gives the definition of area.

With the area of rectangles, parallelograms, and triangles under control, the area of polygons and planer surfaces can be calculated. In practice, measurement also comes into play. The computation of volumes frequently depends on knowing the areas connected to the solid. As the student progresses, the techniques for computing area also progress. The Integral Calculus allows students to extend their knowledge of area to much more



complex figures, but that ability depends heavily on the understanding of area from elementary school.

This thread begins with the area part of:

4.3.C *Determine the perimeter and area of a rectangle using formulas, and explain why the formulas work.*

The “explain why the formulas work” part of this is essential. Next, we go to:

5.3.D *Determine the formula for the area of a parallelogram by relating it to the area of a rectangle.*

The goal of this thread is given by the next two standards:

5.3.E *Determine the formula for the area of a triangle by relating it to the area of a parallelogram.*

and

5.3.I *Solve single- and multi-step word problems about the perimeters and areas of quadrilaterals and triangles and verify the solutions.*

Fractions and the Arithmetic of Fractions

The importance of fractions to mathematics cannot be overstated. Students start with whole numbers and then develop fractions to get the rational numbers. Eventually, real numbers can be constructed from the rational numbers and, finally it is possible to add the last bit to get complex numbers. With the real numbers one can put coordinates on the line or the plane, and from this comes the ability turn geometry into algebra and algebra into geometry. The point is that fractions are an essential intermediary step in mathematics.

Numbers and geometry are at the heart of mathematics, and fractions are required for both. You can’t do mathematics without an understanding of fractions and their operations. To do fractions requires a thorough understanding of whole numbers and the arithmetic operations with them.

The step of going from whole numbers or integers to fractions is the same step taken to go from polynomials to rational expressions. This is a common transition in mathematics and elementary school fractions are the easiest place to start.

The four arithmetic operations with fractions are divided between grades five and six in the Washington State standards. This crosses the boundary between elementary school and middle school and so it is likely that



different programs will be used for these two grades. That boundary makes it all the more important to accomplish the grade five standards in grade five, and that middle school be able to assume mastery of the grade five standards. Because of this jurisdictional problem, the following is a discussion of the elementary school material.

This thread begins with seeing a fraction as a number, and putting it on the number line will do, as in:

3.3.A Represent fractions that have denominators of 2, 3, 4, 5, 6, 8, 9, 10, and 12 as parts of a whole, parts of a set, and points on the number line.

Next fractions need to be defined or represented as numbers in addition and subtraction:

5.2.A Represent addition and subtraction of fractions and mixed numbers using visual and numerical models, and connect the representation to the related equation.

Finally we need a purely numerical way to add and subtract fractions:

5.2.E Fluently and accurately add and subtract fractions, including mixed numbers.

In order to do this, students must understand what denominators mean and how to find and work with common denominators. We also need the fraction part of the following standard:

5.2.H Solve single- and multi-step word problems involving addition and subtraction of whole numbers, fractions (including mixed numbers), and decimals, and verify the solutions.

Multiplication and Division of Fractions

Continuing the fraction thread from elementary school we will focus on multiplication and division for fractions by doing the following:

6.1.D Fluently and accurately multiply and divide non-negative fractions and explain the inverse relationship between multiplication and division with fractions.

And by presenting the corresponding fraction part of the application standard



6.1.H *Solve single- and multi-step word problems involving operations with fractions and decimals and verify the solutions.*

In order for word problems with fractions and decimals to make sense for students, there needs to be a good representation of the multiplication of fraction multiplication. It is difficult to represent fraction multiplication for anything but simple fractions so there has to be a logical connection and explanation that takes the student from the simple cases they can see with a representation to the general formula. There are multiple ways to do this, both geometric and algebraic (numerical), but the connection must be established.

Although certain cases of division with fractions can be represented, it is not easy to represent even simple situations such as $\frac{1}{2} \div \frac{2}{3}$.

There are a number of ways to make sense of fraction division but bringing in the inverse relationship between multiplication and division can make it very easy. Any explanation must make sense not only of the simple example just given, but also of examples such as $\frac{2}{9} \div \frac{3}{7}$.

Proportions

After establishing control over the rational numbers in elementary school, middle school includes a lot of work with rates, ratios, percents and proportions. Proportions are reviewed with the focus on student's understanding well enough to work problems, as described in:

7.2.B *Solve single- and multi-step problems involving proportional relationships and verify the solutions.*

To begin, students need to understand what ratios, rates and proportions are and see a good development of representations for proportions. Cross products always show up here and this technique should be justified. Washington would like to see multi-step problems.

Proportions can be put at the center of a number of mathematical connections, as is the case in the standard:

7.2.F *Determine the slope of a line corresponding to the graph of a proportional relationship and relate the slope to similar triangles.*

This means the proportion needs to be represented as linear graphs through the origin. To do this requires an understanding of slope. Slope is shown to be well defined when it is connected to the proportionality of similar triangles. This is required in order to show that a proportionality equation is a straight line. This standard connects much of middle school mathematics.



Appendix B

	OSPI Rubric		ST Rubric
2	Fully Met <ul style="list-style-type: none"> The standard is fully developed at the expected grade level. A typical student would be able to achieve mastery with the available content. 	3	All content and key teaching/ learning tools present <ul style="list-style-type: none"> The content from the standard is fully present at the correct grade level. There is adequate information about the content and sufficient teaching/learning ideas included in the program to ensure that students develop conceptual understanding and procedural skill. There is sufficient practice to ensure mastery. <i>A typical student would be able to achieve mastery with the core program materials.</i>
1	Partially Met <ul style="list-style-type: none"> The standard is fully developed at +/- one grade level from the expected grade. 50% or more of the standard is met at grade level, but some aspect of the standard is not present. The standard is fully developed, but limited in practice or reinforcement. 	2	All or most content present, but key teaching/learning tools are missing <ul style="list-style-type: none"> The key content from the standard exists in the program at the correct grade level. The core materials need supplementation to do such things as adding additional opportunities for practice or finding more representations to help students consolidate learning. <i>Many students would achieve mastery with the core program material.</i>
		1	Missing important content <ul style="list-style-type: none"> Some significant aspect of the content is not present. <ul style="list-style-type: none"> Some of the content may be completely absent. Some of the content may be less rigorous. It would take significant time and knowledge to fill the content gaps in the program. <i>A typical student would not achieve mastery with the core program materials.</i>
0	Not Met <ul style="list-style-type: none"> The standard is not covered at grade level or +/- one grade level. The standard is briefly mentioned, but a typical student would not be able to achieve mastery with the available content. The standard is partially met at +/- one grade level. 	0	Little or no content <ul style="list-style-type: none"> All or most of the content in the standard is missing in the program at the correct grade level. <ul style="list-style-type: none"> It may be completely absent It may be briefly mentioned, but it is not developed. It may contain less sophisticated precursor content that would lead to the content in the standard <i>A typical student would not be able to achieve mastery with the core program materials.</i>



Appendix C

Average Differences by Grade Level Topics

Grade 2		Grade 4		Grade 7	
2.1. Place value and the base ten system	1%	4.1 Multi-digit Multiplication	11%	7.1 Rational numbers and linear equations	-5%
2.2. Addition and subtraction	-4%	4.2 Fractions, decimals, and mixed numbers	11%	7.2 Proportionality and similarity	20%
2.2. Measurement	4%	4.3 Concept of area	15%	7.3 Surface area and volume	5%
2.4. Additional key content	10%	4.4 Additional key content	16%	7.4 Probability and data	6%
2.5. Reasoning, problem solving, and communication	6%	4.5 Reasoning, problem solving, and communication	16%	7.5 Additional key content	10%
				7.6 Reasoning, problem solving, and communication	6%

This chart shows the average of the differences between OSPI and ST scores by topic. The chart confirms that ST general found a higher degree of alignment than OSPI. Beyond that it does not show other remarkable patterns or inconsistencies.



Appendix D

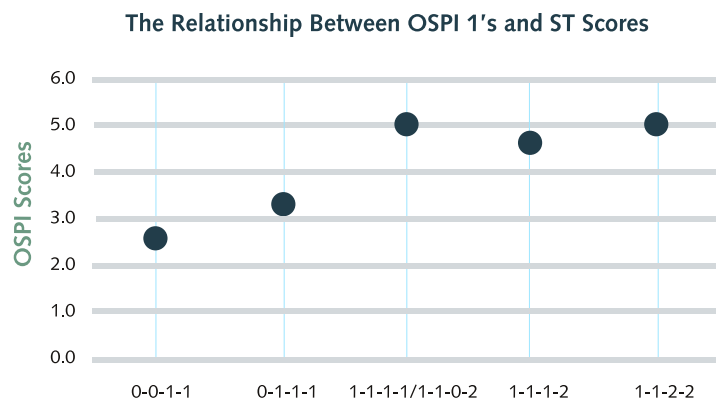
Relationship Between OSPI and ST Scores

ST looked at standards that had been scored “one” by OSPI to see how we scored those standards. To make some sense of this, only those standards to which OSPI gave two “one’s” were considered. Put another way, ST looked at all possible combinations of standards scores that include at least two “one’s.” The score types are:

0-0-1-1 0-1-1-1 1-1-1-1/1-1-0-2 1-1-1-2 1-1-2-2

The possible combinations could have a range of between two and six points given by OSPI reviewers. Scores 1-1-1-1 and 1-1-0-2 are considered together because a total of four points is awarded. The ST total scores that mapped to these standards were then averaged. The ST scores ranged from zero, when both reviewers judged there to be no match to six, when both ST reviewers gave the full three points.

The following chart shows a clear relationship. Standards that received a low total score from OSPI tended to receive a low total score from ST. Standards that receive a high total score from OSPI, tended to receive a high total score from ST.





Appendix E

Strategic Teaching Team

Andrew Clark

- Recently retired K–12 Curriculum Director for Portland Public Schools in Portland, OR
- Has taught every grade level using materials from numerous publishers and supervised a variety of programs supported by other programs
- Developed and published curriculum materials, but is not associated with any ST reviewed for Washington

Connie Colton

- National Board Certified middle school teacher and Department Chair in Omaha, NE
- Math Counts coach
- Benchmarked and reviewed standards multiple states against national and international documents
- Reviewed and benchmarked curriculum for Nebraska and Georgia

Sean Mulvenon, Ph.D.

- Professor of Educational Statistics and Research Methods, University of Arkansas
- Ph.D. Arizona State University, Measurement, Statistics and Methodological Studies with an interest in the study of longitudinal modeling, structural equation models, and non-parametric statistical procedures
- In addition to teaching, directs the National Office for Research on Measurement and Evaluation Systems at the University of Arkansas
- Spent the last three years on loan to the U.S. Department of Education, evaluating growth models for state assessment systems.

Susan Pimentel, J.D.

- Led strategic planning, reform efforts, and/or standards works in such varied jurisdictions as Ardmore, OK; Allentown, PA; Beaufort, SC; Charlotte-Mecklenburg, NC; Chicago, IL; Elaine, AR; Jackson, WY; Kansas City, MO; Menasha, WI; Red Clay, DE; the District of Columbia, and the states of Arizona, California, Indiana, Ohio, and Maryland
- Co-founded Standardsworks
- Serves on the Assessment Development Committee of the National Assessment Governing Board

Linda H. Plattner

- Reviewed and facilitated standards development in more than twenty states
- Reviewed mathematics curriculum in other jurisdictions, including Fulton County, GA
- Facilitated school reform in multiple jurisdictions
- Taught elementary school before becoming a middle school mathematics teacher
- Provided direct support to teachers and schools in California, Ohio and Maryland
- Recruited, trained and managed over 100 presenters and their presentation content for the U.S. Department of Education's 'Teacher -to-Teacher Summer Workshop and Training Corps'

W. Stephen Wilson, Ph.D.

- Professor of Mathematics at Johns Hopkins University
- Ph.D. in mathematics from the Massachusetts Institute of Technology
- Research area is Algebraic Topology.
- In addition to graduate courses and courses for mathematics majors, teaches calculus to engineering and pre-medical students
- Completed extensive reviews of standards and analysis of curriculum programs for Fordham and Strategic Teaching



State Board of Education System Performance Accountability Policy Framework Proposal

October 28, 2008

SUMMARY OF POLICY ISSUES/SBE STRATEGIC PLAN GOAL

Washington State statute¹ assigns the State Board of Education (SBE) the authority to create a statewide accountability system, which includes:

- Identifying objective, systematic criteria for successful schools and districts.
- Identifying objective systematic criteria for schools and districts in need of assistance or where significant numbers of students persistently fail to meet state standards.
- Identifying range of state intervention strategies for legislature to consider authorizing.

The Board has three strategic plan goals, which are the underpinnings of an effective statewide accountability system: 1) improve student achievement; 2) improve graduation rates; and 3) improve student preparation for success in post secondary education, 21st century world of work and citizenship.

BACKGROUND

Why has the Board engaged in this work? ***All students deserve to receive a quality education.***

The Board believes in continuous improvement for all schools and districts to ensure that they have the tools to do their work to help all their students. The Board wants to recognize schools that are doing an outstanding job for their students and many of them are. Like all states, Washington has a small number of schools where students persistently achieve at significantly lower levels than at peer schools. The Board estimates that 70,500 students² are enrolled (one out of 14 students in the K-12 system) in struggling schools (identified by its accountability index). There are no state incentives or significant consequences for making transformational changes in these schools and districts, thus the need for the Board's work, to help these students.

Also like all states, Washington has not been able to eliminate the large achievement gap between affluent and high-poverty students and schools. And finally, Washington's public schools are not yet broadly and successfully preparing most high school graduates with work-ready and or college-ready skills, after 15 years or more of standards-based reform.

¹ RCW 28A.305.130 (4)

² If alternative education students are included, the number is 83,000.

The Board has engaged in an extensive review of accountability issues through its work sessions with the Office of Superintendent of Public Instruction, advisors, stakeholder meetings, community surveys, and research over the last two years. The Board has examined other states' accountability systems, national studies on high performing high poverty schools and accountability issues, and the policy barriers to student achievement in Washington, as identified by policy makers and practitioners.

It has retained the services of consultants to assist with the development of the proposals described below in the framework. The consultants worked with Washington practitioners to develop their proposals. National and Washington-based research reveals a clear set of barriers that have undercut the impact of school reform efforts to date. They include insufficient and unstable resources, insufficient time, inflexibility in allocating resources to higher need areas to improve student achievement, lack of coherent systems to recruit and prepare quality educators, insufficient coordination among intrastate agencies, and insufficient focus (i.e., with funding) on schools serving high-challenge student populations.

The background information and consultant reports for this work can be found on the Board's Web site: www.sbe.wa.gov

DRAFT SYSTEM PERFORMANCE ACCOUNTABILITY POLICY FRAMEWORK

The System Performance Accountability Policy Framework operates under a central premise: all schools and their districts should be engaged in continuous improvement efforts to ensure that all students are reaching their highest potential.

Four suggested guiding principles to this overall accountability policy framework (based on feedback received):

- All students will have a quality education
- Basic Education will be redefined and funded
- A reciprocal relationship will be created between the state and local school district for student success
- The state will create one unified accountability system

The framework includes key and connected components to identify ways to focus on increasing student achievement:

1. An **accountability index**, which uses objective systematic criteria to identify successful schools and districts, as well as those in need of assistance or those where students persistently fail to meet state standards. Those in the latter category will be analyzed in greater detail after identification through the accountability index to develop a list of "Priority Schools" that clearly demonstrate a need for additional support.
2. A **preventative, proactive system** of support to help all schools and districts continue to improve, which would be voluntary for districts except where the accountability index indicates a clear need for support in specific areas, such as closing the achievement gap among certain subgroups (e.g., English Language Learners or African-American students), or in certain curriculum areas including math and science.
3. A range of **voluntary state and/or local district intensive assistance strategies** for districts with one or more "Priority Schools", to develop a systems approach for improving student academic performance including: a) the voluntary state/local Innovation Zone Program, which would allow local school boards (together with their superintendents, union leaders and other stakeholders) to create a systemic turnaround effort that directly and comprehensively addresses the barriers to reform identified by the research cited earlier, supported by state investment in resources and capacity; b) the

voluntary state/local Summit District Program (OSPI operates this currently under No Child Left Behind identification), a district-wide reform initiative focused on developing effective leadership, quality instruction, data analysis, needs assessment, and targeted strategies for improvement, supported by state investment in resources and capacity; or c) a voluntary local district program to develop and implement its own strategies to bring its schools out of Priority status with state approval of the district's plan and accompanying state resources and support.

4. A category of deeper state and local partnership, called **Academic Watch**, if after two full years of implementation there is insufficient progress under any of the forms of intensive assistance described above based on the accountability index and follow-up review of local district conditions and strategies.

I. THE PROPOSED ACCOUNTABILITY INDEX

SBE has developed a draft accountability index to sort schools and districts into different “tiers” based on multiple measures. It is expected that additional work will need to be done to refine this accountability index over the next six months.

Schools and districts in most need are given “Priority” status, making them eligible to receive more significant support as outlined under Table III below.

A set of principles has guided the development of the system. The accountability system will: (1) be transparent and simple to understand; (2) use existing data; (3) rely on multiple measures and familiar concepts; (4) include assessment results from all grades and subjects tested statewide; (5) use concepts of the federal No Child Left Behind Act (NCLB) and its Adequate Yearly Progress (AYP) system when appropriate; (6) be fair, reasonable, and consistent; (7) be valid and accurate; (8) focus at both the school and district levels; (9) apply to as many schools and districts as possible; (10) rely mainly on criterion-referenced measures instead of norm-referenced measures in order to create clear goals and encourage cooperation among educators; and (11) provide multiple ways to demonstrate and reward success.

The proposed index is based on how schools and districts perform on a set of five outcomes and four indicators. The five outcomes are the results of state assessments in four subjects (reading, writing, mathematics, science) and the “extended” graduation rate (for high schools and districts). These five outcomes are examined using four indicators: (1) achievement for all students; (2) achievement of low-income students; (3) achievement of all students compared to similar schools (controlling for the percentage of students who are learning English, have a disability, live in low-income homes, and are mobile); and (4) improvement. The results of the 20 measures form a matrix as shown in Table 1 below.

Table 1: Accountability Matrix

INDICATORS	OUTCOMES				
	Reading	Writing	Math	Science	Extended Grad Rate
Achievement					
Achievement of low-income					
Achievement vs. peers					
Improvement					

Each cell of the matrix is rated on a 5-point scale (from 0 to 4) using fixed benchmarks. Each of the four subjects is rated using the same set of benchmarks across the entire school (i.e., all subjects have the same set of benchmarks, and the assessment results are the aggregate totals for all the tested grades). The index is the simple average of all 20 ratings. The index ranges from 0.0 to 4.0 and is a number similar to a GPA where 4.0 is the highest score. Table 2 shows how each of the five outcomes are measured using the four indicators and the benchmarks that produce the ratings. Tier assignments are determined based on the index score. Schools and districts would fall into four tiers, with an in-depth analysis of the data and conditions of those in the lowest tier to see if they merit being placed in a fifth (Priority) tier.

Table 2: Benchmarks and Ratings for Outcomes and Indicators

	READING	WRITING	MATH	SCIENCE	EXT. GRAD. RATE ¹	
ACHIEVEMENT (ALL STUDENTS)	<u>% MET STANDARD</u>		<u>RATING</u>		<u>RATE</u>	<u>RATING</u>
	86-100%		4		> 95	4
	70-85.9%		3		85-94.9%	3
ACHIEVEMENT (LOW INCOME)	55-69.9%		2		75-84.9%	2
	40-54.9%		1		65-74.9%	1
	< 40%		0		< 65%	0
ACHIEVEMENT VS. PEERS²	<u>DIFFERENCE IN LEARNING INDEX</u>		<u>RATING</u>		<u>DIFFERENCE IN RATE</u>	<u>RATING</u>
	> .20		4		> 12	4
	.10 to .20		3		5.01 to 12	3
	-.099 to .099		2		-5 to 5	2
	-.20 to -.10		1		-5.01 to -12	1
	< -.20		0		< 12	0
IMPROVEMENT³	<u>CHANGE IN LEARNING INDEX</u>		<u>RATING</u>		<u>CHANGE IN RATE</u>	<u>RATING</u>
	> .12		4		> 6	4
	.05 to .12		3		3.01 to 6	3
	-.05 to .05		2		-3 to 3	2
	-.051 to -.12		1		-3.01 to -6	1
	< -.12		0		< -6	0

Note: Assessment results include both WASL and WAAS results.

¹This outcome only applies to schools and districts that are authorized to graduate students.

² This indicator adjusts the outcomes using statistical methods (multiple regression) to control four student characteristics beyond a school's control: the percentage of low-income, ELL, special education, and mobile students. (Mobile students are those who are not continuously enrolled from October 1 through the testing period). Scores are the difference between the actual level and the predicted level. Scores above 0 are "beating the odds" and negative scores are below the predicted level. Separate analyses are conducted for each of the four assessments in elementary, middle, and high schools.

³ Measured in terms of the change from the previous year.

INITIAL RESULTS

Table 3 shows the suggested ranges for the tier assignments and the number of schools and districts that would have been placed in each tier in 2007 using the above criteria.

Table 3: Tier Ranges and Preliminary Results (2007)

Tier	Index Range	Percent of Schools	Percent of Districts
Exemplary	3.00 – 4.00	4%	1%
Good	2.00 – 2.99	32%	35%
Acceptable	1.00 – 1.99	51%	59%
Struggling	0.00 – 0.99	13% ¹	5%
Priority (eligible for Innovation Zone) ²	0.00 – 0.99	TBD	TBD

¹ About 40% of the schools in this tier were alternative schools or served other special populations. Schools in this tier had a total enrollment of about 83,000 students, with about 70,500 attending “regular” schools. About 78% of the schools in this tier had a 2-year index average below 1.00, and 55% of these were “regular” schools with a total enrollment of about 50,500 students. There were 22 districts that had at least two regular schools with a two-year index average of less than 1.00, and eight districts had at least four regular schools with a two-year index below 1.00.

² Those in this tier would be determined after an in-depth analysis of their data and local conditions.

IDENTIFYING “PRIORITY” SCHOOLS AND DISTRICTS (LOWEST TIER)

Various quantitative and qualitative data will be used to determine which schools and districts that fall in the “struggling” tier should be placed in the “Priority” tier and be eligible to receive significant support. The data falls into four categories:

1. Contextual Data:

- Type of school
- Changes in student population
- Programs served by the school
- Level of student mobility

2. Assessment Results (WASL/WAAS/WLPT)

- Trends over multiple years for each subject area
- Subgroup trends
- Results for students who have been enrolled for at least two years

3. AYP Results:

- Distance from the annual goal.
- Type of cells not making AYP
- Percentage of cells not making AYP

4. Other Data:

- Graduation and dropout rates for subgroups
- Student/teacher ratio
- Teacher education and experience levels
- Funding from local levies/bonds and outside sources
- Recent changes in leadership (key central office staff and principals) and teachers

Each year, the process would begin when OSPI computes the index using the most recent data and prepares a set of preliminary results. Given the relatively large number of schools that may fall into the “struggling” tier,³ the schools must be screened to eliminate those that clearly should not fall into the Priority tier, which would reduce the number of schools and districts that require a deeper analysis. OSPI staff would review the index results for each school and district in the “struggling” tier and sort them into two categories:

- (1) Schools/districts will remain in the “struggling” tier if the in-depth analysis provides good cause for why they should not be a part of the Priority Schools Tier.
- (2) The remaining schools/districts are placed in a possible *Priority tier* category pending a deeper analysis.

OSPI staff will conduct a deeper analysis using available data for the schools and districts placed in the possible Priority tier category. This may require contacting the district and/or local ESD to get more information. Based on this review, the schools and districts will be sorted again into the same two categories. Those placed in the possible Priority tier will be notified of the possible designation and given the reasons why designation is possible. The district/school will be given a chance to avoid the Priority designation by providing more information, including what explains the low index results. Districts, with school board approval, could appeal to OSPI. OSPI would review the additional information, and then recommend a final Priority list to the State Board of Education for review and approval.

RECOGNITION

The Board intends to provide recognition based on sustained exemplary performance, and it will provide multiple ways to reward success using the results from the accountability matrix. The Board is considering three options: providing recognition for: 1) each of the 30 cells of the matrix; 2) the 20 “inner” cells of the matrix; and 3) the 10 “average” cells of the matrix. A minimum rating of 3.00 is required to receive recognition in the 20 “inner” cells, and a minimum rating of 2.75 is needed to receive recognition for the “averaged” cells (see Table 4). Any cell with a 3.5 or above would receive recognition “with honors.” The ratings will be calculated every year, and recognition is given when the two-year average rating meets the minimum requirement. This system of recognition will supplement the federal and state awards currently in place.

³ The number will still be far fewer than those not making AYP or identified for “improvement” under NCLB.

Table 4: Minimum Requirements for Recognition**

	Reading	Writing	Math	Science	Extended grad rate	Average
Achievement	3.00	3.00	3.00	3.00	3.00	2.75
Ach. vs. peers	3.00	3.00	3.00	3.00	3.00	2.75
Improvement	3.00	3.00	3.00	3.00	3.00	2.75
Low-inc. ach.	3.00	3.00	3.00	3.00	3.00	2.75
Average	2.75	2.75	2.75	2.75	2.75	2.75

**Any cell of the matrix with a 2-year average rating of 3.50 or above would be recognized “with honor.”

II. PREVENTIVE, PROACTIVE SYSTEM OF SUPPORT FOR ALL SCHOOLS AND DISTRICTS

Traditionally the state has not had a strong comprehensive program of general assistance for all schools and districts to improve student achievement. The State Board of Education requires that all schools have school improvement plans with specific elements, which the local school board approves and monitors. OSPI is in the process of developing more ways, in partnership with the Educational Service Districts and local districts, to provide general and more targeted assistance. Some of the areas that they are working on include: online professional learning and data collection tools; school and district plan management tools, regional training on specific areas such as English language learners, reading and mathematics. Additional areas could include training for school board members from the Washington State School Directors Association (WSSDA).

The accountability index will help districts and the state identify areas of particular challenge, and in these areas, districts meeting certain criteria for underperformance will be required to participate in a new set of state services designed specifically to help them meet these specific challenges. OSPI plans to create services focused on helping districts that are trying to close an achievement gap with one or more subgroups of students (e.g. English Language Learners, African- American or other groups) and may include services designed to assist with certain curriculum areas including math and science.

III. VOLUNTARY INTENSIVE ASSISTANCE STRATEGIES FOR DISTRICTS WITH PRIORITY SCHOOLS

Priority Schools designation reflects school-wide issues that go beyond achievement gaps for students facing certain challenges or within selected curriculum areas, and therefore need a more comprehensive solution as described in Table II above. Districts will be notified by OSPI that they have schools with a Priority designation. Districts will have two years of full implementation (plus six to nine months of planning time) to move their schools out of the Priority Schools designation using one of the following three strategies to work in greater intensity to improve student achievement:

a) the voluntary state/local Innovation Zone Program, which would allow local school boards (together with their superintendents, union leaders, and other stakeholders) to create a systemic turnaround effort that directly and comprehensively addresses the barriers to reform identified

by the research cited earlier, supported by state investment in resources and capacity;

b) the voluntary state/local Summit District Program (OSPI operates this currently using NCLB and primarily federal resources), a district-wide reform initiative focused on developing effective leadership, quality instruction, data analysis, needs assessment, and targeted strategies for improvement, supported by state investment in resources and capacity;

c) a voluntary local district program to develop and implement its own strategies in a plan to bring its schools out of Priority status with OSPI approving the district's plan and providing resources and support.

For the purposes of this memo, we will focus on the Innovation Zone as one of the three options open to districts under Table III, acknowledging that OSPI had provided, or is developing the programs in Table III b and c.

A. INNOVATION ZONE: AN OPPORTUNITY TO UNDERTAKE TRANSFORMATIONAL CHANGE

The Innovation Zone is provided to allow local districts, through their school board, to develop a performance contract with the state in exchange for state resources to assist them. The Innovation Zone concepts represent:

- **At the instructional level**, a chance for educators to ask fundamental questions about what it takes to help high-challenge, high-poverty students succeed, and to reshape their approach accordingly based on research conducted nationally and in Washington State.
- **At the systems level**, an opportunity for district and community leaders and their partners, supported by the state, to re-imagine and rebuild the structures and operating habits that shape the nature and quality of the education they offer.
- **At the policy level**, an effort to pilot the next generation of standards-based reform in Washington State – an approach marked by greater degrees of accountability by every stakeholder in the enterprise.

- **Key Elements of the Innovation Zone:**

- **Making the reforms systemic and “scale-able.”** Districts with Priority Schools as determined by the state's Accountability Index will be encouraged to apply to the Innovation Zone on behalf of a small cluster of schools – including their Priority School(s) – organized intentionally by feeder pattern or school type (within or across district lines), so that the reforms are systemic and scale-able, rather than being limited to a focus on individual schools.
- **Focusing on those districts best positioned to achieve success.** Districts will be selected to develop a comprehensive Innovation Zone plan after careful vetting by OSPI and the SBE for readiness (i.e., strong signals of commitment to transformative change; evidence that it will be a collaborative effort among district leaders, including the school board, superintendent, teachers' union, and community officeholders; and a strong preliminary plan).
- **Establishing demanding criteria and encouraging districts to enlist a highly capable lead partner.** Districts will be provided with resources to develop their Innovation Zone plan. The SBE recognizes that in most cases, districts will need outside support to produce a plan that meets the rigorous criteria the SBE will establish for Innovation Zone plans. The SBE will instruct OSPI to assist with this

process and to facilitate the development of partnerships between districts and lead turnaround providers, both for the planning cycle and for implementation.

- **Incorporating changes in operating conditions into the Zone criteria.** Through a collaborative, local process involving all key stakeholders (district administrators, school board, union, community, and parents), districts with Priority Schools that want to apply to the Innovation Zone will need to develop more flexible operating conditions that research shows are required for transformational – not simply incremental – change and to serve high-challenge, high-poverty students successfully.

The four critical elements of the Innovation Zone are contrasted with Traditional School Improvement in the following chart to understand the differences:

Traditional School Improvement Approach	Transformative, Comprehensive Turnaround Approach (Innovation Zone)
CRITICAL ELEMENT #1: PEOPLE	CRITICAL ELEMENT #1: PEOPLE
Help current staff perform at a higher level through training, coaching, and leadership development.	Turnaround leaders have all necessary tools and authority to fulfill the turnaround plan including: recruiting incentives; flexibility on staff hiring, allocation; and time to make staff development coherent.
CRITICAL ELEMENT #2: TIME	CRITICAL ELEMENT #2: TIME
Tweak existing schedule, while maintaining same-length school day and year.	Strategic assessment to determine if expanding school day, school year, and/or significant change to the schedule is necessary to fulfill the plan; resources to help fulfill those requirements.
CRITICAL ELEMENT #3: MONEY	CRITICAL ELEMENT #3: MONEY
Minimal impact on budgetary authority. Sometimes includes additional resources generally for staff development.	Strategic re-allocation of the budget is allowed. Additional resources are provided to support the implementation including: pay for extra time, incentives, and partner support.
CRITICAL ELEMENT #4: PROGRAM	CRITICAL ELEMENT #4: PROGRAM
Improve quality of existing strategies through evaluation of curriculum, instruction, and assessment tools.	Development of a coherent, whole-school plan that integrates strategies to address impacts of poverty and other strategies shown to succeed in high-challenge schools. Also provides relief from compliance burden to allow focus on instruction.

IV. ACADEMIC WATCH IF NO IMPROVEMENT

It is intended that Academic Watch would be used only after all other intervention efforts fail to improve the academic performance of students in the District's Priority Schools. The Accountability Index will be used to determine initially if the district's schools have moved out of Priority Status. OSPI will verify this status based on additional analysis.

Based on this verification, OSPI will notify the district that it is on Academic Watch if the district has been unable to bring its Priority Schools out of Priority status after two full implementation years. The district will be required to undergo a performance or academic audit managed by one of a number of Peer Review Teams convened by OSPI. The Peer Review Teams will be composed of educators and experts with knowledge of school district processes and improvement strategies. The district will then take the performance audit and strategies and develop an implementation plan for approval by OSPI.

There are two options for the Board to consider under Academic Watch:

Option A: Authority for Implementation Remains with the Local District

After the corrective action and implementation plan is approved by OSPI, the local school board would be responsible for implementation of that plan and the state would provide needed resources to assist the district. OSPI would continue to monitor the district's progress with periodic updates to the State Board of Education.

Option B: Authority for Implementation Requires State-Specified Binding Conditions

OSPI may determine that the district requires a deeper level of state partnership to implement their plan successfully. In that event, after the corrective action and implementation plan is approved by OSPI, the Superintendent of Public Instruction may recommend to the State Board of Education that OSPI place the local school board under a set of binding conditions to carry out the corrective action and implementation plan. The State Board of Education could approve, disapprove, or modify the binding conditions. If the plan is not being carried out successfully after one year, OSPI and the Peer Review Team may recommend to the State Board of Education a new corrective plan of action for implementation for that district.

PROPOSED BOARD ACTIONS

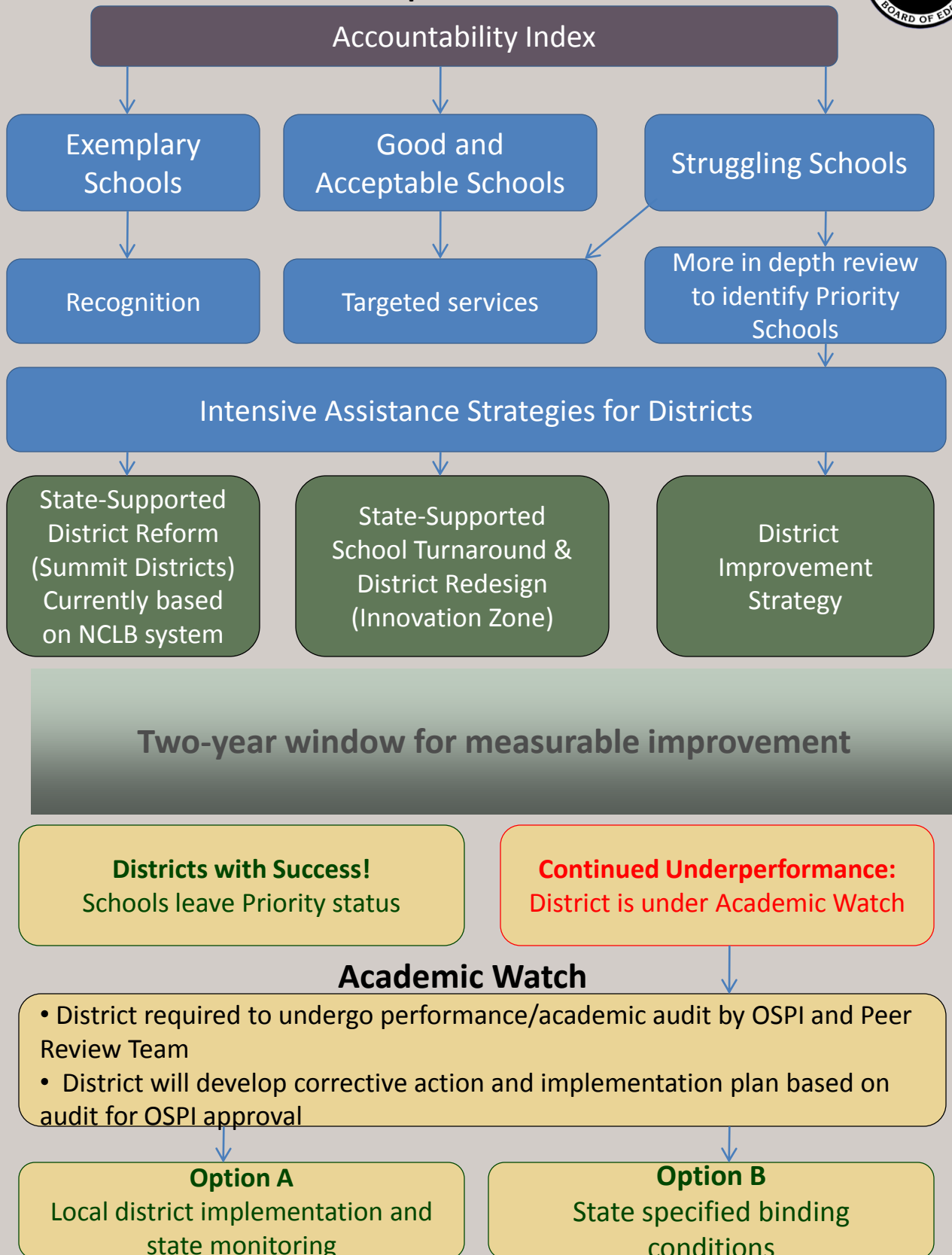
In the interests of ensuring that all students in our state have access to a quality education, the Board will adopt the System Performance Accountability Policy Framework as follows:

1. Motion to adopt the general concepts of a system performance accountability policy framework, per this document, consisting of the guiding principles, found on the second page of this document, and: a) the accountability index; b) preventive, proactive assistance to all districts and schools; c) intensive assistance strategies for districts with one or more Priority Schools, and d) an "Academic Watch" for those districts with Priority Schools that continue not to improve student achievement using Option A or Option B (pick one) as outlined under "Academic Watch."
2. Direct SBE staff to work with OSPI on:
 - a. Refining the overall accountability index through:
 - i. A unified accountability system which creates a coherent system between the current NCLB system and the proposed SBE accountability index.
 - ii. Continued refinement of the draft accountability index that includes different weights assigned to indicators, additional data items such as, but not limited to, the number of cells a school misses Annual Yearly Progress and the percent of college/work ready courses high school students take.
 - iii. A request for national experts to review the SBE proposed accountability index to determine if it measures the achievement and improvement the Board intends.
 - iv. A review of achievement for different subgroups in the non-struggling tiers and recommending ways to address those gaps.
 - v. A request that the Federal government replace its current NCLB system with the state's proposed statewide accountability system.

- b. Refining the recognition system to:
 - i. Define a clear purpose for recognition that encourages schools to continue to make significant and sustained improvements that meet certain achievement levels.
 - ii. Coordinate the SBE proposed accountability index, with the current OSPI schools of distinction process, to determine and ensure a coherent system to identify districts and schools for recognition.
- c. Creating the necessary administrative structures between OSPI and the SBE to carry out the concepts for this new statewide accountability system to:
 - i. Ensure a system of program supports for continuous improvement of student achievement for all schools by identifying practices, policies, and tools necessary to assist and hold districts accountable for closing the achievement gap for students of poverty and color.
 - ii. Refine the continuum of programs available to schools and districts for targeted and intensive assistance, including the SBE-proposed Innovation Zone.
 - iii. Define the specific processes needed to move forward under the Academic Watch under Option A or Option B or an additional Option to be defined by Board members (pick one).
 - iv. Examine ways to address the needs of alternative education schools under the new accountability system.
- d. Defining the resources needed to implement the new statewide accountability system for the state and local districts.
- e. Providing periodic updates to the Board with a final report on the Accountability Index by June 30, 2009, and a final report on the recognition system and administrative structures and resources needed by October 15, 2009.

All Students Deserve a High Quality Education

Continuous Improvement for All Schools



Executive Summary

Updated Recommendations to the State Board of Education for a New State Accountability Index

November 5, 2008

Pete Bylsma, EdD, MPA

CREATING THE ACCOUNTABILITY INDEX

The legislature requires the State Board of Education to develop a statewide accountability system that will help improve academic performance among all students in the state. Part of that requirement is to identify schools and districts for recognition and for receiving additional state support. To meet this requirement, the Board has developed an accountability index to sort schools and districts into different “tiers” based on multiple measures. Schools and districts in most need are given “Priority” status, making them eligible to receive more significant support. These Priority schools and districts would be required to participate in a state system of support if initial offers of more support are not accepted and substantial improvement does not occur after two years.

Several principles have guided the development of the system. The accountability system will (1) be transparent and simple to understand, (2) use existing data, (3) rely on multiple measures, (4) include assessment results from all grades and subjects tested statewide, (5) use concepts of the federal No Child Left Behind Act (NCLB) and its Adequate Yearly Progress (AYP) system when appropriate, (6) be fair, reasonable, and consistent, (7) be valid and accurate, (8) focus at both the school and district levels, (9) apply to as many schools and districts as possible, (10) use familiar concepts when possible, (11) rely mainly on criterion-referenced measures instead of norm-referenced measures; and (12) provide multiple ways to reward success.

The proposed index is based on how schools and districts perform on a set of five outcomes and four indicators. The five outcomes are the results of state assessments in four subjects (reading, writing, mathematics, science) and the “extended” graduation rate (for high schools and districts). These five outcomes are examined using four indicators: (1) achievement for all students, (2) achievement of low-income students, (3) achievement of all students compared to similar schools (controlling for the percentage of students who are learning English, have a disability, live in low-income homes, and are mobile), and (4) improvement. The results of the 20 measures form a matrix as shown in Table 1.

Table 1: Accountability Matrix

INDICATORS	OUTCOMES				
	Reading	Writing	Math	Science	Ext. Grad. Rate
Achievement					
Ach. of low-inc.					
Ach. vs. peers					
Improvement					

Each cell of the matrix is rated on a 5-point scale (from 0 to 4) using fixed benchmarks. Each of the four subjects is rated using the same set of benchmarks across the entire school (i.e., all subjects have the same set of benchmarks, and the assessment results are the aggregate totals for all the tested grades). **The index is the simple average of all 20 ratings.** The index ranges from 0.0 to 4.0 and is a number similar to a GPA where 4.0 is the highest score. Table 2 shows how each of the five outcomes are measured using the four indicators and the benchmarks that produce the ratings. Tier assignments are determined based on the index score. Schools and districts would fall into four tiers, with an in-depth analysis of the data and conditions of those in the lowest tier to see if they merit being placed in a fifth (Priority) tier.

Table 2: Benchmarks and Ratings for Outcomes and Indicators

	READING	WRITING	MATH	SCIENCE	EXT. GRAD. RATE ¹	
ACHIEVEMENT (ALL STUDENTS)	<u>% MET STANDARD</u>		<u>RATING</u>		<u>RATE</u>	<u>RATING</u>
	86-100%		4		> 95	4
	70-85.9%		3		85-94.9%	3
ACHIEVEMENT (LOW INCOME)	55-69.9%		2		75-84.9%	2
	40-54.9%		1		65-74.9%	1
	< 40%		0		< 65%	0
ACHIEVEMENT VS. PEERS²	<u>DIFFERENCE IN LEARNING INDEX</u>		<u>RATING</u>		<u>DIFFERENCE IN RATE</u>	<u>RATING</u>
	> .20		4		> 12	4
	.10 to .20		3		5.01 to 12	3
	-.099 to .099		2		-5 to 5	2
	-.20 to -.10		1		-5.01 to -12	1
	< -.20		0		< 12	0
IMPROVEMENT³	<u>CHANGE IN LEARNING INDEX</u>		<u>RATING</u>		<u>CHANGE IN RATE</u>	<u>RATING</u>
	> .12		4		> 6	4
	.05 to .12		3		3.01 to 6	3
	-.05 to .05		2		-3 to 3	2
	-.051 to -.12		1		-3.01 to -6	1
	< -.12		0		< -6	0

Note: Assessment results include both WASL and WAAS results.

¹ This outcome only applies to schools and districts that are authorized to graduate students.

² This indicator adjusts the outcomes using statistical methods (multiple regression) to control for four student characteristics beyond a school's control: the percentage of low-income, ELL, special education, and mobile students. (Mobile students are those who are not continuously enrolled from October 1 through the testing period.) Scores are the difference between the actual level and the predicted level. Scores above 0 are "beating the odds" and negative scores are below the predicted level. Separate analyses are conducted for each of the four assessments for each type of school (elementary, middle, high).

³ Measured in terms of the change from the previous year.

INITIAL RESULTS

Table 3 shows the ranges for the tier assignments and the number of schools and districts that would have been placed in each tier in 2007 using the above criteria.

Table 3: Tier Ranges and Preliminary Results (2007)

Tier	Index Range	Percent of Schools	Percent of Districts
Exemplary	3.00 – 4.00	4%	1%
Good	2.00 – 2.99	32%	35%
Acceptable	1.00 – 1.99	51%	59%
Struggling	0.00 – 0.99	13%	5%
Priority (eligible for Innovation Zone) ¹	0.00 – 0.99	TBD	TBD

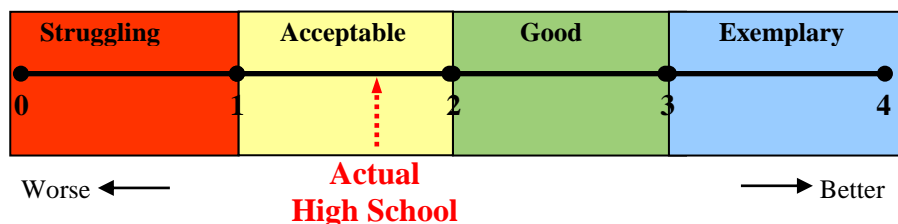
¹ Those in this tier would be determined after an in-depth analysis of their data and local conditions.

About 40% of the schools in “struggling” tier were alternative schools or served other special populations. Schools in this tier had a total enrollment of about 83,000 students, with about 70,000 attending “regular” schools. About 10% of the schools in the state had a 2-year average index below 1.00; about 5% of the schools statewide were “regular” schools with a 2-year average index below 1.00 (total enrollment was about 50,500 students). Fewer districts were in the exemplary and struggling tiers compared to the school results. However, 22 districts had at least two regular schools with a 2-year index average below 1.00, and eight districts had at least four regular schools with a 2-year index average below 1.00.

Table 4 provides an example of the ratings for an actual high school and how the average of the individual ratings generates the index/tier assignment. The school’s average rating of 1.65 is the index score, which puts the school in the middle of the “acceptable” tier. The index is shown graphically relative to the entire continuum. Tiers and average ratings are color-coded to correspond with the colors used for the WASL levels shown on the OSPI Web site. A set of “stars” indicate the rating so the overall results can be seen at a glance. These types of results could be made public on the Web site (the format for presenting the results must still be determined). Results presented in this “dashboard” give policymakers, educators, and the public a quick snapshot of where a school is strong and weak, its overall rating, and where it falls within the tier. It also provides transparency about how the index number is determined.

Table 4: “Actual” High School, 2007

Indicator	Reading	Writing	Math	Science	Grad Rate	Average
Achievement	3	3	1	0	3	2.00
Low-inc. ach.	2	2	0	0	4	1.60
Ach. vs. peers	1	1	1	1	3	1.40
Improvement	0	2	0	2	4	1.60
Average	1.50	2.00	0.50	0.75	3.50	1.65
Achievement	***	***	*		***	
Low-inc. ach.	**	**			****	
Ach. vs. peers	*	*	*		***	
Improvement		*		**	****	



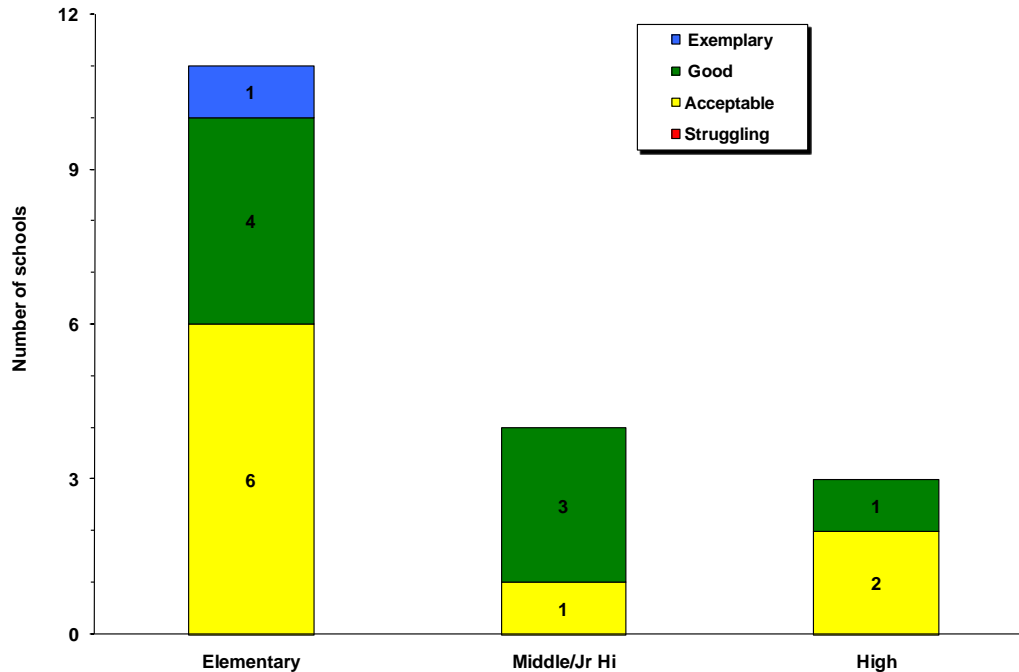
The proposed system holds *districts* accountable using the same indicators, outcomes, and criteria that are used for schools. The results are based on districtwide data for all grades rather than being disaggregated by grade bands (elementary, middle, high). In addition, financial data are used in the “peers” analysis to control for the amount of total operating expenditures per pupil (adjusted for student need). A deeper analyses would also occur for districts that have an index number in the “struggling” tier to determine if they merit receiving extra support.

Other tables and charts can illustrate school and district results as well. Table 5 shows how all the results can be shown across multiple years for a hypothetical district (data in shaded cells are not available). In addition, Figure 1 shows the distribution of the *number of schools* by tier for an actual district. These are examples of how results could be displayed. The actual methods for displaying the results must still be determined.

Table 5: Showing Longitudinal District Results (All Grades)

	YEAR			
<i>Indicator/Outcome</i>	2004	2005	2006	2007
Achievement	1.25	1.25	1.60	1.60
Reading	**	***	***	***
Writing	**	**	**	***
Math	*	*	*	**
Science				
Grad. rate	NA	**	**	**
Low-income ach.	0.50	0.80	1.00	1.20
Reading	*	**	**	**
Writing	*	*	**	**
Math				*
Science				
Grad. rate	NA	*	*	*
Ach. vs. peers	2.00	2.00	2.00	2.00
Reading	**	**	**	**
Writing	**	**	**	**
Math	**	**	**	**
Science	**	**	**	**
Grad. rate	NA	**	**	**
Improvement	3.67	3.25	2.60	1.80
Reading	*****	*****	**	**
Writing	NA	***	*****	**
Math	*****	***	**	**
Science	***	***	**	**
Grad. rate	NA	NA	***	*
INDEX	1.73	1.84	1.80	1.75

Figure 1: Distribution of *Schools* by Grade Level and Tier in “Actual” District



The proposed system does not include AYP results generated for NCLB. Feedback from all the stakeholders revealed a lack of confidence in the validity of AYP results for accountability purposes. The proposed system is not only more valid and transparent for accountability purposes, but it is more inclusive than the federal system because it includes both writing and science, uses a smaller minimum number for reporting (10 students across the entire school/district), and includes the results of all students, regardless of how long they have been attending school or district. It also combines results across all grades, which reduces the volatility of the results over time.

IDENTIFYING “PRIORITY” SCHOOLS AND DISTRICTS (LOWEST TIER)

Various quantitative and qualitative data will be used to determine which schools and districts that fall in the “struggling” tier should be placed in the “Priority” tier and be eligible to receive significant support. The data fall in four categories.

- **Contextual Data:**
 - Type of school
 - Changes in student population
 - Programs served by the school
 - Level of student mobility
- **Assessment Results (WASL/WAAS/WLPT)**
 - Trends over multiple years for each subject area
 - Subgroup trends
 - Results for students who have been enrolled for at least two years
- **AYP Results:**
 - Distance from the annual goal
 - Type of cells not making AYP
 - Percentage of cells not making AYP

- **Other Data:**

- Graduation and dropout rates for subgroups
- Student/teacher ratio
- Teacher education and experience levels
- Funding from local levies/bonds and outside sources
- Recent changes in leadership (key central office staff and principals) and teachers

Each year, the process would begin when OSPI computes the index using the most recent data and prepares a set of preliminary results. Given the relatively large number of schools that may fall into the “struggling” tier,¹ the schools must be screened to eliminate those that clearly should not fall into the Priority tier. This will reduce the number of schools and districts that require a deeper analysis. OSPI staff would review the index results for each school and district in the “struggling” tier and sort them into two categories:

- (1) Schools/districts that *remain in the struggling tier* are those that have not been in this tier in the past two years or have obvious data problems that affected their results (e.g., errors in reporting the number of graduates, missing data for ELL, special education, and low income students that can affect the results of the “peers”).
- (2) The remaining schools/districts are placed in a *possible Priority tier* category pending a deeper analysis.

OSPI staff will conduct a deeper analysis using available data for the schools and districts placed in the possible Priority tier category. This may require contacting the district and/or local ESD to get more information. Based on this review, the schools and districts are sorted again into the same two categories. Those placed in the possible Priority tier are notified of the possible designation and given the reasons why designation is possible. The district/school is given a chance to avoid the Priority designation by providing more information, including what explains the low index results. Appeal would then be made to OSPI with local school board approval. OSPI would review the additional information, and then recommend a final Priority list to the State Board of Education for review and approval.

INTEGRATING THE SYSTEMS

Federal law requires states to have a single accountability system. Many states combine their state accountability system with the federal NCLB system. Washington state can pursue two options to meet this requirement.

1. The preferred approach is to request that the state system be used in place of the current federal system. A new administration may provide more flexibility to states that design alternative systems. The proposed system has many desirable features that could make it a viable alternative to the current rules used to measure AYP.
2. If Washington is not allowed to use the proposed system to replace the current AYP system, the results of the index calculations will still be used to help determine the type of assistance the state provides. Those in “improvement” status under AYP would still face the federally required sanctions. Schools with relatively favorable index results that do not make AYP and fall into school improvement will receive minimal assistance from the state. In addition, some schools will make AYP and not be in school improvement, but they still have relatively low

¹ The number will still be far fewer than those not making AYP or identified for “improvement” under NCLB.

index results. (This happens most often in small schools that have less than 30 continuously enrolled students in a grade band.) In these cases, state funds can be used to focus assistance in the areas of greatest need.

If two systems coexist, the state will clarify what happens when schools and districts fall into the various AYP categories and state tiers in order to minimize any confusion that could occur about the two ways for measuring accountability.

RECOGNITION

The Board intends to provide recognition based on sustained exemplary performance. The accountability system will provide multiple ways to reward success and will rely on criterion-referenced measures using the results from the accountability matrix. Three options should be considered: providing recognition for (1) each of the 30 cells of the matrix, (2) the 20 “inner” cells of the matrix, and (3) the 10 “average” cells of the matrix. Advisors recommended providing recognition in all 30 cells based on the belief that people are motivated to improve the most when they can experience success. A minimum rating of 3.00 is required to receive recognition in the 20 “inner” cells, and a minimum of 2.75 rating is needed to receive recognition for the “averaged” cells (see Table 6). Any cell with a 3.5 or above would receive recognition “with honors.” The ratings will be calculated every year, and recognition is given when the two-year average rating meets the minimum requirement.

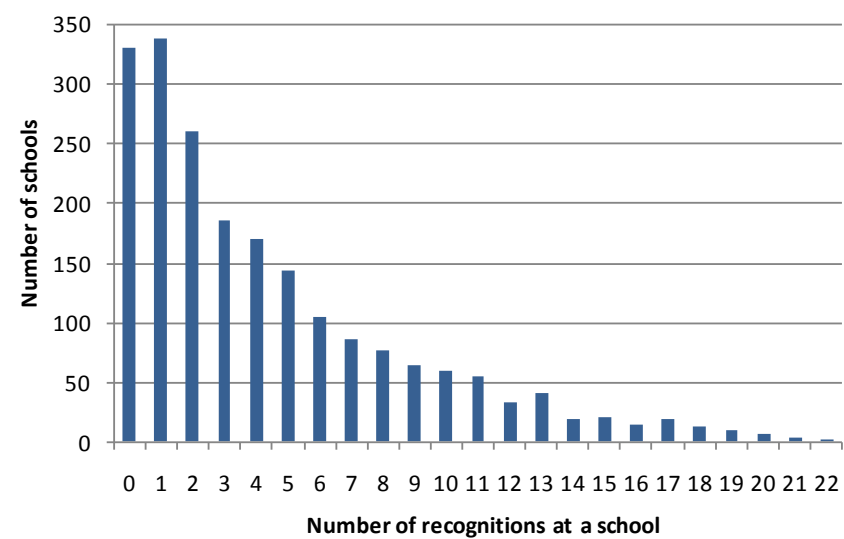
Table 6: Minimum Requirements for Recognition**

Indicator	Reading	Writing	Math	Science	Grad Rate	Average
Achievement	3.00	3.00	3.00	3.00	3.00	2.75
Ach. vs. peers	3.00	3.00	3.00	3.00	3.00	2.75
Improvement	3.00	3.00	3.00	3.00	3.00	2.75
Low-inc. ach.	3.00	3.00	3.00	3.00	3.00	2.75
Average	2.75	2.75	2.75	2.75	2.75	2.75

**Any cell of the matrix with a 2-year average rating of 3.50 or above would be recognized “with honor.”

Figure 2 shows the number of schools that would have received awards if the proposed system was in place in 2007 and all 30 cells were eligible to receive recognition. The largest number of schools would have received recognition in just one or two of the 30 areas, and 16% would not have received any recognition. At the other extreme, about 14% of schools would have received recognition in 10 or more areas, and 2 schools would have received recognition in 22 of the 30 cells of the matrix. The largest number of schools (52% of 2,046 schools) met the criteria for reading achievement. Achievement in math, science, and among low-income students had fewer schools meeting the criteria. Only 4% had an overall average of 2.75 on the accountability index over the 2-year period. Of the schools that had a 2-year index average of less than 1.00 (the “struggling” tier), 64% would not have received any recognition in any of the 30 cells, and the remaining schools averaged only one area of recognition among the 30 possible cells (it was nearly always an “improvement” cell that had a 2-year average that met the minimum criteria).

Figure 2: Number of Schools of Distinction, by Number of Recognitions (2007)



This system of recognition will supplement and could replace some types of recognition currently in place. The federal government provides funding for three awards, primarily for schools receiving Title I funds. OSPI also provides awards for improvement but no extra funding as part of its recognition. Schools and districts that receive recognition in the proposed system will not be compensated monetarily, although exceptions could be made. In its compensation proposal to the Basic Education Finance Task Force, OSPI recommended that schoolwide financial rewards be given each year when a school reaches a certain sustained level of improvement. The improvement dimension of the proposed recognition system could be used as a basis for these rewards. For example, schools that have an average of at least 3.0 for overall improvement could be given a schoolwide financial bonus. In 2007, about 8% of the schools statewide would have qualified for this bonus.

* * * * *

The proposed accountability system will need to remain flexible to adapt to changes in NCLB and graduation requirements, the assessment system, and other factors that may impact the results. Moreover, a number of issues must still be resolved before the index can be implemented effectively. For example, further review of the results should occur to ensure the index measures the achievement and improvement the Board intends. Various OSPI and State Board activities need to be integrated and aligned with one another to avoid duplication and confusion (e.g., how the index relates to NCLB requirements, how to use the index to identify Priority schools and districts, how and when assistance and recognition occur, how index results are represented and made available to the public). Further study is needed to ensure alternative schools and other “buildings” that serve populations with special needs are held accountable in appropriate ways. Finally, the method for measuring improvement needs to be reviewed, particularly when a school is already achieving at very high levels or far above its peers.

Updated Recommendations
to the
State Board of Education
for a
New State Accountability Index

November 5, 2008

Pete Bylsma, EdD, MPA

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BACKGROUND

The legislature requires the State Board of Education to develop a statewide accountability system that will help improve academic performance among all students in the state. Part of that requirement is to identify schools and districts for recognition and for receiving additional state support. To meet this requirement, the Board is developing an accountability index to sort schools and districts into different “tiers” based on multiple factors. Various stakeholders and advisors have provided input and feedback about the proposed index and the data that can be used to help identify “Priority” schools and districts in most need. (Mass Insight is designing a system to support the schools and districts in most need, and this system will be aligned with the system of support that OSPI offers.) This document provides the initial recommendations for the index and information about identifying Priority schools and districts.

A set of principles guided the development of the accountability index. Specifically, the index will:

- Be transparent and simple to understand;
- Use existing data;
- Rely on multiple measures;
- Include assessment results from all grades (3-8, 10) and subjects tested statewide (reading, writing, mathematics, science);
- Incorporate concepts of the federal No Child Left Behind (NCLB) Act and its Adequate Yearly Progress (AYP) system when appropriate;
- Be fair, reasonable, and consistent;
- Be valid and accurate;
- Focus at both the school and district levels;
- Apply to as many schools and districts as possible;
- Use familiar concepts when possible;
- Rely mainly on criterion-referenced measures instead of norm-referenced measures; and
- Provide multiple ways to reward success.

Three assumptions were made during the development of the index.

- Priority schools and districts should be those that are the most challenged in the state – they should meet a “common sense” test as those needing the most support.
- Priority schools and districts would be eligible to receive additional resources to make dramatic improvement in student outcomes through an initiative such as that being developed by Mass Insight. Criteria to be met to receive this support will be specified by the State Board of Education.
- Priority schools and districts would be required to participate in a state-supported initiative, as described by the system being designed by Mass Insight, if offers of additional support are not accepted and substantial improvement does not occur after two years.

ACCOUNTABILITY INDEX

The proposed index is based on how schools and districts perform on a set of outcomes and indicators. Specifically, the recommended index uses a matrix of five outcomes and four indicators. The five outcomes are: the results of state assessments in four subjects (reading, writing, mathematics, science) and the “extended” graduation rate (for high schools and districts). These five outcomes are measured using four indicators: (1) achievement, (2) achievement of students from low-income families, (3) achievement compared to peers (the predicted level controlling for four student characteristics—special education, ELL, low income, and mobility), and (4) improvement. This results in 20 measures, forming the matrix in Table 1.

Table 1: Matrix of Accountability Measures

	OUTCOMES				
INDICATORS	Reading	Writing	Math	Science	Ext. grad. rate
Achievement					
Ach. of low-inc.					
Ach. vs. peers					
Improvement					

Each cell of the matrix is rated on a 5-point scale (0-4) using a set of fixed benchmarks. These benchmarks reflect the performance in each cell, with 4 being the best outcome. Each of the four subjects is rated using the same set of benchmarks across the entire school (i.e., all subjects have the same set of benchmarks and the assessment results are the aggregate totals for all the tested grades). **The index is the simple average of all 20 ratings.** The higher the index, the better the level of performance of the school/district.

Table 2 shows the four indicators, the five outcomes, and the benchmarks that produce the various ratings. The index ranges from 0.0 to 4.0 and is a number similar to a GPA where 4.0 is the highest score. This numbering scheme also reflects the same system used to describe the levels of performance on the WASL (Levels 0-4). The Learning Index is used to measure the assessment outcome for two indicators: *achievement compared to peer schools* and *improvement*. This index (not to be confused with the accountability index) takes into consideration the percentage of students performing at the five different WASL levels, not just those meeting standard. The Learning Index ranges from 0 to 4, with 4.00 the highest score (similar to a grade point average). This index is explained in detail in Appendix A.

Table 2: Benchmarks and Ratings for Outcomes and Indicators

	READING	WRITING	MATH	SCIENCE	EXT. GRAD. RATE ¹	
ACHIEVEMENT (ALL STUDENTS)	<u>% MET STANDARD</u>		<u>RATING</u>		<u>RATE</u>	<u>RATING</u>
	86-100%		4		> 95	4
	70-85.9%		3		85-94.9%	3
ACHIEVEMENT (LOW INCOME)	55-69.9%		2		75-84.9%	2
	40-54.9%		1		65-74.9%	1
	< 40%		0		< 65%	0
ACHIEVEMENT VS. PEERS²	<u>DIFFERENCE IN LEARNING INDEX</u>		<u>RATING</u>		<u>DIFFERENCE IN RATE</u>	<u>RATING</u>
	> .20		4		> 12	4
	.10 to .20		3		5.01 to 12	3
	-.099 to .099		2		-5 to 5	2
	-.20 to -.10		1		-5.01 to -12	1
	< -.20		0		< 12	0
IMPROVEMENT³	<u>CHANGE IN LEARNING INDEX</u>		<u>RATING</u>		<u>CHANGE IN RATE</u>	<u>RATING</u>
	> .12		4		> 6	4
	.05 to .12		3		3.01 to 6	3
	-.05 to .05		2		-3 to 3	2
	-.051 to -.12		1		-3.01 to -6	1
	< -.12		0		< -6	0

Note: Assessment-related results are the combined results of both the WASL and WAAS from all grades.

¹ This outcome only applies to schools and districts that are authorized to graduate students.

² This indicator adjusts the outcomes using statistical methods (multiple regression) to control for four student characteristics beyond a school's control: the percentage of low-income, ELL, special education, and mobile students. (Mobile students are those who are not continuously enrolled from October 1 through the testing period.) Scores are the difference between the actual level and the predicted level. Scores above 0 are "beating the odds" and negative scores are below the predicted level. Separate analyses are conducted for each of the four assessments for each type of school (elementary, middle, high).

³ Measured in terms of the change from the previous year.

The proposed system does not include AYP results generated for NCLB. Feedback from the advisors, members of the Board, and other stakeholders showed a lack of confidence in the validity of AYP results for accountability purposes. The proposed system is more inclusive than the federal system because it includes both writing and science, uses a smaller minimum number for reporting (10 students across the entire school/district), and includes the results of all students, regardless of how long they have been attending school. Nevertheless, various stakeholders believe AYP results still have a role in the state accountability system because (1) the law will likely remain in effect for several more years and AYP results must be calculated, (2) the disaggregation of results by subgroups provides additional details that provide deeper insights into the level of student learning taking place in schools and districts and at individual grade levels, and (3) federal law requires a single accountability system, which means AYP results need to be included in some way. As a result, the proposed system uses AYP results as one source of data to identify Priority schools and districts once initial index numbers are computed.

Tier assignments are determined based on the index score. Schools and districts would initially fall into four tiers based on their accountability index score, with an in-depth analysis of the data and conditions of those in the “struggling” tier to determine if they merit being placed in a fifth (Priority) tier and be eligible to receive more intensive support. The 5-tier system provides sufficient differentiation among schools and districts.

Table 3 shows the suggested ranges for the 5-tier system, along with a descriptive name. The index and tier can be made available in a “report card” for use by policymakers and the public, with a set of “stars” indicating the rating so the overall results can be seen at a glance. This intuitive rating symbolism is used in other settings (e.g., rating movies, restaurants, athletes, tourist attractions) and does not require much interpretation. Table 3 also shows the distribution of schools using the criteria shown in Table 2 and data from 2007. A total of 2,046 schools had an index score.

Table 3: Tier Ranges and 2007 Results (N=2,046)

Tier	Index Range	Number of Schools	Percent of Schools
Exemplary	3.00 – 4.00	72	3.5%
Good	2.00 – 2.99	664	32.5%
Acceptable	1.00 – 1.99	1,043	51.0%
Struggling	0.00 – 0.99	267	13.0%
Priority (eligible for Innovation Zone) ¹	0.00 – 0.99	TBD	TBD

¹Schools and districts in the lowest tier would be determined after an in-depth analysis of quantitative and qualitative information.

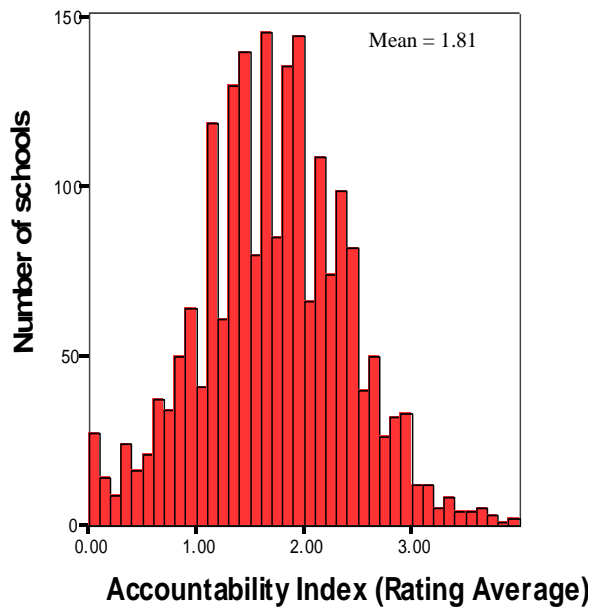
About 83,000 students were enrolled in the 267 schools in the struggling tier in 2007 (about 8.3% of all students statewide). Of these 267 schools, 103 (39% of this group) were alternative schools or served other special student populations. About 70,500 students attended the 164 “regular” schools that were in this tier.

Of the 267 schools in the struggling tier, 209 had a 2-year index average of less than 1.00. These 209 schools enrolled approximately 60,200 students. Of the 209 schools, 114 (55%) were “regular” schools that enrolled approximately 50,500 students (about 5% of the statewide student population). There were 22 districts that had at least two regular schools with a 2-year index average of less than 1.00, and eight districts had at least four regular schools with a 2-year index below 1.00.

Figure 1 shows the index distribution for the 2,046 schools in the analysis based on data in school year 2006-07. There was little difference in the distribution of schools based on their grades served (i.e., elementary, middle, high).¹

¹ Only one regular high school that had a 2-year average index of less than 1.00.

Figure 1: Distribution of Schools by Index Score, 2007**



** All the schools with an index of 0.00 served special populations (correctional facilities, alternative schools, dropout recovery programs), and most had fewer than 10 assessed students so their results would not be reported. The lowest index for a regular school was 0.13, but this school made substantial gains in 2008.

Tables 4 and 5 give examples of how the individual ratings generate the index/tier assignment for two actual schools using results available from 2007. The schools' final index is shown graphically relative to the entire continuum. The tiers and average ratings are noted in colors that correspond to the colors used for the WASL levels on the OSPI Report Card. The results could be made public as part of the OSPI Report Card (the format of the presentation must still be determined). Results presented in this type of "dashboard" give policymakers, educators, and the public a quick snapshot of where a school is strong and weak, its overall rating, and where it falls within the tier. It also provides transparency about how the index number is determined.

- The *high school* described in Table 4 is located in a medium-sized suburb of a large city with fewer low-income students than the typical high school in the state. Its WASL scores had been about the state average in most subjects but both reading and math scores dropped dramatically from 2006 levels. Like many high schools, it has low math and science scores. It also has lower scores than high schools serving similar students, and the performance of its low-income students was below that of "all" students in three subjects. Its graduation rate is fairly high, even when compared to its peers, the rate improved substantially from the previous year, and surprisingly, low-income students had a higher rate than the "all" students rate. Its index of 1.65 puts it close to the middle of the "acceptable" tier, which is probably worse than educators and community members expected.
- The *elementary school* described in Table 5 is located in a medium-sized city with above-average levels of low-income, ELL, and mobile students. Its WASL scores are well above the state average in several grades but below the state average in one grade. It had sharp declines from very high WASL scores the previous year, resulting in low improvement ratings in 3 subjects. Its reading and writing scores are still quite high and its scores are

very high compared to schools serving similar students. Low-income students had the same rating as “all” students in three subjects but were lower in writing. The graduation rate does not apply. Its index of 2.13 is slightly above the middle of the index scale and in the lower end of the “good” tier.

Table 4: “Actual” High School, 2007

Indicator	Reading	Writing	Math	Science	Grad Rate	Average
Achievement	3	3	1	0	3	2.00
Low-inc. ach.	2	2	0	0	4	1.60
Ach. vs. peers	1	1	1	1	3	1.40
Improvement	0	2	0	2	4	1.60
Average	1.50	2.00	0.50	0.75	3.50	1.65
Achievement	***	***	*		***	
Low-inc. ach.	**	**			****	
Ach. vs. peers	*	*	*		***	
Improvement		*		**	****	

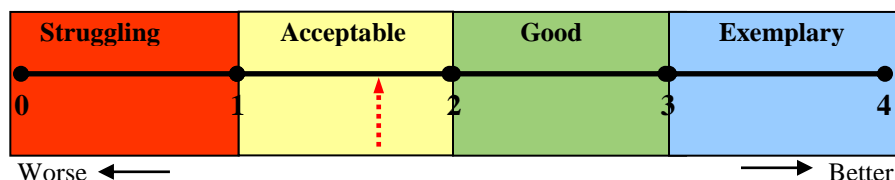
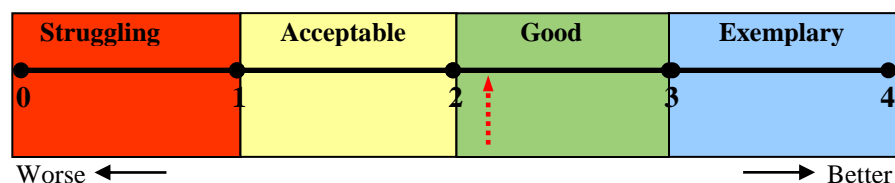


Table 5: “Actual” Elementary School, 2007

Indicator	Reading	Writing	Math	Science	Grad Rate	Average
Achievement	3	3	2	0		2.00
Low-inc. ach.	3	2	2	0		1.75
Ach. vs. peers	4	4	4	3		3.75
Improvement	0	2	1	1		1.00
Average	2.50	2.75	2.25	1.00		2.13
Achievement	***	***	**			
Low-inc. ach.	***	**	**			
Ach. vs. peers	****	****	****	**		
Improvement		*	**	*		



DISTRICT ACCOUNTABILITY

The proposed system would hold districts accountable using the same rules, indicators, and outcomes that are used for school accountability. The results would be based on districtwide data for all grades rather than being disaggregated by grade bands (elementary, middle, high). District results are more likely to be made public when using the combined results for all

grades—only five extremely small districts, with a combined total of 34 students, had fewer than 10 students in their tested grades in 2007. Financial data, which is available only at the district level on a consistent basis, is used the district-level “peer” analysis to control for the amount of total operating expenditures per pupil. The same type of deeper analyses would occur for districts that have an index number in the lowest tier in order to determine if they merit receiving extra support, just like the process used for schools. This closer look would also include examining the percentage of schools and number of students that are found in the lowest tier and the consistency of problems in a particular set of grade bands or subjects. Since more information is available at the district level, district accountability could include additional measures besides the 20 in the matrix. Moreover, other data could be used when analyzing districts and their peers, such as unemployment rates, crime rates, per capita income, and tax base if this information is available at the district level.

Various tables and charts can illustrate the district results. Table 6 and Figure 2 show how all the results for a district can be shown across multiple years to show trends over time. (State results are used, and the data in shaded cells of the table are not available.) Figure 3 shows the distribution of the *number of schools* by tier for an actual district. Figure 4 shows the *percentage of students* enrolled at those schools. (One alternative high school has relatively few students.)

Table 6: Showing Results Over Time (All Grades)

<i>Indicator/Outcome</i>	<i>YEAR</i>			
	2004	2005	2006	2007
Achievement	1.25	1.25	1.60	1.60
Reading	**	***	***	***
Writing	**	**	**	***
Math	*	*	*	**
Science				
Ext. grad. rate	NA	**	**	**
Low-income ach.	0.50	0.80	1.00	1.20
Reading	*	**	**	**
Writing	*	*	**	**
Math				*
Science				
Ext. grad. rate	NA	*	*	*
Ach. vs. peers¹	2.00	2.00	2.00	2.00
Reading	**	**	**	**
Writing	**	**	**	**
Math	**	**	**	**
Science	**	**	**	**
Ext. grad. rate	NA	**	**	**
Improvement	3.67	3.25	2.60	1.80
Reading	****	****	**	**
Writing	NA	***	****	**
Math	****	***	**	**
Science	***	***	**	**
Ext. grad. rate	NA	NA	***	*
INDEX	1.73	1.84	1.80	1.75

¹This indicator does not apply in this example (the state has no peer); a middle rating is given for all outcomes.

Figure 2: Average Ratings, 2003-2007

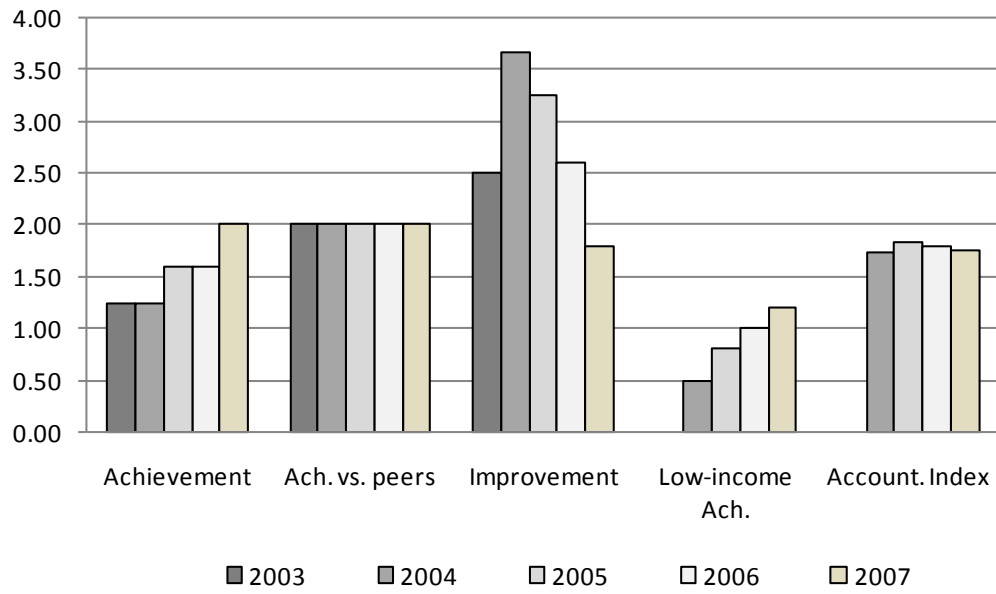


Figure 3: Distribution of *Schools* by Grade Level and Tier in “Actual” District

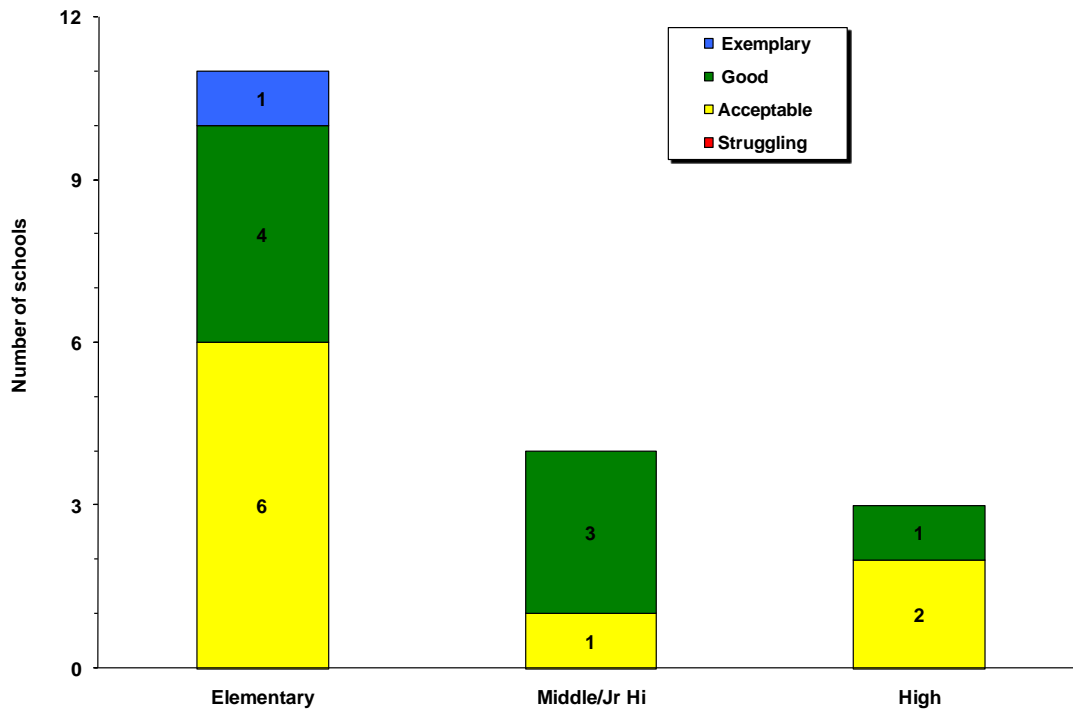


Figure 4: Distribution of *Students* by School Tiers and Grade Level in “Actual” District

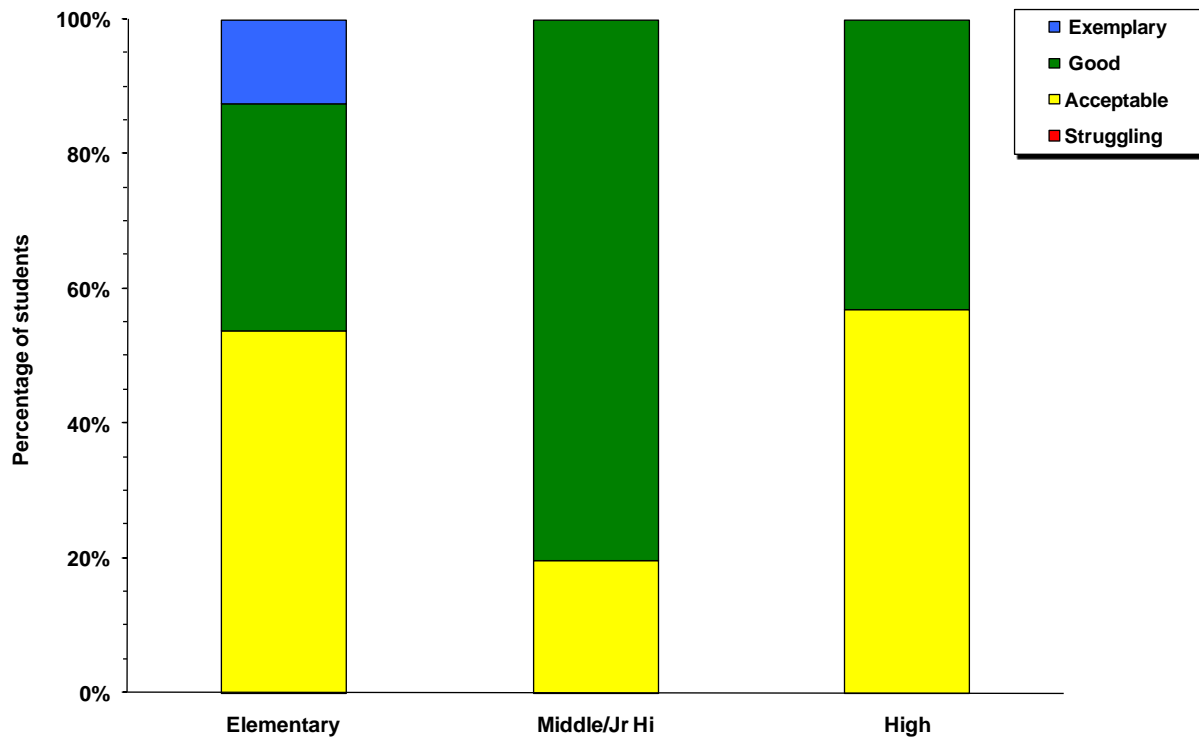


Table 7 shows the district results using the same criteria and rating system used for schools. Districts are more tightly clustered in the distribution than schools, with fewer districts in the top and bottom tiers (see Figure 5).² Figure 6 provides the distribution of all the district index results. Of the 16 districts in the “struggling” tier, the average size was about 1,000 students (the median was slightly more than 400 students). Half of the 16 districts made AYP in part because the AYP targets were relatively low in 2007, the margin of error is large for small districts, and many of the student groups in the smaller districts had fewer students than the required minimum to make an AYP determination. Figure 7 shows the results by county.

Table 7: Tier Ranges and 2007 Results for Districts (N=296)

Tier/Suggested Name	Index Range	Number of Districts	Percent of Districts
Exemplary	3.00 – 4.00	3	1.0%
Good	2.00 – 2.99	102	34.5%
Acceptable	1.00 – 1.99	175	59.1%
Struggling	0.00 – 0.99	16 ¹	5.4%
Priority (eligible for Innovation Zone)	0.00 – 0.99	TBD	TBD

¹About 16,100 students were enrolled in these districts (less than 2% of all students statewide). Only five districts had a 2-year average index below 1.00. These five districts had a total enrollment of 691 students (an average of 138 students).

² District results do not include correctional institutions, tribal schools, contract schools, and schools serving more than 50% of students outside the district boundary. The aggregation rules using in these calculations are the same as those used by OSPI when calculating district results. Results would not be published when the combined number of students assessed is less than 10.

Figure 5: Distribution of Districts by Index Score

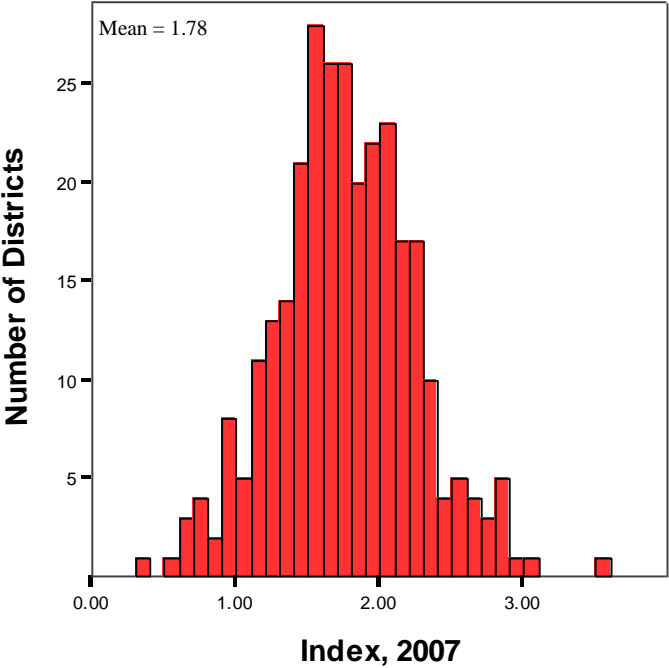


Figure 6: Distribution of Index Score by District, 2007

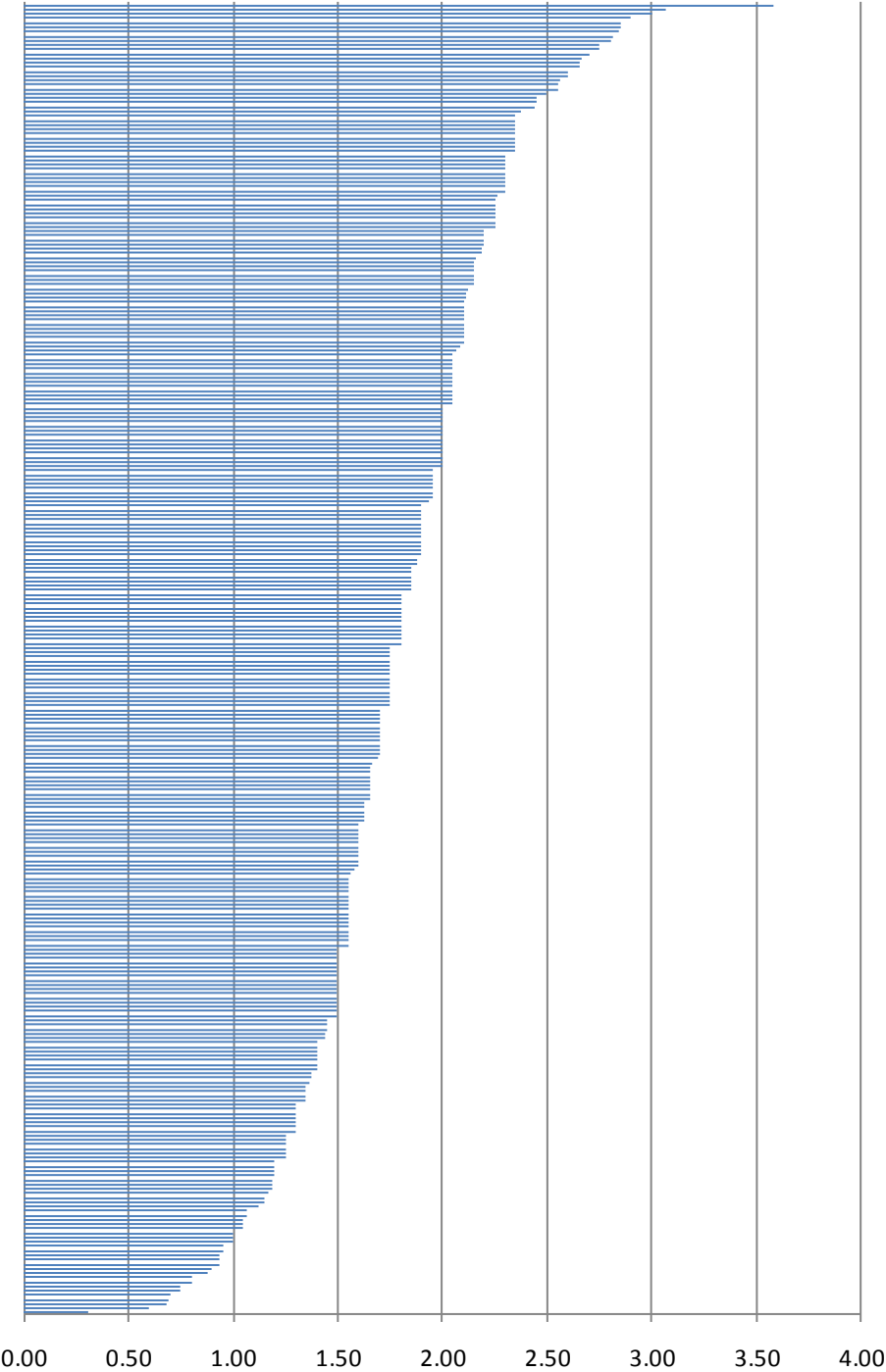
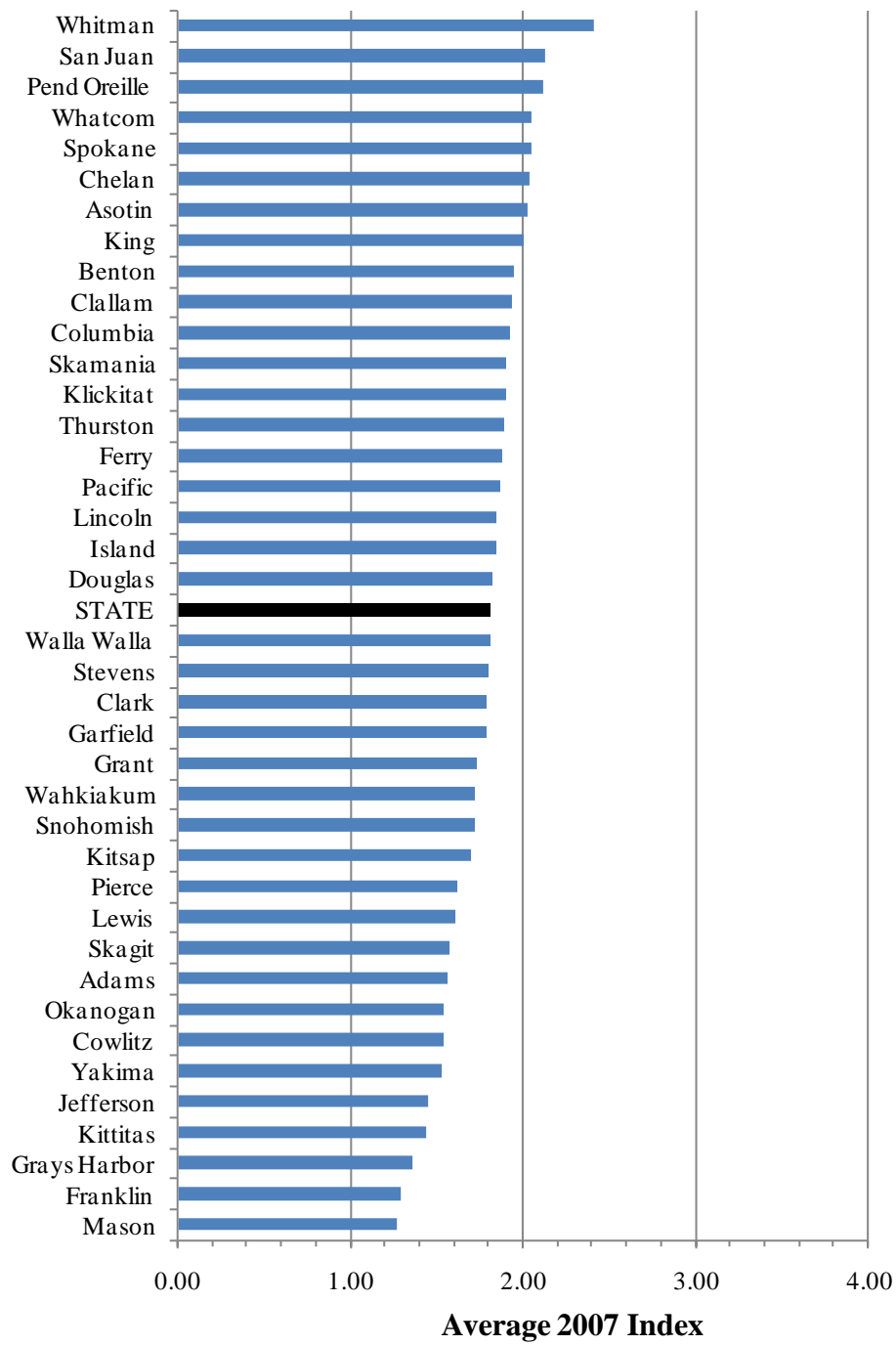


Figure 7: Distribution of Index Results by County, 2007



IDENTIFYING PRIORITY SCHOOLS AND DISTRICTS (LOWEST TIER)

Each year, the process for identifying Priority schools and districts will begin when OSPI computes the index in mid-August using the most recent data and prepares a set of preliminary results. Given the relatively large number of schools that may fall into the “struggling” tier,³ the schools must be screened to eliminate those that clearly should not fall into the Priority tier. This will reduce the number of schools and districts that require a deeper analysis. When OSPI and SBE staff are confident the index has been calculated correctly, OSPI staff will review the index results for each school and district that falls in the “struggling” tier, and then sort them into two categories:

- (1) Schools/districts that will *remain in the struggling tier* are those that have not been in this tier in the past two years or have obvious data problems that affected their results (e.g., errors in reporting the number of graduates, missing data for ELL, special education, and low income students that can affect the results of the “peers”).
- (2) The remaining schools/districts are placed in a *possible Priority tier* category pending further analysis.

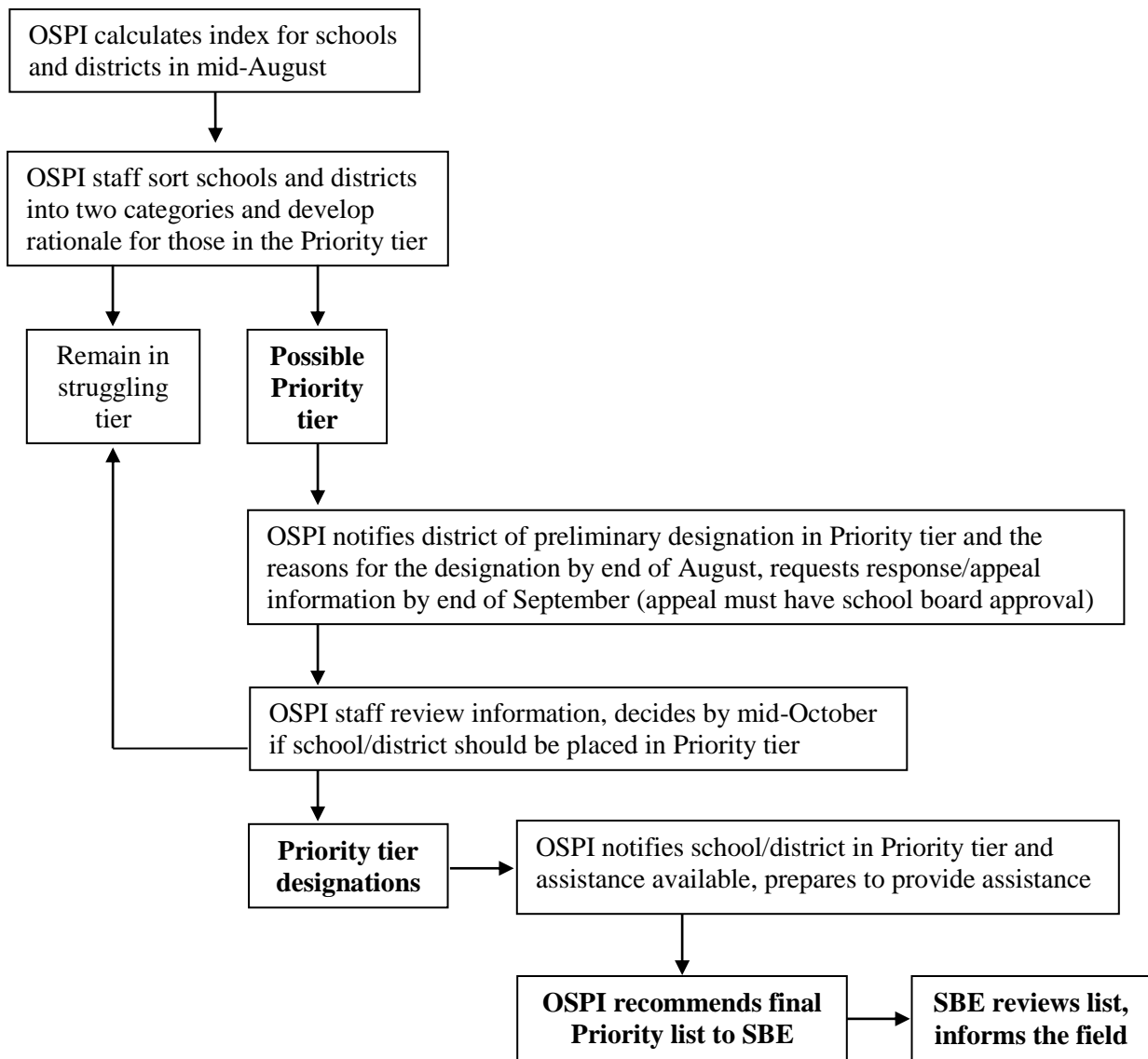
OSPI staff will conduct a deeper analysis using available data for the schools and districts placed in the *possible Priority tier* category. This may require contacting the district and/or local ESD to get more information. A comprehensive list of quantitative and qualitative data was developed that could be used to help determine which schools in the “struggling” tier will fall into the “Priority schools” tier (see Appendix B). Given the comprehensive nature of the list and the limited capacity to analyze all the data for every school and district in the “struggling” tier, the list was refined to determine which factors were the most important to analyze. The data that will be initially reviewed at this exploratory phase fall into four general areas:

- **Contextual Data:**
 - Type of school
 - Changes in student population
 - Programs served by the school
 - Level of student mobility
- **Assessment Results (WASL/WAAS/WLPT)**
 - Trends over multiple years for each subject area
 - Subgroup trends
 - Results for students who have been enrolled for at least two years
- **AYP Results:**
 - Distance from the annual goal
 - Type of cells not making AYP
 - Percentage of cells not making AYP
- **Other Data:**
 - Graduation and dropout rates for subgroups
 - Student/teacher ratio
 - Teacher education and experience levels
 - Funding from local levies/bonds and outside sources
 - Recent changes in leadership (key central office staff and principals) and teachers

³ The number will still be far fewer than those not making AYP or identified for “improvement” under NCLB.

Based on this review, the schools and districts will be sorted again into the same two categories—those that remain in the struggling tier and those in the *possible Priority tier*. By the end of August, districts and schools placed in the possible Priority tier are notified of the possible designation and the reasons why this designation is possible. If required by federal law, this initial list will be made public. During the month of September, the district/school is given a chance to avoid the Priority designation by providing more information that would explain the low index results, and it could provide more favorable results (e.g., feeder school information, results of district assessments, personnel changes, type of interventions made to date) and any plans being made for the future. Any appeal to OSPI will need to have local school board approval. OSPI will review the additional information, and by mid-October, it recommends to the State Board of Education the schools and districts that should be placed in the Priority tier. The State Board will review the list, receive comments, finalize the list, and inform the priority schools and districts about how they can respond to the designation. Figure 8 provides a flow chart of this process.

Figure 8: Process for Identifying Priority Schools and Districts



INTEGRATING THE SYSTEMS

Federal law requires states to have a single accountability system. Many states combine their state accountability system with the federal system described by NCLB. The details for integrating the federal and state system must still be determined. Washington can pursue two options to meet this requirement.

1. The preferred approach is to request that the proposed system, once adopted, be used in place of the current system. A new administration may provide more flexibility to states to design alternative accountability systems and approve them if they meet certain requirements. The proposed system has many desirable features that could make it a viable alternative to the current rules used to measure AYP.
2. If Washington is not allowed to use the proposed system to replace the current AYP system, the results from the accountability matrix will still be used when determining the type and level of assistance the state provides. Those that fall into “improvement” status under AYP will still face the federally required sanctions. However, schools that do not make AYP and fall into school improvement may achieve relatively favorable index results. In these cases, the amount of extra assistance the state provides will be minimal. On the other hand, some schools will make AYP and not be in school improvement, but they may have relatively low index results. In these cases, available state funds can be used to focus assistance in areas of greatest need. Regardless of the results from the two systems, the state will clarify what happens when schools and districts fall into the various AYP categories and state tiers and make every effort to minimize confusion that could occur about the two ways for measuring accountability. Appendix C provides an overview of the current assistance system being used by OSPI to help schools and districts that are in “improvement” status.

RECOGNITION

Two guiding principles apply to recognition system – it should provide multiple ways to reward success and rely mainly on criterion-referenced measures. The proposed recognition system is consistent with these principles and is based on a “theory of change” that people are motivated more by success than by blame or guilt. Recognition is based on results from the accountability matrix. The State Board should consider at least three options: provide recognition in each of the 30 cells of the matrix, or in each of the 20 “inner” cells of the matrix, or in the 10 “average” cells. The advisors recommend providing recognition in all 30 cells. The recommended minimum ratings are 3.00 for the 20 “inner” cells and 2.75 for the “averaged” cells (see Table 8). Any cell with a 3.5 or above will receive recognition “with honors.” The ratings will be calculated every year, and recognition is given when the two-year average rating meets the minimum requirement. This ensures that recognition is given for sustained exemplary performance.

Table 8: Recommended Minimum Requirements for Recognition

Indicator	Reading	Writing	Math	Science	Ext. Grad. Rate	Average
Achievement	3.00	3.00	3.00	3.00	3.00	2.75
Ach. vs. peers	3.00	3.00	3.00	3.00	3.00	2.75
Improvement	3.00	3.00	3.00	3.00	3.00	2.75
Low-inc. ach.	3.00	3.00	3.00	3.00	3.00	2.75
Average	2.75	2.75	2.75	2.75	2.75	2.75

Figure 9 shows how many of the 2,046 schools would have received recognition if the proposed system were in place in 2007 and all 30 cells were able to receive recognition. The largest number of schools would have received recognition in just one or two of the 30 areas, and 330 schools (16%) would not have received any recognition. At the other extreme, 291 schools (14%) would have received recognition in 10 or more areas, and 2 schools would have received recognition in 22 of the 30 cells of the matrix. Of the 209 schools that had a 2-year index average of less than 1.00 (the “struggling” tier), 64% would not have received any recognition in any of the 30 cells, and the remaining schools averaged only one area of recognition among the 30 possible cells (it was nearly always an “improvement” cell that had a 2-year average that met the minimum criteria).

Figure 9: Number of Schools with Recognition, by Number of Recognitions (2007)

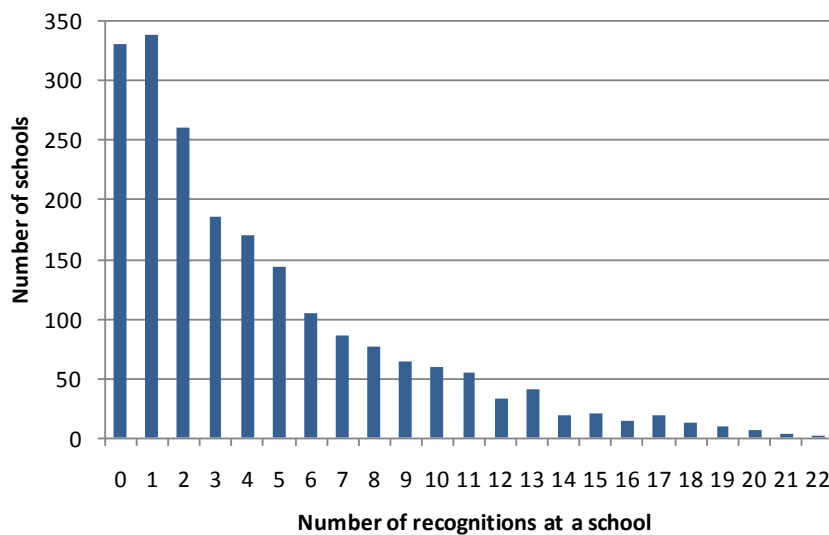
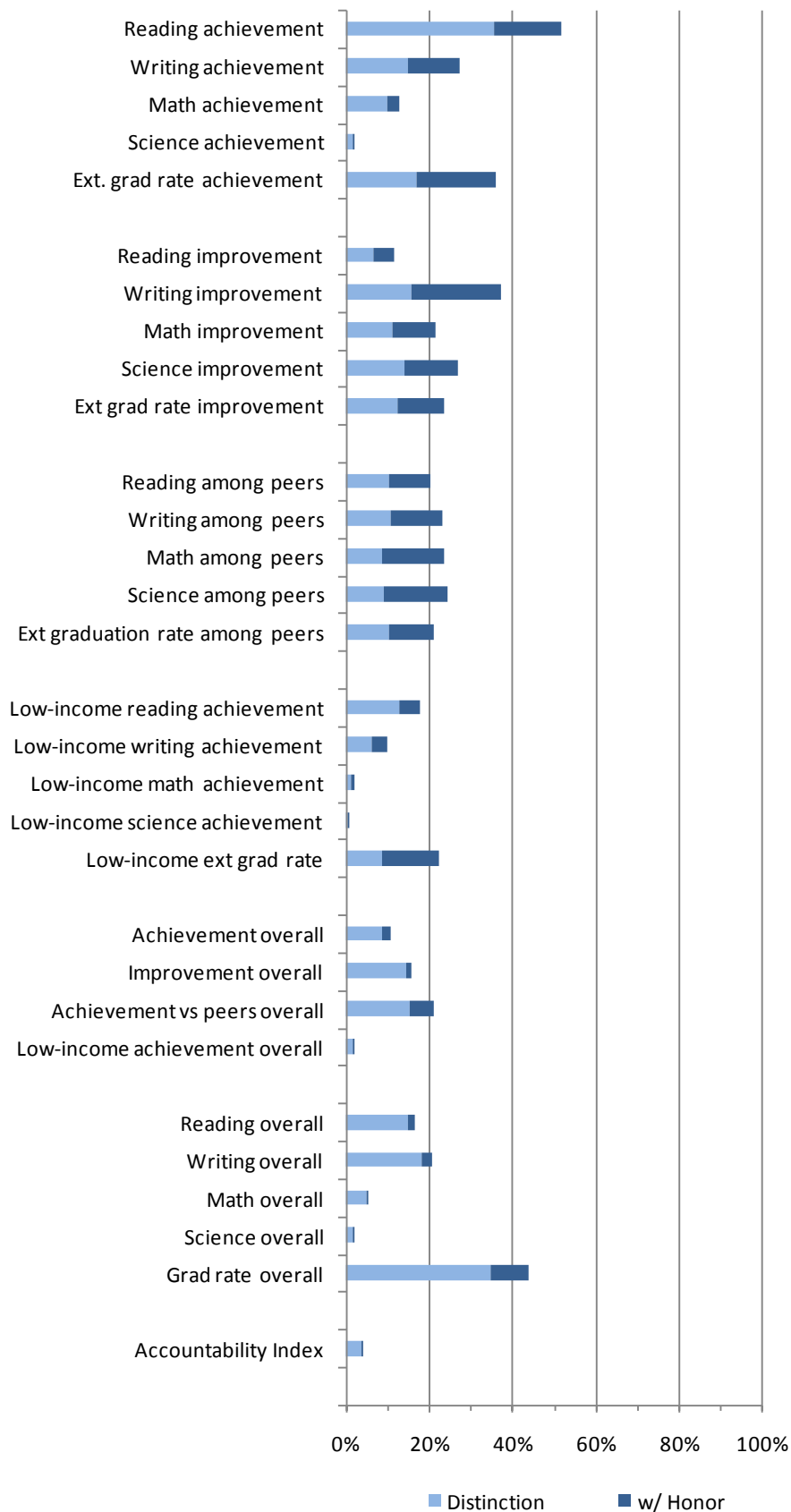


Figure 10 shows the percentage of all schools that met the recognition criteria in each of the 30 cells in 2007. The largest number of schools (52%) met the criteria for reading achievement. Achievement in math, science, and among low-income students had fewer schools meeting the criteria. Only 4% had an overall average of 2.75 on the accountability index over the 2-year period. Although schools would have received recognition in a total of 9,082 areas, this represents less than 15% of the maximum number of areas (30 cells x 2,046 schools).

Figure 10: Percentage of Schools with Recognition, by Number of Recognitions (2007)



This system of recognition will supplement and could replace some types of recognition currently in place. The federal government provides funding for three types of awards, primarily for schools receiving Title I funds. OSPI also provides awards but no funding as part of the recognition (Appendix A provides more information on these awards). Schools and districts that receive recognition in the proposed system will not be compensated monetarily, although exceptions could be made. In its compensation proposal to the Basic Education Finance Task Force, OSPI has recommended that schoolwide financial rewards be given each year when a school reaches a certain level of improvement. The proposed recognition system could be used as a basis for these rewards. For example, schools that have an average of at least 3.0 for overall improvement could be given a schoolwide financial bonus. In 2007, about 8% of the *schools* statewide would have qualified for this bonus (15% of the *districts* averaged 3.0 or better in the improvement cells). The amount of the bonus suggested by OSPI was \$20 to \$50 per student FTE. Other types of recognition, with or without financial awards, could be developed. These could be available to all that meet certain criteria and/or be competitive in nature.

* * * * *

The proposed accountability system needs to be flexible. Changes in NCLB requirements, graduation requirements, the graduation rate formulas, the assessment system, and content standards may have an impact on some measures, which may require changes to the system. As data systems improve statewide and more information becomes available, other indicators could be added to the system and other more sophisticated analyses could be used (e.g., growth models). These changes could be in the form of additional columns in the matrix (e.g., college eligible rates) or additional factors outside the matrix that could be included when calculating the index (e.g., funding amount of local levies).

A number of issues must still be resolved before the index can be implemented effectively. Further review of the cut points and results generated by those cut points should occur to ensure the index measures the achievement and improvement the Board intends. Various OSPI and State Board activities need to be integrated and aligned with one another to avoid duplication and confusion (e.g., how the index relates to NCLB requirements, how to use the index to identify Priority schools and districts, how and when assistance and recognition occur, how index results are represented and made available to the public). Further study is needed to ensure alternative schools and other “buildings” that serve populations with special needs are held accountable in appropriate ways. Finally, the method for measuring improvement needs to be reviewed, particularly when a school is already achieving at very high levels or far above its peers.

Appendix A provides more details about how the index is calculated. Appendix B provides a list of possible data that could be used to identify Priority schools. Appendix C gives an overview of the current state assistance system that is funded primarily by the federal government. Appendix D lists the names of those who provided advice and feedback during the development of this proposal.

APPENDIX A

INDICATORS AND OUTCOMES

This appendix provides more detailed information about the proposed accountability index. It also includes information about how the indicators and outcomes were selected and how the index number is calculated.

SELECTION OF INDICATORS AND OUTCOMES

One of the guiding principles for the accountability system is the use of multiple measures. The advisors (see Appendix D) recommended using four indicators and five outcomes, resulting in a 4x5 matrix with 20 measures. Other indicators and outcomes were discussed besides the WASL and graduation rates, and the advisors wanted to include other outcome data in order to have multiple measures. However, no other reliable and accurate data are available statewide that is collected in a consistent manner. Moreover, using more indicators (e.g., results for separate student groups such as ELL or each race/ethnic group) would make the system much more complicated.

The index is achieved by using the simple average of the ratings across the 20 outcomes. The graduation rate is not applicable for elementary and middle schools, but these types of schools have multiple grades with WASL results that generate the ratings. By using averages, schools without data for some indicators are still included in the system and a separate system is not needed for different types of schools to generate the index.

The advisors preferred a system that uses fixed criteria rather than norm-referenced measures in order to keep the measures simple and to avoid changing goals over time and the use of measures (e.g., standard deviations) that vary by subject. This means that recognition would be given when schools meet certain criteria, and there would not be a limit to how many schools can be recognized (unlike the Schools of Distinction which only recognizes the top 5% based on improvement). With fixed criteria in place, a school and district would know in advance what it needed to do to receive recognition, regardless of how others perform. It would also encourage cooperation among educators because they would not be in competition with one another for recognition.

The advisors discussed other types of analyses that could provide more accurate results (e.g., hierarchical linear modeling, value-added growth models). However, these methods were not selected because they lack transparency, are overly complex, and are not calculated easily at the school and district levels due to capacity and software limitations.

All stakeholder groups believed the federal AYP system is not a valid way to identify schools and districts for recognition and additional support. The advisors felt the current system is too complex, has too many adjustments, and is neither transparent nor fair in its accountability determinations. For example, AYP has different goals for reading and math at three different grade levels, the goals change over time, performance is adjusted with margins of error, some students are not counted (those enrolled after October 1), and schools and districts have different minimum numbers (N) for counting the results. Moreover, AYP is almost entirely punitive in nature and has unrealistic goals. Schools must meet up to 37

goals, and districts must meet as many as 111 goals. Not meeting just one goal leads to negative consequences and labeling. The consequences are the same regardless of how many goals are missed and by how much. If a school “needs improvement,” students in groups that meet the goals must be allowed to transfer to another school, with transportation costs paid by the district. This can reduce the school’s academic performance even further. In addition, AYP does not include two subjects (writing and science) that are assessed in a standardized manner statewide, which has resulted in a narrowing of the curriculum. Finally, AYP’s narrow emphasis on students who meet standard has often resulted in more focused help being given to students that perform near that cut point (sometimes called the “bubble kids”) at the expense of students who are farther above and below that level of performance.

The proposed system is preferred because it is more inclusive and less complex than the federal AYP system. The ratings are based on the results for all students, including those who are not “continuously enrolled” since October 1. No margin of error is used, and the minimum N is 10 across the entire school/district (rather than a grade). This increases the chance that very small schools and districts (e.g., those with less than 10 students in a grade) are included in the accountability system. For example, a K-6 school that has only 4 students in each tested grade (grades 3-6) would have a total of 16 students with assessment results and would therefore be included in the system. (Grade-level results are not reported when there are fewer than 10 students in a grade in order to keep the results confidential.) Grade configurations are not an issue when calculating the results because the same benchmarks are used for each grade and subject. (AYP uses grade bands of 3-5, 6-8, and 10 with separate benchmarks and results generated for each grade band, regardless of the school’s grade configuration. The calculations to compute school results can become very complex and therefore lack transparency.) The current AYP system for holding *districts* accountable is even more complex than the school accountability system. It has different rules and sometimes produces results that are confusing and at odds with its school-level results (e.g., a district might not make AYP but all its schools do and vice versa). A district’s size is the major determinant in its AYP results—only two districts with fewer than 1,000 students are in improvement status. The proposed district accountability system is essentially the same as the system for schools, which makes it relatively easier to understand and compute.

USING THE INDEX

The results from the 20 ratings create an index number for each school and district based on the average rating. Schools and districts are assigned to a “tier” based on their index number.

- Those with the highest index numbers, from 3.00 to 4.00, are in the “exemplary” tier.
- Those with an index of 2.00 to 2.99 are in the “good” tier.
- Those with an index of 1.00 to 1.99 are in the “acceptable” tier.
- Those with an index below 1.00 are in the “struggling” tier.

Schools should not be compared and judgments should not be made about school quality based solely on their overall index score. Even though the index uses multiple measures, some schools have missing data that can affect their index number. Moreover, schools that administer assessments with lower scores overall (e.g., science and math) will tend to have a lower index score than those that do not. For example, schools serving grades 5, 8, and 10 give the science WASL, and these results tend to be very low compared to the other subjects. So a K-4 school will likely have a higher index score than a K-5 or K-8 school. As a result,

the index is only comparable across schools that serve the same grades. In addition, the index does not reflect how close a school may be to the benchmarks—small differences in results could still generate different ratings (e.g., 85%=3 and 86%=4). Moreover, schools serving very few students may have more volatile ratings from year to year. Finally, the lack of vertical alignment of the assessments presents another complicating factor when making comparisons across schools that serve different grade levels.

Given the different types of schools being rating, school results should be reported for similar types of schools. The six suggested categories for reporting the results are as follows:

- *elementary schools* (those serving from kindergarten up to grade 6)
- *middle/junior high schools* (those serving only 6,7 or 8)
- *high schools* (grades 9 or 10 to 12)
- *comprehensive schools* (e.g., K-8, K-12)
- *schools serving special populations* (alternative schools, correctional facilities, those primarily serving ELL students and those with disabilities, private schools on contract)
- *small schools* (those which have their results suppressed because they have fewer than 10 assessed students).

Many districts have only one school, so the district and school index, tier, and recognition would be the same. This has implications for how the state structures the consequences of the accountability system (either with assistance or recognition).

The accountability system will need to remain flexible. Changes in NCLB requirements (e.g., number of tested grades), graduation requirements, the method for calculating the graduation rates, the assessment system (e.g., moving to end-of-course exams in math, adjustments to cut scores), and content standards (e.g., science) may have an impact on some measures, which may require adjustments to the accountability system. Moreover, as data systems improve statewide and more information becomes available, other indicators can be added to the system⁴ and other more sophisticated analyses could be used (e.g., growth models). Other measures of improvement could be used (computing expected change, percent increases). Changes could also be in the form of additional columns in the matrix (e.g., college eligible rates) or additional factors outside the matrix that could be included when calculating the index or peer results (e.g., funding amount of local levies).

CALCULATION METHODS

To calculate the assessment-related measures, student-level data were used and aggregated to the school and districts levels. This provides more accurate results than using aggregated school and district results. Moreover, using student-level data allows for the aggregation of results from the grade level that would be suppressed because the number of students assessed was less than 10. Results are only suppressed when there are fewer than 10 students

⁴ Most of the other outcomes relate to high schools and the transition to higher education. Some data require transcript information, such as AP enrollment, dual enrollment, and college-ready rates. Other data sources could provide information about college entrance exams, college going rates, and remediation rates in higher education institutions.

assessed in the combined grades.⁵ Students who took the alternate assessments (WAAS) were included in the calculations, as were students who previously passed (this relates mainly to high school students that met standard while in grade 9, but it also applies to students that are retained). Students who met standard in a previous year did not have their level included in the student-level database, so they were considered to have performed at Level 3. Students who were exempted from taking the assessments (i.e., those with excused absences and medical exemptions, first-year ELL students, home-based and private school students) were not included in the calculations.

When computing the index, all the ratings are counted equally (i.e., they are not weighted). Averages are computed only for cells of the matrix that had data (e.g., an elementary school has no graduation data, so the averages for the indicators used only the assessment results). District results are based on OSPI's aggregation rules, so the district results do not include results from correctional institutions, tribal schools, private schools or agencies providing services, vocational schools/skill centers, schools that enroll more than 50% of their students from another district, and schools operated by a college or university that are not affiliated with a district. Finally, the results are those for a single year rather than averages over multiple years for simplicity and to avoid the distortions when change takes place over time (e.g., when averaging, schools that have dramatic declines have better outcomes and schools with dramatic increases have worse outcomes).⁶

ACHIEVEMENT INDICATOR

This indicator has five outcomes: the four subjects tested by the WASL/WAAS statewide (reading, writing, math, and science) and the extended graduation rate (see explanation on how the rate is calculated below). The measure reflects the percentage of "all" students meeting standard. Unlike the AYP measure, this indicator is what is shown on OSPI's online Report Card and does not reflect any adjustments (i.e., margin of error, continuous enrollment). The percent meeting standard includes both the results of the WASL and the WAAS, which is given to students with disabilities. These results are the combined total of the WASL and WAAS results found on the Report Card and are used when calculating AYP (without the margin of error and including students not continuously enrolled). For grade 10, only the first grade 10 attempt as reported in June of the tested year is used (this includes results for students who met standard in grade 9). Results from August assessments and retakes will be considered when looking at the "struggling" schools and districts to determine if they should be included in the Priority tier. This will recognize the districts that go to extra effort to help students who are in danger of not graduating unless they pass the required assessments. Subgroups results (for the various race/ethnicity groups, ELL, students with disabilities, gender) are used when examining the "struggling" schools and districts to determine if they should be included in the Priority tier. Results for low-income students are used in aggregate in a separate indicator described below.

⁵ Very small schools (those with fewer than 10 assessed students) will have their index calculated but it will not be made public. However, the index will be viewed by state officials, and if the index is in the struggling tier on a consistent basis, the school could be placed in the Priority tier.

⁶ In small schools, a single student could cause large changes in the index from year to year. However, analyses found relatively little difference in the amount of change in small schools compared to larger schools from one year to the next.

The Achievement benchmarks and ratings for each of the four assessed subjects and the extended graduation rate are as follows:

- Achievement on *assessments* is rated based on the following percentage of students meeting standard:

86-100%	4
70-85.9%	3
55-69.9%	2
40-54.9%	1
< 40%	0

- Achievement on the *graduation rate* is rated on the extended graduation rate from the previous year (see below for more information on how the graduation rate is calculated):

≥ 95%	4
85-94.9%	3
75-84.9%	2
65-74.9%	1
< 65%	0

Students from all tested grades in a school are combined for each subject, and the percentage of these students that meet standard on their respective tests is the school's percent meeting standard for that subject. This means the index can be calculated easily, regardless of a school's grade configuration (although grade configurations influence the results due to differences in the tests given). The same scoring benchmarks are used for all subjects. This gives equal importance to each subject.⁷ It also encourages the vertical alignment of the state assessments.

A school/district must have at least 10 students for it to be included in the accountability system. The minimum number used by OSPI is 10, but this policy is applied at the test and grade level. Using an N of 10 for a *school* means that very small schools will now be included in the accountability system because they will likely have at least 10 students assessed across the entire school. Combining all the test results together and using an N at the school level increases the overall N so a single student in a small school has less impact on the results and causes less of a change in the results from year to year. By using this system, scores in many schools that are currently suppressed at the grade level when there is less than 10 students assessed will become known in their aggregate form. This N policy means the state accountability system is more inclusive than the current AYP system, where the N is 30

⁷ The advisors did not have consensus about how to include science results in the index. Some felt that science should not be included at all because of changing standards and that it is not being taken seriously in many cases, which results in low scores across the state and relatively little improvement over time. As a result, it has little ability to differentiate school performance. Some suggested using lower cut points and raising them over time or including science but giving it less weight. After much discussion, a majority of the advisors concluded that since science will be a graduation requirement relatively soon, the only way to have science taken seriously was to treat it like the other subjects. Keeping the same rating system as the other subjects also keeps the system consistent and less complex and provides the opportunity to receive high ratings for improvement. Moreover, science achievement affects only two of the 20 cells of the matrix. Finally, not including science with equal weight penalizes those who work hard in this subject, and it would send the wrong message about the importance of students learning science concepts.

and applies only students who are continuously enrolled. The advisors felt that the education system has a moral responsibility to serve all students, and having a small minimum N and counting students who have not been in class all year helps hold schools accountable for meeting the needs of *all* their students.

ACHIEVEMENT VS. PEERS INDICATOR

This indicator uses the Learning Index (described below) level and controls for student characteristics beyond a school's control. Scores are the difference between the school's adjusted level and the average level among the school's peers. Specifically, the school/district score is the unstandardized residuals generated by a multiple regression. Those with scores above 0 are performing better than those with the same student characteristics, and those with scores below 0 are performing below those with the same student characteristics. Separate analyses are run for elementary, middle, high, and comprehensive (e.g., K-12) schools because of the variation of the variables at each grade level. Schools serving specialized student populations (e.g., alternative schools, ELL and special education centers, private schools on contract, institutions) are not included in the regressions. Excluding these schools provides a better predicted level for the remaining regular schools in the analysis and better data for use when determining the cut scores for the various ratings. Since the specialized schools have such different characteristics, results for this indicator are not computed and their index is based on an average of their remaining ratings.

For schools, four student characteristics are the independent variables in the multiple regression: the percentage of (1) low-income students (percent eligible for free or reduced-price lunch⁸), (2) English language learners, (3) students with disabilities, and (4) mobile students (not continuously enrolled). A school's Learning Index from each of the four assessments (using WASL and WAAS results) as well as the extended graduation rate for high schools are the dependent variables. The regressions are weighted by the number of students assessed to prevent a small "outlier" school from distorting the regression (predicted) line. Although there is a high correlation between all the independent variables except special education, the regressions showed that all four variables helped improve the quality of the predicted levels, regardless of the regression method used.

For districts, three of the four student characteristics used in the school analysis were the independent variables in the multiple regression: the percentage of (1) low-income students (percent eligible for free or reduced-price lunch), (2) students with disabilities, and (3) mobile students (not continuously enrolled in a school). The percentage of English language learners was not used because the initial analyses using this variable did not provide meaningful results. The same five dependent variables from the school-level analyses were used in the district analyses (the Learning Index for the four subjects and the extended graduation rate).

Financial information was also used as an independent variable in the district analysis. This information is only available at the district level, and some communities are able to raise higher levels of funding. The financial variable used is the total amount of operating expenditures per weighted pupil (funding used for capital purposes is not included). This

⁸ The percentage of students in high schools who are eligible is often higher than what is reported, but this proxy for socioeconomic status is still the best available.

variable controls for the level of funds spent in the district. Weighting the student count “inflates” the enrollment figure because certain students require more resources to educate. The extra weight for ELL and low-income students was .20, which is the typical amount used in school finance studies (although the actual number is likely to be much higher). The weight for students with disabilities was .93, which is consistent with both the national research and the level of funding provided by the state.

- Achievement vs. Peers on the *assessments* is rated based on the difference between the actual and predicted Learning Index levels:

> .20	.....4
.10 to .20	.....3
-.099 to .099	.....2
-.20 to -.10	.....1
< -.20	.....0

- Achievement vs. Peers on the *extended graduation rate* is rated based on the difference between the actual and predicted extended graduation rate:

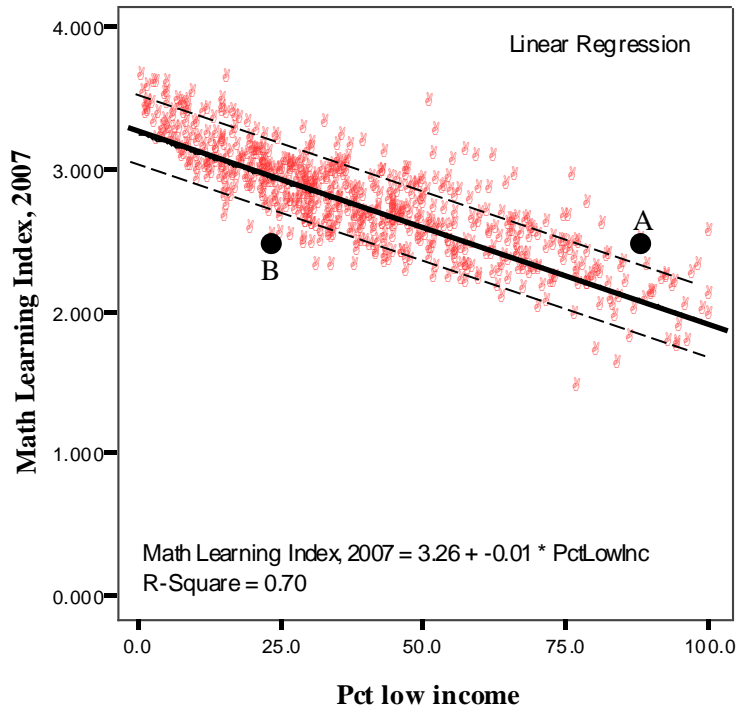
> 12	.....4
5.01 to 12	.....3
-5 to 5	.....2
-5.01 to -12	.....1
< -12	.....0

The mobility measure may need to be refined after further discussion takes place. Currently there is no common definition of mobility, and migrant student data does not include many students who are mobile. OSPI’s student data system includes information about students who are/are not continuously enrolled from October 1 through the end of the testing period in May as part of the AYP system. Using this measure, the average state mobility rate is less than 6%. Most schools with mobility rates above 15% are alternative schools, and very few districts (mainly those in Pierce County close to military bases) have many of their schools with this high of a rate. However, the proposed measure may not identify students who move in and out of a school or district multiple times during the school year and are considered continuously enrolled, nor does it identify students that are new to the district and are still enrolled during the entire year. The proposed measure, the percentage of non-continuously enrolled students, can be used until a better measure is identified.

The scatterplot in Figure 9 illustrates how this indicator works. It shows just one of the independent variables (percent low income students) in relation to one outcome (K-6 math results). Each dot represents a school. The dark line is the average (predicted) level for a given Learning Index and low-income percentage. The distance between the school and the line is the difference from the predicted level. In this example, schools A and B have almost identical Learning Index results, but A falls well above the line while B falls well below the line. The dashed lines running parallel to the trend line represent the highest and lowest cut points used for the ratings (.20 above and .20 below the trend line). When this kind of analysis is done factoring in the other variables (ELL, special education, mobility) at the same time in a multiple regression calculation, the distance from the predicted line is the school’s score, which produces a rating. If the low-income variable was the only one used in

the analysis, School A would have a rating of 4 because its index is more than .20 points above its predicted level, while school B would have a rating of 0 because its index falls more than .20 points below the predicted level.

Figure 9: Scatterplot of Math Results in Elementary Schools by Percent Low Income



The advisors discussed other possible independent variables that could be included in the analysis. These include the percentage of students who are enrolled in a gifted program, the percentage of minority students, and school size (enrollment).

- A gifted variable was not included because of a lack of reliable data, although the system should somehow take into account when a school has concentrations of these students. These schools will likely have very high achievement ratings.
- A race/ethnicity variable was not included because it is highly correlated with the other variables. Statistical analyses that included this variable found it added very little to the explanatory power of the model. Moreover, using this variable would reduce our ability to identify schools where students of color are treated differently. Finally, many of these students are also from low-income families, which is a separate indicator.
- A school size variable was not included because research findings to date reveal mixed results about how school enrollment levels affect student outcomes. School size is also a factor that can be controlled somewhat at the district level through the use of specialized programs and boundary lines. Other methods can be used to help schools compare themselves to those with similar sizes once the accountability results are made known.

The **Learning Index** is the dependent variable used for this indicator and for the Improvement indicator described below. This index, which was developed by the Commission on Student Learning and refined by the A+ Commission,⁹ takes into account the

⁹ These Commissions are no longer in existence.

percentage of students performing at the different WASL levels. Specifically, the WASL and WAAS tests have five levels of performance:

- Level 0 – No score given¹⁰
- Level 1 – Well below standard
- Level 2 – Partially meets standard
- Level 3 – Meets standard
- Level 4 – Exceeds standard

This index is calculated like a grade point average with 4.0 as the highest score and reflects the level of student performance across the entire range of proficiency, not just those meeting standard. It gives greater weight to higher levels of proficiency on the state assessments and provides an incentive to support the learning of all students, including those well below standard (Level 1) and those that already meet the standard (Level 3) so they can move up to the next level. There is a “ceiling effect” when using this measure, but preliminary results show that even high-performing schools were achieving large gains because of the movement of students from Level 3 to Level 4. Once a school has all of its students in Level 4, there would not be any possibility to improvement any more, but all ratings together would still result in a school being in highest tier.

The following example shows how the Learning Index is calculated. The same method is used to calculate the index for all WASL tests (reading, mathematics, writing, science) in all the tested grades:

- Level 0: 5% of all students assessed
- Level 1: 15% of all students assessed
- Level 2: 20% of all students assessed
- Level 3: 40% of all students assessed
- Level 4: 20% of all students assessed

$$\begin{aligned}\text{Learning Index} &= (0*0.05) + (1*0.15) + (2*0.20) + (3*0.40) + (4*0.20) \\ &= 0 + .15 + .40 + 1.20 + .80 = 2.55\end{aligned}$$

IMPROVEMENT INDICATOR

The Improvement indicator relies on changes in the Learning Index for the four assessed subjects and the graduation rate from one year to the next. Specifically:

- Improvement on *assessments* is rated on the levels of annual change in the Learning Index:

> .12	.....4
.051 to .12	.....3
-.05 to .05	.....2
-.051 to -.12	.....1
< -.12	.....0

¹⁰ The “No Score” designation includes unexcused absences, refusals to take the test, no test booklets but enrolled, incomplete tests, invalidations, and out-of-grade level tests.

- Improvement on *graduation rate* is rated on the level of percentage point change in the extended graduation rate from the previous year (see below for more information on how the graduation rate is calculated):

> 6	4
3.01 to 6.00	3
-3.00 to 3.00	2
-6.00 to -3.01	1
< -6	0

A one-year change is used rather than using averages of previous years or a change from a year further in the past because it is the simplest calculation, it reflects the most recent set of results, and it does not distort the most recent results (using a two-year average helps a school if scores go down and penalizes the school if scores go up). New schools would only need two years of data to generate an improvement score. Since results are created each year, changes over time are seen when examining the results across multiple years.

The advisors discussed other possible improvement measures, including a 10% reduction in those not meeting standard (the AYP “safe harbor” measure), a 25% reduction in those not meeting standard over a 3-year period (the goal used for grade 4 reading several years ago), a percentage point gain from the previous year (or over several years), and a change in the scale score. While each of these have merit, the advisors determined that the annual change in the Learning Index provided the best measure of improvement because it focused on more than just those meeting standard and uses available data. The other measures can be used when analyzing “struggling” schools and districts for possible designation in the Priority tier.

ACHIEVEMENT OF STUDENTS FROM LOW-INCOME FAMILIES

Much research has shown that student achievement is highly correlated with a family’s socioeconomic status (SES). Specifically, academic achievement among students who live in a low-income family is usually far below students from families that are not considered low income. This indicator focuses on the performance of low-income students. It uses the same five outcomes as the Achievement indicator: the four subjects tested by the WASL/WAAS statewide (reading, writing, math, and science) and the extended graduation rate. However, the outcome measures are the percentages of assessed students who are from low-income families who meet standard on the assessments and who graduate by the age of 21. The same rating scales are used as the achievement indicator.

A low-income student is one who is eligible to receive a federally-subsidized meal (e.g., free or reduced-price lunch). The percentage of students in high schools who are eligible is often higher than what is reported, but this measure is still the best available proxy for SES. This indicator is highly correlated with the percentage of ELL students and students of color, two groups of students that often have lower levels of student achievement. The indicator is also positively correlated with students with disabilities and mobility.¹¹ This does not imply that a

¹¹ The statewide correlations between the percentage of students considered low-income and the percentage of students of color and ELL students in a school are .70 and .68 respectively. More than 86% of the ELL students are from low-income families. The correlations with mobility and special education are .49 and .27 respectively.

student's socioeconomic status captures all the unique needs of students of color, students with disabilities, those learning English, or those who are mobile. These students face additional challenges in Washington schools that affect their learning.¹² Finally, the results for this indicator will not be different from the Achievement indicator if most or all of the students in a school come from low-income families.

EXTENDED GRADUATION RATE MEASURE

The Washington State definition of the on-time graduation rate is the percentage of students who graduate from public high school with a regular diploma (not including a GED or any other diploma not fully aligned with the state's academic content standards) in the standard number of years. The period of time required for students with disabilities to graduate is specified in each individualized education program (IEP). Students with disabilities who earn a diploma by completing the requirements of an IEP in the required period of time are counted as on-time graduates. The period of time required for EL and migrant students to graduate is determined on an individual basis when they enter the district and may be longer than the standard number of years. The period of time required to graduate for a migrant student who is not LEP and does not have an IEP can be one year beyond the standard number of years. LEP and migrant students who earn a diploma in the required period of time are counted as on-time graduates.

The on-time graduation rate is calculated as follows:¹³

$$\text{On-Time Graduation Rate} = 100 * (1 - \text{grade 9 dropout rate}) * (1 - \text{grade 10 dropout rate}) * (1 - \text{grade 11 dropout rate}) * (1 - \text{grade 12 dropout rate} - \text{grade 12 continuing rate})$$

$$\text{with Dropout Rate} = \frac{\text{number of students with a dropout, unknown, GED completer code}}{\text{total number of students served (less transfers out and juvenile detention)}}$$

To encourage schools to serve students who remain in school beyond 4 years, a separate graduation rate is calculated that includes students who graduate in more than 4 years. This “**extended rate**” is used for AYP purposes and the rate used in the accountability index. The formula for calculating this rate is as follows:

$$\text{Extended Graduation Rate} = \frac{\text{number of on-time and late graduates}}{\text{\# of on-time graduates / on-time graduation rate}}$$

Dropouts are not counted as transfers. Since graduation data are not reported until after the beginning of the school year, the rates from the previous year are used.

¹² The Center for the Improvement of Student Learning (CISL) has convened an advisory committee to develop a strategic plan to address the achievement gap for African American students, as outlined in HB 2722.

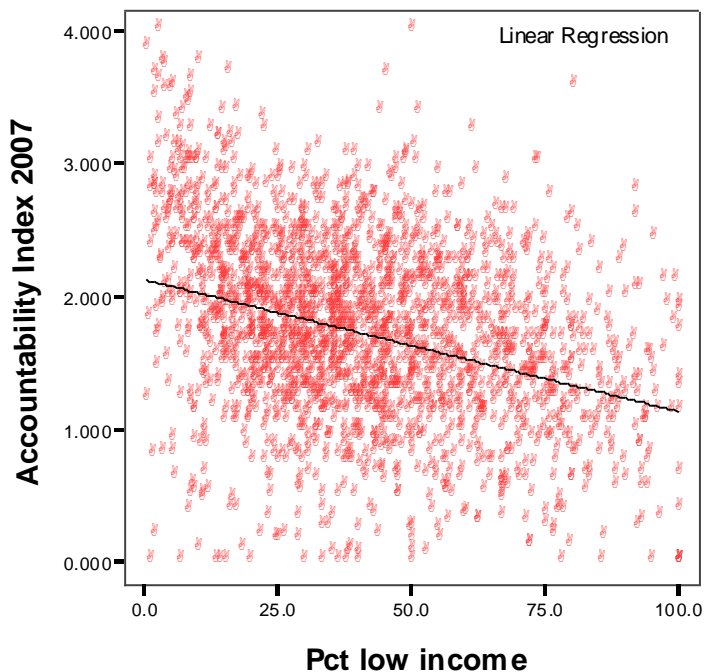
¹³ See <http://www.k12.wa.us/DataAdmin/pubdocs/GradDropout/03-04/Graduationanddropoutstatistics2003-04Final.pdf>, chapter 1, for more information about these formulas.

The calculation method may change in the future when the state has enough data to track students over the entire time period. The cut scores for determining the ratings may need to change if another method produces substantially different results.

DISTRIBUTION OF INDEX

Given the high correlation between family income and student performance, analyses were conducted to see how the school index related to schools' percentage of low-income students. Figure 10 shows these results for the 2,046 schools used in the analysis, while Figure 11 shows the results for the 296 districts. These figures show a much weaker relationship between the two variables than what would be seen if the dependent variable was achievement. Many schools and districts that have relatively few low-income students still have rather low index scores, while many that have high concentrations of low-income students have rather high index scores. The trend line is still sloping downward, but the correlations and r-squares are relatively weak (-.33 and .11 for schools, -.22 and .05 for districts). These are much weaker than the relationship between student achievement and socioeconomic status. This is because achievement represents only half the index and is moderated by two of the other variables (improvement, peers) that have low correlations with socioeconomic status (all the school correlations with the improvement and peers variables were less than $\pm .08$). It is harder for a school or district that has a high percentage of students who are low-income to achieve a very high index because the "all" students results are very similar to the low-income students results.

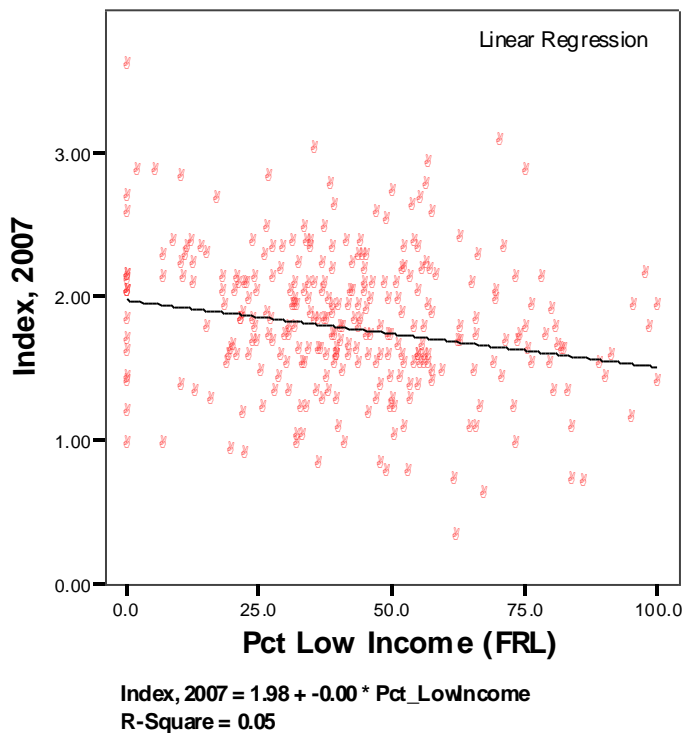
Figure 10: Scatterplot of Index for All Rated Schools, by Percent Low Income



$$\text{Accountability Index 2007 (rating average using student data)} = 2.14 + -0.01 * \text{PctLowInc}$$

R-Square = 0.11

Figure 11: Scatterplot of Index for Districts, by Percent Low Income



RECOGNITION SYSTEM

Many of the guiding principles apply to the recognition system. The system should:

- Be transparent and simple to understand;
- Rely on multiple measures;
- Encourage the improvement of student learning and cooperation among educators;
- Focus at both the school and district levels;
- Rely mainly on criterion-referenced measures; and
- Provide multiple ways to demonstrate success and earn recognition.

With these principles in mind, the same matrix that is used to generate the index is also used to identify schools and districts for recognition. Cut points were developed for all 30 cells of the matrix after looking at distributions of the ratings for all schools. (The impact of the cut points on *districts* was not calculated for this analysis. Districts have fewer high ratings, as noted in Figures 1 and 5, so they would receive recognition less often than schools). To ensure recognition does not occur based on one good year alone, two years are averaged, and the average must meet minimum criteria.

Different cut points are used for different parts of the matrix because it is harder to achieve high ratings for some cells.

- For the “inner” 20 cells of the matrix, at least a 3.0 average is needed to receive recognition. To meet this level, a school/district needs to receive at least two straight ratings of 3, which are the second highest ratings (or it could have a rating of 2 and 4 in a

2-year period). Cells that average 3.5 or better (receive ratings of 3 & 4 or a 4 & 4) would receive recognition with “honors.”

- For the 10 “averaged” cells on the outside of the matrix, at least a 2.75 is needed. This lower average is justified because it is much harder to achieve an average of 3.0 in the multiple categories. Relatively few schools and districts would be recognized even at this lower level—on average only 14% of schools reached this level in each of the 10 cells, and even fewer districts reached this level (districts do not have as many high ratings). If a 3.0 were required instead of a 2.75, only about 9% of schools, on average, would receive recognition in these cells.
 - ✓ To meet an average of 2.75 in the *five outcome categories* (assessments and graduation rate), a school/district needs to have a total of 11 points in the four indicator ratings ($11/4=2.75$). This would usually require a majority of ratings of at least a 3 in two consecutive years.
 - ✓ To meet this level in the *four indicator categories* (achievement, improvement, achievement vs. peers, low-income achievement), a school/district needs to have a total of 14 points in the five outcome ratings ($14/5=2.80$). This would usually require 4 out of 5 ratings of at least a 3 in two consecutive years.
 - ✓ Like the “inner” cells of the matrix, any “averaged” cell with a 2-year average of 3.5 or better would receive recognition with “honors.”

The number of schools and districts that receive recognition depends on the criteria described in Table 2. If the Board wanted to increase or decrease the amount of recognition provided, it could either change the criteria in Table 2 or change the cut points for recognition. Changes in the criteria in Table 2 would also affect the index scores for districts and schools. The Board could also request that a more formal “standard-setting” process take place to confirm or adjust the criteria used in Table 2.

The Board could establish additional criteria in order for a school/district to receive recognition. For example, the Board could require that recognition be given only if the achievement gap (e.g., between genders or between various groups of students) was decreasing. It could also require a closer analysis of the data before a school/district receives recognition with honors to ensure data problems (in their favor) or other factors are not responsible for very high ratings. This would prevent inappropriate designations that could undermine the accountability system.

A number of issues still need to be resolved related to the recognition. This includes what benefits accrue when a school or district meets the recognition criteria. The consequence could be as simple as highlighting the results on a Web site and issuing a press release about the winners. It could also generate financial rewards in certain cases. Another issue is what happens when a school and district are one in the same. The Board would need to make sure that any recognition is not duplicative (e.g., issuing a banner or financial reward for both the school and the district). Further, the Board could create other types of recognition, such as special recognition for a few outstanding schools/districts and some that could be competitive in nature (e.g., require nominations or applications). Finally, the proposed recognition should be integrated with existing awards being given by OSPI. It currently gives recognition through federal and state programs.

• Federal Awards

- ✓ *Blue Ribbon Schools* are nominated by OSPI and selected by the U.S. Department of Education based on high academic performance. In order to be selected, nominated schools must provide detailed information about their school, they can be any type of school (including private schools), and they must make AYP in the year of the nomination and the following year.
- ✓ For the *Academic Achievement Award* program, Title I Part A schools that met AYP for three consecutive years in math and/or reading can apply for recognition of improving student achievement in one or both content areas. Up to nine schools can receive an award of \$10,000. The application provides details about successful math and/or reading strategies, and these strategies are showcased at state conferences and on OSPI's website in order to assist other schools.
- ✓ For the *Distinguished Schools Award*, four Title I Part A schools are selected, two in the national category and two in the state category. Schools must apply for this award, which focuses on either exceptional student performance for two or more years or significant progress in closing the achievement gap. National award winners receive \$10,000 while state award winners receive \$5,000.

• State Awards

- ✓ OSPI began recognizing *Schools of Distinction* in 2007 based on improvement over an extended period of time and achievement that exceeds the state average. Only the top 5% of schools received this award.
- ✓ OSPI has been giving *Improvement Awards* since 2004 to schools and district that make at least a 10% reduction in the percentage of students not meeting standard in reading, writing, and math in grades 4, 7, and 10. Wall plaques with metal plates for updates are provided to those receiving this award. In 2007, there were 1,255 schools that received a total of 2,190 awards in the three grades and subjects; 241 districts received a total of 804 awards in the three grades and subjects. OSPI does not provide any recognition or results based on how schools or districts compare to their peers.

Table 9 provides the data used in Figure 9. It shows the number and percentage of schools that would have received recognition if the proposed system were in place in 2007. Out of the 2,046 schools, the largest number would have received recognition in just one or two of the 30 areas, and 330 schools (16%) would not have received any type of recognition. At the other extreme, 291 schools (14%) would have received recognition in 10 or more areas; 2 schools would have received recognition in 22 of the 30 cells of the matrix.

Table 10 provides the data used in Figure 10, the number and percentage of all schools that met the recognition criteria in each of the 30 areas in 2007. Reading achievement had the largest number of schools meeting the criteria; achievement in math, science, and among low-income students had far fewer schools meeting the criteria. Only 4% had an overall average of 2.75 on the accountability index over the 2-year period. Although schools would have received recognition in a total of 9,082 areas, this represents less than 15% of the maximum number of areas (30 cells x 2,046 schools). Roughly 40% of the recognitions would have been considered “with honor” based on schools averaging 3.5 or better. These “honor” recognitions represent less than 6% of the maximum number of possible areas.

Table 9: Number of Schools with Recognition, by Number of Recognitions (2007)

Number of recognitions at a school	Number of schools	Pct of all schools	Cumulative percent
0	330	16.1%	16.1%
1	338	16.5%	32.6%
2	260	12.7%	45.4%
3	185	9.0%	54.4%
4	169	8.3%	62.7%
5	143	7.0%	69.6%
6	104	5.1%	74.7%
7	85	4.2%	78.9%
8	77	3.8%	82.6%
9	64	3.1%	85.8%
10	59	2.9%	88.7%
11	55	2.7%	91.3%
12	33	1.6%	93.0%
13	41	2.0%	95.0%
14	18	0.9%	95.8%
15	20	1.0%	96.8%
16	14	0.7%	97.5%
17	18	0.9%	98.4%
18	12	0.6%	99.0%
19	10	0.5%	99.5%
20	6	0.3%	99.8%
21	3	0.1%	99.9%
22	2	0.1%	100.0%

Table 10: Distribution of Schools with Recognition, by Type of Recognition (2007)

Type of Recognition	# of “Schools of Distinction”	# of “Schools of Distinction” with Honor	Total # of schools recognized	Pct of all schools**
Reading achievement	727	330	1,057	51.7%
Writing achievement	309	255	564	27.6%
Math achievement	204	60	264	12.9%
Science achievement	37	9	46	2.2%
Ext. grad rate achievement	75	83	158	36.0%
Subtotal, Achievement ¹	1,352	737	2,089	
Reading improvement	135	100	235	11.5%
Writing improvement	322	446	768	37.5%
Math improvement	230	209	439	21.5%
Science improvement	286	265	551	26.9%
Ext grad rate improvement	54	50	104	23.7%
Subtotal, Improvement ¹	1,027	1,070	2,097	
Reading among peers	210	210	420	20.5%
Writing among peers	221	254	475	23.2%
Math among peers	176	312	488	23.9%
Science among peers	191	313	504	24.6%
Ext graduation rate among peers	46	46	92	21.0%
Subtotal, Peers ¹	844	1,135	1,979	
Low-income reading achievement	259	105	364	17.8%
Low-income writing achievement	128	78	206	10.1%
Low-income math achievement	26	17	43	2.1%
Low-income science achievement	5	4	9	0.4%
Low-income ext grad rate	38	61	99	22.6%
Subtotal, Low Income ¹	456	265	721	
Achievement overall	179	41	220	10.8%
Improvement overall	297	29	326	15.9%
Achievement vs peers overall	311	125	436	21.3%
Low-income achievement overall	30	7	37	1.8%
Reading overall	306	30	336	16.4%
Writing overall	374	48	422	20.6%
Math overall	103	8	111	5.4%
Science overall	33	6	39	1.9%
Grad rate overall	153	40	193	44.0%
Accountability Index	75	1	76	3.7%
Total ¹	5,540	3,542	9,082	

** N=2046 for academic measures; N=439 for extended graduation rate measures

¹ Duplicated count

APPENDIX B

IDENTIFYING PRIORITY SCHOOLS AND DISTRICTS

The advisors (see Appendix D) generated a comprehensive list of quantitative and qualitative data that could be used to determine which schools in the “struggling” tier should be identified as needing more significant support from the state over a longer period of time (the Priority tier). Schools in the Priority tier would have the greatest need based on consistent underperformance on multiple measures (grades, subjects, indicators) over multiple years. The advisors assumed that being in this tier would generate the opportunity for substantially more support. The following factors were initially identified (the advisors did not discuss data for identifying Priority *districts*).

Contextual Data

- Type of school (alternative school, institution)
- Changes in student demographic profile (e.g., rapid increase in low-income or ELL students)
- What programs are included in the school (e.g., concentrations of ELL, special education, gifted)
- Program changes (e.g., establishing new ELL or special education programs)
- Student mobility
- Number of languages spoken by students
- Feeder schools
- Boundary changes (closures, consolidations)
- Construction or renovation projects

Analysis of Assessment Results (annual and trends over time)

- Achievement trends over multiple years for each subject area
- Size of the gap between WASL scores in different subjects
- Size of the achievement gap
- Percent students meeting 3 of 3 and 4 of 4 standards
- Trends for subgroups (gender, race/ethnicity, low-income) and programs (ELL, special education)
- Level of growth over time
- Changes in scale scores
- How performance compares to similar schools
- Results of students who have been in the school for longer periods of time (track cohorts of students to see how percent meeting standard changes over time, review results for just “continuously enrolled” students, the percentage of students meeting standard the next year in the next grade compared to the previous year, e.g., the percent in grade 4 in one year compared to the percent in grade 5 the next year)
- Results from retakes (high school) and collection of evidence
- WLPT results for students from different language backgrounds, percentage of students exiting ELL program

AYP Results

- Results generated with minimum Ns, confidence intervals, and continuously enrolled students (helps prevent false positives)

- How far the “all” group is from the annual goal
- Proficiency, participation, and other indicator results for all subgroups
- Number and percentage of cells not making AYP
- Which subgroups and subjects did not make AYP (ELL, special education, and participation rates count less, the all and race/ethnic groups count more)

Other Quantitative Data (some may only be available at the district or school levels)

- *Graduation data:* On-time and extended graduation rates for all students and subgroups, difference in rates, percentage of students still enrolled after four years
- *Dropout data:* Annual and cohort dropout rates for all students and subgroups, difference in rates
- *Discipline data:* Number of suspensions and expulsions, source of referrals, types of infractions, types of students being disciplined the most
- *Perception results:* Surveys of staff, parents, students about school conditions and how the results differ from one another
- *Classroom conditions:* Class sizes, student/teacher ratios by grade and subject
- *Staff characteristics:* Percentage of staff with certificates, teacher education/experience levels
- *Staff turnover:* Teacher and leadership changes at school and district levels
- *District assessments:* Results from any other assessments (e.g., MAP, grade 2 reading, portfolios)
- *Volunteers:* Number of parents volunteers, how they are used
- *Retention:* Number and percentage of students retained in grade, number and type of subjects not passed, level of credit deficiency
- *Finances:* Amount generated by local levies/bonds, fund balances, amount and sources of outside funding, stability in funding over time
- *District characteristics:* Number and percentage of schools in Tier 3, percentage of district students enrolled in Tier 3 schools
- *Data anomalies:* Incorrect data reported that could affect analyses, missing data, reason for missing data, number of ratings generating the average index

Qualitative Data

- *District role:* Resource amounts and types allocated to school, type of staff and programs provided, funding levels, type and intensity of interventions made to date, appropriateness of district policies, data analysis capacity, role of the district in school improvement efforts
- *Initiatives:* Number being attempted, focus and validity of initiatives, level of integration/cohesion among activities
- *Data use:* Quality of data system, capacity to use data, how information is used
- *Self-assessments:* Quality and use/implementation of school improvement plans
- *Staff relations:* Level of collaboration among staff and administrators within the school, union relations
- *Results from external reviews:* Results from accreditation and OSPI’s Comprehensive Program Review (CPR), input from ESDs

Given the comprehensive nature of this list and the limited capacity to analyze all these data for every school in the “struggling” tier, the list was re-examined to determine which were the most important factors to review. Those factors appear in the body of this document.

Schools serving special populations require separate analyses. For example, schools serving high concentrations of more challenging student populations (e.g., alternative schools, institutions, those primarily serving ELL students and those with disabilities) often have low index results that would put them in the “struggling” tier. These schools have great need and should not be automatically excluded from being a Priority school. A closer look into the quality of programs serving these students is needed to see if more support should be provided. These kinds of schools may require an alternative accountability system (states like Texas have set up such a system). Some institutions should be excluded (e.g., jails & detention centers) but other included (e.g., long-term psychiatric facilities).

Other types of schools may need special analyses as well. For example, results for *very small schools* ($N < 10$) are available but cannot be revealed to protect confidential information about students. However, the results could still be examined for trends over time. The number of *virtual schools* is increasing, often serving home-based students who are not required to take state assessments and may not be authorized to grant diplomas, which could mean there are few or no outcomes to measure. While some of these schools will generate results, they often serve many students outside the district, which means the school’s results are not included in the district results.

Certain preconditions need to exist for schools and district for them to use the additional resources effectively. For example, schools in the lowest tier need to be ready to benefit from the extra support. Without their buy-in, the chances for a successful reform are minimal. Size and location may need to be considered. If the number of schools in the “struggling” tier is high and exceeds the level of resources available to support them, the state may want to require a minimum number of students per school before providing assistance to ensure cost-effectiveness of the assistance. Similarly, those identified for the Priority tier may have a wide geographic distribution. A single small school in a remote location may have the same level of need as a cluster of larger schools in a more accessible location. The state will need to determine how best to allocate its limited resources to ensure the cost effectiveness of its support. Finally, the state may want to consider providing support by geographic location to ensure equity in the distribution of the assistance.

APPENDIX C

CURRENT STATE ASSISTANCE PROGRAM

SCHOOL IMPROVEMENT ASSISTANCE

The mission of the Office of Superintendent of Public Instruction's School Improvement Assistance (SIA) program is to help build capacity for districts and schools to improve student achievement through the use of the continuous school improvement model. This comprehensive model of support is unique in the United States. While many states have accountability systems that focus on rewards, punishments and takeovers, the SIA program provides comprehensive support for schools. Independent studies of the program have noted that the schools that received assistance for three years showed greater achievement gains than their respective comparison groups and the state as a whole. Nearly 60% of schools that have participated in SIA have exited federal improvement status and have made Adequate Yearly Progress (AYP) in the last two years of the program. The studies found further evidence that achievement gaps have been reduced in SIA schools.

Program Components

- **School Improvement Facilitator (SIF):** The facilitator works with OSPI, the school district, school, and a **School Improvement Leadership Team (SILT)** to develop a plan to address identified needs and to prepare and implement a jointly developed performance agreement between the school, school district and OSPI. The school improvement facilitators are experienced educators who have been successful in improving student performance and work approximately 1.5 days a week with each school for the three years of school improvement plan development and implementation. The school improvement leadership team includes representatives from the district and school staff, parents, and community members. Additional members may include educational service district (ESD) staff, OSPI staff and students.
- **Comprehensive Needs Assessment/School Performance Review:** The needs assessment/school performance review is completed jointly by the school improvement leadership team, school district, OSPI, and a team of peer educators and experts. The school's strengths and challenges are identified and recommendations for improvement are developed. The school's curriculum, leadership, instructional practices and resources, assessment results, allocation of resources, parental involvement, support from the central office, and staff, parent, and student perceptions are examined. Student performance data, indicators from the "Nine Characteristics of High Performing Schools" and the results of a review of the school's reading and math instructional practices and program, are used to identify areas to consider for improvement. The assessment/audit includes the administration of survey instruments and an on-site visit.
- **School Improvement Process, Tools, and Support:** Schools are given the necessary processes, tools and expertise for the school improvement leadership team to develop a comprehensive *School Improvement Plan*. Funds are provided to contract with individuals to assist with components of the plan, and the school improvement facilitator are responsible for organizing and facilitating meetings in coordination with school and district staff.

- **Funds for Staff Planning and Collaboration:** Funds for planning time related to the development of the school improvement plan are provided. These funds may be used to provide stipends for school improvement leadership team members. A minimum of three days must be devoted to planning time for all staff during the development of the school improvement plan. The funds can be used to pay staff stipends or to pay substitute teachers.
- **Performance Agreement:** Once the school improvement plan is completed, a two-year performance agreement is jointly developed by the school, school district and OSPI. The agreement identifies specific actions and resources the school district, the school and OSPI will commit to implement the school improvement plan. The agreement also includes a timeline for meeting implementation benchmarks and student improvement goals.
- **Implementation and Sustainability:** Tools and resources for the implementation of the performance agreement are provided during years two and three. The resources and expertise are determined on a case-by-case basis for each school, but could include such support as the provision of expertise in working with diverse student populations (e.g. special education, English language learners), funding and expertise to implement research-based practices and programs, and funding for time for staff collaboration. Schools and school districts are expected to ensure that existing funds are used effectively and to dedicate school district resources as identified in the jointly developed Performance Agreement.
- **Training Workshops:** Funds are provided to send a team of representatives to workshops during the school year to effectively plan for school improvement.
- **Professional Development:** Professional development opportunities for the school's principal and other school instructional leaders are provided in partnership with OSPI and the Association Washington School Principals (AWSP). Workshops are available during the school year.

The Process

Year 1: School Improvement Planning and Performance Agreement

- Conduct needs assessment through school performance review (formerly educational audit)
- Support staff training
- Develop school improvement plan/ performance agreement
- Develop student performance goals and evaluation criteria

Year 2: Implementation

- Tools and resources to implement the school improvement plan and performance agreements
- Evaluate student progress based on goals in the agreement

Year 3: Sustainability

- Tools and resources to build capacity and develop sustainability
- Evaluate student progress based on goals in the agreement

DISTRICT IMPROVEMENT ASSISTANCE

For 2008-2009, districts fall in four district improvement groupings: (1) New in Step 1; (2) Continuing in Step 1; (3) New in Step 2; and (4) Continuing in Step 2. The technical assistance provided to districts in improvement status varies to meet the needs of districts either as they are developing their improvement plans or in various stages of implementation of their plans. The following areas are the most common types of support.

- A. Providing a School System Resource Guide (SSIRG):** OSPI and WASA collaborated in developing a resource planning guide that supports districts as they analyze existing systems, structures, data, research findings, and more as they develop/revise their district improvement plan. A revision to the SSIRG is planned to be completed in 2008-09.
- B. Providing a Part-time, External District Improvement Facilitator:** District Improvement Facilitators are experienced educators who have been successful in improving student performance and receive continuous training through a partnership with WASA throughout the year. The selection of the facilitator is a collaborative effort between OSPI and each district. The facilitator works to help build the district's capacity to support high-quality, data-driven, research-based district improvement efforts.
- C. Providing or Arranging for Professional Development:** Additional resources for professional development to expand capacity of district and school personnel to sustain continuous improvement focused on improvement of instruction may be provided to meet the needs of districts.
- D. Provide for a District Educational On-Site Review:** Districts can request an educational on-site review to be completed by a team of peer educators and experts. The district's strengths and challenges are identified and recommendations for improvement are developed and provided to the district.
- E. Providing Identified Expertise:** Additional resources and expertise OSPI could provide is determined on a case-by-case basis for each district, but could include such support as expertise in working with diverse student populations (e.g., special education, English language learners), funding and expertise to implement research-based practices and programs, and funding for team collaboration time.
- F. Providing Limited Grant Money:** Districts may apply for two levels of grant support to assist in implementing one or more of the technical assistance opportunities listed A-E above.

OSPI recognizes the need to emphasize internal capacity building in districts and to revise its support systems and procedures over time.

APPENDIX D

ADVISORY GROUP MEMBERS

Dr. Pete Bylsma, an independent consultant and former state director of research and accountability at OSPI, was hired to help prepare the proposed index for Board review. He was assisted by a number of advisors. This diverse set of advisors reviewed the work that had been done to date, discussed numerous technical issues related to the proposed index, discussed the criteria for recognizing schools and districts, and identified quantitative and qualitative data that can be used to examine schools in the “struggling” tier to determine if they should be a Priority school needing much greater state assistance. Other stakeholders from OSPI were included in some of the discussions, and a State Board working group that focused on System Performance Accountability also provided feedback on the draft proposal.

Members of the advisory group were:

- Dr. Karen Banks, Shelton SD (District Improvement Facilitator)
- Ms. Maggie Bates, Hockinson SD (Assistant Superintendent)
- Ms. JoLynn Berge, OSPI (Federal Policy and Grant Administrator)
- Dr. Phil Dommes, North Thurston SD (Assessment Director)
- Dr. Linda Elman, Tukwila SD (Assessment/Research Director)
- Mr. Doug Goodlett, Vancouver SD (Special Services Director)
- Dr. Peter Hendrickson, Everett SD (Assessment Director)
- Dr. Feng-Yi Hung, Clover Park SD (Assessment/Evaluation Director)
- Dr. Nancy Katims, Edmonds SD (Assessment Director)
- Dr. Bill Keim, ESD 113 (Superintendent)
- Ms. Linda Munson, South Kitsap SD (Special Programs Director)
- Dr. Michael Power, Tacoma SD (Assistant Superintendent)
- Mr. Bob Silverman, Puyallup SD (Executive Director for Assessment)
- Ms. Nancy Skeritt, Tahoma SD (Assistant Superintendent)
- Dr. Lorna Spear, Spokane SD (Executive Director for Teaching and Learning)
- Dr. Alan Spicciati, Highline SD (Chief Accountability Officer)

APPENDIX E

RELEVANT LEGISLATIVE MANDATE

RCW 28A.305.130 Powers and duties — Purpose.

The purpose of the state board of education is to provide advocacy and strategic oversight of public education; implement a standards-based accountability system to improve student academic achievement; provide leadership in the creation of a system that personalizes education for each student and respects diverse cultures, abilities, and learning styles; and promote achievement of the goals of RCW 28A.150.210. In addition to any other powers and duties as provided by law, the state board of education shall:

(4) For purposes of statewide accountability:

(c) Adopt objective, systematic criteria to identify successful schools and school districts and recommend to the superintendent of public instruction schools and districts to be recognized for two types of accomplishments, student achievement and improvements in student achievement. Recognition for improvements in student achievement shall include consideration of one or more of the following accomplishments:

(i) An increase in the percent of students meeting standards. The level of achievement required for recognition may be based on the achievement goals established by the legislature and by the board under (a) of this subsection;

(ii) Positive progress on an improvement index that measures improvement in all levels of the assessment; and

(iii) Improvements despite challenges such as high levels of mobility, poverty, English as a second language learners, and large numbers of students in special populations as measured by either the percent of students meeting the standard, or the improvement index. When determining the baseline year or years for recognizing individual schools, the board may use the assessment results from the initial years the assessments were administered, if doing so with individual schools would be appropriate;

(d) Adopt objective, systematic criteria to identify schools and school districts in need of assistance and those in which significant numbers of students persistently fail to meet state standards. In its deliberations, the board shall consider the use of all statewide mandated criterion-referenced and norm-referenced standardized tests;

(e) Identify schools and school districts in which state intervention measures will be needed and a range of appropriate intervention strategies after the legislature has authorized a set of intervention strategies. After the legislature has authorized a set of intervention strategies, at the request of the board, the superintendent shall intervene in the school or school district and take corrective actions. This chapter does not provide additional authority for the board or the superintendent of public instruction to intervene in a school or school district;

(f) Identify performance incentive systems that have improved or have the potential to improve student achievement.



WASHINGTON STATE BOARD OF EDUCATION

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BYLAWS REVIEW

SUMMARY OF POLICY ISSUE /STATE BOARD OF EDUCATION (SBE) STRATEGIC PLAN GOALS

The Board may be adopting amendments to its Bylaws at the January 2009 Board meeting. This memorandum, presentation, and accompanying handout showing possible amendments, are fulfilling the required notification to Board members for possible revisions. The Bylaws state:

"All members shall be given notification of proposed amendments to the bylaws at the meeting preceding the meeting at which the bylaws are to be amended."

BACKGROUND

Amy Bragdon and Warren Smith are the Board leads and Brad Burnham is the supporting staff member for reviewing the Bylaws. The self-imposed schedule includes:

- Presenting draft amendments at the November 2008 Board Meeting, and
- Presenting final amendments for consideration of adoption at the January 2009 Board Meeting.

The proposed revisions are provided in a handout. The Board leads request that Board members consider the proposed amendments and send comments or questions to Brad Burnham no later than Monday, November 24.

POLICY CONSIDERATION

It is appropriate to periodically review the Bylaws.

EXPECTED ACTION

No action is required at this Board meeting. This document, along with the handout and presentation, serve as notice of amendments to the Bylaws that may be adopted at the January 2009 Board Meeting. The Bylaws may only be amended by a two-thirds affirmative vote of the Board members.



WASHINGTON STATE BOARD OF EDUCATION

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PROPOSED BYLAWS AMENDMENTS

Bylaws

of the

Washington State Board of Education

Adopted April 28, 2006

Bylaws Index

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ARTICLE I

Name

The name of this agency shall be the Washington State Board of Education.

ARTICLE II

Purpose

The purpose of the Washington State Board of Education is to provide advocacy and strategic oversight of public education; implement a standards-based accountability system to improve student academic achievement; provide leadership in the creation of a system that personalizes education for each student and respects diverse cultures, abilities, and learning styles; and promote achievement of the goals of RCW 28A.150.210.

ARTICLE III

Membership

Section 1. Board size. The membership of the Washington State Board of Education shall be composed of sixteen members who are residents of the state of Washington.

Section 2. Board composition. (1) Five (5) of the 16 members shall be elected by school district directors. Three (3) of the members shall be residents of Western Washington and elected by Western Washington school directors. Two (2) of the members shall be residents of Eastern Washington and elected by Eastern Washington school directors.

(2) One (1) of the 16 members shall be elected at-large by the members of the boards of directors of all private schools in the state meeting the requirements of RCW 28A.195.010.

(3) One (1) of the 16 members shall be the Superintendent of Public Instruction.

(4) Seven (7) of the 16 members shall be appointed by the governor.

(5) Two (2) of the 16 members shall be high school students determined by the Washington Association of Student Councils. Student members are non-voting members.

Section 3. Terms. (1) No person may serve as a member of the board, except the superintendent of public instruction, for more than two consecutive full four-year terms. Student members each serve one two-year term.

(2) The governor may remove an appointed member of the board for neglect of duty, misconduct, malfeasance, or misfeasance in office, or for incompetent or unprofessional conduct as defined in chapter 18.130 RCW. The governor shall appoint a new member to fill the vacancy.

(3) If an appointed member of the board resigns, the governor shall appoint a new member to fill the vacancy.

(4) If an elected member of the board resigns, the vacancy shall be filled by election at the next scheduled election opportunity. If the next election opportunity is more than one year away, the Superintendent of Public Instruction shall call for a special election to fill the vacancy.

Section 4. Compensation. (1) Members of the board who are not public employees shall be compensated in accordance with RCW 43.03.240 and shall be reimbursed for travel expenses incurred in carrying out the duties of the board in accordance with RCW 43.03.050 and 43.03.060.

(2) Members of the board who are public employees shall be reimbursed for travel expenses incurred in carrying out the duties of the board in accordance with RCW 43.03.050 and 43.03.060.

ARTICLE IV

Officers

Section 1. Designation. The officers of the board shall be the chair, the vice chair, immediate past chair, the superintendent of public instruction, and a member at-large.

Section 2. Term of officers. (1) The chair shall serve a term of two years and may serve for no more than two consecutive two-year terms.

(2) The vice chair and immediate past chair shall serve a term of two years and may serve no more than two consecutive two-year terms.

(3) The member at-large shall serve a term of one-year.

(4) The Superintendent of Public Instruction shall serve for as long as this member is the Superintendent of Public Instruction.

Section 3. Officer elections. (1) **Two-year positions.** (a) The chair and vice chair shall be elected biennially by the board at the planning meeting of the board.

(b) Should the superintendent of public instruction hold the position of chair, vice chair, or immediate past chair, the board shall elect a second member at-large as provided in subsection (2) of this section to serve as an officer and executive committee member.

(c) Each officer under subsection (1)(a) shall take office at the end of the meeting and shall serve for a term of two years or until a successor has been duly elected. No more than two consecutive two-year terms may be served by a board member as chair, vice chair, or immediate past chair.

(2) **One-year position.** (a) The member at-large office position shall be elected annually by the board at the planning meeting of the board.

(b) The person elected as member at-large shall take office at the end of the meeting and shall serve for a term of one year or until a successor has been duly elected. No more than two consecutive one-year terms may be served by a board member as member at-large.

(3) **Vacancies.** Upon a vacancy in any officer position, except the Superintendent of Public Instruction, the position shall be filled by election not later than the date of the second ensuing regularly scheduled board meeting. The member elected to fill the vacant officer position shall begin service on the executive committee at the end of the meeting at which she or he was elected and complete the term of office associated with the position.

Section 4. Duties. (1) **Chair.** The chair shall preside at the meetings of the board, serve as chair of the executive committee, make committee appointments, be the official voice for the board in all matters pertaining to or concerning the board, its programs and/or responsibilities, and otherwise be responsible for the conduct of the business of the board.

(2) **Vice Chair.** The vice chair shall preside at board meetings in the absence of the chair, sit on the executive committee, and assist the chair as may be requested by the chair. When the chair is not available, the vice chair shall be the official voice for the board in all matters pertaining to or concerning the board, its programs and/or responsibilities.

(3) **Superintendent of Public Instruction.** The superintendent of public instruction shall sit on the executive committee.

(4) **Immediate Past Chair.** The immediate past chair shall carry out duties as requested by the chair and sit on the executive committee. If the immediate past chair is not available to serve, a member of the board will be elected in her/his place.

(5) **Member At-Large.** The member at-large shall carry out duties as requested by the chair and sit on the executive committee.

ARTICLE V

Meetings

Section 1. Regular meetings. (1) The board shall hold an annual planning meeting and such other regular and special meetings at a time and place within the state as the board shall determine.

(2) The board shall hold a minimum of four meetings yearly, including the annual planning meeting.

(3) A board meeting may be conducted by conference telephone call or by use of video/telecommunication conferencing. Such meetings shall be conducted in a manner that all members participating can hear each other at the same time and that complies with the Open Public Meetings Act. Procedures shall be developed and adopted in the BOARD PROCEDURES MANUAL to specify how recognition is to be sought and the floor obtained during such meetings.

Section 2. Agenda preparation. (1) The agenda shall be prepared by the executive committee in consultation with the executive director, and other staff as necessary.

(2) The board chair reserves final authority to approve all items that will appear on the agenda at a board meeting.

(3) Members of the board may submit proposed agenda items to the board chair.

(4) The full agenda, with supporting materials, shall be delivered to the members of the board at least one week in advance of the board meeting, in order that members may have ample opportunity for study of agenda items listed for action.

(5) Hearings to receive information and opinions, other than those subject to the provisions of Chapter 34.05 RCW relating to adoption of rules and regulations or as otherwise provided by law, shall be scheduled when necessary on the agenda prior to final consideration for action by the board.

Section 3. Board action. (1) All matters within the powers and duties of the board as defined by law shall be acted upon by the board in a properly called regular or special meeting.

(2) A quorum of eight (8) voting members must be present to conduct the business of the board.

(3)(a) Subject to the presence of a quorum, the minimum number of favorable votes necessary to take official board action is a majority of the members present. There shall be no proxy voting.

(b) In order to vote at a meeting conducted by telephone or videotelecommunications conference call, members must be present for the discussion of the issue upon which action will be taken by vote.

(4) The manner in which votes will be conducted to take official board action shall be determined by the board chair, unless a roll call is requested and sustained by a majority of the voting members who are present.

(5) All regular and special meetings of the full board shall be held in compliance with the Open Public Meetings Act (Chapter 42.30 RCW).

Section 4. Parliamentary Authority. The rules contained in the current edition of *Robert's Rules of Order Newly Revised* shall govern the State Board of Education in all cases to which they are applicable and in which they are not inconsistent with these bylaws, state law and any special rules of order the State Board of Education may adopt.

ARTICLE VI EXECUTIVE COMMITTEE

Section 1. Executive committee. (1) The executive committee of the board shall consist of the chair, the vice chair, the immediate past chair, the superintendent of public instruction, and a member at-large.

(2) When there is a vacancy of an officer position, excepting the Superintendent of Public Instruction, the vacant position shall be filled pursuant to the election process in the Board Procedures Manual.

(3) The board chair shall serve as the chair of the executive committee.

(4)(a). The executive committee shall be responsible for the management of such affairs as may be delegated to it by the board, including transacting necessary business in the intervals between board meetings, inclusive of preparing agendas for board meetings.

(b) The executive committee shall be responsible for oversight of budget and personnel issues.

(c) The executive committee shall bring to the board recommendations regarding the duties and other matters relating to the executive director.

(d) The executive committee shall conduct an annual evaluation of the executive director with a report to the board. The evaluation will be based, in part, on the fulfillment of job responsibilities outlined in the director's job description.

(5) The executive committee shall meet monthly.

(6) The executive committee shall assure that the board annually conducts a board review and evaluation.

ARTICLE VII Committees

Section 1. Designation. (1) Responsibilities of the board may be referred to committee for deeper discussion, reflection and making recommendations to the whole board. Rule changes should be discussed in committee before recommended language is referred to the board for discussion and possible vote.

(2) The board chair shall appoint at least two board members to each committee to conduct of the business of the board.

(3) Appointments of non-state board members to a state board committee shall be made by the board chair, taking into consideration nominees submitted by board members, and identified groups or organizations.

(4) Board members of committees of the board shall determine which board member shall chair the committee.

(5) Each committee will be responsible for recommending to the budget process costs associated with responsibilities of the committee.

ARTICLE VIII Executive Director

Section 1. Appointment. The board may appoint an executive director.

Section 2. Duties. The executive director shall perform such duties as may be determined by the board. The job description will be approved by the executive committee. The person thus appointed shall serve as secretary of the board, without any vote in its proceedings, for the purpose of keeping a

record of board proceedings which shall be kept in the office of the board. The executive director, upon request, shall furnish to any person a copy of such proceedings. The executive director is responsible for performance and operations of the office; and for staff support of board member duties.

Section 3. Compensation and termination of the executive director. The rate of compensation and termination of the executive director shall be subject to the prior consent of the full board.

ARTICLE IX Amending Bylaws

Section 1. Amending bylaws.

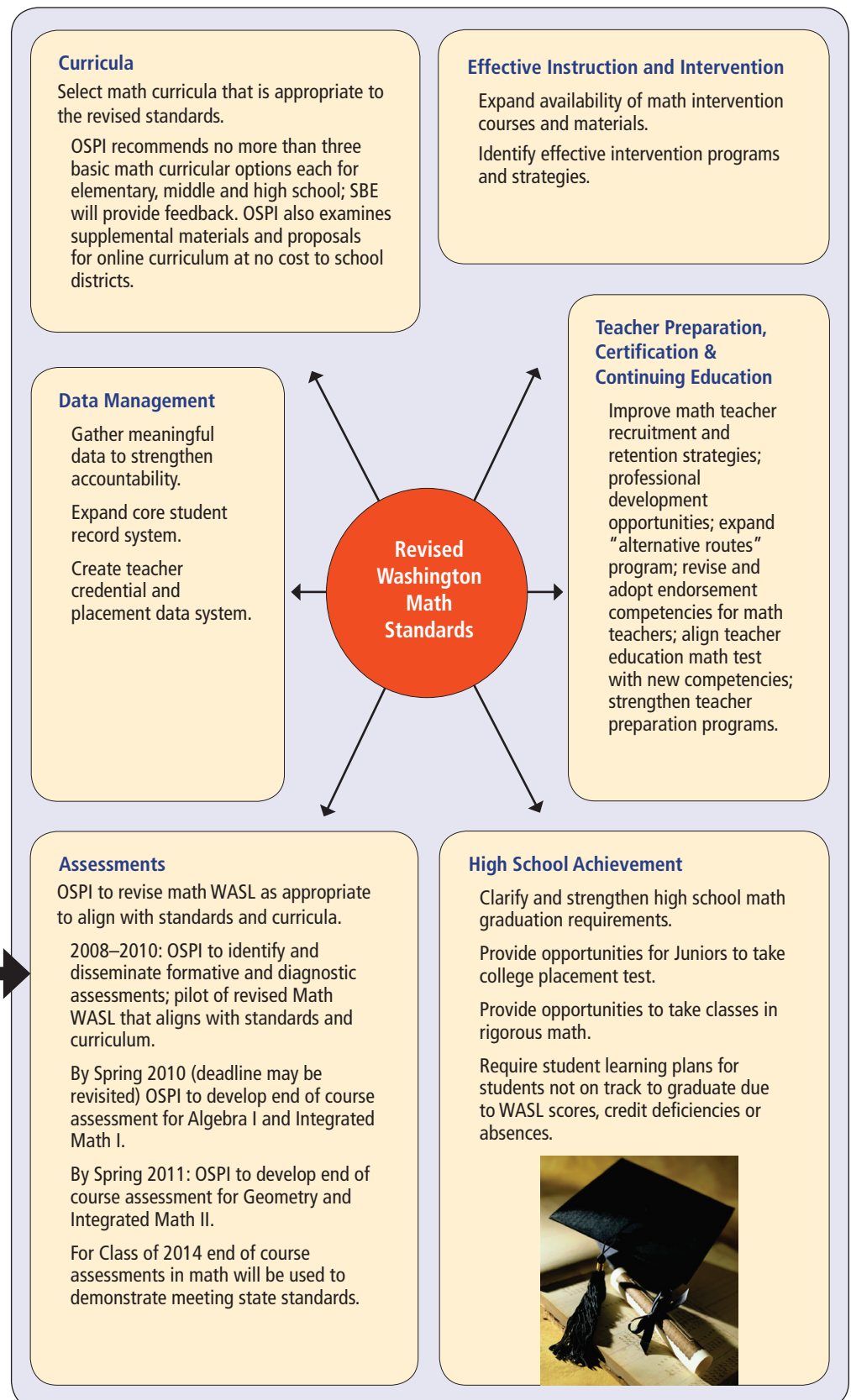
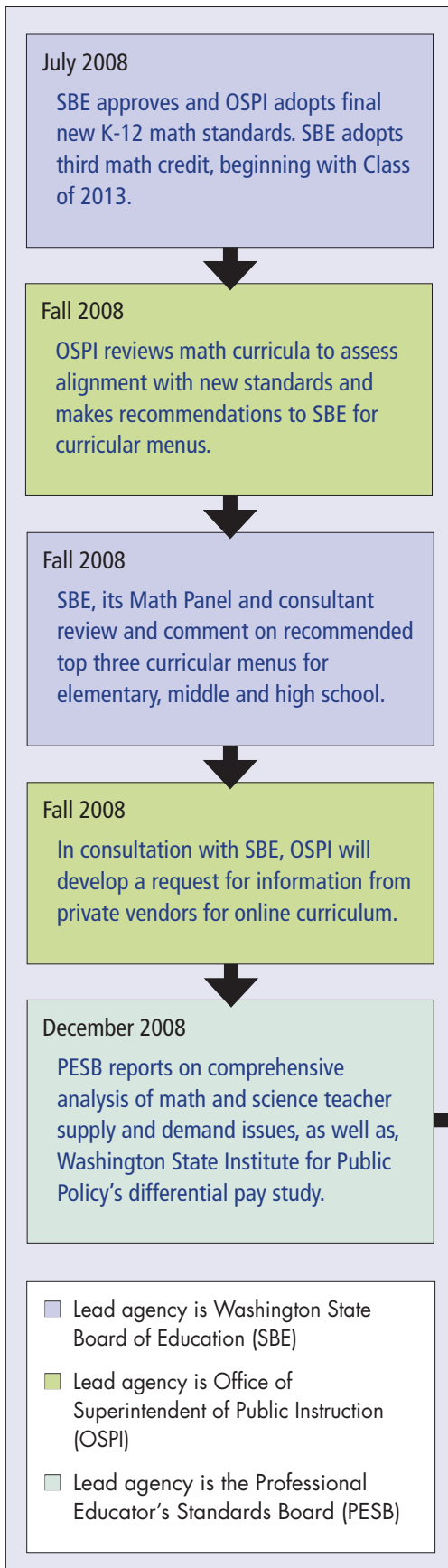
(1) These bylaws may be amended only by a two-thirds affirmative vote of the board members.

(2) All members shall be given notification of proposed amendments to the bylaws at the meeting preceding the meeting at which the bylaws are to be amended.

Section 2. Suspending bylaws. These bylaws may be suspended at any meeting only by a two-thirds affirmative vote of the voting board members present at the meeting.

Adopted by the State Board of Education: April 28, 2006

Adopting World-Class Math Standards to Drive Higher Math Achievement in Washington State's K-12 Schools





WASHINGTON STATE BOARD OF EDUCATION

OLD CAPITOL BUILDING • ROOM 253 • P.O. Box 47206 • 600 S.E. WASHINGTON • OLYMPIA, WA 98504-7206

SCIENCE: STANDARDS REVISION UPDATE AND END-OF-COURSE ASSESSMENT STUDY

SUMMARY OF POLICY ISSUE /STATE BOARD OF EDUCATION (SBE) STRATEGIC PLAN GOALS

The SBE has developed a math action plan and is in the process of developing a science action plan to help meet its goal of preparing all Washington State students for the opportunity to succeed in postsecondary education, in the 21st century world of work, and citizenship. These initiatives are in addition to the legislatively-required (RCW 28A.305.215) tasks given to the SBE to review and make recommendations on the science standards, receive the revised standards from the Office of Superintendent of Public Instruction (OSPI), and provide official comment and recommendations to OSPI regarding science curricula OSPI recommends to align with the revised standards.

BACKGROUND

Science standards revision. The SBE recommended changes to the science standards in May 2008, based on a review by its consultant, David Heil & Associates, Inc., and the science advisory panel. The OSPI is in the process of revising the science standards, which are due December 1, 2008. The SBE amended the Heil contract to add more opportunities for the Heil team to review the revisions and provide formative feedback to OSPI before they were completed.

The Heil team met with OSPI's science standards revision team in July 2008 to orient the team to the recommendations and their intent. Since then, the Heil team has provided formal and informal feedback on the revisions, meeting with the science advisory panel on September 19, 2008 and again on November 12, 2008 to review the most recent drafts.

The SBE will convene a special meeting on December 10 to receive the revised science standards from OSPI and to accept the Heil report on the revised standards.

End-of-course science assessment. The 2008 legislature changed the math assessment graduation requirement by instituting end-of-course math assessments for the graduating class of 2014. Students in the graduating class of 2013 will have the option of taking end-of-course math assessments in lieu of the math Washington

Assessment of Student Learning (WASL). In anticipation that the legislature might explore similar options in science, the SBE sought to become better informed about the issues associated with science end-of-course assessments. The SBE issued a contract to David Heil & Associates, Inc. to prepare a briefing paper on the topic. That paper is included in your packet.

POLICY CONSIDERATION

The SBE is not required, at this time, to take a position on science end-of-course assessments. This briefing is strictly informative.

EXPECTED ACTION

None; information only



Washington State
Board of Education



Working to Raise Student Achievement Dramatically

Implications of Using Science End-of-Course Assessments for High School Exit Exams

A Briefing Paper

*Submitted
October 28, 2008*

PROJECT TEAM

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DAVID HEIL & ASSOCIATES, INC.

Innovations in Science Learning

Introduction

This report was commissioned by the Washington State Board of Education (SBE) to inform the discussion about end-of-course (EOC) assessments that began with a report by Education First Consulting (2008) examining the role of EOC assessments in high school assessment systems. The discussion in this review complements the Education First Consulting report but focuses specifically on science. Where the Education First Consulting report addressed the central question – “How Well Do Comprehensive and EOC Assessments Meet the Four Major Purposes of High School Assessments?” – this report answers the question, “How Well Do Comprehensive and EOC Assessments Serve the Major Goals of Science Education?” In addressing this question, David Heil and Associates, Inc. (DHA) uses the unique features of the Washington science standards and the implied translation of those standards in school science programs as a basis for the discussion.

This brief: 1) reviews the use of science EOC assessments in the national context; 2) describes the Washington context for the use of science EOC assessments; 3) discusses implications for the use of EOC assessments with regard to the main goals of science education; and 4) outlines other considerations for science EOC assessments in Washington. This review does not present formal recommendations. Rather, it attempts to provide a deeper understanding and an insightful perspective on issues associated with the implementation of EOC assessments in Washington, especially in the science content areas.

The Use of Science EOC Assessments in the National Context

In the past 5 years, statewide EOC assessments have gained increasing interest in the education community. Although comprehensive assessments such as the Washington Assessment for Student Learning (WASL) remain the prominent statewide assessment vehicle across the country, the use of EOC assessments is increasing. Tables 1 and 2 are adapted from the Education First Consulting report (2008) and summarize states' uses of comprehensive and EOC assessments. Sixteen (16) states include EOC assessments in their high school assessment system and another 11 plan to implement EOC assessments in the near future. By 2012, twenty-six (26) states will have exit exams and 13 of these states will use EOC assessments as their exit exam.

Table 1	Status of EOC Assessments in State Systems (in Place or Planned)	
Have EOC assessments in place (or field-testing in 2007-2008 school year).	16	AR, CA, GA, IN, LA, MD, MA, MS, NJ, NY, NC, OK, SC, TN, UT, VA
Report plans to have EOC assessments in at least one subject area.	11	AZ, FL, HI, KY, MI, NM, OH, PA, RI, TX, WV
Planning to keep both EOC assessments and comprehensive assessments.	7	AR, CA, GA, LA, MA, MI, SC

Adapted from the Education First Consulting report, January 2008.

Table 2	States with EOC Assessments for Exit Exams and School Accountability (In Place or Planned)	
All states currently or planning to have exit exams for students.	26	AL, AK, AR, AZ, CA, FL, GA, ID, IN, LA, MD, MA, MN, MS, NV, NJ, NM, NY, NC, OH, OK, SC, TN, TX, VA, WA
States currently or planning to use EOC assessments to hold students accountable.	10	AR (2010), IN (2000), MD (2009), MS (2006), NY (2000), NC (2010), OK (2012), TN (2005), TX (2012), VA (2004)
States that will use comprehensives in English/math and EOC assessments in other subjects.	3	MA (English, math 2003, science EOC assessments 2010, U.S. History EOC assessment 2012) NJ (English/math 2003, Biology EOC 2010) SC (English/math 2006, Biology and U.S. History EOC assessments 2010)
Use or plan to use some or all of their EOC assessments for school accountability under NCLB.	12	AR, MA, MD, MS, NJ, NY, NC, OK, SC, TN, UT, VA

Adapted from the Education First Consulting report, January 2008.

The national landscape for science assessment shows a considerable amount of variation in terms of how the results of comprehensive and EOC assessments are used for the purposes of documenting student performance or determining school, district, and state-level accountability. Table 3 summarizes state exit exam requirements for science. By 2012 of the fourteen (14) states using a comprehensive exam as a graduation requirement, only 8 plan to

include a science component. Thirteen (13) states will require students to pass a science EOC assessment as a requirement for graduation, and another state (New Jersey) is considering this requirement. These states have different specifications for which science tests a student must pass. Six states will require students to pass only a biology EOC assessment for graduation. Other variations of science EOC assessment requirements include requiring students to 1) pass one science EOC assessment (MA, SC, VA); 2) pass two EOC assessments out of a set of five that include biology (OK); 3) obtain an average score across EOC assessments for biology, chemistry, and physics that meets the cutoff for graduating (TX); and 4) pass an EOC assessment for an integrated science course (WV).

Table 3 State Exit Exam Requirements for Science Current or Planned by 2012	
Exit Exam Requirement	Number of States¹
No exit exam requirement	24
Comprehensive exit exam without a science component and without a science EOC	6
Comprehensive exit exam with a science component	8
Science EOC exit exam requirement	13
<i>Biology EOC Assessment Only</i>	7
<i>1 Science EOC Assessment</i>	3
<i>Biology as 1 EOC Assessment Option</i>	1
<i>Average of 3 Science EOC Assessments</i>	1
<i>Integrated Science EOC Assessment</i>	1

Sources: Education First Consulting (2008); U.S. Department of Education (2007).

1) Includes Washington DC. Washington State is included in the "Comprehensive exit exam with a science component" category.

Although this paper is focused on the use of science EOC assessments as a graduation requirement, it is important to note additional and alternative uses of science EOC assessments (see Table 4 below). Currently, all of the 13 states that use or plan to use science EOC assessments as a component of their graduation requirement also will use the science EOC assessment to meet the accountability requirement for federal No Child Left Behind (NCLB) legislation. An additional 5 states (GA, LA, CA, MI, UT) that do not use a science EOC assessment as a graduation requirement include science EOC assessments as a component of their science assessment system. These states use the science EOC assessments to 1) provide a diagnostic tool for teachers and students to gauge student progress towards performance on a comprehensive exam; 2) serve as a state-level measure of school or district accountability and ensure consistency in core science curricular areas; and/or 3) measure student performance for the purpose of determining a portion of their course grade.

Table 4	State Uses of Science EOC Assessments			
EOC Assessment	Total States Offering Exam¹	States Requiring Exam for Graduation	States Using Exam as a Graduation Option²	States Using Exam for NCLB
Biology	18	8	4	14
Physics	9	1	2	4
Chemistry	8	1	2	4
Earth Science	5	0	1	2
Integrated Science	2	1	0	1
Living Environment	1	0	0	0
Technology/Engineering	1	0	0	1

Sources: Education First Consulting (2008); U.S. Department of Education (2007).

1) Includes states for which the exam is currently under development.

2) Students may choose this EOC assessment as one of their required EOC assessments.

The Use of Science EOC Assessments in the Washington Context

Excerpts from the Education First Consulting report (2008) provide background for a specific discussion of science EOC assessment in the Washington context. The report thoroughly analyzed the relative strengths and limitations of comprehensive exams and EOC assessments in meeting four major purposes of assessment. Overall, the report found both similarities and differences between comprehensive tests and EOC assessments. Figure 1 provides an excerpt from the report summarizing key features of each type of assessment.

Figure 1	Comparison of Comprehensive & EOC Assessments
State high school assessment systems that are based on comprehensive tests: <ul style="list-style-type: none"> ▪ Usually focus on 10th grade or lower standards; ▪ Assess a slice of the high school standards, rather than deep knowledge of subjects; ▪ Can potentially narrow the delivered curriculum to what is tested; ▪ Provide a “snapshot” of system performance at a point in time for all students; ▪ Take less testing time overall and cost less; ▪ Take a straightforward approach to exit exams and school accountability; ▪ Rarely provide information on students’ readiness for postsecondary education coursework and training. 	

**Figure 1
Cont'd****State Uses of Science EOC Assessments****State high school assessments systems based on EOC assessment testing:**

- Vary widely relative to the number and kinds of courses assessed;
- Measure a broader and deeper range of standards, including advanced subject matter, but only if there are a sufficient number of EOC assessments in each subject;
- Do not assess all students against common standards unless states require all students to take a certain series of courses and/or require all students to take certain EOC assessments;
- Are typically implemented to promote more consistency of teaching and provide more timely information on learning and course quality;
- Motivate students to learn through exit exams as well as other forms of lesser student stakes, such as counting test results as a portion of course grades;
- Make it more complicated to hold students and schools accountable, yet offer the potential to produce more validity and reliability;
- Can be better suited for placing students in postsecondary education courses than comprehensive tests given by states in the 10th grade.

Excerpted from Education First Consulting (2008), pages 2-3.

The Education First Consulting report concluded that although the two formats for assessments can serve many similar purposes, they also have different strengths in different areas. Given that comprehensive and EOC assessments have much in common, and that neither format is in itself a panacea to problems of low student or school performance, the report concluded that Washington policy-makers must first determine the extent to which the four purposes are most important in Washington, in order to choose the most appropriate testing format:

If, for example, Washington leaders want the high school assessment system to ensure greater consistency and bring teaching and learning more closely in line with statewide standards, then EOC assessments are probably better suited to serve this goal. If state leaders instead place a higher priority on preserving simplicity and minimizing complexity in the testing system, then continuing to use the WASL as the state's high school assessment is more appropriate.

Education First Consulting (2008), page 3.

To further the discussion that began with the Education First Consulting report and to extend this discussion specifically to implications within the discipline of science, it is necessary to first clarify several assumptions about the context of science education in Washington.

- I. New Standards for Science Education.** In 2009 Washington will introduce new standards for K-12 science education. The document will include content standards and performance expectations for science content, scientific inquiry, and applications of science in personal and social perspectives. The standards can serve as the basis for EOC assessments, a comprehensive assessment (the WASL), or both.

- 2. Science Credit Requirement for Graduation.** The SBE has approved a graduation requirements policy framework (CORE 24) that includes three credits of science with two of those being laboratory credits. Although contingent upon funding, the new CORE 24 requirements are scheduled to be phased in, beginning in 2013, and are planned to be fully implemented by 2016.
- 3. Science Assessment Requirement for Graduation.** Beginning with the class of 2013, students will be required to pass a science assessment (currently the WASL) to graduate.
- 4. National Requirement for State Accountability for Science.** Beginning in 2007-2008, states are required to administer annual assessments in science at least once in grades 3 through 5, grades 6 through 9, and grades 10 through 12. States may use EOC assessments at the high school level if they are used for high school courses that all students are required to take to graduate from high school. If used, EOC assessments must measure the depth and breadth of the content that the State expects all high school students to know and be able to do by the time they graduate (Department of Education, 2003).
- 5. Stakeholders Value Local Control.** Focus groups conducted with Washington educators during April 2008 revealed that stakeholders value having local control over decisions concerning science education programs and practices at the district, school, and classroom levels. This is a significant note about the Washington context for science education, because decisions about a transition to EOC assessments and/or changes in the WASL will affect local decisions about selection of instructional materials, instructional practices, the curriculum, and the courses and exit exams that meet graduation requirements.

Implications of EOC Assessments for Meeting the Main Goals of Science Education

The new Washington science standards are framed around four widely accepted goals of science education: science content, inquiry, application of science, and career awareness. Each of these goals is briefly described below, so that they may be used as the framework for understanding implications of implementing a science EOC assessment system.

Science Content. Students should understand core concepts and principles that are described in the Washington standards using the categories physical science, earth and space science, and life sciences.

Inquiry. A second major goal of science education involves students' understanding and use of methods associated with scientific investigation. The Washington standards describe this goal using the contemporary term—inquiry.

Applications of Science. This goal involves the application of scientific knowledge and methods to issues of health, resources, environments, as well as understanding the interrelationships among science, technology, and society. The Washington standards use the category—applications—to describe this goal.

Career Awareness. One goal that is always present but rarely dominant centers on careers in science, engineering, health professions, and other science/technology related jobs. Although the current Washington standards do not have an explicit category for this goal, the intent is implicit through each of the categories above. Washington Learns (2006) highlighted the importance of this goal to ensure the development of a 21st Century Workforce that makes the State competitive in the global economy.

Policy makers for education have the challenging task of achieving the highest possible levels of these goals for all students while accommodating constraints of budget, individual student variations, accountability, and other priorities thoroughly described in the Education First Consulting report. Although many factors must be considered when making policy decisions related to implementing EOC assessments for science, one priority should predominate—what will maximize student learning with respect to the major goals of science education. The implications of science EOC assessments are summarized below for each of the major goals of science education previously provided.

Science Content

Identification of a common set of science concepts to be assessed through a comprehensive exam presents some difficulty due to the persistence of the separate academic courses by discipline such as biology, chemistry, physics, geology, and meteorology. EOC assessments better accommodate this condition, but require implementation of several separate assessments. Alignment of EOC assessments would be necessary to accommodate courses such as Physical Science, Earth Science, and Biology, as well as courses with titles such as General Science, Coordinated Science, Science I, and Integrated Science.

In contrast to a comprehensive assessment, EOC assessments would provide more direct feedback on students' depth and breadth of knowledge in specific science content. In some districts and schools, the use of EOC assessments also would have the likely consequence of narrowing the variety of science courses offered, resulting in greater alignment among standards, courses, and assessments.

Scientific Inquiry

The science education community generally agrees on the importance of laboratory experiences as part of school science programs and by extension, the importance of appropriate assessment of these experiences. These assessments should focus on measuring students' knowledge of scientific inquiry and abilities such as the design of investigations; control of variables; collection of data; and use of evidence in support of a conclusion, recommendation, or decision. In comparison to comprehensive examinations, EOC assessments present greater opportunities for in-depth and subject specific evaluation of students' knowledge and abilities of scientific inquiry and the nature of science. These abilities are closely related to 21st century workforce skills and abilities such as problem-solving and critical thinking.

Applications

The science standards call for the application of science and technology to "real-world" problems. Although comprehensive examinations can include items with contexts such as health, resources, and environments, EOC assessments are better suited to assess specific disciplines and types of investigations.

Career Awareness

Inquiry and applications standards in the new Washington science standards address many of the outcomes necessary for 21st Century Workforce skills. A comprehensive assessment will assess these student skills at a single point in time, whereas a collection of EOC assessments could be developed to provide multiple assessments of these skills as they are introduced and learned in different courses or content areas. However, to ensure uniformity and comprehensive coverage, using EOC assessments to measure career awareness would require statewide coordination with regard to which science courses are used to address specific career awareness skills and abilities, and which courses would be required as opposed to elective.

Other Considerations for Science EOC Assessments in Washington

In addition to the implications for the main goals of science education, the selection of either EOC assessments or comprehensive assessments intersects with other issues within the educational system. As discussed previously, the Education First Consulting report provided a number of comparisons between comprehensive and EOC assessments. This report extends this discussion to issues that are specific to science education by highlighting some of the important issues that will require consideration by policy-makers, including graduation requirements; development and implementation of EOC assessments; statewide accountability; measurement of student knowledge and skills; and alignment of standards, curriculum, and assessment.

Graduation Requirements

Recognizing that assessment systems should be designed to measure the depth and breadth of the content that a state expects all high school students to know and be able to do by the time they graduate, increasing the graduation requirement to 3 courses (2 with a laboratory) and maintaining the WASL at 10th grade presents a significant alignment challenge for the State. Using EOC assessments for the three required courses could meet both graduation requirements and serve as a high school exit examination. It also would be possible to use EOC assessments as both criteria for meeting individual course requirements and calculating grades while also maintaining the comprehensive WASL but administering the WASL at grade 11 instead of grade 10. Maintaining the WASL and introducing EOC assessments could provide the state and local districts with accountability options while maintaining a focus on the new standards and purposes of science education.

Development and Implementation of EOC Assessments

Although states use various approaches to designing, administering, and scoring EOC assessments (including providing teachers with rubrics to score tests locally) most states centrally develop the assessments for statewide implementation. This approach helps to ensure that the standards and assessments are fully aligned at the state level but leaves open the potential for local options relative to: instructional materials, teachers' professional development, and course selection for graduation. Implementation of a standard set of EOC assessments would demand greater statewide consistency in high school course offerings as

well as the curricula and instruction for those courses and therefore, could raise tensions around issues of local control.

Implementation of EOC assessments in science will result in an upfront financial investment for the state to develop the new assessments, and additional local costs as the EOC assessments would likely result in some districts and schools selecting new instructional materials and revising their science course offerings and classroom practices. On an on-going basis, EOC assessments require more time for administration, but the tests can be easily administered within the class for which they are designed and within the normal class schedule, thus creating little, if any, disruption to the normal school schedule. Administration of a single comprehensive exam such as the WASL usually requires dedication of time outside of the normal instructional schedule.

Despite their upfront costs at the state and local levels, EOC assessments could ultimately serve as better tools for assessing state and local needs and developing district and school improvement plans. Through increased depth of student assessment in a particular subject, EOC assessments provide a more valid and reliable measure of student performance, making the EOC assessments more effective as tools for diagnosis and improvement of instruction, curriculum, and professional support.

State, District, and School Accountability

The legislature has required the SBE to develop a statewide accountability system. Based on this legislative mandate, the SBE has considered principles for an accountability system such as (SBE, August 12, 2008):

- Encourage the improvement of student learning.
- Be fair, reasonable, and accurate.
- Be a valid assessment.
- Focus educational priorities at classroom, school, and district levels.
- Apply to all schools in the state.
- Use standards-based concepts.
- Rely on criterion-referenced measures (criterion are the content standards).

Either comprehensive or EOC assessments could be effectively implemented to support these principles for accountability, and both approaches could be used to meet federal NCLB legislative requirements. However, the assessment approaches would differ with regard to the types of information that they provide about student, school, and district performance. Although comprehensive examinations would measure school and district performance as a snapshot of student achievement in science standards at a particular point in time, EOC assessments would more closely measure how specific courses support student achievement of science standards.

Student Accountability and Engagement in Learning

As evidenced in the discussion of the national context for EOC assessments, unlike comprehensive assessments, EOC assessments offer a number of medium stakes options for student accountability in addition to the high stakes approach of using the assessment as a graduation requirement. Medium stakes uses include recording the results of an EOC assessment on a student's transcript and basing a final course grade on the assessment.

Research conducted by John Bishop and his colleagues suggests a variety of positive benefits of using EOC assessments to promote student accountability (Bishop, Mane, Bishop, Moriarity, 2000; Bishop, Mane, Bishop, 2001; Bishop, 2007). Student outcomes include increased attention in class, higher levels of engagement in learning, and increased conscientiousness about completing assignments. Holding students accountable in this manner also appears to support changes in teachers and teaching including setting higher standards for students, spending more time teaching cognitively demanding skills, not giving “inflated grades,” and improving relationships with students.

Alignment of Standards, Curriculum, Assessments

Implementation of a comprehensive science exit exam will have implications for course sequencing at the high school level. Implementation of science EOC assessment exit exams will likely narrow the range of course options statewide but clarify the specific content and performance expectations covered by those courses. For example, the SBE database of district-level graduation requirements for the 2007-2008 academic year lists 12 different science courses that imply “Integrated Science” content, including “Science I,” “Introductory High School Lab Science,” “General Science,” “Integrated Science,” “Coordinated Science,” “Freshman Science,” and “Essential Science.” This is a wide array of courses that could be narrowed by the new content standards, a focus on the implied goals of science education, and the development and implementation of a single EOC assessment to measure student knowledge and skills in integrated science.

Conclusion

The previous discussion was presented to assist the SBE in comparing the effectiveness of science EOC assessments and comprehensive assessments with regard to measuring the major goals of science education as outlined in the Washington State science standards and to present other important considerations with regard to the statewide educational system. With the development and implementation of new science standards for the state of Washington, a revision to the number of science credits required for graduation, and current federal requirements for science assessment, Washington is in a position to act decisively on science assessment. Comprehensive and EOC assessments for science have different implications for motivating and measuring student achievement as well as meeting the major goals of science education across the educational system overall. The SBE must weigh these differences and choose an assessment system that acknowledges the values of statewide stakeholders and Washington’s goals for improving science teaching and learning.

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WASHINGTON STATE BOARD OF EDUCATION

OLD CAPITOL BUILDING • ROOM 253 • P.O. Box 47206 • 600 S.E. WASHINGTON • OLYMPIA, WA 98504-7206

REVIEW OF COMPREHENSIVE PROPOSALS TO BASIC EDUCATION FINANCE TASK FORCE AND SBE DISCUSSION OF ITS PROPOSED K-12 BUDGET PARAMETERS

SUMMARY OF POLICY ISSUE /STATE BOARD OF EDUCATION (SBE) STRATEGIC PLAN GOAL

Although only the legislature can appropriate funds for K-12 education in Washington, the Board may advocate for all of the Board's strategic plan goals in various forums and at different times.

BACKGROUND

The 2007 Legislature created a Joint Task Force on Basic Education Finance (JTFBEF) to "review the definition of basic education and all current basic education funding formulas" (SB 5627). The Task Force is to "develop options for a new funding structure and all the necessary formulas, and propose a new definition of basic education." The Task Force will complete its work by December 1, 2008.

Since the last memorandum to the Board in July, one more comprehensive funding proposal has been presented to the Task Force and shared with the public. The new proposal entitled "Basic Education Funding Proposal: Preparing Children to Succeed in the 21st Century," was jointly submitted by Rep. Ross Hunter, Rep. Pat Sullivan, Rep. Fred Jarrett, Rep. Glenn Anderson, Rep. Skip Priest, and Sen. Rodney Tom. This new proposal has been added to the summary spreadsheet shared with Board members in July for comparison review. It has been placed in the first column of the spreadsheet and has been titled "Model School Proposal." The full proposals can be viewed on the Task Force's Web page (<http://www.leg.wa.gov/Joint/Committees/BEF/>).

The Task Force's work plan includes a release of the full set of proposals on November 4 or 5. The Task Force members will begin to review, select, and amend proposals at their November 10, 2008 meeting. The Task Force will create a draft set of recommendations and receive public comment prior to submitting final recommendations to the legislature on December 1, 2008.



Washington State
Board of Education



Working to Raise Student Achievement Dramatically

**SBE Parameters for Discussion Purposes on Basic Education Funding and
Other K-12 Funding Components
November 7, 2008**

Basic Education Funding

CORE 24 Funding Framework: The Board believes that CORE 24 graduation requirements should be a part of basic education in the 21st century.

- Six hours of instruction for all students, including one hour of teacher planning and associated non-employee related costs and special education funding formula impact paid by state.
- Seven hours of instruction for struggling students, including non-employee related costs and transportation (many ways to meet requirements, thus we estimate that ten percent of students will need additional credit catch up assistance).
- Support for Navigation 101 – start up and support of some other high school plan guidance system and additional counselors, beginning in middle school
- Curricular phase-in support for additional course work students will take in Math, Science, English, Arts, World Language, and Career Concentration (fund math and science first).
- There are other costs we are not including – teacher incentives for recruitment, capital facilities, etc. We will look at these with PESB, OSPI and others.

Other Basic Education Funding

The Board recognizes that there are additional important components of K-12 basic education that must also be funded under a new system. While the Board is not taking a position on individual components, it recognizes that many districts are facing large financial challenges under the current funding system.

Other Important K-12 Funding Components

Investment in Math and Science

The state has made a significant investment in new standards for math and science. An aligned curriculum and instruction to students in the classroom are critical to see a significant change in student improvement

- Support OSPI Request for Curriculum to Ensure Alignment to New Math and Science Standards
- Support OSPI Request for Professional Development for Teachers to Ensure Effective Teaching Practices Aligned to the new standards

Accountability for Student Achievement

The SBE is developing a policy framework for a statewide accountability system that includes an Accountability Index that identifies the status of all schools to ensure continuous progress on a variety of indicators of student achievement; a new tool called the Innovation Zone for districts that want to change their operating conditions and a new Required State/Local Partnership for districts that need additional assistance to improve student achievement.

Funding for the accountability system should be implemented concurrently with revisions to the basic education funding formula and the investment in additional resources for alignment of the new math and science standards with classroom materials and instruction.

Professional Development

The SBE currently provides waivers for 82 districts from the Basic Education Act requirement of 180 days of student instruction. The average number of days waived is three days. The primary use of these days is for professional development, but it takes important instructional time away from the students.

- Funding to increase state funded Learning Improvement Days from two days to five days and removal of the authority to grant waivers from the minimum 180 day requirement



WASHINGTON STATE BOARD OF EDUCATION

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BASIC EDUCATION PROGRAM REQUIREMENT WAIVERS

SUMMARY OF POLICY ISSUE /STATE BOARD OF EDUCATION (SBE) STRATEGIC PLAN GOALS

The Board will be considering two applications for waivers from the Basic Education Act requirements at the November Board Meeting.

1. **Prescott School District** is requesting a waiver from the one hundred eighty-day school year requirement for the 2008-09, 2009-10, and 2010-11 school years. The waiver request meets the goals of restructuring to improve student achievement and is similar to a waiver granted to an adjoining school district. The district believes that the waiver will increase parent and guardian participation in the children's education, especially for their Hispanic community. They also believe that it is critical to their work on closing the achievement gap.
2. **Big Picture High School**, in Highline School District, is requesting a waiver from credit-based high school graduation requirements for the maximum four years that are allowed. The waiver request meets Washington State's school reform vision as stated in the State Board of Education's rules, specifically "shifting from a time and credit-based system of education to a standards and performance-based education system."¹ In place of traditional credits, the Big Picture High School has "developed an array of competencies based on college admission criteria adapted from work in other states and in collaboration with admissions staff from major colleges and universities in Washington."² The school believes that the waiver is an essential part of its work to "engage students at risk of dropping out as well as to provide increased rigor for all students."³ The school's vision is aligned with the Board's goals of improving student achievement and improving graduation rates. It also aligns with the purposes of a waiver, to provide an exceptional opportunity to be innovative in order to enhance the educational program for the school's students.

BACKGROUND

Prescott School District Application

Prescott School District, located in Prescott, is in Walla Walla County. It has 247 students in Grades K-12 attending two schools: Prescott Elementary School and Prescott Junior/Senior High School. The application for a waiver is a new application.

¹ WAC 180-51-001

² Highline School District Application

³ Highline School District Application

The details of the waiver are similar to a waiver previously approved by the Board for an adjoining district, Waitsburg School District. The request is to have two days waived from the one hundred eighty-day school year requirement. The purpose of the waiver request is to restructure the school's calendar to allow for four evening parent-teacher conferences, two in the fall and two in the spring. The District is small and rural with many of their families living far from the schools. The majority of the students come from Vista Hermosa, an agricultural working community.

The District believes that "by having two evenings in the fall and two evenings in the spring devoted to student/parent/teacher conferences, direct communication with parents and students will be accomplished. Evening conferences ensure greater participation, as 80% of our families live 20 miles from the Prescott School District and their workday ends at 4:00 p.m. Most are Hispanic families who need translators and this evening accommodation to maximize communication of their children's academic progress."⁴

The District had many formal and informal discussions with stakeholders and the parents have frequently asked for evening parent-teacher conferences. The District believes that the waiver will help build positive relationships with the working families of their community. Their teachers and staff also support the restructuring of the calendar as a means to positively impact student achievement.

Highline Big Picture High School Application

Highline Big Picture High School is in SeaTac and opened in 2005-06. This year the school has about 120 students in grades nine through twelve. Big Picture is one of 12 high schools in the Highline School District, which serves students in Burien, Des Moines, Normandy Park, SeaTac, Boulevard Park, and White Center.

The District is requesting a waiver for Big Picture High School from credit-based high school graduation requirements. This is a new application. The school requests to be permitted to graduate students based on successful demonstration of competencies through its curriculum, which is "both integrated and vocationally immersed, such that students acquire and demonstrate academic proficiencies through school-based work and also through internships in adult workplaces under the supervision of mentors who collaborate closely with school staff."⁵

The proposed competencies are closely aligned to the Proficiency-based Admission Standards System (PASS), which was developed in Oregon in the 1990's, as part of an effort to create a seamless and aligned K-16 system of education. The competencies were created in consultation with admissions directors from major public and private colleges and universities in Washington and were built upon graduation requirements of other schools in the national Big Picture Learning Network.

⁴ Prescott School District application

⁵ Big Picture High School application

Big Picture High School is based on four interrelated principles: 1) multiple, meaningful, and extended adult relationships; 2) a small learning community; 3) academics in the context of real work outside the school; and 4) a school culture pervaded by the expectation of higher education for all students. The move to competency-based graduation requirements, at Big Picture High School, is aligned with the District's vision, as outlined by Superintendent John P. Welch in the application's cover letter:

"The vision of Highline is that all students leave high school prepared for college, career and citizenship, and that no door is closed to them that limits their postsecondary choice."⁶

POLICY CONSIDERATION

Both applications for waivers meet the State Board of Education's criteria for the purpose and use of a waiver. Therefore, approval of the applications should not have any policy implications.

EXPECTED ACTION

Approval of both applications.

⁶ Big Picture High School application



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INITIAL APPROVAL OF A PRIVATE SCHOOL FOR THE 2008-09 SCHOOL YEAR

BACKGROUND

The school herein listed, having met the requirements of RCW 28A.195 and consistent with the State Board of Education rules and regulations in chapter 180-90 WAC, be approved as a private school for the 2008–09 school year.

RECOMMENDATION

The private school seeking State Board of Education approval is required to submit an application to the Office of Superintendent of Public Instruction. The application materials include a State Standards Certificate of Compliance and documents verifying that the school meets the criteria for approval, established by statute and regulations for this school seeking initial approval. A more complete description is attached for reference. Staff recommends approval of this school.

Enrollment figures, including extension student enrollment, are estimates provided by the applicants. Actual student enrollment, number of teachers, and the teacher preparation characteristics will be reported to OSPI in October 2008. This report generates the teacher/student ratio for both the school and extension programs. Pre-school enrollment is collected for information purposes only.

Private schools may provide a service to the home school community through an extension program, subject to the provisions of RCW 28A.200. These students are counted for state purposes as private school students.

Private Schools for Approval

2008-09

School Information	Grade Range	Projected Pre-school Enrollment	Projected Enrollment	Projected Extension Enrollment	County
Small World Montessori (Initial) Shelly Perera 12810 35 th Ave SE Everett WA 98208 425.338.7771	P-2	70	10	0	Snohomish



Washington State
Board of Education



Working to Raise Student Achievement Dramatically

Washington State Board of Education
Meeting Dates and Locations for 2009-10

Proposed Dates/Locations for 2009	Proposed Dates/Locations for 2010
January 14-15 Olympia New Market Skills Center	January 13-14 Olympia TBD
March 12-13 ** Olympia New Market Skills Center	March 18-19 Olympia TBD
May 14-15 ** Yakima Yakima Valley Community College	May 13-14 Spokane ESD
July 15-17 – to include Retreat Gig Harbor Inn at Gig Harbor	July 14-16 - to include Retreat TBD
September 17-18 Renton PSESD	September 16-17 Seattle PSESD
November 12-13 Vancouver Heathman Lodge	November 4-5 Seattle PSESD

** The March and May meeting date changes are due to dates already approved for the Professional Educator Standards Board 2009 meetings. All SBE 2010 meetings were reviewed with the PESB dates to ensure there are no conflicts.