WASHINGTON STATE BOARD OF EDUCATION

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

December 26, 2007

Dear Board members:

All your staff elves are busy putting the Board packet together. I hope you are finding time to enjoy your family and friends during the holiday season. Last week I took off to Bend, Oregon with my family for a bit of skiing, card playing, all round carousing and unplugging from our computers! It's the only way my husband and I can "capture" our college boys for some real family time. The boys reminded us during our quality time together that college students know everything and parents know nothing. How well I remember that feeling when I was 20☺!
We have some good Santa news…the Gates Foundation liked our proposal and asked us to submit our proposal formally, which I will do in the latter part of this week. This additional funding ($850,000) will allow us to continue our important work in the area of communications and a contract to do several studies (high school student transcript analysis, barriers to student achievement at the district level, model state/local partnerships for chronically underperforming schools, and our symposium, which we have moved to the fall of 2008).

Before our March Board meeting I would like to call each of you for a 15-20 minute check in conversation. I will ask Loy to work with you to set these up. It is roughly half way after our summer retreat and I want to know how things are working for each of you, answer any questions you have, and listen to your thoughts as we move ahead.

I am enclosing several additional pieces for you to read before you delve into your Board agenda materials. These include:

- **Edie's Goals 2007-08** – I have had these in draft form for awhile and have finalized them (finally!) for all of you.

- **Tribal Leader Congress on Education Letter** – At the November Board meeting, Karen Condon, from the Colville Confederated Tribe, read a letter requesting .5 credits of local Tribal History be required for graduation from Washington State schools. The Tribal Leader Congress (TLC) also agreed in this resolution to participate with the State of Washington to create the local Tribal History curricula by 2012. The TLC passed this request formally at its December meeting and you now have a copy of the letter. This language is <u>slightly different</u> from the original Memorandum of Agreement, which asked the Board to reach a decision on whether to include tribal history, culture and government as a graduation requirement. The key changes are the specificity of .5 credits and *local* tribal history. Staff will work with stakeholders to devise a process for considering this request in the context of the meaningful high school diploma work.

- **APCO Communications Plan 2008 for the State Board** – I asked APCO to prepare a communications plan as I would like to extend their contract for this next year. I have been pleased with the support they have given us and am asking for some new pieces including: interviews with community leaders; one on one briefings with key stakeholders; support for our fall symposium; a video with student perspectives; ideas for a new Board logo and some revisions for our Web site. They will continue to provide media training to Board members as well as assist with strategies, materials, and support for presentations and outreach. The total amount of the extension is $260,000. Their plan is enclosed for you to see. Due to the packed agenda, we will not have a presentation on their plan, but if you have questions please call me! We will use the Gates grant for this effort and will also reserve an additional amount for additional expert advice on public relations strategy as we build final proposals.

- **December 5th Event and Partnership4Learning College and Work Ready Agenda** – About half of you attended the December 5th event "Closing the Student Achievement Gap" that we co-sponsored with the Partnership4Learning and OSPI. This college and work ready agenda paper "Improving the Odds" was presented at the meeting. We thought for those of you who could not attend that you would find this of interest as you think about your Board work in January and beyond. Katy Haycock from the Education Trust group gave a great presentation on closing the student achievement gap. Mary Jean also provided some wonderful comments, introducing Katy that we sent to you earlier this month.

- **Math Feedback on the Third Credit** – I wanted you to see how people have responded to the third credit of math issue during our outreach. The vast majority of folks who responded (112 people) support multiple options for the third math credit, but not Algebra II for all students (only 16 people supported that option). Keep in mind that most of our "public" was primarily K-12 educators and administrators or school board directors. Also we just received a short letter on December 20th from AWSP, WEA, WSSDA, WASA, and the Public School Employees Union asking us to hold off on the content of the 3rd math requirement until the Board defines what it expects students to learn and accomplish to receive a diploma. I will talk with the Executive Committee about how to address this letter, but I wanted you to see it.

A few other "odds and ends" to update you on:

- **Graduation Requirements** – When the Board reviewed the graduation requirements of all 246 districts with high schools last spring, five districts appeared to be out of compliance. Letters were sent to those districts in July 2007, asking for a response by November 1, 2007. Each of the five districts responded with policies showing that the district was in compliance with the minimum state graduation requirements.

- **Joint Meeting with the Professional Educator Standards Board** – the two executive committees will be meeting on February 15th to discuss items of mutual interest (e.g. basic education funding, accountability and data, progress on the Joint Math Action Plan, and high school graduation requirements. I think the PESB may be interested in working on the fall 2008 symposium with us.

- **Math Panel** – OSPI, with the Dana Center as their consultant, produced a draft of the new math standards. Our Math Panel met with Cathy Seeley from the Dana Center on December 13th. Linda Plattner, Steve Floyd, Mary Jean Ryan and Linda Lamb also attended. Some of our Math Panel members are from the group "Where's the Math". The "Where's the Math" folks are not happy with the work that has been done on the OSPI math standards revisions. They have a long list of concerns, most of which I think boil down to the following: ensure the standards include traditional algorithms (such as long division), missing content, lack of rigor, insufficient use of how to measure mastery of certain mathematical concepts, the standards do not look like California's, and there are no guidelines for when to use calculators. This group has been extremely vocal with legislators and the media. Other members of our Math Panel have found the initial OSPI draft promising, in terms of its alignment with National Math Council's Focal Points and reduction of the number of standards, but expressed concern about pushing down concepts to earlier grades. OSPI is obviously under tremendous pressure to complete this work by January 31st. We need to support their efforts to reach out to the public and complete their work. A number of legislators want to know what the Board thinks about this draft and we have said we do not want to comment formally until after the final math standards are completed on January 31st. We have asked Linda Plattner to review the January 31st document at a "high level" to determine if it meets her recommendations.

- **Science Panel** – Jeff Vincent and Kathe Taylor attended the first Science Panel meeting with our consultants, David Heil and Associates, to discuss the review of the current science standards. They feel the meeting went well and you will have the opportunity to meet David at our January Board meeting. We have been very fortunate to hire some incredibly capable consultants to help us.

- **Public Outreach** – We had 465 people, in addition to our staff and Board members attend our six public outreach sessions this fall. Thanks to you Board members who attended and special thanks to those who did two sessions! Brad Burnham did a wonderful job with help from APCO organizing these events. We are starting to show up on people's radar screens and they certainly appreciated the Board taking time to visit and listen in their communities. These efforts take a huge amount of staff time and I really appreciate all of our staff pulling together to do these on top of everything else we have going on! For those of you, who could not attend a session, please see the PowerPoint under the Outreach tab that shows our staff presentation to set the context for those meetings.

And now drum rolls for the Board agenda and packet. Thanks to those fabulous staff elves!! Okay I know I know we have another stuffed agenda. My New Year's resolution truly is to create less packed Board agendas (after January). Really, I promise!

January 9th (Wednesday)

We are at the New Market Skills Center in Tumwater, which is one of the nine secondary vocational skills centers in the state. It seems like a very appropriate place to be as we wrestle with what all kids need to succeed in post secondary and career next steps! We will hear from New Market students and get a tour of their facility over the two day meeting.

Science Standards Review

We are all about science in the morning! David Heil will share what he and his consulting group are planning to do for us on the review of the science standards. This review must be completed by June 30th. I want to thank Kathe Taylor and Jeff Vincent for all their work on creating the new Science Panel and working with our consultant. Kathe has also secured several very interesting people from other states (Ohio and Idaho) to present on their states recently revised new science graduation requirements.

End of Course Study Presentation

Jenn Vranek will present her End of Course study. We will email the final study to you when we receive the final report on January 4th. Later this week I will review the draft report she has sent me. She and I have talked about some additional follow up after her presentation with stakeholders. Legislators, OSPI and the Governor are very interested in the findings.

New Market Skills Center Students Presentation

We have four students and one of their teachers who will share what they are learning in the math and science programs they are enrolled in (e.g. professional medical careers, DigiPen, AP Environmental Exploration, Clinical Scientific Investigation) with the Board. New Market has put a heavy investment into science programs and just built a new facility. It will be good to hear from these students.

Panel on the Third Credit of Math

A number of folks expressed an interest in talking with the Board about how to create a challenging third credit of math for students, particularly those who have struggled with math. You will hear from the community colleges and two school districts with a high proportion of low income and minority students. The panelists have all been working on developing new courses to meet the needs of their students. We have asked them to address how Algebra II would fit into those courses.

Math Standards, Third Credit of Math, and Math WASL Effective Date for Graduation

Your Board packet has a lot of important information on math that I hope you will review carefully. You will get a brief update on the OSPI math standards rewrite process. Linda Plattner will present her paper on the third credit of math options and research. Steve Floyd, Linda and I will discuss the options for the third credit available to you. Steve also is asking the Board to consider moving back the deadline for high school students to meet the math standards on the WASL or one of its alternatives for graduation from the class of 2013 to the class of 2012. We need your guidance on the level of the third credit of math and the WASL effective date so that we can start to prepare a rule for you to adopt at your March meeting.

Dinner
Dinner will be at the Water Street Café on Wednesday night. We hope to see many of you there!

January 10th (Thursday)

Career and Technical Education Study
Kyra Kester will present the findings for you, on the Career and Technical Education study that looked at student enrollment patterns. We will hand out the study at the meeting. We have not yet received the study. We have heard a lot of concern from the CTE community that their enrollments are dropping with the WASL, which was the genesis of this study. I think you will learn that enrollment in certain programs is dropping but in other programs it is increasing.

Fall Public Outreach Summary Update
We are still crunching the numbers and responses to our outreach on the high school graduation requirements. You do have the responses on the third math credit as mentioned above. (Katy Disharoon, our great summer student, is back over the holidays to help out with this task!)

Update on the Meaningful High School Diploma
Kathe Taylor and Eric Liu have prepared some final language for you to review and approve on the purpose of a diploma. We hope this language will guide your work as you make decisions about the graduation requirements. Kathe will share a framework (enclosed in packet) with you on how she plans to approach the graduation requirements this winter and spring. We want to focus on issues that you think will help guide your decisions to develop some draft proposals in March that we could take out this spring.

Teacher of the Year Recognition
Laura Jones, who teaches marketing and is an instructional coach at Pasco High School, will be recognized by the Board as teacher of the year.

Tour of New Market Skills Center
New Market is eager to show you their wonderful facility and programs for their students. Our meals will be prepared by the Culinary Arts students.

English Language Learners
Bunker Frank, Bernal Baca, Mary Jean Ryan and Steve Dal Porto have had conversations with the Yakima Superintendents who are concerned about their English Language Learner students and want additional support. I have included what I thought was the most recent proposal, but I understand that their proposal has changed again. I assume Dr. Cole, the Superintendent from Sunnyside, will share the newest one with you when he presents. The new OSPI program administrator for Migrant/Bilingual Education, Howard DeLeeuw, will share some information on what OSPI is planning to do to address the needs of English Language Learners.

Business Items
We have a few 180 day waiver requests that Evelyn has reviewed very carefully. She did a great job working with the districts to revise these. We are supporting these waivers with a caveat that if the legislature approves additional funding for more school days based on the Joint Task Force for Basic Education, the Board will not continue to support requests for waiver days. We also would like you to give us direction on the 3rd math credit and the Math WASL. We will ask you to approve the language for the purpose of a diploma, and approve the studies we receive on CTE and End of Course assessments, a few private schools (who came in late for approval) and finally acknowledge that all districts have reported that they have met the Board's minimum basic education requirements.

Update on System Performance Accountability Activities
We are providing you with an overview of our system performance activities. This work may take a little longer for final recommendations (September rather than July) than we initially anticipated. Part of this is due to our need to wait to advertise our studies that are contingent on Gates funds and another part is the staging of many complicated pieces. At this meeting we will share information about our focus on school improvement planning at the October 2007 work session and get your guidance on issues you want us to focus on for revising the school improvement plan rule and for thinking about the February work session we have planned.

Legislative Session 2008 and the Basic Education Finance Joint Committee
Brad Burnham will be our "man on the hill" for the 2008 session. It is a short (60 day) session. We will talk about potential education issues with you as well as the status of the basic education finance joint committee.

State Board of Education Meeting
New Market Skill Center
7299 New Market St. SW
Tumwater, WA 98501
January 9 9:00 a.m. — 5:00 p.m.
January 10 8:30 a.m. — 4:45 p.m.

AGENDA

January 9, Wednesday

9:00 a.m. **Call to Order**
Welcome, Mr. Joe Kinnerk, Executive Director of the New Market Skills Center
Pledge of Allegiance
Agenda Overview
Approval of Minutes from the November 1-2, 2007 Meeting **(*Action Item*)**

9:10 a.m. **Independent Review Washington K-10 Science Standards**
Dr. Kathe Taylor, Policy Director
Mr. Jeff Vincent, Board Lead
Dr. David Heil, CEO, Heil and Associates
Dr. Rodger Bybee, Co-Director of Science Standards Review Project, David Heil & Associates
Mr. Harold Pratt, Co-Director of Science Standards Review Project, David Heil & Associates

Other States' Perspectives on High School Science Graduation Requirements
Ms. Sue Thilo, Board Member, Idaho State Board of Education
Ms. Susan Bodary, Executive Director, EDvention

10:30 a.m. **Break**

10:45 a.m. **Science Perspectives Continued**

11:15 a.m. **End of Course Study Presentation**
Ms. Jennifer Vranek, President, Education First Consulting

Board discussion

12:30 p.m. **Lunch**

1:00 p.m. **Students from New Market Skills Center- on Math and Science Programs**
Ms. Jessica Vatne, Student, Professional Medical Careers
Ms. Codi Fiman, Student, DigiPen Computer Science
Mr. Dylan Thalya, Student, Environmental Exploration AP
Mr. Delaine Woods, Student, Clinical Scientific Investigation Program
Mr. Chris Mondau, Instructor, Math Specialist

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1:45 p.m. **A Third Credit of Math: How Relevant is Algebra II for All Students?**
Mr. Bob McIntosh, Director of Mathematics, North Thurston School District
Dr. Bill Moore, Policy Associate, State Board of Community and Technical Colleges
Dr. Helen Burn, Chair of Pure and Applied Sciences and Mathematics Instructor, Highline Community College
Mr. Shepherd Siegel, Manager of Career and Technical Education, Seattle School District

2:30 p.m. **Break**

2:45 p.m. **Math Standards Review Update, Third Credit of Math Overview, Decision on Math WASL Effective Date for Graduation for Board Decision**
Mr. Steve Floyd, Board Lead, SBE
Ms. Edie Harding, Executive Director, SBE
Ms. Linda Plattner, President, Strategic Teaching

Board discussion

4:00 p.m. **Public Comment on Board Agenda Items**

5:00 p.m. **Adjourn**

January 10, Thursday

8:30 a.m. **Fall Public Outreach Summary Update**
Mr. Brad Burnham, Legislative Specialist, SBE

Board discussion

9:15 a.m. **Update Meaningful High School Diploma Activities**
Mr. Eric Liu, Board Lead, SBE
Dr. Kathe Taylor, Policy Director, SBE

Board discussion

10:15 a.m. **Break**

10:30 a.m. **Career and Technical Education Study Presentation**
Dr. Kyra Kester, Senior Research Associate, Washington State University's Social and Economic Science Research Center

Board discussion

11:30 a.m. **Public Comment**

12:00 p.m. **Teacher of the Year Recognition - Laura Jones, Pasco High School**

12:15 p.m. **Lunch**

1:00 p.m. **Tour of New Market Skills Center**

1:45 p.m. **English Language Learners – Opportunities to Support Students**
Dr. Richard Cole, Superintendent, Sunnyside School District

Dr. Howard DeLeeuw, Program Administrator for Migrant/Bilingual Education, OSPI

2:30 p.m. **Break**

2:45 p.m. **Business Items**

- 180 Day Waivers ***(Action Item)***
- Direction for Math Credit Rule Adoption ***(Action Item)***
- Direction for Math WASL Effective Date ***(Action Item)***
- Purpose of Meaningful High School Diploma ***(Action Item)***
- End of Course Assessment Study ***(Action Item)***
- Career and Technical Education Study ***(Action Item)***
- Private Schools 2007-08 Approval ***(Action Item)***
- Acceptance of Districts' Minimum Basic Education Requirement Compliance Forms ***(Action Item)***

3:30 p.m. **Update on System Performance Accountability Activities**
Dr. Kris Mayer, Board Lead, SBE
Ms. Edie Harding, Executive Director, SBE
Dr. Evelyn Hawkins, Research Associate, SBE

3:50 p.m. **Legislative Session 2008 and Basic Education Finance Joint Committee Update**
Mr. Brad Burnham, Legislative Specialist

4:10 p.m. **Public Comment on Board Agenda Items**

4:30 p.m. **Next Steps from the Board Meeting**

4:45 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. Emergency contact number during the meeting is 360-570-4500.

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. Emergency contact number during the meeting is 206-878-3710 x3033.

STATE BOARD OF EDUCATION

HEARING TYPE: ___X___ INFORMATION

DATE: January 9-10, 2008

SUBJECT: **SCIENCE UPDATE: STANDARDS REVIEW AND GRADUATION REQUIREMENTS OF OTHER STATES**

SERVICE UNIT: Ms. Edie Harding, Executive Director
State Board of Education

PRESENTER: Mr. David Heil, President and Project Co-Director,
David Heil & Associates
Dr. Rodger Bybee, Project Co-Director, David Heil & Associates
Mr. Harold Pratt, Project Co-Director, David Heil & Associates
Ms. Sue Thilo, Member, Idaho State Board of Education
Ms. Susan Bodary, Executive Director, EDvention

BACKGROUND:

Science Standards Review

David Heil, Rodger Bybee and Harold Pratt will summarize the input provided by the Science Standards Advisory Panel gathered at the first panel meeting held on December 18, 2007, and will outline the next steps in the review process.

Science Graduation Requirements

Two representatives from states (Idaho and Ohio) that have recently changed their science graduation requirements to mandate three credits for future classes, will speak to the Board about the changes that were made and the rationale behind them.

Sue Thilo (Idaho) is one of the eight members of the Idaho State Board of Education. Sue chaired the Board's Statewide Task Force on Accelerated Learning and Preparation for Post-Secondary Education that developed recommendations for high school redesign in Idaho.

Susan Bodary (Ohio) is the Executive Director for EDvention, a P-20 collaborative to accelerate Science, Technology, Engineering, and Mathematics (STEM) development in the Dayton, Ohio area. She is the former Education Policy Advisor to Governor Bob Taft and was involved in creating Ohio's new graduation requirements, the Ohio Core.

Science Standards Review Update

The Board hired a consultant, David Heil and Associates, to perform the work of the science standards review and selected 19 people from a field of 68 applicants to serve on the advisory panel. The panel represents years of science-related experience and diverse perspectives and includes practicing scientists, educators, a school board member and parents from different parts of the state. Panel members will provide formal feedback and guidance to the external consultant as the review progresses.

The panel met for the first time on December 18, 2007. Jeff Vincent gave opening remarks and set the stage for the importance of the work. The leadership team of David Heil, Rodger Bybee, and Harold Pratt facilitated the rest of the meeting. They outlined a brief history of the standards movement, then asked the panel to assess the strengths and weaknesses of the current Washington state science standards. The team also provided input on key considerations for Washington's science standards and reviewed the rationale for selecting Massachusetts, California, Colorado (all Global Challenge states) and Singapore and Finland as the states and countries against which Washington's standards would be compared. The meeting concluded with a discussion and suggested definitions of the nine criteria (clarity, rigor, content, coherence from grade to grade, balance, depth, specificity, accessibility, and measurability) that will be used to evaluate the standards.

The next meeting of the science advisory panel will be held on February 28. The consultant will be prepared at the March Board meeting to outline preliminary, draft recommendations for revisions to the science standards.

Science Graduation Requirements

As the Board embarks on its review of graduation requirements, credit requirements for all subject areas will be analyzed critically. Currently, Washington requires all students to earn two credits of science, with one being a lab science.

When the Board reviewed graduation requirements for all districts, it found that the vast majority of districts—198 or 80% of the 246 districts with high schools—required students to earn only the state two-credit minimum.

In order to align with Washington's public baccalaureate's minimum college admissions standards, the Board would need to change the second credit of science to an algebra-based, lab science. But are two credits sufficient? What is a lab science? What is an algebra-based lab science? What are the implications of requiring more lab-based credits? What are the implications of requiring more credits in science? These are all questions that the Board will need to consider as it evaluates Washington's science requirements.

National Picture

Graduation credit requirements in science are distributed nationally in this way:

Science Graduation Requirements of 50 States and District of Columbia

State Credit Requirement	Number of States with this Requirement in 2008	Number of States with this Requirement in 2009+
0	7	5
1	1	0
2	17	11
2-3 or 2-4	2	2
3	22	28
3-4	1	2
4	1	3

States with a range of requirements (2-3, 2-4, or 3-4) require different numbers of credits for graduation depending on which pathway the student chooses. For instance, South Dakota requires two credits of students who take the *standard* curriculum but three credits of those who take the *recommended* curriculum. Students, with the permission of school staff and their parents, have to opt out of the recommended curriculum.

Twenty-four (56%) of the 43 states with state-mandated graduation requirements currently require three or more credits. Two states (Iowa and Michigan) are instituting requirements for the first time in 2011. In 2009 or later, 33 (73%) of the 45 states with state-mandated graduation requirements will require three or more credits.

Twenty-one states specify at least one credit of lab, although in some cases (Arkansas, Indiana, Oklahoma, and South Dakota), the number of lab-based courses depends on the type of pathway students choose.

The Idaho and Ohio Experience

Staff identified two states that have recently made changes to their science graduation requirements. **Idaho** requires two credits of science, including one lab-based science. Effective with the class of 2013, students will be asked to complete three credits of science, including two lab-based credits. **Ohio** requires three credits of science, including one credit each of biological and physical sciences. Effective with the class of 2014, students will be asked to complete three lab- and inquiry-based science credits. The number of credits didn't change, but the specifications that they must be lab- and inquiry-based were added.

Representatives from both states will speak about the rationale, issues, and process for those changes.

Idaho

Idaho, which currently requires 21 credits, has increased the credit requirements to 23, effective for the class of 2013. Those requirements will include:

Idaho Graduation Requirements for the Class of 2013

Subject	Credits	Notes
Science	3.0	2 must be lab
English	4.0	
Math	3.0	Classes must be tied to Algebra I and geometry standards, and include 1 credit in the senior year. Students must take pre-algebra before entering ninth grade.
Social Studies	2.5	Government, history, and economics
Health	0.5	
Physical Education	0.5	
Humanities, including fine art and foreign language	1.0	
District-determined electives	8.5	
Total	23.0	

Effective with the class of 2013, students must complete a senior project that includes a research paper and oral presentation. All students must take the ACT SAT or Compass by the end of 11th grade.

<u>Ohio</u> ***(excerpted from the Ohio Core Fact Sheet)***

Beginning with the high school graduating class of 2014, students will be required to complete 20 credits of the Ohio Core.

Ohio Graduation Requirements for the Class of 2014

Subject	Credits	Notes
Science	3.0	Inquiry-based laboratory experience, including physical science, biology, and advanced study in one or more of the following sciences: chemistry, physics or other physical science; advanced biology or other life science; astronomy, physical geology or other earth or space science
English	4.0	
Math	4.0	Including Algebra II or its equivalent
Social Studies	3.0	American history and government
Health	0.5	
Physical Education	0.5	
Foreign language, fine arts, business, technology, and Career Technical	5	Select any combination of electives.
Total	20	

Schools are to formally integrate economics/financial literacy into the social studies requirement or as a stand-alone class. Economic and financial literacy standards already exist within the social studies academic content standards.

Students must complete two semesters of fine arts sometime between grades 7 and 12 as a requirement of graduation.

Recognizing the importance of foreign language in today's competitive global economy, a *Foreign Language Education Council*, comprised of education and business leaders was tasked with developing and recommending a plan for foreign language learning across Ohio's P-16 education spectrum.

No changes were made to the total credits (20) required to graduate. Until 2015, students may choose to opt out of the Ohio Core after the end of their second year of high school and graduate under the requirements of current law.

STATE BOARD OF EDUCATION

HEARING TYPE: ___X___ ACTION

DATE: January 9-10, 2008

SUBJECT: **END OF COURSE ASSESSMENT STUDY**

SERVICE UNIT: Ms. Edie Harding, Executive Director
State Board of Education

PRESENTER: Ms. Jennifer Vranek, CEO
Education First Consulting

BACKGROUND:

Senate Bill ESSB 6023 directed the Washington State Board of Education (SBE) to examine and recommend changes to high school assessments with a limited series of end-of-course (EOC) assessments. The Governor vetoed this provision because she felt that the study should not predetermine that end-of-course assessments would be implemented. She asked the Board to do a study to understand the implementation issues, costs, and lessons learned.

In addition, The Office of the Superintendent of Public Instruction (OSPI) is directed to request that vendors bidding on its upcoming new testing contract address cost and technical aspects of implementing EOC assessments.

An additional section of the law passed, directs the SBE to examine opportunities for approved alternatives for the CAA assessment system to include one or more standardized norm-referenced student achievement tests and the possible use of reading, writing, or mathematics portions of the ACT ASSET and ACT COMPASS tests and how they relate to state standards. This review will be conducted as a part of this overall study on alternative assessments.

The Board advertised a request for proposals to solicit contractors to conduct the end of course assessment study. Education First Consulting was awarded the contract (for $53,000) to conduct the study.

The contractor examined three major areas for the end of course assessment study:

1. A thorough review of the primary and secondary literature on EOCs and high school assessment systems and a documentation of what states are using EOCs and norm referenced tests currently, and in what capacity (EOCs in all subject areas, not just those limited to math and science will be explored as well as the purposes);
2. A set of in depth case studies of states with extensive experience implementing EOCs; and
3. A discussion of policy implications for Washington's high school assessment system based on lessons learned from states with EOCs.

In its EOC Charter the Board specifically stated that it wanted to review the strengths and weaknesses, but that it did not have sufficient time to obtain public feedback and review the consultant's study to make recommendations. At the November Board meeting, Board members received an interim report that summarized eight states' EOC programs as well as a literature review of the different kinds of assessments. One of the key findings from that report was that the EOCs vary greatly across states in terms of purpose (accountability, graduation requirement, and standardizing the content tested) as well as the number of assessments used.

At the January Board meeting, Ms. Vranek, from Education First Consulting, will present the report. We will email her report to Board members on January 4, 2008 which is when she will provide it to the SBE office. The Board will be asked to accept the report on January 10th. Board staff plan to meet with Ms. Vranek and interested education stakeholders and OSPI staff to discuss the report's implications on January 18th from 3-5 p.m. at the Board's office.

Copies of the report will be distributed at the meeting.

STATE BOARD OF EDUCATION

HEARING TYPE: __X_ INFORMATION

DATE: January 9-10, 2008

SUBJECT: **STUDENTS FROM NEW MARKET SKILLS CENTER ON MATH AND SCIENCE PROGRAMS**

SERVICE UNIT: Ms. Edie Harding, Executive Director
State Board of Education

PRESENTER: Ms. Jessica Vatne, Student, Professional Medical Careers
Ms. Codi Fiman, Student, DigiPen Computer Science
Mr. Dylan Thalya, Student, Environmental Exploration AP
Mr. Delaine Woods, Student, Clinical Scientific Investigation Program
Mr. Chris Mondau, Instructor, Math Specialist

BACKGROUND:

The presenters will discuss the programs in math and science that they are taking at New Market and what it has meant to them to have access to New Market's programs, through their local high schools, in assisting to meet their educational and career plans.

STATE BOARD OF EDUCATION

HEARING TYPE: __X__ INFORMATION/ACTION

DATE: January 9-10, 2008

SUBJECT: **A THIRD MATH CREDIT OF MATH: HOW RELEVANT IS ALGEBRA II FOR ALL STUDENTS?**

SERVICE UNIT: Ms. Edie Harding, Executive Director
State Board of Education

PRESENTER: Mr. Bob McIntosh, Director of Mathematics,
North Thurston School District
Dr. Bill Moore, Policy Associate,
State Board of Community and Technical Colleges
Dr. Helen Burn, Chair of Pure and Applied Sciences and Mathematics
Instructor, Highline Community College
Mr. Shepherd Siegel, Manager of Career and Technical Education,
Seattle School District

BACKGROUND:

The Board will hear from a variety of K-12 and community and technical college representatives on providing a third credit of math that increases the rigor beyond the two current math high school credits.

Materials will provided at the meeting

STATE BOARD OF EDUCATION

HEARING TYPE: ___X___ ACTION

DATE: January 9-10, 2008

SUBJECT: **MATH STANDARDS REVIEW UPDATE, MATH THIRD CREDIT AND DATE OF EFFECTIVENESS FOR REQUIRING MATH WASL FOR GRADUATION**

SERVICE UNIT: Edie Harding, Executive Director
State Board of Education

PRESENTER: Steve Floyd, Board Lead
Edie Harding, Executive Director
Linda Plattner, CEO of Strategic Teaching

BACKGROUND:

Math Standards

The Board completed its review of the current K-12 math standards in September. OSPI had prepared a draft of the new math standards for public input, the standards will then be completed by January 31st. The Board will receive a brief update on OSPI's revised draft math standards.

The Third Math Credit and Math Content for Three Credits

During the last session, the legislature requested the State Board of Education to "revise high school graduation requirements to include a minimum of three credits of mathematics, one of which may be a career and technical course equivalent in mathematics, and prescribe the mathematics content in the three required credits." [1] The Board was asked to complete this work by December 1, 2007. This work has now been extended for adoption (by legislative agreement) at the March Board meeting, but the Board needs to give guidance to staff about how to proceed to draft a rule for the third credit of math.

There are three options to consider. All three options would incorporate a career and technical education option and appropriate accommodations for Special Education students). Linda has prepared pros and cons in her paper for Options 1 and 2. Staff is providing a third option to consider, which would combine Option 1 and 2. While the expected effective date for any of these options is intended to be for the Class of 2013, the Board may select a different phase in date.

Option 1:
The content in the third math credit would exceed the content taught in the first two years of high school. Courses, whether academic or CTE, that fit into this category would include some content from grades 9 and 10, but at least 50 percent of the content would go beyond grade 9 and 10 content. Mastery of that content would be expected.

Option 2:
The content in the third math credit would be the same content as is in Algebra 2. This doesn't mean that it would need to be a formal Algebra 2 course. For example, it could be a CTE business course in applied excel that required two years of enrollment to earn the one math credit.

Option 3:
The content in the third math credit would be the same content as is in Algebra 2, but a student and his/her family could meet with a high school counselor after the first year of high school and decide through a formal sign off on the high school and beyond plan that the student will take the math outlined in Option 1.

Based upon the Board's decision, staff will draft a rule by January 23rd for action at the March Board meeting.

Math WASL for Graduation

During the 2007 session, the legislature deferred the graduation requirement that students must meet the math standard on the 10th grade WASL until the class of 2013, but they also said that the Board could decide to move the requirement back to the Class of 2012. The Board will be asked at its January meeting to give staff guidance as to whether or not move the requirement of meeting the math standard on the 10th grade WASL to the Class of 2012 as a high school graduation requirement. If the Board decides in the affirmative, staff will draft a rule by January 23rd for action at the March Board meeting.

Washington State Board of Education

Working to Raise Student Achievement Dramatically

MATHEMATICS UPDATE

Math Standards

The Board has been examining math issues for over a year. Last fall the Board worked with the Office of the Superintendent of Public Instruction (OSPI) and the Professional Educator Standards Board to develop a Joint Math Action Plan to address the system issues for math in K-12, including topics such as aligning standards, curriculum and assessment, teacher supply and professional development. Last winter the Board hired Strategic Teaching to conduct an independent review of the K-12 math standards and to work with the Board's Math Panel. Those recommendations were reviewed at three focus groups and through online feedback forms. The recommendations were approved by the Board at its September 2007 meeting.

OSPI has hired the Dana Center to facilitate a process to rewrite the math standards based on those recommendations. The revisions, due to the legislature by January 31, 2008, were released in draft by OSPI on December 4. The Board's Math Panel met with Dr. Cathy Seeley from the Dana Center on December 13th to provide feedback on the revised standards. A copy of Seeley's PowerPoint is included in your packet. At the January meeting, Steve Floyd will share with you the discussion at the Math Panel meeting.

Strategic Teaching's Linda Plattner will review the final standards the first week in February and then meet with the Board's Math Panel on February 11th to determine to what extent OSPI has followed the Board's recommendations. This information will be shared with all of you when it is completed in February.

OSPI has made a lot of progress in a very short time. They are reaching out to many different groups to get feedback. Many groups are weighing in with comments, including our own math panel. The high school standards are currently in one block 9-12 with no breakout by grade level. This presents the Board with several challenges, including: What is expected for the first two credits of high school math and what should the third credit be?

While we expected the content to include Algebra I, Geometry and Algebra II, there are many standards on data, probability and statistics. To look at the standards, go to the home page of the OSPI Web site: http://www.k12.wa.us. The Dana Center is currently working on defining the standards by grade and course content, but it is not clear if this information will be available by the Board's January meeting.

The Third Math Credit and Math Content for Three Credits

At the November meeting the Board agreed that it made sense to ask for an extension on the Board's required adoption of a third math credit from December 1, 2007 to the end of March 2008. This was done for two reasons: The Board felt it wise to wait until they could see what had happened with the math standards rewrite for high school and the Board was in the middle of conducting its public outreach on math. The Board directed Edie Harding to draft a letter to that effect. Edie also met with the chairs and other legislators from the Senate and House education

committees and they agreed it made sense to wait until March. It is understood that this third credit would still go into effect for the class of 2012.

Linda Plattner was retained to assist the Board with a review of the third math credit and to explore ways that Career and Technical Education (CTE) courses could be used as equivalents as well as to draft suggested math content for the three credits. At the November Board meeting she shared (via phone) her PowerPoint to present some initial ideas. At the January meeting the Board will be asked to give staff guidance about the third math credit. There are three options to consider. All three options would incorporate a CTE option and appropriate accommodations for Special Education students. Linda has prepared pros and cons in her paper for Options 1 and 2. Staff is providing a third option to consider, which would combine Option 1 and 2. While the expected effective date for any of these options is intended to be for the Class of 2013, the Board may select a different phase in date.

Option 1:
The content in the third math credit would exceed the content taught in the first two years of high school. Courses, whether academic or CTE, that fit into this category would include some content from grades 9 and 10, but at least 50 percent of the content would go beyond grade 9 and 10 content. Mastery of that content would be expected.

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Option 3:
The content in the third math credit would be the same content as is in Algebra 2, but a student and his/her family could meet with a high school counselor after the first year of high school and decide through a formal sign off on the high school and beyond plan to allow the student to take the math outlined in Option 1. This third option is similar to how other states have addressed the Algebra 2 issue.

The biggest question will be whether or not to align the third credit with Algebra 2 for all students and to ensure a career and technical education equivalent. Linda Plattner has prepared the enclosed paper, which includes research on the impact of Algebra 2 on students as we heard during our public outreach sessions concerns about dropouts and what graduates really need today to be successful in careers and postsecondary education.

The work on the Meaningful High School diploma may consider other issues this winter and spring including: a fourth credit of math and or a requirement for students to take math in their senior year.

During the Board's fall public outreach sessions, people were asked what they thought about the third credit of math. In general, the majority of people supported a third credit of math but wanted different choices of math for students which did not include support requiring Algebra 2 for all students. More specific information on findings from the outreach will be handed out at the meeting.

We are providing information on what other states are doing. Currently 14 states will or plan to require Algebra 2 as a high school graduation requirement. However, in all but two states students could elect to opt out of college pathway and take another kind of math credit that was not Algebra 2.

We have also provided an interesting article from the November 2007 issue of Education Leadership on the use of algebra: “How Mathematics Counts,” by Lynn Arthur Steen.

At the January meeting Board members will hear from students who are taking vocational programs that use math and science at the New Market Skills center as well as a panel of K-12 and community and technical college math experts who will talk about how they are approaching higher level math for students that traditionally struggle with math.

The Board will be asked to review the options posed and give staff guidance on how to proceed as we must prepare a draft rule by January 23rd to allow sufficient time to go through the code reviser process to prepare for adoption (although we can make modifications) at the March Board meeting.

Linda Plattner will continue to work on the content of the three math courses, which will be available at the March Board meeting. She will review the work of the Dana Center, Achieve, and the National Council of Math Teachers.

Date for Math WASL as High School Graduation Requirement

During the 2007 session, the legislature deferred the graduation requirement that students must meet the math standard on the 10th grade WASL until the class of 2013, but they also said that the Board could decide to move the requirement back to the Class of 2012. The Board will be asked at its January meeting to give staff guidance as to whether or not move the requirement of meeting the math standard on the 10th grade WASL to the Class of 2012 as a high school graduation requirement. If the Board decides in the affirmative, staff will draft a rule by January 23rd for action at the March Board meeting. The Board should ask OSPI and other education stakeholders for an indication of system readiness to determine if it is wise to move the deadline back. Currently, Board staff lack sufficient information to make a recommendation.

STATE REPRESENTATIVE
40th DISTRICT
DAVE QUALL

State of
Washington
House of
Representatives

EDUCATION
CHAIRMAN

AGRICULTURE &
NATURAL RESOURCES

December 10, 2007

Mary Jean Ryan, Chair
Washington State Board of Education
PO Box 47206
Olympia, WA 98504-7206

Dear Mary Jean,

Last session the Legislature asked that the State Board revise the high school graduation requirements to include a minimum of three credits of mathematics, one of which may be a career and technical course equivalent in mathematics, and prescribe the mathematics content in the three required credits. This was to be done by December 1, 2007.

Since that time, there have been a number of ongoing efforts related to the development of math standards in the state which will not be completed until the end of January 2008. You have asked that you be allowed to wait until your March 2008 meeting to make your decisions based on information still outstanding.

I support your request and thank you for all the efforts of the State Board on behalf of the students of Washington State.

Sincerely,

Dave Quall

DAVE QUALL
State Representative
40th District

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K-12 Mathematics Standards Revision
OSPI Next Steps
December 13, 2007
SBE Math Panel Meeting

1. **Formative Feedback Groups: December 2007**
   → **Input received during December will be integrated into the next draft of the standards document in January.**
   - Project web site (feedback form and email feedback) - http://www.utdanacenter.org/wamathrevision/
   - Formative groups – regional, by expertise, grade-specific, by affiliation, etc…
     - CARC + (CARC members, including OSPI mathematics specialists, ESD Math Coordinators, WSECC representation, Math Helping Corps Coordinators, Transition Math Project)
     - Washington Education Research Association (December 6, 2007)
     - Where's the Math (December 8, 2007)
     - State Board of Education Math Panel (December 13, 2007)
     - Superintendent's Advisory Committee (January 3, 2008)
     - OSPI Bilingual Education Advisory Committee (BEAC) and ELL Mathematics team (Dec. 20, 2007)
     - Business/Industry (Partnership for Learning, Business Roundtable)
     - Legislators and Legislative Committees
     - Other…

2. **Formal Focus Groups: January 21 -29, 2008 (specific timing to be determined)**
   → **These groups will provide input/comment on the next draft of the revised standards developed as a result of December input.**
   - WA TOTOM (Washington Teachers of Teachers of Mathematics)
   - Math Leadership Alliance Advisory – North Central ESD
   - PTSA Math/Science Group
   - Transition Math Project
   - OSPI Curriculum Advisory and Review Council

3. **Public Community Forums: January 2008 (dates and times to be determined)**
   - Spokane, Yakima, Seattle, Vancouver
4. **Present Revised Standards to Legislature: January 31, 2008**
5. **Develop "Roll-out" and Support Plan for New Standards: January 2008**
   - Rollout and training to begin in Spring 2008

K-12 Mathematics Standards Revision

Update to the Washington Math Panel

Cathy Seeley
Charles A. Dana Center, University of Texas
December 13, 2007

Role of the Dana Center

- Manage and facilitate the standards revision process to assure fidelity and alignment with the SBE Review and Recommendations report.
- Work with Washington educators, mathematicians and expert advisors to develop comprehensive drafts of the revised standards.

The Commitment

- This work will be generated by Washington educators, Washington mathematicians and Washington citizens.
- There must be as many opportunities and vehicles as possible for feedback and input from Washington educators, Washington mathematicians and other Washington citizens.
- The revised math standards will balance 1) Washington's unique strengths and needs with 2) expert advice from mathematicians and practicing educators and 3) conformity to national directions.
- The strengths of the current math GLEs will be preserved, while addressing the SBE recommendations.

The Reality

- The timeline is (nearly) impossible.
- The pressure and stress on all involved is significant.
- Collaboration, consensus, and reflection are more challenging to accomplish on this timeline.
- This is a ***Preliminary Draft***.
- Readers will find improvements to suggest.
- Those suggestions will not agree.
- The commitment from the Washington team members is extraordinary.
- The only way any standards will work is with a long-term, comprehensive program of implementation support.

Mathematics Standards Revision Process Team Structure

- Standards Revision Team (Washington educators and other stakeholders)
- Editorial Team (Washington and out-of-state experts)
- Articulation Team (Washington and out-of-state experts)
- Project Management Team (OSPI, Dana Center)
- *and* opportunities for public input/feedback

Format of the Preliminary Draft: Priorities (Paragraphs)

- Three to four content priorities per grade K-8 describing the most important mathematics for students to learn.
- Three to five content priorities in each of four strands describing the most important mathematics for three years of math in grades 9-12.
  (Alg/Number, Functions/Analysis, Geom/Meas, Probability/Statistics)
- Two additional process priorities describing important mathematical processes for each grade level
  - Reasoning/Problem Solving
  - Mathematical Communication (including representations, vocabulary, symbolism, definitions)

Format of the Preliminary Draft: Expectations (Statements)

- Specific statements of what students should learn (left-hand column).
- Elaborations, clarifications and examples (right-hand column)

Format of the Preliminary Draft: Supporting Ideas (K-8)

- A summary paragraph, identifying other important content to be addressed at this grade level.
- Specific student expectation statements (left-hand column)
- Elaborations, clarifications, examples (right-hand column)

In Support of the Preliminary Draft: Thread Documents

- Number
- Operations
- Geometry
- Measurement
- Algebra
- Data Analysis

SBE Recommendation #1:
'...fortify the content and **raise the rigor**'

- 3.2.a: Introduces fraction concepts at grade 3 rather than grade 4
- 4.3.c: Introduces the use of formulas for finding perimeter and area measurements in grade 4 rather than in current grade 5 GLE 1.2.5.
- 5.1.a, 5.1.c, 5.1.d, 5.1.e, and 5.1.f: Addition and subtraction of fractions applies to all fractions and mixed numbers and does not limit which numbers are used in denominators as in the current grade 5 GLE 1.1.6.

SBE Recommendation #2:

'...importance of all aspects of mathematics: mathematics **content**, including **standard algorithms**; **conceptual understanding**; and **application** of mathematical processes within the content.'

- 5.1.d: Use efficient algorithms, including standard algorithms, for addition and subtraction of fractions (proper and improper fractions), decimals (to hundredths), and mixed numbers.
- 2.1.b: Represent numbers to at least 1000 in different ways using physical models, pictures, graphs, written words, and numerals and translate from one representation to another.
- 7.3.a: Solve problems for a wide variety of proportional situations including those involving similarity, congruence, probability, percent increase, and percent decrease.

SBE Recommendation #3:

'Identify those topics that should be taught for extended periods at each grade and show how topics develop over grade levels.'

- Four to six priorities per grade level K-8
- Sixteen priorities for grades 9-12
- 'Threads' documents... other possibilities?

SBE Recommendation #4:

'Increase the clarity, specificity, and measurability...'

- 3.S.b: Round whole numbers up to 10,000 to the nearest ten, hundred, and thousand.
  (Includes rounding as a specific expectation rather than being grouped with estimation strategies as in current Grade 3 GLE 1.1.8; makes clear what numbers are to be addressed.)
- 4.3.e : Find the area of non-rectangular shapes that can be composed or decomposed into rectangles.
  (Specifies a structure for decomposing shapes into rectangles, not in the current grade 4 GLE 1.2.6.)

SBE Recommendation #5:

'Write EALRs that restructure [standards to]…reflect both the conceptual and procedural sides of mathematics.'

- Replace K-12 EALRs with grade-level priorities describing content (conceptual/procedural) and processes *(See Priority 6.1 and related Expectations)*

Note from SBE Recommendation #5:

- ‘We also suggest collapsing the process strands into fewer EALRs. We like the idea of reducing the number of EALRs from four to two:
  - 1) Reasoning and problem solving and
  - 2) Communication.’
- The Preliminary K-12 Washington Math Standards: Priorities at each grade level include two priorities on mathematical processes (total of five to six priorities):
  - 1) Reasoning/Problem Solving and
  - 2) Communication.

SBE Recommendation #6:

‘...easily used by most people.’

- Descriptive paragraphs allow readers to see what’s important.
- Paragraphs help teachers focus instruction.
- A reasonable number of expectations allows teachers to organize and focus instruction.
- Avoiding extra levels (of organization) allows communication of the most important ideas without excessive repetition.
- Fewer pages per grade, with organization tighter
  (Ex: Gr 3 EALRs/GLEs: 10 full pages; Prelim. Gr 3 standards: 8 pages, including large-font paragraphs and white space; 5 EALRs/15 components/40 GLEs/152 bullets; 5 grade-specific priorities/34 expectations)

SBE Recommendation #7:

'Create expert Standards Revision Teams for each grade band … and collect feedback.'

- Knowledgeable, committed Standards Revision Teams (K-2, 3-5, 6-8, 9-12) representing diverse perspectives on mathematics, teaching and learning

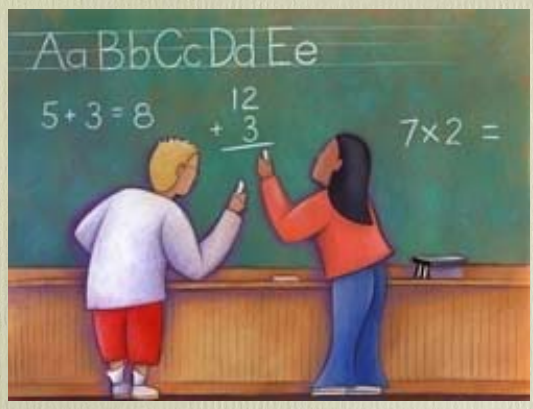
- Informal and formal focus groups, presentations, discussions, invited meetings, accessible website with online feedback, gathered daily, summarized and shared regularly with SRTs

Issues and Discussion Points

- Maintaining the integrity of the process, while addressing the SBE recommendations
- Maintaining the integrity of the process, even on a short timeline
- 'Understand'
- Priorities in descriptive paragraphs vs. student expectations in more specific terms
- Putting in perspective other states'/nations' standards and expert recommendations

Questions?

Thank you for your commitment to Washington teachers and students!



Background Paper for Third Math Credit Options
Linda Plattner, Strategic Teaching
December 2007

The State Board of Education has been tasked with revising Washington's high school graduation requirements to include a minimum of three credits of mathematics and to define the content in those credits. One of these credits can be a Career and Technology Education (CTE) credit.

There are three likely routes to earning the mathematics credits:

1. The traditional sequence of Algebra 1, Geometry, and Algebra 2.
2. Three years of integrated math.
3. The first two years of either of the above and one other course, which may be a CTE course.

The work of defining the content in each of the courses has begun.

There is a draft of the content for each course in the traditional sequence and these drafts will be finalized when Washington's new math standards are approved. In addition to the new math standards, the work of the National Math Advisory Panel,[1] Achieve's Traditional Plus Content[2], and feedback from the Washington Math Panel will be considered when the content for the traditional courses is finalized.

The content from the traditional courses will be used as the foundation of the content in the integrated courses. Generally, the content that is included in Algebra 1, Geometry, and Algebra 2 will be reorganized into the courses of Integrated Math 1, Integrated Math 2 and Integrated Math 3. Achieve's Integrated Math Course Sequence, the typical organization of content in integrated math programs, feedback from the Washington Math Panel, and the effect of the WASL will be considered when the content for the integrated math courses is finalized.

The third math credit might be either an academic course or a Career and Technical Education course. Because there are many possible courses that could serve as this third credit, it makes more sense to define the parameters of the content than to try to specify content for an indefinite number of courses. In

[1] On April 18, 2006, President Bush created the National Mathematics Advisory Panel. The panel is in the process of defining the content that should be included in Algebra.

[2] Achieve is an organization dedicated to raising expectations for all students. Thirty states, including Washington, are part of its coalition. Achieve has established high school exit standards and the content that should be included in each of the courses in the traditional and the integrated series.

other words, it makes more sense to describe the kind of content that is acceptable rather than to specifically define each topic.

The Board needs to make a decision about the grade level of content necessary for the third math credit. The draft of new math standards, which are not yet available by grade level or subject area, includes Algebra 2 content. It is assumed that Algebra 2 content will be included in the new standards as expectations for the third year of high school math. This seems to leave two viable choices for courses that would qualify as the third math credit:

Option 1:
The content in the third math credit would exceed the content taught in the first two years of high school. Courses, whether academic or CTE, that fit into this category would include some content from grades 9 and 10, but at least 50 percent of the content would go beyond grade 9 and 10 content. Mastery of that content would be expected.

While nothing is certain, the assumption is that the topics in grades 9 and 10 fit into Algebra 1 and Geometry and that grade 11 equates to Algebra 2.

This means that the third credit math course content could be some, but not all, of the topics associated with Algebra 2 or it could be an extension of grade 9 and 10 topics, such as a more sophisticated treatment of statistics and probability.

New academic or CTE courses will need to be created since few, if any, exist that meet these criteria. This aligns well with the work of CTE because the spring of 2008 marks the beginning of a 5-year initiative to develop Programs of Study.[3]

Option 2:
The content in the third math credit would be the same content as is in Algebra 2. This doesn't mean that it would need to be a formal Algebra 2 course. For example, it could be a CTE business course in applied excel that required two years of enrollment to earn the one math credit.

Option 1: The case against requiring Algebra 2 content

- Expecting all students to master Algebra 2 content will reduce the number of students who graduate from high school.

- Increasing the number of years students are required to take math is enough to ensure they will learn more mathematics, even if it is not Algebra 2.

[3] According to OSPI's CTE website, A program of study is "a planned program of courses and learning experiences that begins with exploration of career options, supports basic academic and life skills, and enables achievement of high academic standards, leadership, preparation for industry-defined work, and advanced and continuing education." Retrieved from http://www.k12.wa.us/CareerTechEd/

- The application of mathematics, particularly in CTE courses, adds a dimension of rigor that is as important as the increased sophistication of content in Algebra 2.

- Students have multiple opportunities without Algebra 2 including:
  - Acceptance into most state-approved apprenticeships;
  - Entry into 2-year community and technical colleges to pursue associate, certificate, or transfer programs; and
  - Participation in proprietary schools.

- Although it is true that students who have not taken Algebra 2 often begin college in non-credit bearing math courses, this has little effect on their graduation rates.[4] Nationally, 60% of students who start college with no remedial courses graduate, while 55% of students who take 1 remedial course graduate. The percentage of students who graduate drops with every additional remedial course that is taken, but the impact of remedial math courses is less profound than the impact of remedial courses in reading.

- While courses that go beyond the first two years of high school and yet are not equivalent to Algebra do not yet exist, this presents a wonderful opportunity. Courses could be developed that include rich and meaningful mathematics. Students not intending to pursue mathematics-intensive majors, should be able to select from a number of courses that meet their needs.

Option 2: Case for aligning to Algebra 2

- Washington graduates must compete nationally and internationally. A total of thirty-five states already require or are phasing in at least 3 years of math for graduation.[5]

- The skills and knowledge required to be college ready or to be qualified for a living-wage occupation are the same. ACT[6] found this to be the case when it compared the knowledge and skills in the "zone 3" category of WorkKeys to the knowledge and skills associated with college ready. WorkKeys, a widely used assessment system that matches job applicants and employees with high work-ready skills and skill needs, has 5 levels; Zone 3 was chosen for the comparison because it is the lowest level of the WorkKeys system that enables a worker to support a small family.

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[4] Adelman, Clifford. (Summer, 1998) "The kiss of death? An alternative view of college remediation." *National Crosstalk, 6(3).* Retrieved December 4, 2002, from http://www.highereducation.org/crosstalk

[5] Reys, B. J., et. al., (April, 2007) "High School Mathematics: State-Level Curriculum Standards and Graduation Requirements." *Center for the Study of Mathematics Curriculum.* Retrieved December 8, 2007 from mathcurriculumcenter.org/PDFS/HSreport.pdf

[6] ACT Issue Brief, 2006; *Ready for College and Ready for Work: Same or Different*?; Retrieved Dec. 10, 2007 from http://wwwhttp://www.act.org/path/policy/pdf/ReadinessBrief.pdf

The study found that the type of class in which the student gained the skills—academic or CTE—was not important. It was only important that the student be held to high expectations.

- Requiring Algebra 2 does not increase the drop out rate, especially if support is provided. At the very worst, some studies suggest that graduation rates would dip by about one percentage point or less. At best, such policies might actually help *improve* graduation rates[7]—especially if coupled with strong supports to help ninth graders pass algebra.

  Valerie Lee and David Burkam examined whether high schools that allow students to take more low-level math courses have higher graduation rates—again, all else being equal. Rather than low-level math helping to raise graduation rates, "for every two additional math courses offered *below* the level of algebra, students experienced more than a 30% *increase* in the odds of dropping out […] This finding flies in the face of those who say that high schools must offer a large number of undemanding courses to keep uncommitted students in school."[8]

  John Bishop and Ferran Mane looked across states to determine whether states that require students to complete more academic courses have higher dropout rates. They found that tougher graduation requirements have no statistically significant impact overall, and a slight negative impact for high-poverty students.[9]

- In Washington, a minimum of Algebra 2 is required for admittance to any 4-year college or university. The Washington Higher Education Coordinating Board set these requirements last year.

- In a pair of landmark studies that followed high school students through their postsecondary years, Clifford Adelman found that the highest level of math taken in high school has the most powerful relationship to earning a bachelor's degree. This is true regardless of student ethnicity, family income or parents' education levels. Students who complete Algebra 2 in high school *more than double* their chances of earning a four-year college degree. Those who do not take challenging math courses are more likely to end up in remedial courses and are more likely to drop out.[10]

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[7] Greene, J.P., (April, 2006) "Leaving Boys Behind: Public High School Graduation Rates," *Manhattan Institute*, Civic Report Mc 48.
[8] Lee, V. E. & Bukam, D. T. (2003). Dropping out of high school: The role of school organization and structure. American Educational Research Journal, 40(2), 353-393.
[9] Bishop, J. H., and Mane, F. (2004) "Educational Reform and Disadvantaged Students: are they better off or worse off?" *Center for Advanced Human Resource Studies: working paper series*
[10] Adelman, Clifford. *Answers in the Tool Box: Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment,* Office of Educational Research and Improvement, U.S.

- High expectations, including Algebra 2, helps close the achievement gap. Taking a rigorous high school curriculum that includes math, at least through Algebra II, cuts in half the gap in college completion rates between white students and African American and Latino students.[11] In communities where a college-preparatory curriculum is not required, economically disadvantaged students are less likely to be in schools that offer college-prep courses, may not know which courses they need to take, may require approval of a guidance counselor or school administrator to enroll, or may be discouraged from choosing a rigorous course schedule.

The Kentucky example

Beginning in 2012, the State of Kentucky will implement an approach to the mathematics required for graduation that may be worth further investigation by SBE. In Kentucky, students will be required to:

- Enroll in a mathematics course every year of high school;
- Earn 3 credits of mathematics; and
- Learn the content in Algebra 1, Geometry, and Algebra 2.

One note-worthy aspect of Kentucky's system is that a variety of courses can be substituted for the traditional Algebra 1, Geometry, and Algebra 2 courses. Specifically, an integrated, applied, interdisciplinary, occupational, or technical course that prepares a student for a career path may be used, but only if the substituted course contains all of the core content.[12]

Another interesting aspect is that students must be enrolled in a math class every year, but only need 3 credits for graduation. This opens the door for CTE courses that require two years of participation to earn 1 math credit. Kentucky's system aligns well with the research that supports the importance of 4 years of math. Students who don't take math in their senior year lose valuable math skills that effect their placement in college level courses or skill level in other post-secondary options.

Department of Education, June 1999. Adelman, Clifford. *The Tool Box Revisited,* Office of Educational Research and Improvement, *U*.S. Department of Education, 2006.

[11] Adelman, Clifford. *The Tool Box Revisited,* Office of Educational Research and Improvement, *U*.S. Department of Education, 2006.

[12] Core content is the content in the standards and in courses that is "testable" on KERA, Kentucky's state assessment.

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Mathematics High School Graduation Requirements
50 States and District of Columbia
2008 and Beyond (*Updated December 21, 2007)*

State	Credits 2008	Credits 2009+	Alg I	Alg II	Geom	Notes
Alabama	4		X		X	
Alaska	2					
Arizona	2	3 2012				The course content for at least two of the mathematics credits shall include Number Sense and Operations; Data Analysis, Probability and Discrete Mathematics; Patterns, Algebra and Functions; Geometry and Measurement; and Structure and Logic in preparation for proficiency at the high school level on the AIMS test and shall be taken consecutively beginning with the ninth grade, unless a student meets these requirements prior to the ninth grade pursuant to this subsection. The third credit shall include significant mathematics content as determined by the local school district governing board or charter school. Courses successfully completed prior to the ninth grade that meet the high school mathematics credit requirements may be applied toward satisfying those requirements.
Arkansas	3	4 2009	X	See notes	X	Effective 2010, **smart core** becomes the default college and work readiness curriculum and includes 4 credits, with math in grades 11 or 12; Algebra II, and a 4th class more advanced than Algebra II. Students who take the **core** curriculum must take 4 credits, including Algebra I and Geometry.
California	2		X			At least one course or a combination of the two courses must meet or exceed the rigor of the content standards for Algebra I. Students who took Algebra I before grade 9 must still complete 2 credits of math while in grades 9-12.
Colorado	0					Only state requirement is in social studies.
Connecticut	3					
Delaware	3	4 2011	X 2011	X 2011	X 2011	
District of Columbia	3	4	X 2011		X 2011	Currently, elementary algebra is required. Students must complete 1 credit of Algebra I and/or a higher level course and must enroll in the course no later than grade 9.

Note: States that are in bold type have opt-out policies.

State	Credits 2008	Credits 2009+	Alg I	Alg II	Geom	Notes
Florida	3	3-4 2011	X			Florida offers 3 graduation programs: 24 credit; 3-year, 18-credit college prep; and 3-year 18-credit career prep. Effective 2011: **24 credit:** 4 credits, Algebra I or its equivalent, or a higher-level math course **18-credit college prep**: 3 credits, Algebra I or above chosen from the list of courses that qualify for state university admission **18-credit career prep**: 3 credits, Algebra I or its equivalent (Equivalent = Algebra I Honors, Algebra Ia and Ib; Applied Math I and II, Integrated Math I and II; Pre-AICE Math, Pacesetter Math I
Georgia	3-4	4 2012	X	See notes	See notes	Current requirements vary depending on whether a student is enrolled in a **college prep** or **tech /career prep** pathway. Students in **college prep** take 4 credits, including Algebra I, Geometry, and Algebra II; **tech/career prep** take 3, including Algebra I or its equivalent. Effective 2012, students must take 4 credits of math, including Mathematics I, II, and III or their equivalents.
Hawaii	3					
Idaho	2	3 2013	X 2013		X 2013	Classes tied to Algebra I and Geometry standards, including 1 credit in the senior year.
Illinois	2	3 2009	X 2010		X 2010 Geom. content	One course must “include Geometry content,” effective 2010.
Indiana	2	3 2010	X See notes			Effective 2011, all students must earn a **Core 40** Diploma <u>unless</u> student qualifies to **opt out** for a **General Diploma**. Students in **Core 40** must take one of two course sequences: Algebra I, Geometry and Algebra II or Integrated Math I, II, III. Students are required to take a math or physics course during their junior or senior year. Students in **General Diploma** must take 1 credit in Algebra or Integrated Math I.
Iowa	0	3 2011				State is establishing requirements for first time in all subjects, effective 2011.
Kansas	2	3 2009				Courses including “algebraic and geometric concepts.”
Kentucky	3		X	X 2012	X	An integrated, applied, interdisciplinary or technical/occupational course that prepares a student for a career path based on the student's Individual Learning Plan may be substituted for a traditional Algebra I, Geometry or Algebra II course. This

State	Credits 2008	Credits 2009+	Alg I	Alg II	Geom	Notes
						decision is made on an individual student basis. The course must meet the content standards in the program of studies. Pre-Algebra shall not be counted as one of the three required Mathematics credits for high school graduation but may be counted as an elective. Mathematics shall be taken each year of high school.
Louisiana	3	4	X 2009 See notes	X 2012 See notes		Algebra I or Integrated Math I. Effective 2009, students can earn an academic endorsement or a career/technical endorsement to the standard diploma but currently the math requirement is the same for each. Effective 2012, all students automatically will be enrolled in the Louisiana **Core 4** Curriculum, unless they opt out.
Maine	2					Students must achieve "standards of the system of learning results" in all eight content areas, effective 2010.
Maryland	3		X		X	
Massachusetts	0					Massachusetts has no state-mandated requirements. A recommended curriculum, **MassCore,** was approved by the Board in November 2007. **MassCore** recommends 4 credits of math, including completion of Algebra II or completion of the Integrated Math equivalent. All students are recommended to take a math course during their senior year.
Michigan	0	4 2011	X 2011	X 2011	X 2011	Michigan is establishing state requirements for the first time, effective for the class of 2011, when students must take the **Michigan Merit** curriculum. All students must take math in senior year. Per parental request and counselor approval, student may complete **personal curriculum** with modified math requirements, but only after student has completed 2.5 credits of math and if student completes 3.5 credits of math before graduation, including 1 credit during senior year. All modifications still require Algebra II, but in varying amounts (e.g., .5 credit instead of 1), over extended time (e.g., 2 years instead of 1), or in a career and technical education program.
Minnesota	3		See notes	X 2015	See notes	Currently, 3 credits include "algebra, geometry, statistics and probability content sufficient to satisfy the academic standards." Effective class of 2011: Students must complete Algebra I by end of grade 8 and pass the state test (MCA-II/GRAD) in math in grade 11. Effective 2015: Students must complete an "Algebra II

Mathematics Requirements, 2008 and Beyond: 50 States and District of Columbia
Source: Education Commission of the States Standard High School Graduation Requirements database (last updated March 2007), updated by the Washington State Board of Education, 2007

State	Credits 2008	Credits 2009+	Alg I	Alg II	Geom	Notes
						credit or its equivalent." A CTE course may fulfill a general science, math or arts credit requirement.
Mississippi	3	4 2009	X			Effective 2012, Mississippi will require all students to complete a college preparatory curriculum unless they **opt out.** Both options require 4 credits, but the college preparatory curriculum requires Algebra I and two higher courses; those students who opt out take Algebra I and one higher course.
Missouri	2	3 2010				
Montana	2					Vocational/technical education
Nebraska	0					No state requirements; all local
Nevada	3					
New Hampshire	2					
New Jersey	3					
New Mexico	3		X			
New York	3					
North Carolina	3-4		X	See notes	See notes	Depends on pathway; students in **career prep** must take 3 credits, including Algebra I. Those in **college technical prep** must take 3 credits, including Algebra I, II, Geometry; <u>or</u> Algebra I, Technical Math I & II, <u>or</u> Integrated Math I, II, III. Students in **college prep** pathway take 4 credits, including Algebra I, II, Geometry, (or Integrated Math I, II, III) and a higher level course for which Algebra II is a prerequisite.
North Dakota	0					No specific state requirement beyond total credits; all local.
Ohio	3	4 2014		X 2014		
Oklahoma	3		X	See notes	See notes	Depends on curriculum. Oklahoma has a **college preparatory/work ready curriculum**, but students may **opt out** for a **core curriculum**. Effective 2010, students in the **college preparatory/work ready curriculum** must choose courses from Algebra I, II, Geometry, Trigonometry, Math Analysis, Calculus, Advanced Placement Statistics or any mathematics course with content and/or rigor above Algebra I and approved for college admission requirements. Students in the **core curriculum** must take 3 credits of math, including 1 credit of Algebra I or Algebra I taught in a contextual methodology, and 2 credits chosen from a prescribed list including all of the above courses and adding Statistics and/or Probability; Computer Science I, II; Mathematics of Finance; Intermediate Algebra, and others.

State	Credits 2008	Credits 2009+	Alg I	Alg II	Geom	Notes
Oregon	2	3 2010	X 2014			Effective 2014, Algebra I and above.
Pennsylvania	0					No state requirements; all local.
Rhode Island	4					4th credit must be math-related, such as computer programming, physics or accounting.
South Carolina	4					
South Dakota	3		X	See notes	See notes	Effective class of 2010, **advanced program** includes Algebra I, II, and geometry. **Standard program** requires Algebra I. All students must complete **advanced program** unless excused by parent/guardian and school counselor or school administrator.
Tennessee	3		X See notes	See notes	See notes	Depends on pathway. Students in **university prep** programs must take 2 credits in Algebra II, Geometry or other advanced math course or 2 credits in Integrated math II and III. Class of 2009 must take one of the following: "Algebra II, Geometry, Integrated Math II, or Technical Geometry."
Texas	3	4 2011	X	See notes	X	Depends on program. **Recommended** program includes Algebra I, II, and Geometry. **Minimum** program requires Algebra I and Geometry.
Utah	2	3 2011	X		X	
Vermont	3					
Virginia	3		x			Algebra I and higher, including at least two course selections from among: Algebra I, Geometry, Algebra II, or other math courses above the level of algebra and geometry.
Washington	2					
West Virginia	3	4 2010	X	See notes	X	Depends on pathway. Recommended sequence for **professional** pathway is Algebra I, Geometry, Algebra II, Trigonometry, and Pre-Calculus; for **skilled** pathway: Algebra I, Geometry, conceptual mathematics, college transition mathematics, or Algebra II.
Wisconsin	2					
Wyoming	3					Depends on endorsement. **Comprehensive endorsement:** standard requirements plus proficient performance on common core of knowledge and skills in math. **General endorsement:** proficient performance in a majority of nine subject areas, which include math.

Mathematics Requirements, 2008 and Beyond: 50 States and District of Columbia
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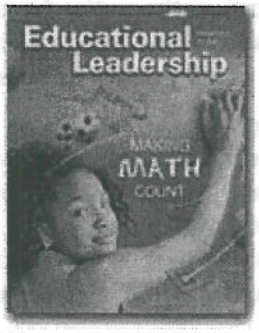
How Mathematics Counts



November 2007

Lynn Arthur Steen

Fractions and algebra represent the most subtle, powerful, and mind-twisting elements of school mathematics. But how can we teach them so students understand?

Much to the surprise of those who care about such things, mathematics has become the 600-pound gorilla in U.S. schools. High-stakes testing has forced schools to push aside subjects like history, science, music, and art in a scramble to avoid the embarrassing consequences of not making "adequate yearly progress" in mathematics. Reverberations of the math wars of the 1990s roil parents and teachers as they seek firm footing in today's turbulent debates about mathematics education.

Much contention occurs near the ends of elementary and secondary education, where students encounter topics that many find difficult and some find incomprehensible. In earlier decades, schools simply left students in the latter category behind. Today, that option is neither politically nor legally acceptable. Two topics—fractions and algebra, especially Algebra II—are particularly troublesome. Many adults, including some teachers, live their entire lives flummoxed by problems requiring any but the simplest of fractions or algebraic formulas. It is easy to see why these topics are especially nettlesome in today's school environment. They are exemplars of why mathematics counts and why the subject is so controversial.

Confounded by Fractions

What is the approximate value, to the nearest whole number, of the sum 19/20 + 23/25? Given the choices of 1, 2, 42, or 45 on an international test, more than half of U.S. 8th graders chose 42 or 45. Those responses are akin to decoding and pronouncing the word *elephant* but having no idea what animal the word represents. These students had no idea that 19/20 is a number close to 1, as is 23/25.

Neither, it is likely, did their parents. Few adults understand fractions well enough to use them fluently. Because people avoid fractions in their own lives, some question why schools (and now entire states) should insist that all students know, for instance, how to add uncommon combinations like 2/7 + 9/13 or how to divide 1 3/4 by 2/3. When, skeptics ask, is the last time any typical adult encountered problems of this sort? Even mathematics teachers have a hard time imagining authentic problems that require these exotic calculations (Ma, 1999).

Moreover, many people cannot properly express in correct English the fractions and proportions that *do* commonly occur, for instance, in ordinary tables of data. A simple example illustrates this difficulty (Schield, 2002). Even though most people know that 20 percent means 1/5 of something, many cannot figure out what the something is when confronted with an actual

example, such as the table in Figure 1. Although calculators can help the innumerate cope with such exotica as 2/7 + 9/13 and 1 3/4 ÷ 2/3, they are of no help to someone who has trouble reading tables and expressing those relationships in clear English.

Figure 1. The Challenge of Expressing Numerical Data in Ordinary Language

Not available for electronic dissemination.

These examples illustrate two very different aspects of mathematics that apply throughout the discipline. On the one hand is calculation; on the other, interpretation. The one reasons *with* numbers to produce an answer; the other reasons *about* numbers to produce understanding. Generally, school mathematics focuses on the former, natural and social sciences on the latter. For lots of reasons—psychological, pedagogical, logical, motivational—students will learn best when teachers combine these two approaches.

There may be good reasons that so many children and adults have difficulty with fractions. It turns out that even mathematicians cannot agree on a single proper definition. One camp argues that fractions are just names for certain points on the number line (Wu, 2005), whereas others say that it's better to think of them as multiples of basic unit fractions such as 1/3, 1/4, and 1/5 (Tucker, 2006). Textbooks for prospective elementary school teachers exhibit an even broader and more confusing array of approaches (McCrory, 2006).

Instead of beginning with formal definitions, when ordinary people speak of fractions they tend to emphasize contextual meaning. Fractions (like all numbers) are human constructs that arise in particular social and scientific contexts. They represent the magnitude of social problems (for example, the percentage of drug addiction in a given population); the strength of public opinion (for example, the percentage of the population that supports school vouchers); and the consequences of government policies (for example, the unemployment rate). Every number is the product of human activity and is selected to serve human purposes (Best, 2001, 2007).

Fractions, ratios, proportions, and other numbers convey quantity; words convey meaning. For mathematics to make sense to students as something other than a purely mental exercise, teachers need to focus on the interplay of numbers and words, especially on expressing quantitative relationships in meaningful sentences. For users of mathematics, calculation takes a backseat to meaning. And to make mathematics meaningful, the three *R*s must be well blended in each student's mind.

Algebra for All?

Conventional wisdom holds that in Thomas Friedman's metaphorically flat world, all students, no matter their talents or proclivities, should leave high school prepared for both college and high-tech work (American Diploma Project, 2004). This implies, for example, that all students should master Algebra II, a course originally designed as an elective for the mathematically inclined. Indeed, more than half of U.S. states now require Algebra II for almost all high school graduates (Zinth, 2006).

Advocates of algebra advance several arguments for this dramatic change in education policy:

- Workforce projections suggest a growing shortage of U.S. citizens having the kinds of technical skills that build on such courses as Algebra II (Committee on Science, Engineering, and Public Policy, 2007).
- Employment and education data show that Algebra II is a "threshold course" for high-paying jobs. In particular, five in six young people in the top quarter of the income distribution have completed Algebra II (Carnevale & Desrochers, 2003).
- Algebra II is a prerequisite for College Algebra, the mathematics course most commonly required for postsecondary degrees. Virtually all college students who have not taken

Algebra II will need to take remedial mathematics.

- Students most likely to opt out of algebra when it is not required are those whose parents are least engaged in their children's education. The result is an education system that magnifies inequities and perpetuates socioeconomic differences from one generation to the next (Haycock, 2007).

Skeptics of Algebra II requirements note that other areas of mathematics, such as data analysis, statistics, and probability, are in equally short supply among high school graduates and are generally more useful for employment and daily life. They point out that the historic association of Algebra II with economic success may say more about common causes (for example, family background and peer support) than about the usefulness of Algebra II skills. And they note that many students who complete Algebra II also wind up taking remedial mathematics in college.

Indeed, difficulties quickly surfaced as soon as schools tried to implement this new agenda for mathematics education. Shortly after standards, courses, and tests were developed to enforce a protocol of "Algebra II for all," it became clear that many schools were unable to achieve this goal. The reasons included, in varying degrees, inadequacies in preparation, funding, motivation, ability, and instructional quality. The result has been a proliferation of "fake" mathematics courses and lowered proficiency standards that enable districts and states to pay lip service to this goal without making the extraordinary investment of resources required to actually accomplish it (Noddings, 2007).

Several strands of evidence question the unarticulated assumption that additional instruction in algebra would necessarily yield increased learning. Although this may be true in some subjects, it is far less clear for subjects such as Algebra II that are beset by student indifference, teacher shortages, and unclear purpose. For many of the reasons given, enrollments in Algebra II have approximately doubled during the last two decades (National Center for Education Statistics [NCES], 2005a). Yet during that same period, college enrollments in remedial mathematics and mathematics scores on the 12th grade National Assessment of Educational Progress (NAEP) have hardly changed at all (NCES, 2005b; Lutzer, Maxwell, & Rodi, 2007). Something is clearly wrong.

Although we cannot conduct a randomized controlled study of school mathematics, with some students receiving a treatment and others a placebo, we can examine the effects of the current curriculum on those who go through it. Here we find more disturbing evidence:

- One in three students who enter 9th grade fails to graduate with his or her class, leaving the United States with the highest secondary school dropout rate among industrialized nations (Barton, 2005). Moreover, approximately half of all blacks, Hispanics, and American Indians fail to graduate with their class (Swanson, 2004). Although mathematics is not uniquely to blame for this shameful record, it is the academic subject that students most often fail.
- One in three students who enter college must remediate major parts of high school mathematics as a prerequisite to taking such courses as College Algebra or Elementary Statistics (Greene & Winters, 2005).
- In one study of student writing, one in three students at a highly selective college failed to use any quantitative reasoning when writing about subjects in which quantitative evidence should have played a central role (Lutsky, 2006).
- College students in the natural and social sciences consistently have trouble expressing in precise English the meaning of data presented in tables or graphs (Schield, 2006).

One explanation for these discouraging results is that the trajectory of school mathematics moves from the concrete and functional (for example, measuring and counting) in lower grades to the abstract and apparently nonfunctional (for example, factoring and simplifying) in high school. As many observers have noted ruefully, high school mathematics is the ultimate exercise in deferred

gratification. Its payoff comes years later, and then only for the minority who struggle through it.

In the past, schools offered this abstract and ultimately powerful mainstream mathematics curriculum to approximately half their students—those headed for college—and little if anything worthwhile to the other half. The conviction that has emerged in the last two decades that all students should be offered useful and powerful mathematics is long overdue. However, it is not yet clear whether the best option for all is the historic algebra-based mainstream that is animated primarily by the power of increasing abstraction.

Mastering Mathematics

Fractions and algebra may be among the most difficult parts of school mathematics, but they are not the only areas to cause students trouble. Experience shows that many students fail to master important mathematical topics. What's missing from traditional instruction is sufficient emphasis on three important ingredients: communication, connections, and contexts.

Communication

Colleges expect students to communicate effectively with people from different backgrounds and with different expertise and to synthesize skills from multiple areas. Employers seek the same things. They emphasize that formal knowledge is not, by itself, sufficient to deal with today's challenges. Instead of looking primarily for technical skills, today's business leaders talk more about teamwork and adaptability. Interviewers examine candidates' ability to synthesize information, make sound assumptions, capitalize on ambiguity, and explain their reasoning. They seek graduates who can interpret data as well as calculate with it and who can communicate effectively about quantitative topics (Taylor, 2007).

To meet these demands of college and work, K–12 students need extensive practice expressing verbally the quantitative meanings of both problems and solutions. They need to be able to write fluently in complete sentences and coherent paragraphs; to explain the meaning of data, tables, graphs, and formulas; and to express the relationships among these different representations. For example, science students could use data on global warming to write a letter to the editor about carbon taxes; civics students could use data from a recent election to write op-ed columns advocating for or against an alternative voting system; economics students could examine tables of data concerning the national debt and write letters to their representatives about limiting the debt being transferred to the next generation.

We used to believe that if mathematics teachers taught students how to calculate and English teachers taught students how to write, then students would naturally blend these skills to write clearly about quantitative ideas. Data and years of frustrating experience show just how naïve this belief is. If we want students to be able to communicate mathematically, we need to ensure that they both practice this skill in mathematics class and regularly use quantitative arguments in subjects where writing is taught and critiqued.

Connections

One reason that students think mathematics is useless is that the only people they see who use it are mathematics teachers. Unless teachers of all subjects—both academic and vocational—use mathematics regularly and significantly in their courses, students will treat mathematics teachers' exhortations about its usefulness as self-serving rhetoric.

To make mathematics count in the eyes of students, schools need to make mathematics pervasive, as writing now is. This can best be done by cross-disciplinary planning built on a commitment from teachers and administrators to make the goal of numeracy as important as literacy. Virtually every subject taught in school is amenable to some use of quantitative or logical arguments that tie evidence to conclusions. Measurement and calculation are part of all vocational subjects; tables, data, and graphs abound in the social and natural sciences; business

requires financial mathematics; equations are common in economics and chemistry; logical inference is fundamental to history and civics. If each content-area teacher identifies just a few units where quantitative thinking can enhance understanding, students will get the message.

The example of many otherwise well-prepared college students refraining from using even simple quantitative reasoning to buttress their arguments shows that students in high school need much more practice using the mathematical resources introduced in the elementary and middle grades. Much of this practice should take place across the curriculum. Mathematics is too important to leave to mathematics teachers alone.

Contexts

One of the common criticisms of school mathematics is that it focuses too narrowly on procedures (algorithms) at the expense of understanding. This is a special problem in relation to fractions and algebra because both represent a level of abstraction that is significantly higher than simple integer arithmetic. Without reliable contexts to anchor meaning, many students see only a meaningless cloud of abstract symbols.

As the level of abstraction increases, algorithms proliferate and their links to meaning fade. Why do you invert and multiply? Why is $(a + b)^2 \neq a^2 + b^2$? The reasons are obvious if you understand what the symbols mean, but they are mysterious if you do not. Understandably, this apparent disjuncture of procedures from meaning leaves many students thoroughly confused. The recent increase in standardized testing has aggravated this problem because even those teachers who want to avoid this trap find that they cannot. So long as procedures predominate on high-stakes tests, procedures will preoccupy both teachers and students.

There is, however, an alternative to meaningless abstraction. Most applications of mathematical reasoning in daily life and typical jobs involve sophisticated thinking with elementary skills (for example, arithmetic, percentages, ratios), whereas the mainstream of mathematics in high school (algebra, geometry, trigonometry) introduces students to increasingly abstract concepts that are then illustrated with oversimplified template exercises (for example, trains meeting in the night). By enriching this diet of simple abstract problems with sophisticated realistic problems that require only simple skills, teachers can help students see that mathematics is really helpful for understanding things they care about (Steen, 2001). Global warming, college tuition, and gas prices are examples of data-rich topics that interest students but that can also challenge them with surprising complications. Such a focus can also help combat student boredom, a primary cause of dropping out of school (Bridgeland, DiIulio, & Morison, 2006).

Most important, the pedagogical activity of connecting meaning to numbers needs to take place in authentic contexts, such as in history, geography, economics, or biology—wherever things are counted, measured, inferred, or analyzed. Contexts in which mathematical reasoning is used are best introduced in natural situations across the curriculum. Otherwise, despite mathematics teachers' best efforts, students will see mathematics as something that is useful only in mathematics class. The best way to make mathematics count in the eyes of students is for them to see their teachers using it widely in many different contexts.

My "Aha!" Moment

Douglas Hofstadter, Distinguished Professor of Cognitive Science, Indiana University, Bloomington.

I first realized the deep lure of mathematics when, at about age 3, I thought up

the "great idea" of generalizing the concept of 2 × 2 to what seemed to me to be the inconceivably fancier concept of 3 × 3 × 3. My inspiration was that since 2 × 2 uses the concept of two-ness *twice*, I wanted to use the concept of three-ness *thrice*! It wasn't finding out the actual value of this expression (27, obviously) that thrilled me—it was the idea of the fluid conceptual structures that I could play with in my imagination that turned me on to math at that early age.

Another "aha" moment came a few years later, when I noticed that $3^2 \times 5^2$ is equal to $(3 \times 5)^2$. Once again I was playing around with structures, not trying to prove anything. (I didn't even know that proofs existed!) It thrilled me to discover this pattern, which of course I verified for other values and found mystically exciting.

I believe that teachers should encourage playfulness with mathematical concepts and should encourage the discoveries of patterns of whatever sort. Any time a child recognizes an unexpected pattern, it may evoke a sense of wonder.

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Lynn Arthur Steen is Professor of Mathematics at St. Olaf College, 1520 St. Olaf Ave., Northfield, MN; steen@stolaf.edu.

STATE BOARD OF EDUCATION

HEARING TYPE: ___X___ ACTION

DATE: January 9-10, 2008

SUBJECT: **CAREER AND TECHNICAL EDUCATION STUDY**

SERVICE UNIT: Ms. Edie Harding, Executive Director
State Board of Education

PRESENTER: Dr. Kyra Kester, Senior Research Associate
Social and Economic Research Center/Puget Sound Division

BACKGROUND:

The legislature asked the Board to…

> "…reevaluate the graduation requirements for students enrolled in vocationally intensive and rigorous career and technical education programs, particularly those programs that lead to a certificate or credential that is state or nationally recognized. The purpose of the evaluation is to ensure that students enrolled in these programs have sufficient opportunity to earn a certificate of academic achievement, complete the program and earn the program's certificate or credential, and complete other state and local graduation requirements. The Board shall report its findings and recommendations for additional flexibility in graduation requirements, if necessary, to the legislature by December 1, 2007."[1]

The Board hired Washington State University's Social and Economic Research Center to analyze available data from the classes of 2005 and 2006 (the most recent year data was available) to provide a better understanding of graduation trends for Career and Technical Education (CTE) completers—students enrolled in vocationally intensive programs.

The study analyzed graduation trends and WASL performance for students enrolled in the 16 different CTE programs to determine the:

- relationship between high school students who graduate and their peers who have completed CTE programs;
- relationship between high school graduates and non-graduates who complete CTE programs and various characteristics of the students (demography, socio-economic status) and their districts (geography/poverty);
- post-high school graduation characteristics of the class of 2005 and 2006 (e.g., tech prep participation and completion, enrollment in two-year schools, enrollment in four-year schools); and
- number of industry certificates earned.

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[1] RCW 28A.230.090

The Board will view a presentation that will illustrate characteristics of these groups, including ethnicity and gender, and characteristics of the schools they attend, such as size, poverty rate, and WASL success. CTE definitions and structure will be explained, as well as issues affecting CTE programs.

The data show that:

- In 2005 and 2006, CTE students had much the same characteristics (gender, ethnicity) as the general student population.
- CTE students' choices of the 16 CTE programs they took changed, in some cases substantially, with enrollment increasing in some areas and decreasing in others.
- CTE programs varied in the rate at which students in them met standard on the WASL, graduated, attended college, required college remediation, and went to work.

Most important, students continued to graduate and complete CTE programs at virtually the same rate in 2006 as in 2005. In fact, the overall number of students completing a CTE program relative to their peers actually rose slightly in 2006.

Copies of the report will be distributed at the meeting.

STATE BOARD OF EDUCATION

HEARING TYPE: __X____ INFORMATION/NO ACTION

DATE: January 9-10, 2008

SUBJECT: **FALL PUBLIC OUTREACH SUMMARY UPDATE**

SERVICE UNIT: Ms. Edie Harding, Executive Director
State Board of Education

PRESENTER: Mr. Brad Burnham, Policy and Legislative Specialist
State Board of Education

BACKGROUND:

This fall, as part of its efforts to improve requirements for high school graduation to better prepare students for life after high school, the Washington State Board of Education held community meetings across the state to hear the public's opinion on the topic.

During the meetings, the Board discussed how the economy of our state and prospects for high school graduates have changed since the state last reviewed the number of high school graduation credit requirements 22 years ago. The meeting also included a conceptual framework for improving state graduation requirements and the opportunity to listen to public input.

The Board asked citizens to give feedback on the following questions:

- What essential skills should students learn in high school?
- What are the pros and cons of requiring ALL students to meet a common core of state requirements in order to earn a diploma (with consideration for special education students)?
- What are the pros and cons of raising graduation requirements to prepare students to take non-remedial coursework in community and technical colleges and/or matching graduation requirements to meet 4-year college entry requirements?
- What changes would you recommend to the state minimum high school graduation requirements (High School and Beyond Plan, Culminating Project and state credits)? And why?
- What should the content be for a required third credit of math?

In the near-term, input from the meetings will help the Board to define the purpose of the high school diploma and identify the content for a required third credit of math. The feedback also will be used by the Board to draft recommendations for new high school graduation requirements, which it will release to the public in spring 2008. During a second round of community meetings in spring 2008, members of the public will have the opportunity to provide feedback on the draft recommendations before they are finalized.

A total of 464 people attended the evening meetings held in Bremerton, Bethel School District/Tacoma, Yakima, Vancouver, Spokane, and Seattle (Table 1). The meetings were successful in gaining ideas, comments, and concerns of the public about the state minimum high school graduation requirements. Attendees included school administrators, school board members, teachers, counselors, parents, students, employees or members of businesses, colleges, and educational associations.

At the January meeting, Board staff will present the information obtained at the community meetings and additional comments submitted to the Board via fax, mail, and email. Please refer to the handouts provided during the meeting.

Table 1. Meeting Attendance Information

Date	Location	Total Number	Citizen	Parent	Business/Business Org	Elected official	HS Student	K-12 School/District Employee	K-12 Teacher	K-12 Counselor	Education Administrator	School Board Member	Education Org. Member	Postsecondary Institution
30-Oct	Bremerton	73	12	7			1	8	17		16	5	6	1
5-Nov	Bethel/Tacoma	58	7	3			1	18	4		15	4	2	4
27-Nov	Yakima	43	8		2			15	1		7	2	2	6
29-Nov	Vancouver	87	10	5	1		3	20	15	4	19	4	2	4
3-Dec	Spokane	95	17	2	5	1		33	5	1	11	3	13	4
4-Dec	Seattle	108	19	6	5			24	4		9	4	26	11
	Total =	464												

THE NEW STATE BOARD OF EDUCATION

Accountability | World-Class Math and Science Standards | Meaningful Diploma

Preparing Students to Succeed… In the World

Purpose of tonight's meeting

- Examine ways to prepare our students for success after high school
- Listen to what you think our students need to learn in high school

Early in the review process

To date, the Board has:

- Reviewed state and national studies
- Collected current high school district requirements
- Re-examined purpose of diploma
- Listened to workforce, college and subject matter experts

Your input is essential…

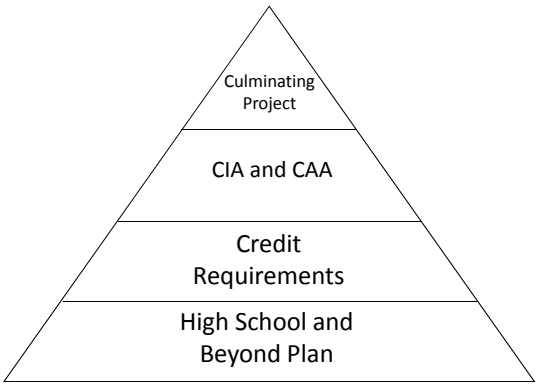
- The Board will review feedback, conduct work sessions, and draft a proposal to take out for more public review in Spring 2008
- Board will decide what changes to adopt in Summer of 2008 and make recommendations to Basic Ed Funding Study
- One exception: 3rd math credit which legislature required Board to adopt this winter for class of 2012

The New State Board of Education: A Catalyst for Improvement

- Act as a catalyst for positive and immediate change in the state's K-12 educational system
- Revise high school graduation requirements
- Drive policy to improve student achievement
- Provide advocacy and strategic oversight of public education

What requirements must students meet today in order to earn a diploma?

Common Washington State minimum core high school graduation requirements



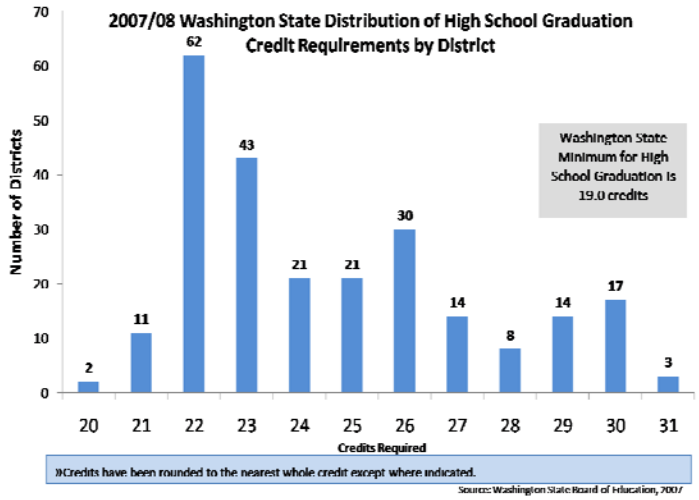
Common Washington State minimum core high school graduation requirements

Requirement	Class of 2008	Class of 2012	Class of 2013
English	3	3	**To Be Determined**
Mathematics	2	3 (specified content)	
Social Studies	2.5	2.5	
Science	2 (one lab)	2 (one lab)	
Art	1	1	
Occupational Education	1	1	
Health and Fitness	2	2	
Electives	5.5	5.5	
TOTAL CREDITS	**19**	**20**	

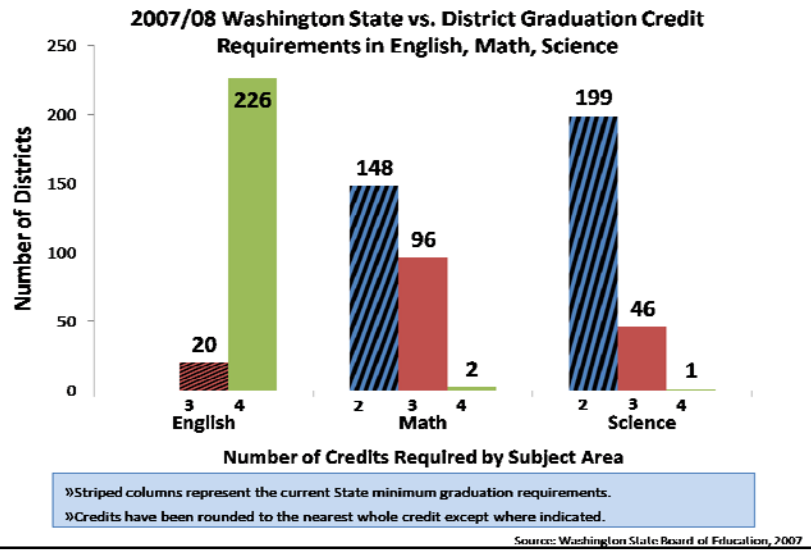
Common Washington State minimum core high school graduation requirements

Requirement	Class of 2008	Class of 2012	Class of 2013
High School & Beyond Plan	√	√	TBD
Culminating Project	√	√	TBD
Certificate of Academic Achievement / Certificate of Individual Achievement	***+ 1 math credit beyond 11th grade for students not passing math WASL***	***+ 2 math credits beyond 10th grade for students not passing math WASL***	√

Distribution of District Credit Requirements



Some districts require more credits, but most only meet math and science minimum



Since graduation credit requirements were last changed in 1985…Globalization and technology have dramatically changed our economy. We are preparing students to live in a global society.

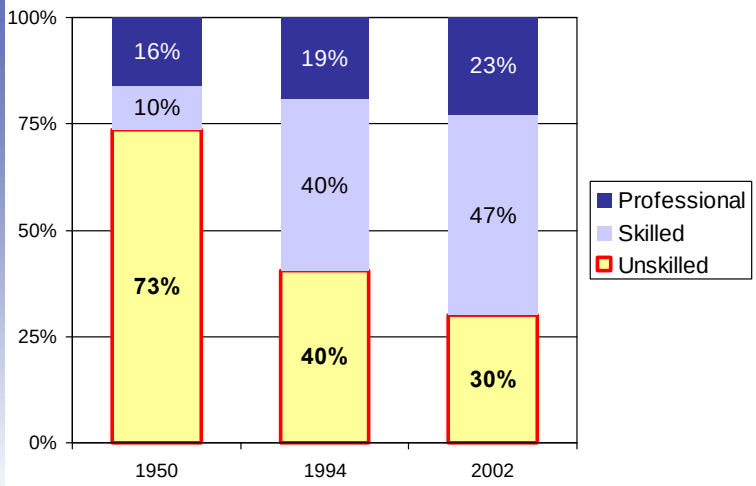
Students must work and live in a global society

Today's economy demands that graduates understand the world and can compete with other countries:

- In Washington, **1 in 3** jobs is related to international trade.
- Washington State exports more on a per capita basis than any other state in the nation.
- If Washington were a country it would rank as the 35th largest exporter in the world.

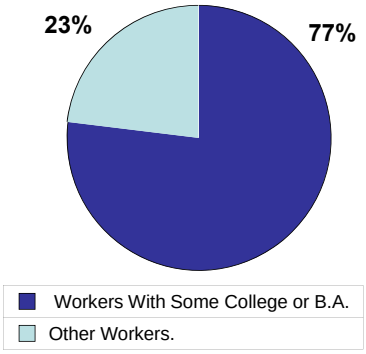
13

Unskilled jobs are disappearing; demand for higher skills is rising



Sources: American Diploma Project; U.S. Bureau of Census and Pennsylvania Department of Labor and Industry, Center for Workforce Information and Analysis (Pennsylvania statewide)

Today's students need more skills and education to earn a family wage. And it will only get harder…



- By 2014, 77% of new family-wage jobs to support a family of three will be held by workers with education or training beyond high school

Source: Partnership for Learning;
U.S. Bureau of Labor and Statistics

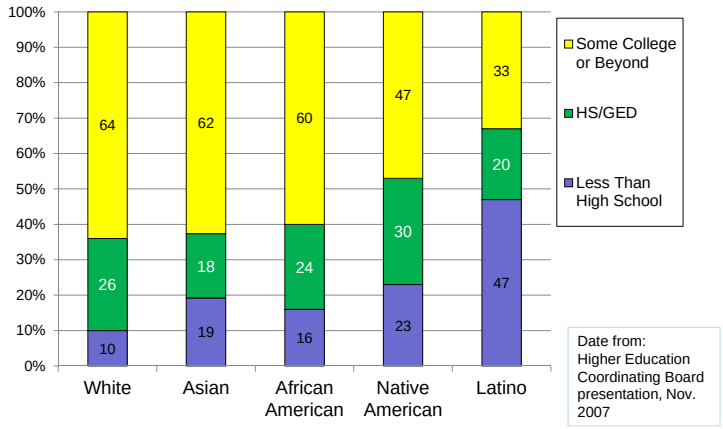
Washington students miss out on opportunities

- Washington leads the nation in jobs that use bachelor's degrees, but is 36th in the nation in the percentage of students who obtain a bachelor's degree
- Washington has the lowest rate in the nation of students who go directly to college

Source: Prosperity Partnership; US Department of Commerce 2004 State Science & Technology Indicators

Washington adults miss out on opportunities

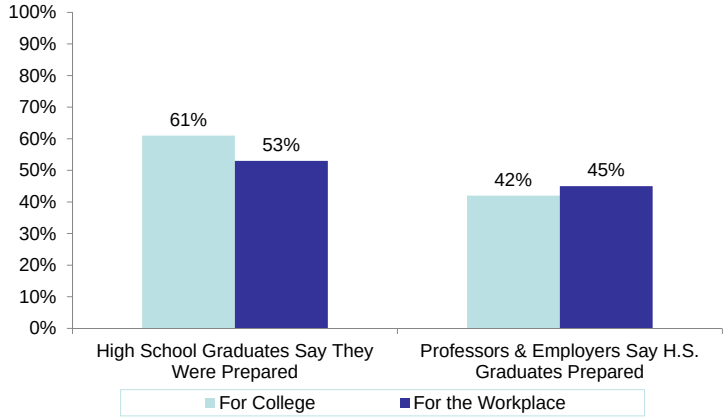
Latinos and Native Americans are particularly at risk for not participating in postsecondary education



Today, many students are graduating from high school without the skills they need to succeed…whatever dream they follow.

Students say they aren't prepared for postsecondary education or jobs

National study finds many students, in hindsight, say they were not prepared



Source: Peter D. Hart Research Associates/Public Opinion Strategies, *Rising to the Challenge: Are High School Graduates Prepared for College and Work?* prepared for Achieve, Inc., 2005.

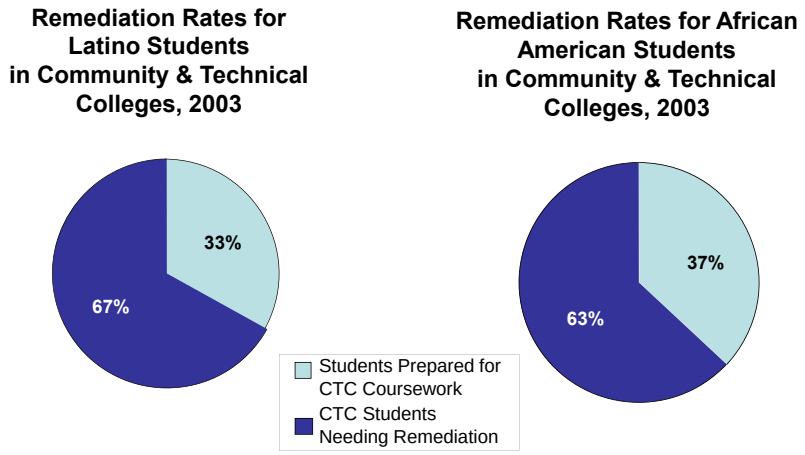
Many Washington students not prepared for college-level work

Of college freshmen:

- 44% of the class of 2003 required remedial classes in Math, English or both
- In a 2007 survey of Washington residents 84% said the remediation issue is a serious problem

Sources: Washington State Graduate Follow-Up Study: Class of 2003 All Students; Davis, Hibbits & Midghall for Partnership for Learning, *2007 Washington Survey*

Washington students of color are disproportionately impacted



Sources: Partnership for Learning

What are the expectations of employers, vocational/ technical, 2 year and 4 year colleges?

Colleges expect students to exceed minimum requirements in nearly every subject

Subject	Current Graduation Requirements	Four-year Public College Admission Requirements
English	3	4
Math	2	3 (1 senior year)
Science	2 (1 lab science)	2 (2 lab sciences)
Social Studies	2.5	3
World Language	0	2
Arts	1	1

Trade jobs and apprenticeships require students have a rigorous education

Iron workers:

- Recommended high school courses include Algebra, Geometry and Physics

Electricians:

- Recommended high school courses include Algebra, Geometry, Trigonometry and Physics

Sheet metal workers:

- Four or five years of apprenticeship
- Algebra, Geometry, Trigonometry and technical reading

Draftsmen:

- Recommended high school courses include Geometry and Trigonometry
- Draftsmen may wish to seek additional study in mathematics and computer-aided design to keep up with technological progress within the industry.

Sources: American Diploma Project, 2002; The Associated General Contractors of America (AGC) http://www.agc.org/page.ww?section=About+AGC&name=About+AGC.

Imagine the high level of skills needed to build this…

Employers expect graduates to have skills beyond basic academic subjects

A national survey of over 400 employers across the United States asked employers to articulate the skill sets that new entrants—recently hired graduates from high school or from colleges or technical schools—need to succeed in the workplace. Among the most important skills cited by employers:

- Professionalism/Work Ethic
- Communications
- Teamwork/Collaboration and
- Critical Thinking/Problem Solving

A Consortium Report from: The Conference Board, Corporate Voices for Working Families, Partnership for 21st Century Skills, Society for Human Resource Management, 2007.

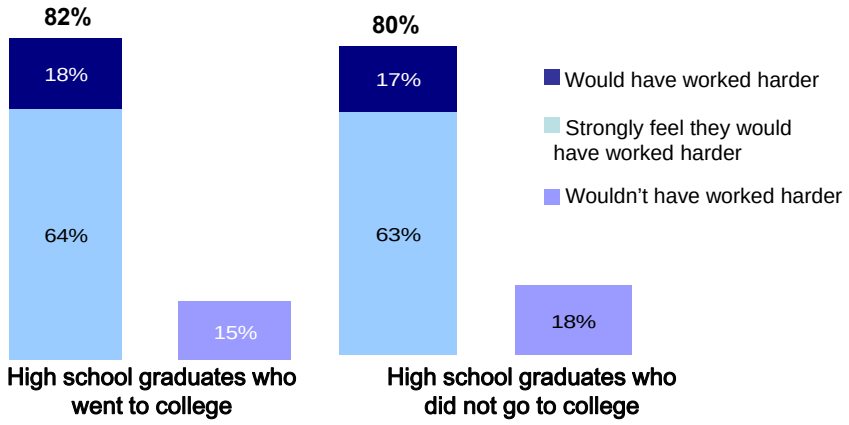
Empowering students to be positive members of our communities

How do we prepare students to:

- Understand current issues in the newspaper?
- Live in communities with different cultures?
- Understand a voter's pamphlet?
- Create household budgets, apply for a loan or mortgage?
- Understand contracts and rental agreements?
- Develop new products?
- Create…imagine…invent…

Let's remember… Students aren't afraid to be challenged

Percentage of students who feel that they would have worked harder if schools had demanded more of students



Source: Peter D. Hart Research Associates/Public Opinion Strategies, *Rising to the Challenge: Are High School Graduates Prepared for College and Work?* prepared for Achieve, Inc., 2005.

Time for a fresh look: A diploma for the 21st century

A diploma for the 21st century
Draft concepts

Valuing Public Input: The Board…

- Developed preliminary draft concepts for extensive and formative public input and refinement
- Acknowledges magnitude of the implementation challenges that these proposals may present
- Is especially sensitive to identifying potential implementation barriers as well as strategies for dealing with them

A diploma for the 21st century
Draft concepts

The Board is Considering:
Purpose of Diploma

- Success in postsecondary education, gainful employment, and citizenship
- Personalized education needs of student as well as society's needs

A diploma for the 21st century
Draft concepts

The Board is Considering: One Diploma For All

- Send clear message to all students about what they need to succeed after high school.
- Ensure that diploma means that students have met certain standards.
- Give appropriate recognition to special education student Individualized Education Programs.

A diploma for the 21st century
Draft concepts

The Board is Considering: Key Principles and Critical Elements

- Overarching expectations/essential skills needed for student lifelong learning
- Equivalency or competency credits

A diploma for the 21st century
Draft concepts

The Board is Considering: Key Principles and Critical Elements

- Comprehensive integrated graduation requirement package
- Alignment with postsecondary education minimum entry requirements

Next steps…

- Conduct public outreach fall 2007 and spring 2008
- Complete required reports to Legislature and Governor 2007-08
- Adopt final package on meaningful high school diploma in July 2008 for 2009 session
- Specify math content and adopt 3rd credit of math as high school graduation requirements (as legislatively required this winter)
- Provide input to basic education funding task force 2007-08

Now, we'd like to hear from you.

What essential skills should students learn in high school?

What are the pros and cons of requiring ALL students to meet a common core of state requirements in order to earn a diploma (with consideration for special education students)?

What are the pros and cons of raising graduation requirements to prepare students to take non-remedial coursework in community and technical colleges and/or matching graduation requirements to meet 4-year college entry requirements?

What changes would you recommend to the state minimum high school graduation requirements (High School and Beyond Plan, Culminating Project and state credits)? And why?

Report back.

Life Skills Dot Exercise

___civic responsibility
___creativity/innovation
___critical thinking/
problem solving
___ethical sense
___financial literacy
___global awareness
___information literacy
___leadership
___media literacy
___nutrition awareness
___public presentation skills
___teamwork/collaboration
___technology literacy
___other *(please specify)*
_____

Contact Information

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Web site:	www.sbe.wa.gov

STATE BOARD OF EDUCATION

HEARING TYPE: __X_ ACTION

DATE: January 9-10, 2008

SUBJECT: **MEANINGUL HIGH SCHOOL DIPLOMA UPDATE**

SERVICE UNIT: Ms. Edie Harding, Executive Director
State Board of Education

PRESENTER: Dr. Kathe Taylor, Policy Director
Mr. Eric Liu, Board Lead

BACKGROUND:

The Board will be asked to take action on the purpose of a diploma, as directed by the legislature. The statement has been reworked since the November 2007 draft to reflect feedback provided by Board members at the November meeting and at a subsequent Executive Committee meeting.

In order to adhere to the ambitious timetable the Board has set, decisions will need to be made at the March 26-27, 2008 Board meeting about a set of draft graduation requirements to vet with stakeholders at public outreach sessions in April and May.

To help the Board meet that timetable, staff recommends that the Board take the following actions:

1. Discuss and adopt the language for the purpose of a meaningful high school diploma

2. Direct staff to prepare a series of policy briefs on topics that will inform the Board's actions, and that reflect issues raised at the public outreach sessions. These policy briefs should provide a succinct snapshot of current practice and issues. Possible topics for the policy briefs are listed in this tab.

3. Agree to convene a work session in late February to discuss the policy briefs and to consider their implications for the directions that Washington's graduation requirements could take. Suggested date: February 25, 2008.

Washington State Board of Education

Working to Raise Student Achievement Dramatically

MEANINGFUL HIGH SCHOOL DIPLOMA UPDATE

DRAFT CONCEPTS FOR GRADUATION REQUIREMENTS

In September 2007, the Board approved draft concepts to frame its thinking about high school graduation requirements, with the caveat that any changes made to the requirements would need to take into consideration implications for system implementation. They include:

1. **Purpose of a diploma**. The diploma should signify that students are ready for success in postsecondary education, gainful employment, and citizenship. Requirements should address the personalized education needs of students as well as society's needs.

2. **One diploma for all**. The purpose and expectations of a diploma apply to all students (with appropriate recognition for special education students on IEPs). Requirements for the diploma send a clear message to all students about what they need to succeed after high school, and ensure that students have met a common set of standards.

3. **Proposed guiding principles.** Graduation requirements should:
   - Establish overarching expectations/essential skills needed for student lifelong learning;
   - Explore equivalency or competency credits, particularly, but not exclusively in the area of career and technical education;
   - Represent a comprehensive, integrated package;
   - Align with postsecondary education minimum entry requirements.

PUBLIC OUTREACH RESPONSE

The draft concepts were vetted at six public outreach sessions this fall, as well as at state and regional WSSDA conferences and community meetings (e.g., Clover Park Rotary). The formal tabulation of those responses has not been completed as of this writing. That said, there appeared to be general agreement about the purpose of a diploma as preparation for postsecondary education, work and citizenship, and the value of rigor, as long as there was some flexibility in the system for students to pursue that rigor in different ways.

PURPOSE OF A DIPLOMA

The 2005 legislature asked the Board to develop and propose a revised definition of the purpose and expectations for high school diplomas issued by public schools in Washington State. The legislature asked that the definition address two issues:

1) Whether attainment of a high school diploma is intended to signify that a student is ready for success in college, ready for successful and gainful employment in the workplace, or some combination of these and other objectives.
2) The knowledge, skills, and abilities that students are expected to demonstrate to receive a high school diploma, as well as the various methods to be used to measure student performance, rather than focusing on courses, credits, seat time, and test scores.[1]

The Board has considered the purpose of a diploma in its meaningful high school diploma work and in its own goals for students. In an earlier paper, the Meaningful High School Diploma Committee characterized the diploma as a "social contract" to whatever institution or employers the graduate moved on to—a contract that says the graduate has acquired a particular set of knowledge and skills. At its September 2007 meeting, the Board clarified the purpose as follows:

> *The purpose of a diploma is to prepare a student to be ready for success in postsecondary education, gainful employment, and citizenship. The diploma should meet the personalized education needs of each student, as well as society's needs.*

With respect to methods used to measure student performance, the Board redefined in 2000 a credit to include the "satisfactory demonstration by a student of clearly identified competencies established pursuant to a process defined in written district policy."[2]

The Board reviewed a purpose statement for a diploma at its November 2007 meeting and suggested that a revision be made to clarify the nature of a social contract by specifying who the contract is with. That revision, along with suggestions made by the Executive Committee, is incorporated into the staff recommendation below.

---

[1] ESSHB 3098
[2] WAC 180-51-050

Staff Recommendation: Staff recommends that the Board consider a definition that builds on the ideas listed above and addresses the two issues specified by the legislature:

> *The purpose of the diploma is to prepare a student to be ready for success in postsecondary education, gainful employment, and citizenship, and to be equipped with the skills to be a lifelong learner. The diploma represents a balance between the personalized education needs of each student and society's needs, and reflects at its core the state's basic education goals. The diploma is a compact between the state and whatever institution or employer the graduate moves on to—a compact that says the graduate has acquired a particular set of knowledge and skills. How the student demonstrates those skills may differ; whether a student earns credit by participating in formal instruction or by demonstrating competency through established district policies is immaterial; they are equally acceptable.*

NEXT STEPS

In order to adhere to the ambitious timetable the Board has set, decisions will need to be made at the March 26-27, 2008 Board meeting about a set of draft graduation requirements to vet with stakeholders at public outreach sessions in April and May.

Staff Recommendation: Staff recommends that the Board take the following actions:

1. Direct staff to prepare a series of policy briefs on topics that will inform the Board's actions, and that reflect issues raised at the public outreach sessions. These policy briefs should provide a succinct snapshot of current practice and issues.
    a. **College and work readiness**: How are states defining college and work readiness? What is a college and work-ready curriculum? Is a college and work-ready curriculum the same as alignment with postsecondary education?
    b. **Personalized education**: How are states defining a personalized education? What are states doing to create flexibility in the curriculum for students to pursue individual interests?
    c. **Competency-based credit**: How are states operationalizing competency-based credit?
    d. **Mandatory vs. default curricula**: How do opt-out policies work? What states are using them, and what is their impact?
    e. **Impact of higher standards on dropout rates:** What do we know?
    f. **Credit requirements of other states:** What are other states doing with credit requirements in the various subject areas?
    g. **Culminating project**: What are districts doing?

h. **High School and Beyond Plan**: What are districts doing?
i. **High school funding**: How does it work?
j. **Other states' approaches to graduation requirements**: What patterns, themes, and outliers emerge?
k. **Cross-crediting and equivalencies**: How do they work? What is the state already doing?
l. **Other?**

2. Agree to convene a work session in late February to discuss the policy briefs and to consider their implications for the direction that Washington's graduation requirements could take. Suggested date: February 25, 2008.

STATE BOARD OF EDUCATION

HEARING TYPE: ___X___ INFORMATION

DATE: January 9-10, 2008

SUBJECT: **ENGLISH LANGUAGE LEARNERS**

SERVICE UNIT: Edie Harding, Executive Director
State Board of Education

PRESENTER: Dr. Howard DeLeeuw, Program Administrator for Migrant/Bilingual Education, OSPI
Dr. Richard Cole, Superintendent, Sunnyside School District

BACKGROUND:

A group of Yakima County Superintendents has met with the Governor, OSPI and legislators to discuss their concerns that a significant number of English Language Learners has yet to pass portions of the reading and writing portions of the WASL, which could lead to a disproportionate number of these students not receiving a diploma. They would like to present their concerns to the Board.

These superintendents are requesting, for the graduating classes of 2008-2012, that students be allowed to graduate without a Certificate of Academic Achievement if they do not meet the reading or writing standard on the high school WASL or one of its alternatives, but meet all other graduation requirements. For the class of 2008 the students must earn one English credit (or career and technical education credit equivalent) for the class of 2009-12, the students must earn two English credits (or career and technical education credit equivalent). There have been a number of other earlier proposals by the Superintendents from Yakima, but we do not know their current status.

The Office of the Superintendent of Public Instruction has submitted several legislative proposals to address these issues. Legislators are anxious to work with the Yakima superintendents to help these students.

The Office of Superintendent of Public Instruction's presentation will provide an overview of English language learner data for Washington State. Data provided will address questions such as what grade levels have the largest percentage of new English language learners and WASL passage rates of students who have exited the program. The presentation will also include specific information regarding English language learners in the Class of 2008. OSPI will end with a discussion of the State Transitional Bilingual Program evaluation and current policy initiatives regarding English language learners.

STATE BOARD OF EDUCATION

HEARING TYPE: _X_ ACTION

DATE: JANUARY 9-10, 2008

SUBJECT: **REQUEST FOR WAIVER FROM THE 180-DAY SCHOOL YEAR REQUIREMENT FOR AUBURN, PORT ANGELES and SHORELINE SCHOOL DISTRICTS**

SERVICE UNIT: Ms. Edie Harding, Executive Director
State Board of Education

PRESENTER: Dr. Evelyn Hawkins, Research Associate
State Board of Education

RECOMMENDATION:

The review team recommends that the State Board of Education (SBE) approve the waiver requests from the minimum 180-day school year for the Auburn, Port Angeles and Shoreline school districts. The number of years granted for the waivers may be revised if the legislature revises the basic education funding formula in the future, to provide additional school days.

BACKGROUND:

Based on Legislative authority (Chapter 208, Laws of 1995), the SBE adopted Chapter 180-18 WAC Waivers for Restructuring Purposes. Section 180-18-040 of this chapter allows school districts to apply for waivers from the minimum 180-day school year requirement with the assurance that they meet the annual minimum instructional hour offering requirements in such grades as are conducted by the school district as prescribed in RCW 28A.150.220.

Below are brief summaries of the district requests. The decision to recommend approval or non-approval of a request was based on an assessment by a team of reviewers: Ms. Linda Lamb, Mr. Jack Schuster, and Dr. Evelyn Hawkins. As a result of the initial review, the reviewers had clarifying questions for the districts. These summaries reflect the final submissions by the districts.

As decided at the March 2007 Board meeting, full applications will not be in the Board's agenda. Board members who want to have the full applications should contact Dr. Hawkins at 360-725-6501 or evelyn.hawkins@k12.wa.us.

Auburn School District
Auburn, King County

District Enrollment (October 2006): 13,932
District Schools: 8 elementary schools, 4 middle schools, 4 high schools

Five (5) waiver days requested
One (1) school year: 2008-09

Type of Request: Renewal, prior waiver was for 5 days for 2007-08 and 2 days for 2006-07

The Auburn School District is requesting five waiver days for the 2008–09 school year. This request along with its two prior 1-year approvals is part of a 3-year package to support the District's plan for restructuring district programming. The District has a long-range strategic plan for education reform called Futurescape – The Next Generation. The plan aims to close the District's achievement gaps with a focus on math and science, improvement in literacy, development of instructional models that address student mobility (high mobility and its impacts on achievement is of major concern to the District), and use of technology for differentiated instruction.

The District's areas of focus are based on achievement data and the individual needs of their students. For example, the focus on math and science is based on low performance on the WASL in those areas. In terms of math, Auburn recognizes the need for a better system of delivering math instruction that aligns more intensely with grade-level expectations and addresses the episodic learning needs of a transitory, low-income demographic. Waiver days are needed for the development of math intervention models across grade levels. With regard to literacy, the District has experienced success in piloting the OSPI literacy intervention models in elementary and mid-level schools resulting in significant gains and narrowing of the achievement gaps. Waiver days are needed to expand the use of these literacy intervention models. Schools and teachers have already been working towards the required 2008-09 implementation of classroom-based assessments in social studies, health and fitness, and the arts. Waiver days are needed to continue working on these CBAs.

While each school's improvement plan supports the District strategic plan, a school's plan specifically addresses the learning demographics and needs of its students. The District works with the schools to see that school improvement plans promote the characteristics of high-performing schools, enhance teachers' use of differentiated instruction aimed at closing achievement gaps, deeply align school instruction and assessment to state standards, develop intervention models across grade levels and promote cultural competency and ELL accommodations in classroom learning.

The school plans include measurable achievement goals and specific strategies for meeting those goals. All schools appear to have goals for reading and math; many have them for writing and science as well. Most of the schools have other goals, including ones related to assuring a safe school environment. For example, the following is one of Mt. Baker Middle School's five goals:

> Goal 3: Mt Baker Middle School students will improve their math scores on the 6th grade WASL from 54.9% meeting standard to 60% meeting standard, 7th grade WASL scores will improve from 60.2% meeting standard to 67% meeting standard, 8th grade WASL scores will improve from 45.9% meeting standard to 60% meeting standard by June 2008.

The following is one of Ilalko Elementary School's four goals:

> Goal 4: In the next year, Ilalko Elementary staff, students, and parents will work to create and maintain an environment free from bullying. We will be working toward decreasing the number of office referrals as well as decrease the number of referrals for physical issues. Additionally work will be done around emergency preparedness to ensure that Ilalko remains a safe building before, during, and after disasters.

The professional development and planning for restructuring in which teachers and staff participate during waiver days support the attainment of these goals. Schools need the time provided by waiver days to implement their improvement plans in order to attain the goals they set for themselves.

This request for a waiver has the endorsement of the School Board, School Improvement Plan teams, the Auburn Education Association, the PTA, the District Advisory In-service Committee, the Classified In-service Advisory Committee, principals and the district Curriculum Instruction and Assessment Committee.

Teachers and staff participated in various activities during the 2006-07 waiver days and 2007-08 waiver days held thus far. At the conclusion of each waiver day, the teachers assessed their outcomes and evaluated the success of the planned activity. For example, on the March 16, 2007 waiver day, history teachers at Auburn Mountainview High School engaged in initial dialogues about the creation of classroom-based assessments (CBA) for history, aligning the curriculum and identifying learning outcomes for specific courses. The outcome was by the end of the day the teachers had assembled a collection of CBA materials that are ready for piloting and developed a tentative schedule to pilot the assessments. The evaluation of their success indicated that "department members are feeling more comfortable and confident about CBA's and believe that the pilot will go well next year." This waiver day activity was related to one of Auburn Mountainview High School's school improvement plan goals: specifically:

Goal 6: Create initial CBAs in Social Studies, PE/Health, and Fine/Performing Arts.

Waiver day activities in 2008-09 will follow a similar format in which outcomes and evaluations of success will be made following each waiver day.

Auburn WASL Results for Grades 4, 7, and 10

Auburn – Percent Met Standard										
	4th Grade			7th Grade			10th Grade			
Year	Reading	Math	Writing	Reading	Math	Writing	Reading	Math	Writing	Science
2001-02	69.6	52.1	50.4	44.2	30.8	50.9	53.5	30.2	57.1	
2002-03	64.0	49.6	54.5	44.6	35.1	56.6	60.6	38.3	62.5	25.6
2003-04	72.4	57.0	41.7	56.0	44.8	56.7	60.1	40.8	55.9	29.7
2004-05	78.1	59.3	49.4	66.5	46.5	62.4	71.4	39.6	55.1	31.1
2005-06	80.9	60.2	58.7	54.3	45.6	66.7	79.2	42.1	76.9	27.1
2006-07	74.7	55.5	59.7	65.1	52.3	71.2	79.5	45.8	85.3	29.3
State – Percent Met Standard										
	4th Grade			7th Grade			10th Grade			
Year	Reading	Math	Writing	Reading	Math	Writing	Reading	Math	Writing	Science
2001-02	65.6	51.8	49.5	44.5	30.4	53.0	59.2	37.3	54.3	
2002-03	66.7	55.2	53.6	47.9	36.8	54.7	60.0	39.4	60.5	31.8
2003-04	74.4	59.9	55.8	60.4	46.3	57.9	64.5	43.9	65.2	32.2
2004-05	79.5	60.8	57.7	69.0	50.8	61.2	72.9	47.5	65.2	35.8
2005-06	81.2	58.9	60.4	61.5	48.5	64.6	82.0	51.0	79.8	35.0
2006-07	76.6	58.1	60.2	68.7	54.6	68.4	80.8	50.4	83.9	36.4

Port Angeles School District
Port Angeles, Clallam County

District Enrollment (October 2006): 4,519
District Schools: 6 elementary schools, 2 middle schools, 2 high schools, 1 special education school, 1 Parents as Partners program

Two (2) waiver days requested
Three (3) school years: 2008-09, 2009-2010, 2010-2011

Type of Request: Renewal, prior waiver was for 5 days each for 2005-06, 2006-07, 2007-08

The Port Angeles School District is requesting two waiver days for the 2008–09, 2009-10, and 2010-11 school years. The waiver directly supports Goals 1 and 2 of the district and school improvement plans:

> Goal 1: Students are engaged in powerful learning experiences appropriate to each individual.
>
> Goal 2: Adults throughout the system are accountable for advancing personalization and powerful teaching and learning; necessary conditions and resources are in place to support all students achieving at high standards.

The waiver days will allow the district to continue to implement professional development that engages staff in the design and alignment of curriculum and assessment within grade levels in math and science, in particular, but also in reading and writing. In fall 2007, the district adopted new math materials for grades K-10; this came after a 2006 adoption in new writing curricular materials for grades K-8. The professional development that staff have and will continue to engage in provide them powerful learning experiences that prepares teachers and staff with the knowledge and tools to assist their students every day in their classrooms.

Following a trend of improvements in WASL performance, the District experienced declines in 2007 across most of the content areas and grades (i.e., 4, 7, and 10, since these are the grades for which there are more than two years of data; see table below). Furthermore, although district performance in grades 4 and 7 remain above the state averages, its high school performance is slightly below the state's average. Some possible reasons given for the 2007 declines are school closures, a district re-boundary process, the realignment of elementary schools from K-5 to K-6, and the new curricular adoptions. These declines support the continuing need for collaborative professional development time. The District and schools have used WASL data and curriculum adoption cycles to determine areas of focus for professional development.

Staff, parents, and the community are involved in the continuous school improvement planning process. It is through this process that they all expressed the desire to eliminate half days and use full days for professional development. The school and wider community, including the para-educator association, were also able to provide input on waiver days at the meeting of the District's Board of Directors. Parents are informed of learning improvement activities through various sources: school newsletters, school site teams, district web site reports, VISIONS—a school district community newsletter, monthly radio programs, community roundtable discussions, and district brochures.

Port Angeles – Percent Met Standard

	4th Grade			7th Grade			10th Grade			
Year	Reading	Math	Writing	Reading	Math	Writing	Reading	Math	Writing	Science
2001-02	73.5	52.3	41.9	57.6	34.4	49.9	73.0	52.1	49.7	
2002-03	77.0	56.4	51.3	54.4	43.3	62.3	71.7	47.6	61.3	44.5
2003-04	88.9	74.0	57.5	71.7	56.4	68.6	68.0	41.2	66.5	35.1
2004-05	87.2	67.6	61.0	74.0	55.6	69.6	71.0	45.8	60.3	33.5
2005-06	92.8	65.5	58.7	76.4	61.2	76.5	85.4	52.2	84.4	34.5
2006-07	86.1	62.7	62.6	69.4	60.4	72.3	78.0	48.4	82.6	36.5

State – Percent Met Standard

	4th Grade			7th Grade			10th Grade			
Year	Reading	Math	Writing	Reading	Math	Writing	Reading	Math	Writing	Science
2001-02	65.6	51.8	49.5	44.5	30.4	53.0	59.2	37.3	54.3	
2002-03	66.7	55.2	53.6	47.9	36.8	54.7	60.0	39.4	60.5	31.8
2003-04	74.4	59.9	55.8	60.4	46.3	57.9	64.5	43.9	65.2	32.2
2004-05	79.5	60.8	57.7	69.0	50.8	61.2	72.9	47.5	65.2	35.8
2005-06	81.2	58.9	60.4	61.5	48.5	64.6	82.0	51.0	79.8	35.0
2006-07	76.6	58.1	60.2	68.7	54.6	68.4	80.8	50.4	83.9	36.4

Shoreline School District
Shoreline, King County

District Enrollment (October 2006): 9,534
District Schools: 14 elementary schools, 4 middle schools, 4 high schools

Five (5) waiver days requested
Three (3) school years: 2008-09, 2009-10, 2010-11

Type of Request: Renewal, prior waiver was for 5 days for 2007-08

The Shoreline School District is requesting five waiver days for the 2008–09, 2009-10, and 2010-11 school years. The District has established the following goals for the waiver.

1. Develop and implement a new District Instructional Plan that will address the needs of all learners.
2. Close the achievement gap for English Language Learner (ELL) and special education students.
3. Align the new state math standards and Math Grade Level Expectations (GLEs) with the district's K-12 curriculum, evaluate the effectiveness of the current curriculum, and implement diagnostic math assessments to improve math achievement.
4. Implement, by spring 2009, the new Classroom-Based Assessments (CBA's) in social studies, health and fitness, and the arts; by spring 2010 assess the proficiency of all students in these content areas; and by spring 2011 evaluate the effectiveness of these programs.
5. Have in place by 2011 the Strategic Science Plan currently being updated and based on implementing inquiry-based science programs at all levels. The plan will include the professional development needed to ensure that teachers have the skills to effectively provide inquiry-based instruction.
6. Continue its district partnership with Puget Sound Writing project to improve writing instruction, increase the number of students meeting standard on the writing WASL, and by 2011 have a district-wide writing curriculum and a staff that understands and uses clearly defined grade level writing standards.

The goals were created through collaboration among teachers, parents, principals, and other district administrators and they support school-level goals. Every school in the district has a school improvement plan with reading and math improvement goals. Schools may also have other goals, such as a writing improvement and/or school community goals.

These goals were driven by student performance data and expected changes and implementations, such as new math standards and GLEs and classroom-based assessments in social studies, the arts, and health and fitness, to which the District and its schools must respond. For example, the District established goal #2 because WASL data has shown the ELL and special education student achievement gaps. In addition, Shoreline has experienced a growth in its population of ELL students and expects that this population will continue to grow. Similarly, goal #5 was established because fewer students in Shoreline meet standards on the science WASL than any other WASL tested subject. The district determined that it needed to align its curriculum across grades levels, particularly between elementary and middle school, and middle and high school.

On waiver days, the district or schools provide professional development opportunities in support of these goals. On some days, the professional development is district-wide in which grade-level or content-level collaboration is the focus of the training. On other days, schools may choose to have their teachers work on their school-identified relevant training. Whatever professional development activities teachers and staff participate in on waiver days must be shown to be in support of the six goals. In general, the district endorses the different activities in which schools, teachers and staff can participate on a given waiver day; all teachers and staff must select from these activities.

The District has identified multiple measures/benchmarks for each goal to show progress in meeting the goal. For example, for goal #3, improving math achievement, the District expects:

- At least a 6% increase in the number of students meeting standard on the Math WASL every spring from 2009 to 2011;
- Fewer students failing secondary math and science classes;
- Documentation of grade level and secondary alignment with the new Math GLE's; and
- Implementation of District wide diagnostic math assessments.

The decision to apply for a waiver was based on the Board of Directors, teachers, administrators, and classified employees agreeing that non-student time was needed to facilitate collegial planning and collaboration between buildings and/or grade levels. Furthermore, support for waiver days was voiced at meetings of the Instructional Leadership Team, Superintendent's Cabinet, the District Calendar Committee, PTSA, site councils, school staffs, the Professional Development Committee, secondary department chairs, and District grades levels.

Shoreline has been able to eliminate all but one half day (day before Thanksgiving) from their school calendar as a result of receiving a waiver and will continue to be able to do so with approval of this current request. The District is asking for three years of waivers because its goals can only be achieved with several years for thorough planning and careful implementation. The most obvious need for three years is with goal #4, the implementation of the new Classroom Based Assessments (see enumeration of goals above). The District integrates waiver days with LID and TRI days to create a comprehensive year of professional development and planning.

This application is a renewal for Shoreline, which is currently in a one-year waiver. The time period is too short to provide student achievement data. However, Shoreline had a 3-year waiver from 2004-07. During those three years, the District focused on secondary reading and math across the grades. The District experienced increases in the percentage of students that met standard in reading WASL from 2004 to 2007. In spite of their math initiatives, the District, as a whole, did not make great gains on the math WASL. Shoreline's 4th and 7th grade Hispanic students, however, showed notable gains. The District continues to focus on improving math achievement.

The expectation is that schools will keep parents informed regarding district and school academic goals, student progress, and how the calendar works to support the goals through monthly newsletters from the school.

Shoreline – Percent Met Standard

	4th Grade			7th Grade			10th Grade			
Year	Reading	Math	Writing	Reading	Math	Writing	Reading	Math	Writing	Science
2001-02	77.6	66.3	61.2	57.6	49.4	58.4	73.0	50.8	70.5	
2002-03	82.4	73.9	65.7	62.5	52.1	69.1	69.3	54.9	73.4	39.1
2003-04	86.4	78.0	72.9	732	66.2	69.0	73.8	60.5	73.4	43.8
2004-05	88.5	79.9	74.0	78.3	63.0	73.0	83.0	65.5	74.2	55.6
2005-06	90.9	75.5	74.5	72.3	61.5	79.9	89.2	64.0	88.5	46.0
2006-07	85.3	76.2	76.0	77.8	64.2	72.1	89.4	63.4	88.1	51.6

State – Percent Met Standard

	4th Grade			7th Grade			10th Grade			
Year	Reading	Math	Writing	Reading	Math	Writing	Reading	Math	Writing	Science
2001-02	65.6	51.8	49.5	44.5	30.4	53.0	59.2	37.3	54.3	
2002-03	66.7	55.2	53.6	47.9	36.8	54.7	60.0	39.4	60.5	31.8
2003-04	74.4	59.9	55.8	60.4	46.3	57.9	64.5	43.9	65.2	32.2
2004-05	79.5	60.8	57.7	69.0	50.8	61.2	72.9	47.5	65.2	35.8
2005-06	81.2	58.9	60.4	61.5	48.5	64.6	82.0	51.0	79.8	35.0
2006-07	76.6	58.1	60.2	68.7	54.6	68.4	80.8	50.4	83.9	36.4

STATE BOARD OF EDUCATION

HEARING TYPE: ___X___ACTION

DATE: January 9-10, 2008

SUBJECT: **APPROVAL OF PRIVATE SCHOOLS FOR 2007–08 SCHOOL YEAR**

SERVICE UNIT: Office of Superintendent of Public Instruction
Mr. Martin T. Mueller, Assistant Superintendent
Student Support, OSPI

PRESENTER: Mr. Martin T. Mueller, Assistant Superintendent
Student Support, OSPI

RECOMMENDATION:

The schools herein listed, having met the requirements of RCW 28A.195 and are consistent with the State Board of Education rules and regulations in chapter 180-90 WAC, be approved as private schools for the 2007–08 school year.

BACKGROUND:

Each 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. A more complete description is attached for reference. The schools presented here were not able to get the application materials in prior to the start of school. Under WAC 180-90-145, the Office of Superintendent of Public Instruction is submitting these schools for approval at this time.

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. 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.

STATE BOARD OF EDUCATION

HEARING TYPE: __X____ ACTION ITEM

DATE: January 9-10, 2008

SUBJECT: **MINIMUM BASIC EDUCATION REQUIREMENT COMPLIANCE**

SERVICE UNIT: Edie Harding, Executive Director
State Board of Education

PRESENTER: Brad Burnham, Policy and Legislative Specialist
State Board of Education

Background

The Minimum Basic Education Compliance, FORM SPI 1497, reporting by Washington State school districts gives assurance to the State Board of Education that the districts are in compliance with the minimum requirements of the Basic Education Act, as well as related requirements such as the State High School Graduation Minimum Requirements. All 295 Washington State school districts have completed and submitted Form SPI 1497 for the 2007-08 school year and are in compliance.

To conserve expenses, the memorandum and FORM SPI 1497 were posted on the SBE Web site and were emailed using established list serves. The school districts were required to complete form and mail one original copy with signatures of the superintendent and board chair, to the State Board of Education by November 2, 2007.

Categories of Reporting

- **Total Instructional Hour Offering (RCW 28A.150.220/WAC 180-16-200)** Kindergarten offering of 450 hours. Grades 1–12 offering of a district-wide annual average of 1,000 hours linked to the Essential Academic Learning Requirements and other district-determined subjects/activities (not tied to grade spans).

- **K–3/4–12 Students to Classroom Teacher Ratio (RCW 28A.150.250/WAC 180-16-210)** The district ratio of students per classroom teacher in grades kindergarten through three is not greater than the ratio of students per classroom teacher in grades four and above.

- **Minimum 180-Day School Year (RCW 28A.150.220(3)/WAC 180-16-215)** The 180-day program is accessible to all legally eligible students, including students with disabilities, five years of age and under 21 years of age who have not completed high school graduation requirements.

- **State High School Graduation Minimum Requirements (RCW 28A.230.090) (WAC 180-51-061)** minimum state credits (19) in all subject areas are aligned with the high school standards at a minimum, to grades 9/10 grade level expectations or state essential academic learning requirements at Benchmark 3 (high school). District high schools meet all state minimum graduation requirements.

Reported Information

All 295 Washington State school districts have completed and submitted Form SPI 1497 Minimum Basic Education Requirement Compliance for the 2007-08 school year. Some districts did not submit on time because many new district administrators were not aware of the report and had not received the email announcements. This year's new administrators will be added to the email distribution list for next year.

School District Reporting Summary

	Instructional Hours	Students Teacher Ratio	180-Day School Year	180-Day Kindergarten/ Instructional Hours	Graduation Minimum Requirements
In Compliance	295	288	295	294	252
Not Incompliance	0	0	0	0	0
Does Not Apply/Exempt	0	7	0	1	43

(295 districts this year because Vader School District was dissolved September 1, 2007)

School Districts in Compliance:

All 295 school districts reported and are in compliance. Following is a list of the districts:

District Name lookup
Aberdeen School District
Adna School District
Almira School District
Anacortes School District
Arlington School District
Asotin-Anatone School District
Auburn School District
Bainbridge Island School District
Battle Ground School District
Bellevue School District
Bellingham School District
Benge School District
Bethel School District
Bickleton School District
Blaine School District
Boistfort School District
Bremerton School District
Brewster School District
Bridgeport School District
Brinnon School District
Burlington-Edison School District
Camas School District
Cape Flattery School District
Carbonado School District
Cascade School District
Cashmere School District
Castle Rock School District
Centerville School District
Central Kitsap School District
Central Valley School District
Centralia School District
Chehalis School District
Cheney School District
Chewelah School District
Chimacum School District
Clarkston School District
Cle Elum-Roslyn School District
Clover Park School District
Colfax School District
College Place School District
Colton School District
Columbia (Stevens) School District
Columbia (Walla Walla) School District
Colville School District
Concrete School District
Conway School District
Cosmopolis School District
Coulee-Hartline School District
Coupeville School District
Crescent School District
Creston School District
Curlew School District
Cusick School District
Damman School District
Darrington School District
Davenport School District
Dayton School District
Deer Park School District
Dieringer School District

Dixie School District
East Valley School District (Spokane)
East Valley School District (Yakima)
Eastmont School District
Easton School District
Eatonville School District
Edmonds School District
Ellensburg School District
Elma School District
Endicott School District
Entiat School District
Enumclaw School District
Ephrata School District
Evaline School District
Everett School District
Evergreen School District (Clark)
Evergreen School District (Stevens)
Federal Way School District
Ferndale School District
Fife School District
Finley School District
Franklin Pierce School District
Freeman School District
Garfield School District
Glenwood School District
Goldendale School District
Grand Coulee Dam School District
Grandview School District
Granger School District
Granite Falls School District
Grapeview School District
Great Northern School District
Green Mountain School District
Griffin School District
Harrington School District
Highland School District
Highline School District
Hockinson School District
Hood Canal School District
Hoquiam School District
Inchelium School District

Index School District
Issaquah School District
Kahlotus School District
Kalama School District
Keller School District
Kelso School District
Kennewick School District
Kent School District
Kettle Falls School District
Kiona-Benton City School District
Kittitas School District
Klickitat School District
La Center School District
LaConner School District
LaCrosse School District
Lake Chelan School District
Lake Quinault School District
Lake Stevens School District
Lake Washington School District
Lakewood School District
Lamont School District
Liberty School District
Lind School District
Longview School District
Loon Lake School District
Lopez School District
Lyle School District
Lynden School District
Mabton School District
Mansfield School District
Manson School District
Mary M Knight School District
Mary Walker School District
Marysville School District
McCleary School District
Mead School District
Medical Lake School District
Mercer Island School District
Meridian School District
Methow Valley School District
Mill A School District

Monroe School District
Montesano School District
Morton School District
Moses Lake School District
Mossyrock School District
Mount Adams School District
Mount Baker School District
Mount Pleasant School District
Mount Vernon School District
Mukilteo School District
Naches Valley School District
Napavine School District
Naselle-Grays River Valley School District
Nespelem School District
Newport School District
Nine Mile Falls School District
Nooksack School District
North Beach School District
North Franklin School District
North Kitsap School District
North Mason School District
North River School District
North Thurston Public Schools
Northport School District
Northshore School District
Oak Harbor School District
Oakesdale School District
Oakville School District
Ocean Beach School District
Ocosta School District
Odessa School District
Okanogan School District
Olympia School District
Omak School District
Onalaska School District
Onion Creek School District
Orcas Island School District
Orchard Prairie School District
Orient School District
Orondo School District
Oroville School District

Orting School District
Othello School District
Palisades School District
Palouse School District
Pasco School District
Pateros School District
Paterson School District
Pe Ell School District
Peninsula School District
Pioneer School District
Pomeroy School District
Port Angeles School District
Port Townsend School District
Prescott School District
Prosser School District
Pullman School District
Puyallup School District
Queets-Clearwater School District
Quilcene School District
Quillayute Valley School District
Quincy School District
Rainier School District
Raymond School District
Reardan-Edwall School District
Renton School District
Republic School District
Richland School District
Ridgefield School District
Ritzville School District
Riverside School District
Riverview School District
Rochester School District
Roosevelt School District
Rosalia School District
Royal School District
San Juan Island School District
Satsop School District
Seattle Public Schools

Sedro-Woolley School District
Selah School District
Selkirk School District
Sequim School District
Shaw Island School District
Shelton School District
Shoreline School District
Skamania School District
Skykomish School District
Snohomish School District
Snoqualmie Valley School District
Soap Lake School District
South Bend School District
South Kitsap School District
South Whidbey School District
Southside School District
Spokane School District
Sprague School District
St. John School District
Stanwood-Camano School District
Star School District
Starbuck School District
Stehekin School District
Steilacoom Hist. School District
Steptoe School District
Stevenson-Carson School District
Sultan School District
Summit Valley School District
Sumner School District
Sunnyside School District
Tacoma School District
Taholah School District
Tahoma School District
Tekoa School District
Tenino School District
Thorp School District
Toledo School District
Tonasket School District

Toppenish School District
Touchet School District
Toutle Lake School District
Trout Lake School District
Tukwila School District
Tumwater School District
Union Gap School District
University Place School District
Valley School District
Vancouver School District
Vashon Island School District
Wahkiakum School District
Wahluke School District
Waitsburg School District
Walla Walla School District
Wapato School District
Warden School District
Washougal School District
Washtucna School District
Waterville School District
Wellpinit School District
Wenatchee School District
West Valley School District (Spokane)
West Valley School District (Yakima)
White Pass School District
White River School District
White Salmon Valley School District
Wilbur School District
Willapa Valley School District
Wilson Creek School District
Winlock School District
Wishkah Valley School District
Wishram School District
Woodland School District
Yakima School District
Yelm School District
Zillah School District

STATE BOARD OF EDUCATION

HEARING TYPE: __X__INFORMATION/NO ACTION

DATE: January 9-10, 2008

SUBJECT: **SYSTEM PERFORMANCE ACCOUNTABILITY**

SERVICE UNIT: Ms. Edie Harding, Executive Director
State Board of Education

PRESENTER: Ms. Edie Harding, Executive Director
State Board of Education

Dr. Evelyn Hawkins, Research Associate
State Board of Education

BACKGROUND:

The Board approved three draft concepts at its September 2007 meeting that will guide subsequent work on the Board's System Performance Accountability (SPA) effort:

1. Performance Improvement Goals and Indicators to Measure System Progress

2. A Tiered System of Continuous Improvement for All Schools

3. Targeted Strategies for Chronically Underperforming Schools

The Board expects these concepts to receive extensive and formative public input and refinement (See the SPA Charter Adopted at the November Board meeting- enclosed with revisions in time line). In addition to the regular Board meetings, there are three work sessions with our advisors scheduled around these topics and related issues:

- October 22, 2007 (local perspectives on school improvement planning process)

- February 26, 2008 (OSPI proposed district assistance program, accreditation, SBE accountability index, proposed revision to school improvement rule)

- June 19, 2008 (performance goals and indicators, barriers to districts for increasing student achievement, and preliminary ideas on addressing chronically underperforming schools)

Board members are encouraged to attend these sessions. After each work session, the Board will be briefed on a distillation of the presentations and comments at its next scheduled Board meeting. Board members will have an opportunity to share their thoughts and provide guidance to staff as well as to listen to further public comment.

Attached is a policy memo updating you on our work, a PowerPoint summary of information from the October 22nd work session, and a copy of the SBE current rule on school improvement plans. We will be asking for Board guidance at this meeting and ideas for us to consider as part of the revision to the SBE rule on school improvement plans.

Washington State Board of Education

Working to Raise Student Achievement Dramatically

SYSTEM PERFORMANCE ACCOUNTABILITY UPDATE

PURPOSE

The purpose is to bring the Board up to date on our work for System Performance Accountability (SPA) concepts:

1. Performance Improvement Goals and Indicators to Measure System Progress
2. A Tiered System of Continuous Improvement for All Schools
3. Targeted Strategies for Chronically Underperforming Schools

To accomplish this work, the Board staff has engaged in the following efforts:

PERFORMANCE IMPROVEMENT GOALS AND INDICATORS

Data. There are several groups that are currently meeting around the issue of K-12 data that were mandated by the legislature. One is a data feasibility study sponsored by the Office of the Superintendent of Public Instruction (OSPI) and the other is creation of a new education data center, which is a part of the Office of Financial Management. The OSPI feasibility study is to examine the expansion of a longitudinal student-teacher data system to establish better linking of data on students, teachers and student achievement. OSPI is to conduct a pilot in two school districts to identify additional data element under the statewide student data system. The SBE is part of the OSPI advisory group. To date one meeting has been held. A final report is due to the legislature November 1, 2008. The Education Data Center's function is to conduct collaborative analyses of early learning, K-12 and high education programs and issues. The Center is providing support for the P-20 Council.

Board staff has also been in discussions with OSPI and PESB about some of our perceived data needs for accountability. Because it appears a number of elements are in flux, we are waiting until this spring to push for some more definition in what we need for our own accountability system. We would like to use the June work session to explore our findings and proposals.

TIERED SYSTEM OF CONTINUOUS IMPROVEMENT

Accountability Index. A major piece of the Board's draft accountability framework is the creation of a four-tiered system for the 2,000 schools in our state.[1] The tiers are ranked in order of increasing need for assistance. The accountability framework also includes an award system for recognizing outstanding achievement or improvement in student performance. The Board's System Performance Accountability (SPA) committee has recommended that all schools participate in continuous improvement. What is expected or required of schools and the level of assistance provided to them as part of the SBE accountability system as they engage in continuous improvement will depend on the tier in which a school is placed. Our guiding principles for the index are:

- *Simple & includes readily available data*
- *Recognizes improvement*
- *Uses multiple measures*
- *Incorporates NCLB AYP & will accommodate future changes in AYP*

We have contracted with five people (Dr. Robert Linn, Mr. Pete Bylsma, Dr. Sandy Sanford, Dr. Peter Hendrickson, and Dr. Linda Elman) to examine our proposed accountability index, which would be used to identify schools in different tiers for continuous improvement. They will report back to us in January on the technical aspects of our index based on the following questions:

1. Does the proposed accountability index for identifying schools (and districts) into tiers for differing intensity of assistance (e.g., a school that falls into tier three might need to select from state-mandated curricular materials, while a school in tier one would not be required to do, but would be allowed to do so) appear reasonable?

2. Do the three components—AYP Status, Achievement Status, and Improvement Status—contribute meaningfully to the index? That is, do they each add distinct information about school/district performance important for identifying schools in need of assistance?

3. Does the proposed index appear to be technically sound?

4. Is combining all grades and content areas tested into one achievement performance measure of school/district performance technically acceptable? If not, what do you suggest?

5. Are there other state accountability index models used in identifying schools for levels of assistance and rewards that the SBE should consider in its deliberations?

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[1] The Board has discussed the necessity of including districts in the school improvement process. Therefore, districts will also be assessed and be a major part of any assistance and/or intervention efforts. The specifics of how districts and schools will participate are yet to be determined.

School Versus District Continuous Improvement. We have been in many conversations with OSPI staff (Janell Newman, Shannon Thompson) about their thoughts on how to "improve" the OSPI school improvement program. They are thinking (and we agree as staff) that it makes a great deal of sense for OSPI to focus on district improvement to build sustainability rather than to approach this effort one school at a time. We have asked them to present their thinking for our Board work session on February 26th. We will need to figure out how to meld moving to a district model with our accountability index, which identifies schools. One key piece for the Board's accountability work is to decide when districts must select from the state curricular menus for math and science. This will be a part of our discussion this spring with an expected decision this summer.

School Improvement Plans and SBE Rules. OSPI wants to revise their School Improvement Planning Process Guide for this summer. This means that the SBE should revise its current rule on the School Improvement Plan (SIP). We had a good discussion at our October work session with our advisors about the school improvement process. Evelyn has also had some insights based on her review of the 180 day waivers about the current status of school improvement plans. We would like Board guidance on considerations for revising the Board rule on school improvement plans. We would use our February work session to discuss specific changes and then draft language for you to review at your March Board meeting with the anticipation of adopting a new rule at the May Board meeting. Currently Board staff is working with OSPI to share some suggested ideas for changes to the current rule.

TARGETED STRATEGIES FOR CHRONICALLY UNDERPERFORMING SCHOOLS

Video and Studies. Several projects are underway to conduct further analysis and review of this topic. Due to the complexity, Board staff is reviewing what we can accomplish this year and what we may need to undertake in the following year. We are working with APCO on a video of student voices and their school experiences, which we expect to be completed by March. We have drafted two requests for proposals which we expect to advertise in January and solicit some major talent to help us. The first proposal would be to conduct a study of barriers to districts in achieving significant improvement in student performance. There would be a literature review, interviews with key stakeholders, and some specific exploration in several districts to engage in depth in the issues identified. We hope to have this study completed in June and to discuss in our June work session and July Board meeting. The second proposal would be to assist the Board and key stakeholders to develop a state/local partnership to create strategies for assisting chronically underperforming schools and their districts. We hope to have this study completed by September, but with some good draft ideas in July.

Symposium. We initially planned to host a symposium with researchers and practitioners this spring. Due to our heavy workload, we believe we will need to move this to October. We have had initial conversations with the Professional Educator Standards Board staff and they may be interested in working on this with us.

Outreach. We know we will need to conduct some focus groups and public outreach on these topics and these will most likely be done in next fall.

School Improvement Plans and Processes

State Board Meeting
January 10, 2008

1

School Improvement Plans and Processes

WAC 180-16-220 (SBE Rule)

- Supplemental basic education program approval requirements: (1) current & valid certification; (2) annual school building approval
- Potentially subject to withholding of basic education funds due to non-compliance
- SBE adopted revised rules in March 2002; took effect with the 2003-04 school year
- An initial purpose of SIP: guide the school accreditation process
- SBE developed a school improvement planning process and prepared a school improvement planning guide (but it is not used by schools)

2

School Building Approval: WAC Requirements

- Schools approved annually by local school district board of directors
- Annual approval process requires a school improvement plan (SIP)
- SIP based on a self-review with active participation from staff, students, families, parents, and community members

3

School Improvement Plans

- Must be data driven
- Promote student learning
- Include continuous improvement process

4

School Improvement Plans

Shall address, but are not limited to:

- Characteristics of high performing schools, including safe and supportive learning environments
- Educational equity: giving each student what she/he needs, when and how she/he needs it to reach her/his achievement potential
- Use of technology to facilitate instruction
- Parent, family and community involvement

5

More SIP Requirements

- School involvement with SIP assistance under the state accountability system or through the Elementary and Secondary Education Act shall constitute a sufficient SIP
- School improvement plan requirements may not be waived
- Not a part of Form 1497 – Minimum Basic Education Requirement Compliance form

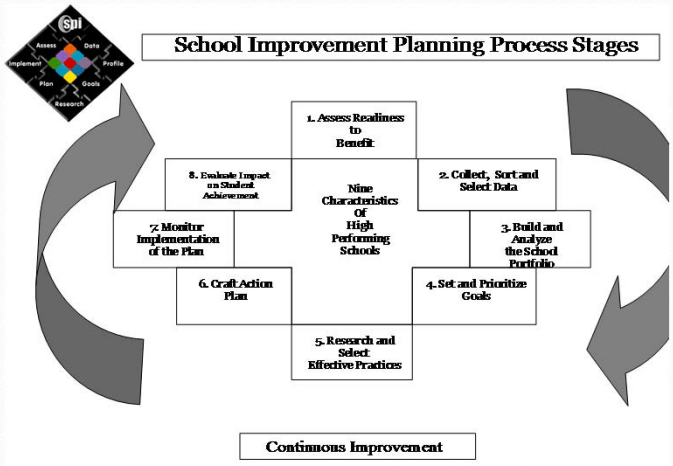
6

School Improvement Plans and Processes

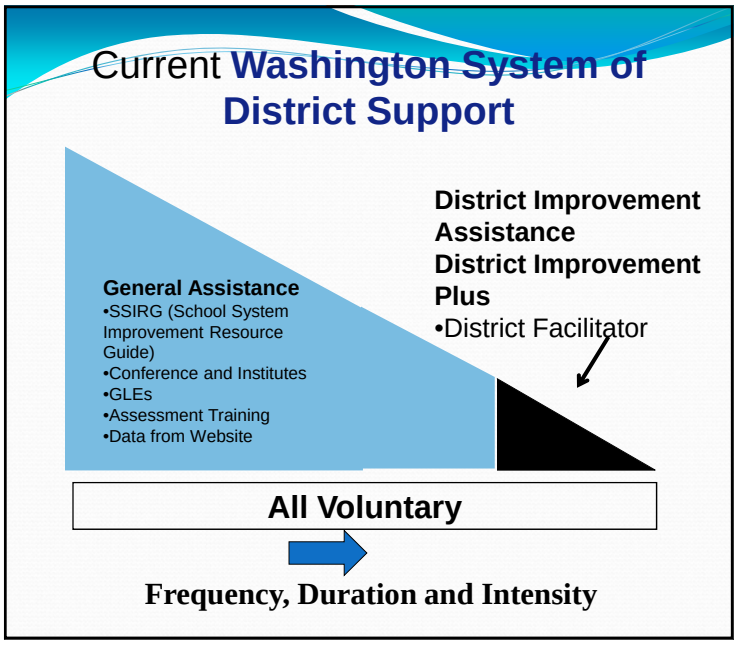
- 2006 legislature took away the public school accreditation function from the SBE
- 2002 SBE rule remains “on the book”
- OSPI has a School Improvement Planning Guide that schools may use. They would like to update it this spring based on any changes we want to make to our SIP rules use
- OSPI focused assistance program for school improvement is voluntary

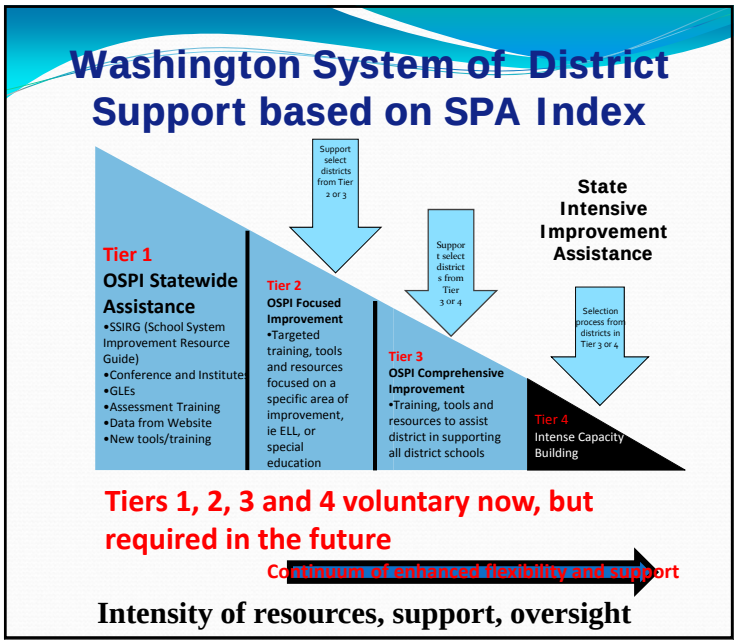
7

OSPI School Improvement Process



8


Current Washington System of District Support
General Assistance
•SSIRG (School System Improvement Resource Guide)
•Conference and Institutes
•GLEs
•Assessment Training
•Data from Website
District Improvement Assistance
District Improvement Plus
•District Facilitator
All Voluntary
Frequency, Duration and Intensity


Washington System of District Support based on SPA Index
Support select districts from Tier 2 or 3
Support select districts from Tier 3 or 4
Selection process from districts in Tier 3 or 4
State Intensive Improvement Assistance
Tier 1
OSPI Statewide Assistance
•SSIRG (School System Improvement Resource Guide)
•Conference and Institutes
•GLEs
•Assessment Training
•Data from Website
•New tools/training
Tier 2
OSPI Focused Improvement
•Targeted training, tools and resources focused on a specific area of improvement, ie ELL, or special education
Tier 3
OSPI Comprehensive Improvement
•Training, tools and resources to assist district in supporting all district schools
Tier 4
Intense Capacity Building
Tiers 1, 2, 3 and 4 voluntary now, but required in the future
Continuum of enhanced flexibility and support
Intensity of resources, support, oversight

SPA October 2007 Work Session

- Board Members met with advisors including teachers, ESD, WEA, principals, AWSP, superintendents, WSSDA, Partnership for Learning, business
- Advisors shared:
  - experiences with school improvement planning process
  - Recommendations for improvements of planning process

11

Advisors' Recommendations

- Avoid more state layers of review: do not bureaucratize the SIP process –we want to make real change not deal with process
- Don't want accreditation system with different requirements from SIP
- Need from state and peers:
  - flexibility in resources
  - more time to make instructional changes
  - leadership training

12

Advisors' Recommendations

- Need from state and peers (continued):
  - interventions that work for different student populations,
  - data on how students are performing through diagnostic assessments
  - ways to get more math and science teachers

13

Advisors' Recommendations

- Role for local school board and ownership at local level important for improvement effort
- Provide assistance in building district-level leadership and instructional capacity to assist schools in improving classroom instruction

14

Board's Guidance

- Are there specific issues we should examine in the WAC with regard to school approval and school improvement plans?
- Do you have ideas about our partnership with OSPI on new direction of a mandatory district (rather than school) improvement program as part of our accountability/tiered system?

15

WAC 180-16-220

Supplemental basic education program approval requirements.

The following requirements are hereby established by the state board of education as related supplemental condition to a school district's entitlement to state basic education allocation funds, as authorized by RCW 28A.150.220(4).

(1) **Current and valid certificates.** Every school district employee required by WAC 180-79A-140 to possess an education permit, certificate, or credential issued by the superintendent of public instruction for his/her position of employment, shall have a current and valid permit, certificate or credential. In addition, classroom teachers, principals, vice principals, and educational staff associates shall be required to possess endorsements as required by WAC 180-82-105, 180-82-120, and 180-82-125, respectively.

(2) **Annual school building approval.**

(a) Each school in the district shall be approved annually by the school district board of directors under an approval process determined by the district board of directors.

(b) At a minimum the annual approval shall require each school to have a school improvement plan that is data driven, promotes a positive impact on student learning, and includes a continuous improvement process that shall mean the ongoing process used by a school to monitor, adjust, and update its school improvement plan. For the purpose of this section "positive impact on student learning" shall mean:

(i) Supporting the goal of basic education under RCW 28A.150.210, "...to provide students with the opportunity to become responsible citizens, to contribute to their own economic well-being and to that of their families and communities, and to enjoy productive and satisfying lives...";

(ii) Promoting continuous improvement of student achievement of the state learning goals and essential academic learning requirements; and

(iii) Recognizing nonacademic student learning and growth related, but not limited to: Public speaking, leadership, interpersonal relationship skills, teamwork, self-confidence, and resiliency.

(c) The school improvement plan shall be based on a self-review of the school's program for the purpose of annual building approval by the district. The self-review shall include active participation and input by building staff, students, families, parents, and community members.

(d) The school improvement plan shall address, but is not limited to:

(i) The characteristics of successful schools as identified by the superintendent of public instruction and the educational service districts, including safe and supportive learning environments;

(ii) Educational equity factors such as, but not limited to: Gender, race, ethnicity, culture, language, and physical/mental ability, as these factors relate to having a positive impact on student learning. The state board of education strongly encourages that equity be viewed as giving each student what she or he needs and when and how she or he needs it to reach their achievement potential;

(iii) The use of technology to facilitate instruction and a positive impact on student learning; and

(iv) Parent, family, and community involvement, as these factors relate to having a positive impact on student learning.

(3) Nothing in this section shall prohibit a school improvement plan from focusing on one or more characteristics of effective schools during the ensuing three school years.

(4) School involvement with school improvement assistance under the state accountability system or involvement with school improvement assistance through the federal Elementary and Secondary Education Act shall constitute a sufficient school improvement plan for the purposes of this section.

(5) Nonwaiverable requirements. Certification requirements, including endorsements, and the school improvement plan requirements set forth in subsection (2) of this section may not be waived.

Washington State Board of Education

Working to Raise Student Achievement Dramatically

System Performance Accountability Charter
December 2007 (with modifications in time line)

Project Purpose:

To develop a statewide accountability system with state and local policy makers, educators, parents, and citizens working together to ensure no student falls through the cracks and that no school fails its students.

Background:

When the legislature reconstituted the State Board in 2005, it transferred the responsibilities for creating a statewide accountability system from the A+ Commission to the State Board of Education. The requirements[1] for an accountability system include:

- Setting performance improvement goals;
- Setting cut scores on state assessments;
- Identifying criteria for successful schools and districts in need of assistance and those where students persistently fail;
- Identifying criteria for schools and districts where intervention and appropriate strategies are needed;
- Creating performance incentives;
- Reviewing the assessment reporting system to ensure fairness, accuracy, timeliness, and equity of opportunity;
- Providing biennial report on progress; and
- Determining when school districts should choose from a curricular and instructional materials menu (2SHB 1906 from the 2007 Legislative Session).

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

The Board adopted two overall goals to frame its work with accountability and the review of high school graduation requirements. The goals are:

- Improve student performance dramatically; and
- Provide all Washington students the opportunity to succeed in post-secondary education, the 21st century world of work, and citizenship.

[1] RCW 28A.305.130 (4)

A focus on system performance accountability is one of the top priorities for the Board's work plan in 2007-08.

Board Role

Kris Mayer will serve as the Board lead. Board members will participate in work sessions as well as regular Board meetings. The Board will adopt a final package of system performance accountability measures in July 2008 to prepare for the 2009 Legislative Session.

Scope of Work

The Board adopted a preamble to its motions on key concepts for the system performance accountability work to provide direction to staff as they develop proposals for the State Board of Education's future review. The Board wants to be clear that these are preliminary, draft concepts that will receive extensive and formative public input and refinement. The Board, in advancing these concepts, is not endorsing specific details at this point. In addition, the Board acknowledges the magnitude of the implementation challenges that these proposals may present and asks our staff to be especially sensitive to identifying potential implementation barriers as well as strategies for dealing with them as they bring forward proposals for our review.

The three draft concepts are:

1. Performance Improvement Goals and Indicators to Measure System Progress

2. A Tiered System of Continuous Improvement for <u>All</u> Schools

3. Targeted Strategies for Chronically Underperforming Schools

Deliverables

- Revisions to school and district improvement plans through SBE rules and guidelines
- Proposed accountability index to identify schools and districts
- Two consultant RFPs: a barrier study, state/local partnership blueprint to address chronically underperforming schools
- Video with student perspectives
- Development of tiers with detail for continuous school and district improvement
- Proposal on when school districts must adopt a state curricular menu
- Proposal on strategies for chronically underperforming "Summit Schools"
- Legislative packages for 2009 or 2010 sessions
- Proposals on revision and adoption of performance goals
- SBE report card

Timeline for Input Process and Board Deliverables

October 22, 2007	Board work session with advisors on school and district improvement plans
November 1, 2007	SPA Charter and discussion of teacher distribution study
November-December 2007	Consultant expert review of accountability index
January 9-10, 2008	Board meeting to discuss staff recommendations on WAC rule revisions and other changes for school improvement plans
January-March 2008	Begin video production to address student voices Commission studies to identify barriers in districts that prevent significant improvement in student learning and develop state/local partnerships for chronically underperforming schools (if additional funding is available)
February 26, 2008	Board work session with advisors on OSPI proposed district assistance program, accreditation, SBE accountability index, proposed revision to school improvement rule (need to include discussion on when to require locals use state curricular menu)
March-June 2008	Potential focus groups on accountability issues
March 26-27, 2008	Board meeting to discuss OSPI new district improvement plan accountability index and accreditation. Adopt rule on school improvement plans
Spring 2008	Public outreach on system performance accountability concepts at two community meetings across the state
May 14-15, 2008	Board meeting to discuss outreach and chronically underperforming schools
June 19, 2008	Board work session with advisors on performance goals and indicators, barriers to districts for increasing student achievement, and preliminary ideas on addressing chronically underperforming schools
July 23-24, 2008	Board meeting to review draft concepts for state/local partnership for chronically underperforming schools
September 30, 2008	Board reviews more refined concepts for state/local partnership for chronically underperforming schools Submit legislative and budget proposals to the Governor
Fall 2008	Continued Board outreach to key stakeholders and community on proposed legislative and budget package Board work session and meetings on performance improvement goals Board host national symposium on chronically underperforming schools (if additional funding available). Possibly joining with PESB as a partner. Determine final performance indicators
2009	Continue work on chronically underperforming schools Produce first SBE Report Card

Note we have made some changes in our dates for work products and activities

Communication Plan

The communication plan includes work sessions and public outreach meetings to be held periodically throughout the year (see Timeline) with relevant stakeholders such as educators, legislators, parents, and business representatives. A symposium with national experts focused on improving chronically-underperforming schools is considered for the fall of 2008.

Staff Project Managers

Edie Harding, Executive Director and Evelyn Hawkins, Research Associate

STATE BOARD OF EDUCATION

HEARING TYPE: __X____ INFORMATION/NO ACTION

DATE: January 9-10, 2008

SUBJECT: **LEGISLATIVE SESSION 2008 AND BASIC EDUCATION FINANCE JOINT COMMITTEE UPDATE**

SERVICE UNIT: Ms. Edie Harding, Executive Director
State Board of Education

PRESENTER: Mr. Brad Burnham, Policy and Legislative Specialist
State Board of Education

BACKGROUND:

Handouts will be provided at the meeting for the following topics:

- 2008 Legislative Session's Key Education Policy Issues and Information about Committees Dealing with Education
- The Joint Taskforce on Basic Education Finance
- The Governor's 2008 Supplementary Budget