



SUPERINTENDENT OF PUBLIC INSTRUCTION

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June 30, 2009

Edie Harding, Executive Director
State Board of Education
Old Capitol Building
Olympia, WA 98504

Dear Ms. Harding and Members of the State Board of Education:

During the 2007 legislative session, the state Legislature directed the Office of Superintendent of Public Instruction (OSPI) to revise the state's K-12 Science Standards and to make recommendations of no more than three basic science curricula for elementary, middle and high school that align with the revised standards. The 2009 Legislature refined the timeline and requirement for the science curricula recommendations as part of ESSB 5414, Section 5 (7)(c-f) directing OSPI to make recommendations to the State Board of Education (SBE) by June 30, 2009 of "...no more than three basic science curricula each for elementary and middle school grade spans, and not more than three recommendations for each of the major high school courses within the following science domains: Earth and space science, physical science, and life science." Following these "initial recommendations", the SBE has two months by which to provide OSPI with "official comment and recommendations regarding the curricula". OSPI is then directed to make any changes based on the comment of the SBE and finalize the recommendations.

This letter provides a summary of the process by which core science materials were reviewed for their alignment with the revised K-12 Science Standards and presents to you my initial recommendations of science curricula materials. Following input from the Board and the SBE Science Panel this summer I will make my final recommendations as required by the law. I sincerely look forward to your further input and guidance regarding these initial recommendations.

Review Process Summary:

The 2009 Science Core Instructional Materials Review (IMR) process was designed to be rigorous, transparent, inclusive and reliable. As with the mathematics review, OSPI conducted a competitive bid process to solicit an external facilitator to co-lead the science review process and to provide support in data collection and statistical analysis. Following the review of proposals, Relevant Strategies, with Porsche Everson as the lead contractor was selected as our partner in this process.

During the development process professionals from across the science community, OSPI and SBE contributed to the success of the project during its multiple phases. Specifically, the SBE Science Panel and the OSPI Science IMR Advisory Group provided significant input to the review framework and the proposed minimum threshold by which a program should meet in its final content score to be included in the curricula recommendations. During the review week of

May 8-11, 2009, 69 reviewers reviewed 85 individual products from 20 publishing companies. Each program received four to five independent readings, with each reviewer taking an average of six hour per review. The review itself consisted of three primary levels:

1. **Content Review** (70% of the composite score) - This review included analysis of standards alignment and overall program coherence
2. **Key Program Elements Review**(30% of composite score) – This review included analysis of the following areas:
 - Student Learning
 - Facilitating Instruction
 - Equity and Accessibility
 - Assessment
3. **Conceptual Development Review** – Following the review week, top scoring programs were reviewed independently by university subject-area experts for their conceptual development quality.

The full 2009 K-12 Science Instructional Materials Review Preliminary Report and Initial Recommendations can be found on the OSPI website at (<http://www.k12.wa.us/CurriculumInstruct/pubdocs/PublishersNotices/ScienceIMRPreliminaryDraftReport6-24-09.pdf>). This report provides in-depth information regarding the process, programs reviewed, and specific data for each program.

Initial Curricular Recommendations:

The SBE Science Panel and the IMR Advisory Group also recommended that OSPI consider a threshold that a program should meet to be considered for the initial recommendations. In making these initial recommendations, I have selected materials that have met or exceeded a minimum composite score threshold of 0.7 with a 95% confidence level. Each program’s weighted composite score was calculated and consisted of the data collected as part of the Content and Key Program Elements Reviews. The following table represents my initial recommendations of basic science curricula to be considered by the Board.

Initial Curricula Recommendations		Composite Score
Elementary School (grades K-5)		
	○ No Initial Recommendations are made at this time at the Elementary level	No curricular materials met the 0.70 threshold in Composite Score
Middle School (grades 6-8)		
	○ <i>Science Explorer</i> -Pearson (Prentice Hall)	○ 0.8694
	○ <i>Middle Level Modules in Life, Earth and Physical Science</i> -Holt McDougal	○ 0.8147

Initial Curricula Recommendations		Composite Score
	<ul style="list-style-type: none"> ○ <i>Full Option Science System (FOSS)</i>-Delta Education 	<ul style="list-style-type: none"> ○ 0.7813
High School Domains (grades 9-12)		
Life Science Domain (one major course)	Biology: <ul style="list-style-type: none"> ○ <i>Biology: A Human Approach</i>-Kendall/Hunt (BSCS) ○ <i>Insights in Biology</i> -Kendall/Hunt 	Biology: <ul style="list-style-type: none"> ○ 0.8981 ○ 0.7973
Earth and Space Domain (one major course)	Earth Science: <ul style="list-style-type: none"> ○ <i>EarthComm</i>-It's About Time Publishing 	Earth Science: <ul style="list-style-type: none"> ○ 0.7992
Physical Science Domain (four major courses)	Chemistry: <ul style="list-style-type: none"> ○ <i>Active Chemistry</i> -It's About Time Publishing ○ <i>Chemistry</i>-Kendall/Hunt Integrated Science: <ul style="list-style-type: none"> ○ <i>Science: An Inquiry Approach</i>-Kendall/Hunt ○ <i>Coordinated Science</i>- It's About Time Publishing **Note: <i>Coordinated Science</i> is comprised of <i>EarthComm</i> , <i>Active Chemistry</i> and <i>Active Physics</i> . It does not have a life science component. Physical Science: <ul style="list-style-type: none"> ○ <i>Active Physical Science</i>- It's About Time Publishing ○ <i>Foundations of Physical Science</i>-CPO Science Physics: <ul style="list-style-type: none"> ○ <i>Active Physics</i>- It's About Time 	Chemistry: <ul style="list-style-type: none"> ○ 0.8434 ○ 0.6854 (the 95% confidence level upper bound is 0.7163) Integrated Science: <ul style="list-style-type: none"> ○ 0.8023 ○ 0.7079 Physical Science: <ul style="list-style-type: none"> ○ 0.7077 ○ 0.6948 (the 95% confidence level upper bound is 0.7264) Physics <ul style="list-style-type: none"> ○ 0.8764

	Initial Curricula Recommendations	Composite Score
	Publishing	

Once again, I am looking forward to seeking further guidance from the Board and the SBE Science Panel regarding all of these rankings, with particular interest in their comments regarding the elementary programs and the integrated programs. While school districts will not be required to select the recommended curricula, this next phase of the process will be instrumental to assist me in making the most thoughtful decision on the final recommendations in order to best serve districts in the state of Washington.

If you have specific questions regarding the review process or the initial recommendations please contact the OSPI Teaching and Learning Science Office at (360) 725-6311 or Mary McClellan, Science Director for Teaching and Learning, at mary.mcclellan@k12.wa.us.

Sincerely,



Randy I. Dorn
 State Superintendent of
 Public Instruction