

## **SUMMARY OF BOARD PANEL DISCUSSIONS**

**May 24, 2007**

### **Creating a college-bound culture in the public schools**

Colleges and universities need to take a more active role helping middle and high school students plan for, participate and succeed in higher education, student panelists told the Higher Education Coordinating Board at its May meeting.

Too many high school students who are capable of earning college degrees do not prepare for or participate in postsecondary education because the state's public schools lack the resources to provide adequate pre-college counseling, the students said.

### **Universities absent in high school classrooms**

The state's four-year institutions are noticeably absent in high school classrooms.

Too few campus tours are offered and high school teachers and counselors are under-informed about scholarships, admission requirements, degree planning and other vital information, the students said.

Keiko Weir, a junior at Todd Beamer High School in Federal Way, and Rob Muilenburg, a junior at the University of Washington Seattle, said the problem of inadequate college preparation affects more than two-thirds of high school students.

"The greatest predictor of college attendance and success remains whether one's parents earned degrees," Muilenburg said.

"Consequently if we want to involve more students in college in the future, we need to be focusing on first-generation students today."

Students who plan to attend college wind up getting most of their information either from friends, family or individual institutional Web sites, Weir and Muilenburg said.

The lack of centralized scholarship information also hinders students who are attempting to make a decision about which college they might be able to afford.

### **Early involvement needed**

Middle and high school students need to learn more about college much earlier - about how to prepare for college and what to expect when they make the transition, the students said.

Colleges and universities should also consider conducting regular on-site visits to high school classrooms to help students learn more about how colleges work, what will be expected of them, how they can access financial aid and other fundamentals.

More coordination with local school districts is needed to conduct these 'teaching' sessions.

## Teaching and learning

The board also heard reports from three panelists involved in programs to improve teaching and learning in math and English in Washington.

Substantial progress is being made in math and science education and learning, participants reported.

Panel members were Loyce Adams, professor of applied mathematics at the University of Washington; Greg Benner, assistant professor, University of Washington Tacoma education program; and the SBCTC's William S. Moore, policy associate, assessment, teaching and learning. Moore coordinates the Transition Mathematics Project.

### Transition Math Project

The Transition Mathematics Project, a K-16 public-private partnership, focuses on improving math readiness for college-bound students in Washington.

"Nationally, people have been re-thinking the idea of college readiness... what it means to be prepared," Moore said. "There is a growing belief that all high school students need to be ready for college, and yet our systems are disconnected. In some ways, we are our own worst enemies."

Building and sustaining high school/college partnerships is a key challenge for the program, Moore said.

Moore cited the program's strengths:

- Raises vision and focus beyond just "passing the WASL"
- Represents **a critical vehicle for higher education involvement in math work**
- Focuses on existing local connections & needs/strategies

Phase I (2004-06) defined a consensus set of expectations for college readiness in math and created and disseminated materials for public communication about math and college/work readiness. The program has received funding from the Legislature and the Gates Foundation to continue with Phase II in 2007-09.

Moore said Phase II of the program would establish a statewide college readiness assessment and would provide an additional one to three years of funding for 13 current regional projects.

The project will focus on creating an articulated connection between high school and college mathematics and on placing students appropriately into college math courses.

### Zipper to integrate existing work

Moore said 'zipper' (more integrated, collaborative processes) are needed to connect various strands of work occurring statewide:

- Curriculum, instruction and teacher support
- Classroom assessment
- Messaging/communication efforts to students & parents
- Data-based decisions around math course-taking and performance

Closer coordination will:

- 1) Help establish clear, meaningful and relevant consensus standards;
- 2) Align curriculum, instructional materials, and assessments to the standards; and
- 3) Lead to increased investment in significant and focused professional development.

## **UW's GK-12 program**

The University of Washington's GK-12 Program, funded by the National Science Foundation since 1998, annually sends eight to 12 graduate students in math and science to assist elementary and middle school teachers with math instruction.

Each fellow is partnered with two or three teachers for the entire school year at one school. The fellows work in all classrooms during scheduled math times. The program goal is school-wide change in mathematics.

The NSF-funded grant program is being conducted at 100+ colleges and universities nationwide. This year the fellows worked at least 12 hours per week at Leschi and Emerson Elementary schools in Seattle.

Past programs have been conducted at the Thurgood Marshall School and in the Northshore School District. Workshops and additional professional development are provided for the teachers during the summer and academic year, said Adams, the grant's principal investigator.

Adams said in one year, more than 45.5 percent of the students at Thurgood Marshall School passed the WASL compared with only 9.8 percent in the previous year.

"We believe the only way to improve mathematics instruction and mathematics results of students must involve a WHOLE SCHOOL effort," (??) Adams said.

"Too often, programs that want to help have fragmented efforts that are not sustainable once the program has left the school."

The NSF grant ends in two years. Adams is seeking sustainable funding from public and private sources to continue the program at one or two schools in an urban, economically challenged environment.

If the program can be conducted over a longer time period at the same two schools, she thinks the gains achieved will be sustainable after the graduate students leave.

## **No magic bullets**

"How can we do this throughout the public schools? The effort needed is an intensive all-school effort, and the only real change is going to be school by school," Adams said.

Adams cited the program's benefits:

- Improves graduate education
- Provides real-time professional development for teachers in mathematics
- Helps students in the classroom

"If we are lucky enough to receive another round of money from some source to continue this work, we would work very closely with the principals in the school as well as the teachers. The principals need to make this high priority for their schools."

## **Building reading skills**

Greg Benner of the University of Washington Tacoma, has developed a program to help middle school teachers and staff

screen, diagnose, monitor progress, and measure reading outcomes.

The program provides instruction in the application and sustained use of scientifically based reading instruction techniques. It features a three-tiered response-to-intervention system to address the literacy needs of all students.

Benner said about 15 percent of all middle school students suffer from either moderate or severe reading disabilities. The program helps identify these students early and provides intensive individual and group strategies to improve reading skills.

1. Students with severe reading problems receive intensive individual intervention that is high-intensity and assessment-based.
2. Students with moderate reading problems receive targeted group interventions designed to increase reading efficiency rapidly.
3. Students in the normal range of reading performance receive preventative and proactive

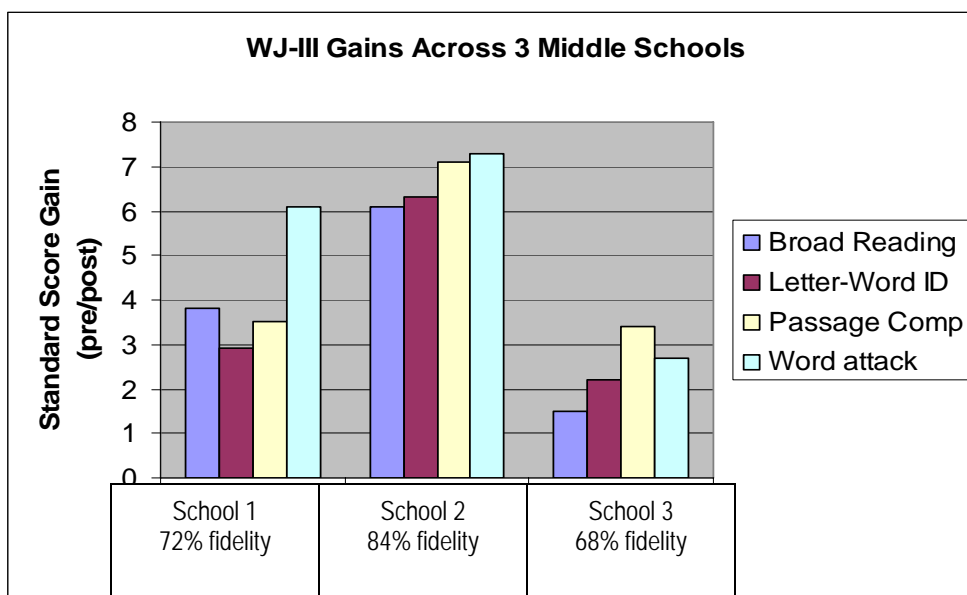
universal interventions designed to help chart and support increased reading ability.

Our society continues to grapple with the problem of literacy, Benner said. About 70 percent of older readers require some form of remediation in reading and 25 to 40 percent of the general population is “functionally illiterate.”

Failure to learn to read is a major reason for lack of high school completion, the need for long-term remediation, and qualification for special education services.

“There is a close relation between reading and social adjustment, mental health and criminality, Benner said. “Some states are using fourth grade reading rates to predict the accommodation needs of their prisoners 10 years into the future.”

The BERS program can achieve positive results when teachers fully adopt it as a teaching strategy, Benner said. The following chart shows reading results for three BERS schools.



**Note on Chart**  
Reading gain is measured on a scale of one to eight. Schools 2 and 3 were rural. School 1 was urban. The overall fidelity to the program was a key factor in gains recorded. Fidelity percentages appear under each school.