

Attachment 1

CONCLUDING REMARKS FROM SCIENCE CONTENT TEAM

A major objective of college readiness is to encourage a more cohesive approach to the processes of science education. The science college readiness attributes and definitions should, therefore, be viewed as a framework to better prepare students for entry-level general education science classes. Students planning to major in science, math, or engineering will find additional science and math classes in their junior and senior years of high school to be essential.

One of the strengths of this document is that it builds on the existing framework of standards and assessments used in Washington's secondary education system. It is important to recognize that high school curricula and teaching practices in Washington State already incorporate some of what is included in this college readiness document.

Also, it is both fair and important to state that the causes of student failure or success at the college level can be as varied as the quality of instruction and resources available in K-12 and postsecondary education institutions in our state. Therefore, it is imperative to acknowledge that a student's preparation and likelihood for success in college might be diminished by factors ranging from a lack of trained science educators in elementary grades, to college related factors such as lecture-style teaching to hundreds of students, which we know does not work well for all students.

Perhaps Phase II of this project could identify factors that lead to both success and failure of students during their college years so that needed adjustments can be made at all levels. Significantly more students in our state could meet science college readiness expectations provided our system is adequately equipped to offer a quality, coordinated learning program. Defining science college readiness is considered vital to the goal of a quality coordinated program.

To this end, the capacity of school districts and colleges to offer improved science education also deserves careful consideration and thorough analysis. Some of the most compelling capacity issues include class size, professional development (K-20), equipment and facilities, additional demands placed on teachers without sufficient resources, and teacher compensation and retention.

Another significant challenge is providing resources that address economic disparities and home, community and cultural differences that affect learning. School institutions often are ill equipped to meet the complex needs of our state's diverse and needy student populations.