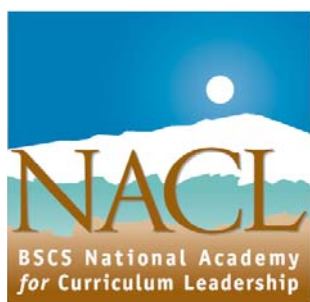


BSCS National Academy for Curriculum Leadership

What does it take to for innovators and leaders to develop the capacity to clarify and achieve a powerful vision for science education? What does it take to offer tried and true science teachers the knowledge, skills, and resources to share and enact this vision? What does it take to get those who are more reluctant to join their colleagues and achieve the vision? These are some of the questions taken up by approximately 200 science leaders across the state of Washington in a unique partnership between Washington State LASER and BSCS' National Academy for Curriculum Leadership (NACL). Secondary science leadership teams in the second cohort of the Washington-based NACL begin their third and final year of the program in Richland, WA on November 15-20, 2009.



The BSCS National Academy for Curriculum Leadership is a nationally recognized, in-depth, three-year professional development experience for district leadership teams. The primary goal of the BSCS National Academy for Curriculum Leadership (NACL) is to improve the quality of *secondary science programs* through the implementation of research-based instructional materials supported by high-quality, sustained professional development.

Evidence collected as part of the NACL program evaluation and research suggests that participants are:

- Taking a leadership role within their schools and districts,
- Using school and district data on student achievement, course enrollment and teacher capacity to make the case for change,
- Leading efforts to select effective, research-based instructional approaches and assessment strategies to pilot in classrooms,
- Analyzing curriculum for alignment with best practices in instruction and assessment,
- Designing transformative professional development that supports the implementation of effective instructional practices,
- Learning to monitor and adjust interventions based on data about student learning, teaching practice, formative classroom assessment, professional development support, and system infrastructure and capacity.

While committed to achieving results among district participants such as those noted above, another goal of the NACL in Washington is to develop the capacity of statewide faculty who can continue to lead the program into the future.. Annually, faculty members gather for a Faculty Retreat to more deeply study the program. One faculty member shared the following comment after our Year 3 Retreat which focused primarily on the Concerns-based Adoption Model (CBAM).

More paramount than gains in understanding of each data gathering tool of CBAM is the whole picture synthesis of the Principles of Change and the Change Process. Understanding how each tool is used and contributes to "monitoring and supporting teachers" during the adoption, implementation and sustainability of research and inquiry centered materials is the big take-away for me. I have used Stages of Concern (SoC) and Levels of Use (LoU) and feel comfortable applying the tools and interventions with teachers in [Washington School District]. By their use and reporting of data, I am helping administrators see the value [of CBAM] for use in 'how to support' the [adoption and implementation of the research-based instructional materials] we've put into place.

As a result of the strong leadership and tireless efforts of the NACL Faculty, participants consistently share how their ideas and practices have changed as a result of their participation in the NACL.

I look at professional development differently now. Before we gave teachers a three-hour professional development workshop and said, "Goodbye, we'll see you again in seven years when we adopt another textbook." Before we were not clear about why we were doing professional development... now we are very intentional. We have ongoing professional development, not just three hours. We are looking at least one year down the road, quality, not just one-size fits all. It is very intentional, depending on people's stages.

The progress we have made in two years has not been easy or without pain, but the benefits to teachers and students has been immense. We have taken great strides moving from traditional "talking head" instruction toward a coordinated team teaching science with inquiry pedagogy that will better prepare our students to be able to "do science." There is no question that this progress would not have been made without our involvement in NACL and the instruction and guidance of the NACL leaders.

The NACL is currently led by science educators from BSCS and eight Faculty from Washington including Peggy Willcuts, PNNL; Anne Kenney, ESD 112; Pat Ehrman, Center for Inquiry Science; John Henry, Port Angeles High School; Jeff Estes; Co-Director Washington State LASER and PNNL, Bonnie Lock, LaCenter School District, Mike Brown, ESD 105; and Ann Wright-Mockler, PNNL. Faculty for the first cohort of teams in Washington also included Mary McClellan, Science Director with OSPI and Sonia Siegel-Vexler, LASER Statewide Program Director with the Pacific Science Center. Jody Bintz is the Director of the BSCS National Academy for Curriculum Leadership. The NACL design was originally funded through a grant from the National Science Foundation. In Washington State, the Agilent Technologies Foundation and Battelle have made substantial grants to Washington State LASER to underwrite Cohorts 1 and 2 (2004-2010). In addition, Intel and several publishers have provided financial support.

Secondary science leadership teams begin their third year of the NACL in Richland, WA on November 15-20, 2009

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Districts that have participated in the two cohorts of the Washington-based NACL include:

Colville	North Beach	West Valley
East Valley (Yakima)	North Franklin	Walla Walla
Everett High School	North Thurston	Wapato
Everett Middle School	Pasco	Wishkah Valley
Evergreen (Vancouver)	Puyallup	Yakima
Highland	Richland High School	LASER Alliance Directors
Highline	Richland Middle School	
Hockinson	Selah	<i>Teams from other states include:</i>
Issaquah	South Kitsap	Delaware Department of Education
Kennewick	Sunnyside	Newark, California
LaCenter	Tacoma	Anchorage, Alaska
Mabton	Tumwater	