

Alphabet Soup



*Commonly used acronyms and jargon for
science education professionals*

A — D

Administrator – This term typically refers to senior school district personnel, such as the Superintendent and Curriculum Directors. At times, it can include ‘building administrators,’ also known as principals.

ASCD – Association for Supervision and Curriculum Development. A membership organization that develops programs, products, and services to support the way educators learn, teach, and lead. Many of the resource articles used this week come from this association.

Assessment – The process of documenting knowledge and skills; can take place during instruction (see *Formative Assessment*) or at the end instruction (see *Summative Assessment*).

Brain Research – Research used to understand how people learn; this knowledge impacts how teachers teach.

CBAM – Concerns Based Adoption Model; personal attitudes, feelings, perceptions, and motivations relative to an innovation.

CBA – Curriculum-Based Assessment are used to make sure students are getting key skills and knowledge. CBA's are built from the state's learning standards.



Curriculum – The way content is organized and presented in the classroom; is developmentally appropriate and provides a learning progression which develops over time and supports student's deep conceptual understanding of the Big Ideas of science (see *EALR 4*).

Differentiated Instruction – Changing the ways of instruction to meet the needs of different learners.

Director of Teaching and Learning – A position in the administration office of some school districts. Position varies from school district to school district, but typically this person is in charge of curriculum issues and instruction.



E — G

EALRs – Essential Academic Learning

Requirements; broad statements of the learning standards that apply to K-12th grades. The first 3 EALRs are crosscutting EALRs that characterize the nature and practice of science; the 4th EALR focuses on nine Big Ideas in science:

1. **Systems** – The student is able to analyze and understand complex phenomena through systems thinking.
2. **Inquiry** – The student knows and applies the skills, processes, and nature of scientific inquiry.
3. **Application** – The student knows and applies science concepts and skills to develop solutions to human problems in societal contexts.
4. **Domains of Science** – Focuses on nine Big Ideas in Physical Science, Life Science, and Earth and Space Science.

ESD – Educational Service District; multiple school districts are serviced by one ESD. There are 9 in Washington State.

Formative Assessment – All activities that teachers and students undertake during a period of instruction to get information that can be used diagnostically to alter teaching and learning.



Gallery walk – Education term for moving around the room to look at and/or listen to findings found by different groups on similar topics.



I — M

Inquiry-Based Science – A teaching technique that focuses on student constructed learning as opposed to teacher-transmitted information. The teachers and materials prompt the students to think through a problem rather than the teachers providing the answers or directing the activity. Typically, inquiry-based science lessons include hands-on activities, but hands-on doesn't always mean inquiry.

Instructional Materials – Any materials, including books and physical materials, that are used in the classroom as part of instruction. **Exemplary Instructional Materials** meet the criteria set by Washington State LASER; examples of these materials are on display Thursday.

Instructional Strategies – The different approaches a teacher may take to reach learning objectives.

Jigsaw – Education term for splitting up the work among groups or individuals, having each work independently and then bringing back the information to the group as a whole, like putting together a jigsaw puzzle.

LASER – Leadership and Assistance for Science Education Reform.



Literacy – Reading and writing at a level adequate for communication.

MESA – Organization working towards Mathematics, Engineering and Science Achievement for underrepresented K-12 students.

Metacognition – To think/reason about one's own thinking. Students learn best when they are engaged in their own learning and taking part in metacognition.

MSP – Mathematics and Science Partnership. Washington State Office of Superintendent of Public Instruction (OSPI) provides math and science partnership grants.



N — R

NACL – National Academy for Curriculum Leadership; it is a 3-year professional development program for high school educators.

NSF – National Science Foundation, a federal agency which provides science research funding.

NSRC – National Science Resources Center launched LASER, a national initiative to improve science education.

OSPI – Office of Superintendent of Public Instruction; a state agency with central offices in Olympia which oversees all public schools and education.

PD – Professional Development; activities which promote professional growth and skill.

Pedagogy – Refers to the strategies of instruction or a style of instruction a teacher may use.

Performance Expectations – A part of the Standards; specifies the depth of knowledge students are expected to know and the evidence that students have met the standard.

Research-based – Instructional materials that are based on current research about how people learn.



Rubric – A scoring tool that clearly lists criteria for each level.



S — W

SALT or SALTERs – Science Assessment

Leadership Team (SALT) or someone who attended these meetings (SALTER). This team works with the Science WASL.

SMC – Science Materials Center; used by districts and ESDs to manage materials used in classrooms.

Standards – The core of conceptual knowledge and abilities that all students should achieve by the time they leave our classrooms; standards include **EALRs** and **Performance Expectations**.

STEM – Abbreviation for the fields of Science, Technology, Engineering, and Mathematics.

Summative Assessment –Used to check the level of learning at the end of the period of instruction (e.g. end of course or unit); are comprehensive in nature.

TOSA – Teacher on Special Assignment. This is a classroom teacher who is not teaching and has been given a special assignment such as a science coach.

WASL – Washington Assessment of Student Learning. The WASL measures student learning of the state's academic standards (EALRs). Students are tested each spring in reading and math (grades 3-8 and 10), writing



(grades 4, 7 and 10) and science (grades 5, 8 and 10).

WSTA – Washington Science Teachers Association, a professional association of teachers which provides professional development, networking, and advocacy for science education.



Science Instructional Materials Publishers and Instructional Materials

The following publishers will present their materials at the Strategic Planning Institute. This is not a comprehensive list of science instructional materials or publishers, but it represents some of the more common acronyms and names you'll hear at the Institute.

Carolina Biological Supply Company –

Publishers of science instructional materials including:

STC – Science and Technology for Children (K-6)

STC/MS – Science and Technology Concepts for Middle School (6-8)

Chicago Educational Publishing – Publishers of

Science Companion elementary instructional materials

Delta Education – Publishers of science instructional materials including:

FOSS – Full Option Science System (K–8)

It's About Time – Publishers of science instructional materials (6-12).

Kendall/Hunt Publishing Co. – Publishers of science instructional materials including:



BSCS – Biological Sciences Curriculum Study
materials (K-12)

Insights – (K-6)

Lab-Aids, Inc. – Publishers of science
instructional materials including:

SEPUP - Science Education for Public
Understanding Program (6-8)

