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Laboratory Schools

At A Glance

Laboratory schools serve as training sites that prepare teachers for the classroom while providing students with model educational programs. This Information Capsule provides a brief description and history of laboratory schools in the United States. The benefits of laboratory schools, as well as some of the obstacles that have been encountered during implementation, are summarized. Research on laboratory schools' impact on student achievement is also reviewed. A listing of some of the laboratory schools and specialized math and science programs offered across the country is provided at the conclusion of the capsule.

The National Association of Laboratory Schools (2008) describes a laboratory school as one that prepares teachers for the classroom while delivering quality instructional programs to students. Laboratory schools are based on the belief that enhanced learning occurs when students are given the opportunity to think independently. The teaching pedagogy emphasizes students' active investigation of concepts, processes, and phenomena. Laboratory schools are connected to colleges and universities and are sometimes also referred to as demonstration schools, model schools, campus schools, or university-affiliated schools (SeokHoon, 2003; Baumann & Elinich, 1997).

Most laboratory schools have three interrelated goals (National Association of Laboratory Schools, 2008; Cassidy & Sanders, 2001; McBride, 1996):

- To serve as a training site for pre-service and in-service teachers by offering them the opportunity to practice the methods learned in their classrooms.
- To enable university faculty and graduate students to create and pilot new educational ideas and methods and to conduct the research needed to validate those ideas and methods.
- To provide students with model educational programs.

Learning principles upon which laboratory schools are based include (Henson, 2003):

- Education should be experience-based. The most valuable experiences occur when students are manipulating objects and solving problems.

- Since curiosity drives learning, educational experiences should motivate students to acquire more knowledge. The solution to a particular problem should lead to new, related questions about the topic.

- Learning is most effective when the curriculum is relevant and meaningful to students. They must be actively engaged in connecting the content being taught to their prior knowledge and experiences.

- Learning occurs in environments characterized by positive interpersonal relationships and interactions and in which students feel appreciated, acknowledged, and respected.

- Students come to the classroom with distinctive perspectives, qualities, and dispositions, influenced by their backgrounds, interests, goals, and beliefs. Instructional techniques that recognize these differences must be selected if students are to become actively involved in the learning process.

- Even when students are of the same age, they are often at different stages of development, with unique learning rates and styles, talents, and abilities. Curricula should be personalized to meet each student's learning needs.

History of Laboratory Schools

The nation's first laboratory school was created by John Dewey at the University of Chicago in 1896. Dewey believed that education should begin with an understanding of how children's capacities, interests, and habits can be directed to help them learn. He promoted the concept of collateral learning, a theory that recognizes that the richest learning occurs when emotions are involved (Henson, 2003). In 1938, Dewey wrote, "Perhaps the greatest of all pedagogical fallacies is the notion that a person learns only the particular thing he is studying at the time. Collateral learning . . . may be and often is much more important than the spelling lesson or lesson in geography or history that is learned."

While laboratory schools thrived on the campuses of major colleges and universities until the 1950s, their numbers began to decline in the 1960s. Between 1960 and 1980, almost half of the country's laboratory schools were either closed or reduced in scope (National Association of Laboratory Schools, n.d.). By the year 2000, only about 100 laboratory schools existed within the United States (Cassidy & Sanders, 2001). According to Hausfather (2000), laboratory schools "fell from grace when they no longer were seen as research laboratories for innovative practices or practical arms of college teacher education programs." Other reasons cited for the decline in laboratory schools' popularity include (Cassidy & Sanders, 2001; Haufsfather, 2000; VanTil, n.d.):

- Strong financial pressures from university administrators and state legislators to close laboratory schools, based on the belief that traditional schools should become the focus of student teaching, observation, and demonstration.

- Lack of research and experimentation. Two factors led to the shortage of outcome studies produced by laboratory schools: (a) teachers were not given lighter loads, additional staff, or extra release time to engage in experimentation; and (b) many university professors had highly individual research interests that resulted in very specific studies, instead of broad experimentation and evaluation of curricular strategies and procedures. When research was conducted, there was often a failure to widely disseminate the findings to other educators and the general public.

- Doubts about laboratory schools' ability to transfer their methods, materials, and philosophies to traditional schools and classrooms.

- Inadequate resources to offer all of the specialized services of larger schools (such as special education, gifted education, music, or physical education).

- The perception that laboratory schools tended to become favored institutions for the education of university faculties' children. Enrollment trends, in fact, indicated that laboratory schools were not representative of local student populations.

Factors Critical to the Success of Laboratory Schools

The National Association of Laboratory Schools (n.d.) identified the following factors as critical to the effective functioning of laboratory schools:

- Laboratory schools must be given autonomy over their programs, curricula, and research. Teaching strategies and curricula must be exempted from local and state regulations. Because laboratory schools function as cutting edge alternatives to traditional schools, they must be given the freedom to respond quickly to new techniques and practices.

- Laboratory schools must offer facilities and resources superior to those provided in traditional schools, such as smaller class sizes, quality materials, and advanced technology. One of the reasons why laboratory schools provide both students and teachers with enhanced experiences is that they are able to offer resources and facilities that exceed those normally provided in traditional schools.

- Laboratory schools must be within close proximity to college or university campuses. Teacher training, research, and demonstration are often compromised when students or teachers must travel long distances to designated schools.

Benefits of Laboratory Schools

Studies have documented that laboratory schools can provide students, teachers, and the community with many benefits, including (SeokHoon, 2003; Hasslen et al., 2000; Baumann & Elinich, 1997; McConnaha, 1996; Prince et al., 1993):

- Innovative teaching and learning strategies. Laboratory schools' increased freedom to experiment with and customize techniques leads to a greater diversity of creative approaches and processes.

- Strategies that develop students' abilities to think creatively and flexibly and to cooperate with one another.

- Instructional strategies that balance acquisition of factual knowledge with mastery of concepts and skills.

- Inclusion of alternative assessments that measure students' ability to apply information, think critically, and communicate clearly.

- Enhanced teacher education programs. Most teacher preparation programs provide teacher-candidates with only limited opportunities to build their teaching skills and are unable to adequately support the transition from university student to classroom teacher. Actual classroom experience and repeated practice using effective techniques are critical components of teacher training. Laboratory schools provide teachers with specialized training that school districts, universities, and professional organizations cannot offer independently of one another.

- Partnerships between universities, school districts, businesses, and cultural institutions. Collaboration enhances connections between students and society, allowing them to become more aware of global issues and solve problems cooperatively.

- Higher levels of intra-school collaboration, especially among staff. Teachers have consistently indicated that their participation in laboratory schools led to increased collaboration that benefitted them both personally and professionally.

Obstacles to the Formation and Operation of Laboratory Schools

Case studies and qualitative research have documented several obstacles encountered during the formation and ongoing operation of laboratory schools, including:

- Different institutions are characterized by different values. For example, the Science Learning Network, located in six states, reported their greatest challenge was maintaining project focus and progress when attempting to integrate the different cultures that existed in six schools, six science centers, and a corporate partner (Baumann & Elinich, 1997). An evaluation of a school-university partnership in Minnesota concluded that implementation was hindered by insufficient communication and lack of trust between university and district teachers, unclear roles, and the absence of a forum for arbitrating disagreements (Hasslen et al., 2000). Researchers have therefore concluded that partnerships must work to develop clear and open lines of communication, a common language, and a blending of cultures.

- Reeve (2001) stated that teaching in new ways is a complex endeavor that requires extensive professional development with the new approaches. Laboratory school teachers must acquire expertise in the areas of pedagogy, technology management, online resource creation, and project administration. Baumann and Elinich (1997) reported that the Science Learning Network struggled to create professional development experiences that were ongoing, supported by technology, and involved a significant portion of the school's staff, not just those willing to teach science and math in new ways. Cassidy and Sanders (2001) reported that laboratory school teachers voiced concerns that more was expected of them than their counterparts in the public schools.

- Planning how to integrate technology into the curriculum has emerged as a critical issue. Some instructional programs mistakenly assume that the use of technology alone will lead to improved teaching and learning (SeokHoon, 2003; Rodriguez & Williams, 2001; Baumann & Elinich, 1997). According to Baker, Herman, and Gearhart (1996), "Technology use must be grounded firmly in curriculum goals, incorporated in sound instructional process, and deeply integrated with subject-matter content. Absent this grounding, which too often is neglected in the rush to glittery application, changes in student performance are unlikely." Educators must determine what technology skills students should acquire, how those skills can be integrated into the curriculum, and if teachers are prepared to use technology effectively (Rodriguez & Williams, 2001).

- School personnel have documented the challenges of setting up technical infrastructures for use in technology-based laboratory classrooms. For example, Science Learning Network staff reported they spent the first 10 months of the project establishing a working technical foundation at schools and science centers. In addition, a convenient system for software acquisition must be established so teachers have access to a wide range of resources that meet their curriculum needs (SeokHoon, 2003; Baumann & Elinich, 1997).

Research on Laboratory Schools

Because few empirical studies have been conducted on laboratory schools, no firm conclusions can be drawn regarding their impact on student achievement. Although qualitative studies have found that those involved in laboratory schools rate them highly, there is little quantitative evidence to back up these claims. Studies that have examined the impact of university-public school partnerships and the implementation of experience-based learning curricula on student achievement are summarized below.

- Calderon (2004) examined the effect of a pilot university-elementary school partnership on students' academic achievement in Louisiana over a five-year period. She found that the school received a higher School Performance Score following implementation of the partnership. [The School Performance Score was based on Louisiana Educational Assessment Program (LEAP) scores, Iowa

Test of Basic Skills (ITBS) scores, and school attendance rates.] Specifically, fewer percentages of grade 4 students failed the LEAP in all subject areas tested (English/ language arts, mathematics, science, and social studies) during the three partnership years. Results for fifth grade students on the ITBS were similar, with lower percentages of students failing the test during the partnership years in all subjects tested. However, at grade 3, higher percentages of students failed the ITBS during the partnership years in all subject areas except social studies. Calderon concluded that the university-school partnership may have positively impacted students' academic achievement.

It should be noted, however, that changes in the percentages of failing students could not be attributed solely to the implementation of the partnership, as opposed to other school programs. Additionally, several factors resulted in highly unreliable study findings. For example, the elementary school had one of the highest mobility rates in the school system. At the end of the three-year partnership, only five students had attended the school for the entire three years. Furthermore, the principal left the school after the first year of the partnership and only 27 percent of the original teachers were still at the school at the end of the third year.

- Cassidy and Sanders (2001) examined student outcomes at the Early Childhood Development Center (ECDC), a laboratory school operating on the campus of Texas A&M University and serving Corpus Christi Independent School District students ages 3 through grade 9. The school focuses on dual language instruction but also incorporates the use of technology, multi-age groupings, and team teaching into its curriculum.

  The ECDC administered the Texas Assessment of Academic Skills (TAAS) in 1999, at the end of its third year of operation and the year their first group of students completed grade 3. The school was rated as recognized. (Based on TAAS reading and mathematics scores and school attendance rates, schools receive a rating of exemplary, recognized, acceptable, or low-performing.) The following year, the school received a rating of exemplary, indicating that over 90 percent of its students had received a passing score on the TAAS.

- A study conducted by the ARC Center (2003) did not involve laboratory schools, but was considered relevant to this discussion because it examined the use of mathematics curricula that were based on many of the same principles as laboratory school instruction. Analyses focused on the impact of the curricula, which emphasized the use of problem-solving exercises using real-world contexts, on students' levels of mathematical achievement. The curricula implemented were *Everyday Mathematics; Math Trailblazers;* and *Investigations in Number, Data, and Space.* The study involved over 100,000 students from three states (Illinois, Massachusetts, and Washington State). Program schools were matched with schools not implementing one of the three curricula and analyses controlled for variables such as students' ethnicity, socioeconomic status, and reading scores. Results indicated that the average mathematics scores of students in the program schools were significantly higher than the scores of students in the matched control schools. Findings held across five different state-mandated mathematics tests and across the tested content areas of computation, measurement, geometry, algebra, problem-solving, and making connections. Results were also consistent across all grade levels tested (grades 3-5), socioeconomic status, and ethnicity.

The interested reader is referred to two Information Capsules previously distributed by Research Services which address research-based strategies and practices for improving student achievement in mathematics and science. Both documents are available at the department's website (http://drs.dadeschools.net). The capsule concerning mathematics (Blazer, 2004a) contains research-based information in each of the following areas:

- Opportunity to learn;
- Focus on meaning;
- Learning new concepts and skills while solving problems;
- Opportunities for invention and practice;
- Openness to student solution methods and student interaction;
- Small group learning;
- Whole class discussion;
- Number sense;
- Concrete materials; and
- Calculators.

The capsule concerning science (Blazer, 2004b) contains research-based information in each of the following areas:

- Learning cycle approach;
- Collaborative learning;
- Analogies;
- Wait time;
- Concept mapping;
- Computer simulations;
- Microcomputer-based laboratories;
- Systematic approaches in problem solving;
- Conceptual understanding in problem solving;
- Science-Technology-Society;
- Real-life situations; and
- Discrepant events.

Summary

Laboratory schools serve as training sites that prepare teachers for the classroom while providing students with model educational programs that emphasize active learning and independent thinking. Benefits provided by laboratory schools include the development of innovative teaching and learning strategies; enhancement of teacher education programs; and formation of partnerships between universities, school districts, businesses, and cultural institutions. Several obstacles to the formation and ongoing operation of laboratory schools have been documented, such as simultaneously developing staff expertise in the areas of pedagogy, technology, and project administration; integrating the unique cultures that different organizations bring to laboratory school partnerships; and preparing for the integration of technology into the classroom. Because few empirical studies have been conducted on laboratory schools, no firm conclusions can be drawn regarding their impact on student achievement. Some of the laboratory schools and specialized math and science programs offered across the country are described below.

Selected Laboratory Schools and Programs

The following listing includes some of the laboratory schools and specialized math and science programs currently being implemented across the United States. Additional information on each program is available by accessing the Web sites provided.

Henry Barnard School (http://www.ric.edu/hbs)

The Henry Barnard School, Rhode Island College's Laboratory School, is open to students in preschool through grade 6. The school offers an innovative educational curriculum and provides teachers with opportunities to conduct educational research. In addition to the core curriculum, students attend classes in technology education, arts, music, Spanish, and physical education. Students participate in hands-on experiences in integrated learning environments designed to develop their intellectual, physical, and artistic growth.

Over 300 students are enrolled in the school. Tuition ranges from over $6,000 to $8,000 per year, depending on the grade level in which the student is enrolled.

Baylor High School Summer Science Research Program (http://www.baylor.edu/summerscience)

Baylor's High School Summer Science Research Program is a residential program that provides high achieving students with hands-on research experience by allowing them to work on projects with Baylor University science professors. The program allows students to become familiar with the operation of instruments and interpretation of data obtained by techniques not typically available in high school laboratories; participate in science and technology seminars; and access Baylor University libraries, facilities, and computers.

The five-week summer program is open to students who are between their junior and senior years of high school. Selection into the program is based on teacher recommendations, test scores, high school transcripts, and essays. Students are selected each year from high schools throughout the United States and earn one semester hour of college credit. Each student is awarded a scholarship that covers all program costs. Participants are responsible for the purchase of a meal plan, service fees, and incidentals.

COSMOS (California State Summer School for Mathematics and Science) (http://cosmos.ucdavis.edu/2008/index.html)

COSMOS is a mathematics and science residential summer program located at the University of California. Students attend lectures, take courses and participate in labs, course-related field trips, special activities, and study groups. COSMOS places a strong emphasis on technology and engineering, in addition to mathematics and science. Students enroll in one area of study, such as embedded computer systems; engineering design and control of kinetic sculptures; living oceans and global climate change; earthquakes in action; and bioengineering.

COSMOS is a four-week program that enrolls 150 high school students from California's 58 counties. Programs are conducted at the University of California's four campuses: Davis, Irvine, San Diego, and Santa Cruz. The program selects students in grades 9-12 with a demonstrated interest and achievement in math and science. Participants are selected on the basis of academic performance, test scores, essays, extracurricular math and science activities, and teacher recommendations. In 2007, tuition was $2,200 for in-state students and $6,200 for out-of state students. Financial assistance is available.

The University of California Davis also offers a **Young Scholars Program**, a summer residential research program for high achieving juniors and seniors. During the 6-week program, students engage in research in the natural sciences with an emphasis on biology, the environment, and agricultural sciences. Students work one-on-one with university staff on individual research projects, attend a lecture series, and participate in weekend excursions. Students work in their labs at least 3 days per week during the first two weeks of the program and 4 to 5 days per week for the remainder of the program. The Young Scholars Program accepts 40 students. The cost for the 6-week program is approximately $4,500.

GlaxoSmithKline's Science in the Summer (http://www.scienceinthesummer.com)

Science in the Summer is an educational program that introduces elementary school children in the greater Philadelphia area to scientific concepts by engaging them in a variety of hands-on activities. Classes are held at local public libraries. Courses include chemistry, genetics, oceanography, physical science/electricity, and simple machines. One hundred forty local libraries participate in the program, sponsored by GlaxoSmithKline (GSK) and administered by the American Association for the Advancement of Science (AAAS). GSK, AAAS, and Philadelphia-area public libraries are partners in the planning and implementation of the program.

Students entering 2nd through 6th grades are eligible to participate in the free program. Four 45-60 minute classes are conducted over the course of a week, scheduled during the months of June and July. Approximately 6,000 local children attend the program.

Michigan Math and Science Scholars High School Summer Program (http://www.math.lsa.umich.edu/mmss)

Michigan's summer program is designed to expose high school students to current developments and research in the sciences. The program allows students to carry out field work with university professors and to spend time working in research and computer laboratories. Students can attend one or two two-week sessions. Courses are offered in areas such as chemistry; astronomy; geological sciences; mathematics; molecular, cellular and developmental biology; physics; and statistics.

The program is open to all students who have completed at least one year of high school but have not yet entered their senior year. Acceptance into the program is based on students' high school transcripts, a student research statement, and teacher recommendations. The program is available on a residential or commuter basis. Classes are conducted at the University of Michigan. The cost of the program is $1000 per session for commuter students and $1,700 per session for residential students, which includes lodging in the university's residence hall.

The Pennsylvania Governor's Schools of Excellence (http://pgse.cis.drexel.edu)

Sponsored by the Commonwealth of Pennsylvania Department of Education, the Pennsylvania Governor's Schools of Excellence are five-week summer residential programs that are conducted on college campuses throughout the commonwealth. The programs offer students from across the state the opportunity to participate in one of eight schools of excellence in areas such as agricultural sciences; information, society, and technology; science; the arts; and health care. The program combines experiential instructional activities and individual guidance.

One of the Schools of Excellence, The Governor's School for the Sciences, includes study in mathematics, chemistry, physics, molecular biology, computer science, astrophysics, and material sciences. The program emphasizes access to hands-on laboratory research and technology. It is open to students in grade 11 and located on the campus of Carnegie-Mellon University in Pittsburgh, PA. Selection is based on students' demonstrated academic achievement, especially in the sciences and mathematics, and a record of pursuing these interests beyond the classroom.

There is no charge for tuition at any of the Governor's Schools. The programs receive funding through Pennsylvania's Department of Education (except the School for Health Care, which is funded by the commonwealth's Department of Health).

Note: Summer residential Governor's Schools operate in numerous states. The number of programs fluctuates from summer to summer as programs are awarded and lose legislative funding. In general, between 15 and 20 states offer Governor's School Programs during any given summer. Because some states offer multiple programs at the same time, the number of individual Governor's Schools is estimated at over 50. The National Conference of Governor's Schools maintains a list of available programs at http://ncogs.org/2ndgen/programs/programs.php.

Smithsonian Early Enrichment Center (http://www.seec.si.edu)

The Smithsonian's Early Enrichment Center (SEEC) is an educational program that helps students learn scientific concepts by exploring the Smithsonian's collections and exhibits. Museums and gardens are used as settings that allow students to observe, explore, classify, predict, and experiment. Interactions with scientists, artists, and cultural historians help students learn in concrete, engaging ways.

The program operates within the Smithsonian museum complex during the months of July and August and serves children between the ages of 3 months and 6 years of age through its child development center, preschool program, and kindergarten. Enrollment in the program is based on an annual lottery process.

The SEEC is a non-profit organization, working in partnership with the Smithsonian Institution. The Smithsonian Institution provides the program with space, utilities, and limited administrative services. Weekly tuition rates range from $251 to $313, depending on the age of the student, plus an activities/materials fee. Parents who are not employees of the Smithsonian Institute are required to pay an additional $1500 program fee. Financial assistance is available.

The SEEC also offers a number of services for educators, including seminars, professional training classes, written materials, and teaching kits. Customized consulting is available to support schools interested in integrating an arts-based or object-based approach to learning into their curricula. Consulting services include conceptual planning and analysis for the development of new programs, development of resource kits, and customized lesson plans.

The Summer Science Program (http://www.summerscience.org/home/index.php)

The Summer Science Program (SPP) is a residential enrichment program that provides gifted high school students with in-depth, hands-on experiences in areas such as astronomy, physics, calculus, and programming. Students complete research projects in celestial mechanics and attend lectures and field trips.

SSP is operated by Summer Science Program, Inc., an independent, non-profit corporation, established in cooperation with the California Institute of Technology, Harvey Mudd College, Jet Propulsion Laboratory, New Mexico Tech, Pomona College, Stanford University, and University of California, Los Angeles.

The SSP is conducted at two campuses: New Mexico Tech (a Science Engineering Research University in Socorro, New Mexico) and Besant Hill School (a private boarding school in Ojai, California). Students from around the world are accepted into the program based on standardized test scores and school performance, with priority given to students earning top grades in the most advanced math and science courses available at their schools. Students are typically juniors and enrollment is limited to 72 students. The program fee is $3,600. Financial assistance is available.

University of Chicago Laboratory Schools (http://www.ucls.uchicago.edu)

The Laboratory Schools, a division of the University of Chicago, teach students to analyze and critically solve problems, based on the philosophy that students learn best through experimentation. Students pursue a rigorous curriculum in reading, writing, mathematics, science, foreign languages, music, and the arts.

Approximately 1700 students, age 3 through grade 12, attend the school. Students are accepted from Chicago and its surrounding areas. Admissions are based on an independent school entrance exam, transcripts from the student's former school, and parent interviews. Tuition ranges from $10,656 per year for half-day nursery school to $20,445 for grades 9-12. Financial assistance is available.

The University of Chicago's **Summer Lab** extends the Laboratory Schools' mission into the summer. The Summer Lab is a six-week experiential program that includes Summer School, Adventure Kids Day Camp, Summer Lab Sports Camps, Summer Lab on Stage, and Lab Adventurer Field Study (an exploration of different cultures through travel for middle and senior high school students). The PreK through grade 12 summer school is designed to help students think critically and creatively, gain a sense of personal and community responsibility, and master important subject matter.

Summer school tuition ranges from $450 for a half-day, three-week session to $2,220 for a full-day, six-week session. Other summer lab costs vary, depending on the program. For example, Adventure Day Camp tuition is $2,220 for six weeks and Sports Camp tuition is $970 for six weeks.

University Laboratory High School at the University of Illinois (http://www.uni.uiuc.edu)

Established in 1921, the University Laboratory High School is located on the Urbana campus of the University of Illinois. Academic programs include computer science, math, science, English, fine arts, foreign languages, physical education, social studies, and independent studies. Approximately 300 students, spanning five years (the traditional 9^{th} through 12^{th} grades, preceded by a composite 7^{th} and 8^{th} grade year) are enrolled in the school. Admission is based on previous academic performance, test scores, essays, and letters of recommendation.

The school is a publicly-funded but competitive enrollment school that receives support from state taxes, but not from local property taxes, as well as from private donations. Until the early 1980s, the school was funded by the University of Illinois; however, the university now only provides some salary support, utilities, building maintenance, and other selected services. The school does not charge tuition, only annual book and miscellaneous fees, totaling about $700 per year.

University of Wyoming Astro Camp (http://wyomingspacegrant.uwyo.edu/Summerk12Programs.asp)

The Astro Camp is a summer program in which students, teachers, and scientists work together to understand the universe through hands-on experiments and telescopic activities. Students study in areas such as astronomy, physics, rocketry, and satellite assembly. Activities include observing the universe using professional telescopes; processing astronomical images on computers; constructing scientific spectrographs; assembling satellites; and building and launching model rockets.

The camp runs for six days each summer and is open to all Wyoming students who have completed grades 6, 7, and 8. Students are chosen based on demonstrated interest and academic potential in science, astronomy, or space. Approximately 24 students are selected from around the state. Registration is $125. Financial assistance is available.

The University of Wyoming also offers an **Engineering Summer Program** that provides high school juniors with the opportunity to participate in hands-on experiences in various engineering fields. Students engage in laboratory sessions that involve activities such as building digital circuits, programming robotic devices, or studying solutions to environmental issues. 30 students are selected to participate in the two-week program that is held on the University of Wyoming campus. The program cost is $50.

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