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## Student Enrichment Project (SEP) A Legislative Program Funding Competitive Grants for Enriched Learning Opportunities for K-12 Students in Wyoming

### **A Report of SEP Learning Programs for Summer 2010 and School Year 2010-11** Prepared by Ruth Sommers for the Wyoming Department of Education December 1, 2011

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## Student Enrichment Projects (SEP) Grant Summer 2010 and School Year 2010/11

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#### Authority

State funding directed specifically to student enrichment instruction was made available as a stand-alone program for the third consecutive year by the 60<sup>th</sup> Legislature through Section 1 of Senate File 0042, Enrolled Act 44. That act set aside \$450,000 from the school foundation program to be directed to districts in a competitive grant process for summer and school-year student enrichment programs

#### History

The Student Enrichment Project (SEP) had its beginnings as part of the Wyoming Bridges grant which provides summer school and extended day learning opportunities for academically at-risk students. The original Bridges grant was broadened over time to include enrichment instruction for students who were not considered academically at risk. When the school funding model was recalibrated in 2008, the philosophy of supporting (first and foremost) academically at-risk students with additional funding was reiterated, and the Bridges grant was again focused more narrowly on these students. This eliminated the use of Bridges grant funds for enrichment programs targeted to other student groups.

However, during the time enrichment learning opportunities were made available under the Bridges grant, the concept of stand-alone independent enrichment programs for a broad variety of students was seen to have its own intrinsic value and to be a vital component of student engagement and growth. Thus, for three consecutive years the legislature set aside \$450,000 to be directed to districts in a competitive grant process, ensuring projects closely adhere to the objectives specified by policymakers, thus encouraging program integrity and program quality.

#### Action

Student Enrichment Project (SEP) grant application and guidelines set forth guiding principles and program requirements for student enrichment projects, such as:

**Purpose** – The SEP was established to provide enriched learning experiences to Wyoming students. The intention of this project was to help students meet or exceed state and local standards in core academic subjects

by offering a range of high-quality opportunities for academic enrichment that support student learning and youth development principles as well as reinforce and complement regular academic programs.

**Research base** – There should be evidence that enriched learning strategies included in a district’s program are research-based and proven to be effective and the source of that proof documented.

**Enrichment Definition** – Enrichment is defined as learning opportunities and activities that engage students in developing essential knowledge, skills, values, and relationships as a vehicle for inspiring learning and encouraging academic and life success.

**Link to Standards** – All activities must be linked to academic standards and should be creative, exciting, fun, engaging, relevant, active, different than the regular school day, and full of learning. Enrichment programming should also hold student attention, awaken imagination, and inspire the desire for broader learning.

**Timing** – Programs must take place during non-school hours, before school, after school, on weekends, school holidays or summer recess periods.

**Target Population** – All public school students grades K-12. No specific groups of students were targeted to ensure that all students who may receive benefit from enrichment programming could participate and districts could determine population based on perceived need.

**No minimum/maximum funding limits** – Applicants were instructed to request all funds needed and reasonable to implement their proposed program(s).

**Program evaluation** - The academic effect on student performance of programs funded under the grant is to be evaluated rigorously and evaluation should adhere to processes proposed in district applications.

During the third year of the SEP grant, 25 applications were received from 22 Wyoming school districts requesting funds for projects costing more than \$1.2 million. Requests ranged from \$15,800 to \$163,700. Applications were scored separately by seven individual readers, using a pre-established scoring rubric. Readers met collectively to discuss scoring and applications. Nine districts received funding for ten enrichment projects to cover programs that occurred during the summer of 2010 (seven summer programs) and across all or some of the 2010-11 school year (nine school-year programs). Programs served students in grades kindergarten through twelve and addressed standards in math, science, language arts, social studies, physical education, health, technology and career/vocational.

## Financial

As **Table 1** below indicates, nine districts were awarded a total of \$440,000, of which \$434,023 was released. In total, 1,354 students participated in student enrichment programs over the timeframe of the grant. Expenditures per pupil averaged \$321 ranging from \$86 in Sheridan County School District #1 to \$919 per student in Lincoln County School District #2. Additional information on each district's proposed projects, student participation by grade level, and program adherence to their original proposal is included as Attachment A of this report.

How districts expended funds is shown in **Table 2**. Not surprisingly, the majority of expenses were incurred in salaries and benefits (64 percent), although some districts expended a fairly large amount of the grant (proportionally) on supplies and materials.

<b>Table 1: Wyoming Department of Education School Enrichment Pilot Project Grant Reimbursement 2010 Summer &amp; SY10-11 Projects (FY11) - 3rd grant year</b>					
District	Programs Delivered	Grant Amount Awarded	Grant Funds Paid to District	Undup or Largest Pgm Student Count	Cost Per Student
Big Horn #3	Summ & Schl Yr	\$ 25,585.00	\$ 22,823.00	60	\$ 380.38
Carbon #2	School Yr only	\$ 19,100.00	\$ 16,762.00	140	\$ 119.73
Fremont #1	Summ & Schl Yr	\$ 30,240.00	\$ 30,240.00	145	\$ 208.55
Johnson #1	Summer only	\$ 57,818.00	\$ 57,818.00	118	\$ 489.98
Laramie #1	Summ & Schl Yr	\$ 140,446.00	\$ 139,950.00	145	\$ 965.17
Lincoln #2	School Yr only	\$ 16,000.00	\$ 15,622.00	17	\$ 918.94
Natrona #1	School Yr only	\$ 28,241.00	\$ 28,239.00	33	\$ 855.73
Sheridan #1	Summ & Schl Yr	\$ 43,829.00	\$ 43,829.00	511	\$ 85.77
Teton (STEM)	Summ & Schl Yr	\$ 36,741.00	\$ 36,740.00	46	\$ 798.70
Teton (Dual)	Summ & Schl Yr	\$ 42,000.00	\$ 42,000.00	139	\$ 302.16
<b>Totals: (10)</b>		<b>\$ 440,000.00</b>	<b>\$ 434,023.00</b>	<b>1354</b>	<b>\$ 320.55</b>

**Table 2: Wyoming Department of Education  
School Enrichment Pilot Project Grant Reimbursement  
2010 Summer & SY10-11 Projects (FY11) - 3rd grant year**

<b>District</b>	<b>Salaries</b>	<b>Benefits</b>	<b>Purchased Services</b>	<b>Supplies Materials</b>	<b>Indirect Costs</b>	<b>Total</b>
Big Horn #3	\$ 15,133.00	\$ 2,925.00	\$ 2,393.00	\$ 2,372.00	\$ -	\$ 22,823.00
Carbon #2	\$ 6,310.00	\$ 1,786.00	\$ -	\$ 8,666.00	\$ -	\$ 16,762.00
Fremont #1	\$ 9,360.00	\$ 1,946.00	\$ 13,997.00	\$ 4,530.00	\$ 407.00	\$ 30,240.00
Johnson #1	\$ 38,600.00	\$ 7,301.00	\$ 7,417.00	\$ 4,500.00	\$ -	\$ 57,818.00
Laramie #1	\$ 88,789.00	\$ 18,358.00	\$ 5,633.00	\$ 21,789.00	\$ 5,383.00	\$ 139,950.00
Lincoln #2	\$ 2,500.00	\$ 539.00	\$ 10,779.00	\$ 1,804.00	\$ -	\$ 15,622.00
Natrona #1	\$ -	\$ -	\$ 16,452.00	\$ 11,787.00	\$ -	\$ 28,239.00
Sheridan #1	\$ 28,282.00	\$ 5,003.00	\$ 4,765.00	\$ 5,379.00	\$ 400.00	\$ 43,829.00
Teton (STEM)	\$ 11,332.00	\$ 2,210.00	\$ 6,352.00	\$ 15,369.00	\$ 1,477.00	\$ 36,740.00
Teton (Dual)	\$ 29,234.00	\$ 5,642.00	\$ -	\$ 5,278.00	\$ 1,846.00	\$ 42,000.00
<b>Totals: (10)</b>	<b>\$ 229,540.00</b>	<b>\$ 45,710.00</b>	<b>\$ 67,788.00</b>	<b>\$ 81,474.00</b>	<b>\$ 9,513.00</b>	<b>\$ 434,025.00</b>
<b>Percentage:</b>	<b>53.45%</b>	<b>10.64%</b>	<b>15.78%</b>	<b>18.97%</b>	<b>2.22%</b>	

## **District Enrichment Program Descriptions**

In addition to the following description of district projects, detailed information on actual student participation and program adherence to their original proposal is included for each district as Attachment A of this report.

Big Horn County School District #3 – Authentic Learning (summer and school-year) - \$25,585). The district targeted students in low socioeconomic status for the summer authentic learning program, although it was open to all students in grades three through eight who were interested in participating; 24 attended. The program provided hands-on learning and research of real, existent problems in the local community considered interesting enough to engage learners. Middle school students studied the reintroduction of wolves into the greater Yellowstone area and their subsequent impact on ranching and wild game. Elementary students researched the origination of the community’s water supply, how it is managed, purified, and delivered to people’s homes.

Carbon County School District #2 – Fantastic Fridays (school-year) - \$19,100. Saratoga Elementary school operates on a modified four-day weekly calendar. This grant allowed the district to provide Friday activities that engaged students in learning, exposing them to educational and cultural activities and diversity through written communication, critical thinking, and information literacy. In addition to teaching staff, the program enlisted community members and high school students to develop different Friday opportunities for participants. These “classes” included hands-on activities in forestry, art, rocketry, job shadowing, and field trips to historical sites, the

University of Wyoming, museums, etc. Students could additionally participate in Lego League and science fair.

Fremont County School District #1 – Make it REAL (Real World Enrichment Activities for Leadership) (summer and school-year) - \$30,240. Funds awarded to the district supported three separate enrichment programs offered to students in summer as well as throughout the school year. Outdoor Recreation Education Opportunities (OREO) targeted academically at-risk students, particularly sixth grade students transitioning into middle school; summer peer mentoring training was geared to academically successful eleventh and twelfth-grade students so they could serve as mentors during the school year to high school freshmen; and all students were given the opportunity to participate in project-based learning STEM (science, technology, engineering and math) activities through Geosciences + Tech.

Outdoor Recreational Education Opportunities (OREO) is a Wyoming Game and Fish program which teaches outdoor experiences and skills through several standards-based modules, with a different module taught one day per week over a one-week period during the summer. Modules include topics such as habitat, orienteering, water science, mapping, water safety, etc. During the school year, OREO was continued weekly through a two-hour opportunity to expand on the modules. As during the summer, it was targeted primarily to academically at-risk students.

Summer peer mentor training consisted of an eight-day camp lead by the National Outdoor Leadership School (NOLS). This session taught discreet outdoor skills, but also emphasized affective interpersonal and leadership aptitude to enable participants to work successfully with incoming freshmen the following school year. After the summer training, mentors provided after-school tutoring to freshmen four days a week during the school year and advised their mentees monthly, with the target of encouraging them to stay on track to graduation.

Science, technology, engineering, math (STEM) activities occurred both in summer and during the school year. These investigations centered on science, technology, engineering and math, with modules published by 4-H, the Civil Air Patrol, and NASA. The hands-on investigations included topics such as wind energy, forensics, rocketry, aeronautics, flight, and space science. During summer, STEM activities were available one day a week for eight weeks and twice weekly during the school year.

Johnson County School District #1 – Challenging Kids to get REAL (Rising to Engaging and Authentic Learning) (summer) - \$57,818. The district's offerings were made available during the summer and included different programs for elementary, middle, and high school students. They provided students the opportunity to experience real-world engaging activities tied directly to state standards. All interested students in grades kindergarten through twelve were invited to participate.

Students in elementary settings took part in science-based projects and experiments in forensics, aquatic and land ecosystems, culminating in a science fair exhibit for parents, family, and friends. The middle school program was a week-long field trip where students studied conservation, ecology, flora, fauna, water quality, and kept extensive journals of observations and findings. High school students were involved in multiple projects including the exploration of the life of a musician, instruction in public speaking, home-building, and maintaining fitness logs.

Laramie County School District #1 – Really Cool Discovery School (summer and school-year) – \$140,446. High-tech science equipment in nine “discovery” boxes served as the hook to capture student interest as they learned the interdependence of core subject areas such as science, math, and language arts. The summer component of the program was targeted to all interested incoming seventh and eighth grade students, and the school-year component continued with the same group. This was project-based learning in which students were introduced to concepts in math and science through performing experiments and building various projects, then recording their experiences using analytical and computational processes. Students maintained daily journals of their discoveries and outcomes which were to be graded as the language arts component of the program. It was a collaborative project with the University of Wyoming, and educators from the University participated in the summer portion of the project.

The program ran for seven weeks during summer, and students could elect to explore more than one activity. During the school year, students were able to attend “clubs” four days per week after school. Opportunities included exposure to physics, biology, geometry, genetics, geology, ecology, atmospheric sciences, astronomy, radio, flight, forensics, genetics, and use of compasses, clinometers, thermal cyclers, telescopes and computer simulators, plus standard lab equipment/tools.

It is interesting to note that participation in these offerings was very diverse and integrated, with many students considered to be in a low socioeconomic status and those on special education plans taking part.

Lincoln County School District #2 – American Citizenship (school-year) - \$16,000. High school students attending Swift Creek Alternative School were afforded the opportunity to study civics and government at the local, state, and national levels in this weekly after-school exploration of what it means to be an American citizen. Students studied the unique freedoms, rights and responsibilities of living in a democratic society and learned how citizens can affect policy. They studied the people, events, problems, ideas and cultures significant in the history of their community, state, nation, and world. Students maintaining a certain grade level, not dropping classes and participating regularly in the program were then able to take a trip to Washington D.C. This trip included visiting many of the nation’s important historic and cultural sites such as the Supreme Court, the Library of Congress, the Smithsonian, Mount Vernon, the National archives, Arlington National Cemetery, etc.. They also participated in service learning, visiting and donating items to a

homeless shelter in Washington, D. C; they attended cultural events in the city. Students were able to meet with all three members of the state's Congressional delegation. Students had to meet rigorous requirements to be eligible for the Washington trip, and only six of the seventeen students who started completed the requirements in order to participate in the trip to our nation's capitol.

Natrona County School District #1 – Theory, Nature, and Technology – (school-year) - \$28,241. This after-school program at Star Lane Center used research of and participation in the natural world to enrich the core subjects of language arts, math, science, and social studies. Students worked with staff, parents, and experts from the Casper community and national parks to familiarize themselves with controversial environmental issues of the day. Field trips were experiences that were longer in duration, required greater preparation, and had a cumulative effect, showing students how to become more adept learners in the natural world. Students participated in outdoor learning through the Teton Science School and the Yellowstone Institute, as well as locally at Casper Mountain and Martin's Cove. The program emphasized analytical thinking and problem-solving, effective use of real-world tools, the ability to produce relevant products, and stewardship.

Sheridan County School District #1 – Multiple Activities through Adventure Club, Outdoor Education, History Camp and Exercise Club (summer and school-year) - \$43,829. Almost 500 students in grades kindergarten through ten participated in one or multiple offerings available through these enrichment programs. In summer, Outdoor Education week focused on science, ecology, math and language arts through journaling. Each day during the week, students spent two hours on academics and four in integrated outdoor-based education, studying riparian, foothills, canyons, and high mountain habitats. The school-year Adventure Club was made available to any student who would commit to the extra work needed to complete the study and time necessary to prepare for and summarize the adventure. Many of the Adventures took place on weekends, and included historical, cultural, and scientific field trips, performances (theatre, puppetry, etc.), geo-caching, and gardening. Students planned all trips or projects, researched their destination, calculated costs, established schedules, and maintained substantial field journals.

During both summer and school year, exercise options were made available to students. Some were given pedometers and kept graphs of miles covered, again journaling their experience with exercise. The district purchased and made available to all interested students activity-based gaming stations which operate only when the gamer is signed onto equipment that will log their progress. These stations were also made available during the summer to students through the community's recreation center. After students graph results, improvements, and activities they complete each week, they are able to participate in an additional adventure.

Teton County School District #1 – Gateway Academy and Project Lead the Way (summer and school-year) - \$36,741. The district's summer academy was designed to be an introduction for middle grade students to explore careers in math, science,

technology, and engineering, to link them during the school year to Project Lead the Way, Gateway to Technology, and Pathway to Engineering curricula. Students worked on specific projects during the summer such as solar cars, bridges, gliders, robots, all with the goal of fostering more interest in STEM careers and to build confidence in students to take more science and math courses in high school. During the school year, middle and high school engineering students are afforded additional use of labs after school to pursue team activities and competitions in robotics, Lego League, business, marketing, etc. The engineering labs were staffed by math and science teachers. Students could seek help with coursework, and work on projects of their choice.

Teton County School District #1 – Dual Immersion (summer and school-year) - \$42,000. The goal of this program was to build content knowledge in math and science by teaching classes in Spanish for students already enrolled in the district's dual immersion program which provides extended learning opportunities in English only. It operated four weeks during the summer and two extended day sessions were offered each week throughout the school year. Classes included both native English-speaking and native Spanish-speaking students in grades kindergarten through second who work together to meet the project objectives of increasing Spanish oral fluency, preventing remediation needs for students in math, as well as increasing literacy in both English and Spanish and continuing development of cross-cultural competencies for participants.

## Results

**Program Monitoring** – SEP project administrators visited Fantastic Fridays in Carbon County School District #2 during the SY2010-11 school year and Teton Dual Immersion and Gateway Academy/STEM. These programs made available a wide variety of enrichment opportunities to their students. Please see program descriptions above to understand offerings made available.

As with monitoring experiences the past three years, a similar observation made this year was the presence of highly committed and dedicated staff. Students observed were quite engaged in learning activities and enjoyed being there. Learning strategies used by class coordinators were dynamic and hands-on and the classes attended were aligned with specific content standards. Although students participating in the STEM project were fewer than hoped, attendance in the other two was robust and included many participants. The Teton Dual Immersion program completed a very thorough study of effectiveness, explained below.

**Assessing Program Effectiveness** - District ability to effectively evaluate the success and effect of enrichment programming remains a specific component of the grant application, and district response to this question continues to be heavily weighted on the grant's scoring rubric. During this third year of the enrichment grant, it appears districts were beginning to more carefully evaluate effectiveness of their programs through the use of quantitative data; however, adherence to the

evaluation process proposed in applications was not consistent. Thus, it is difficult to say with accuracy that all programs funded through the SEP grant result in positive academic growth.

Nearly all districts used parent, teacher, and/or student surveys to help evaluate the quality of their programs. These kinds of surveys are qualitative in nature, and do not necessarily provide “proof” of program effectiveness. Responses in these surveys, across all programs offered, were quite enthusiastic. Parents and students both perceived they learned a great deal from their experiences. Participants, their families, and teachers all expressed hope that these opportunities for learning can continue and worry that without this targeted funding, they will no longer be made available to students. Student enrichment was not funded for the summer of 2011/SY2011-12, and most programs funded through the grant will not continue.

Isolating and assessing the quality of programs which operate concurrently with the school year is a consistent problem faced by data analysts. At the least, this requires sophisticated record-keeping and a large population of students so program segregation can be accomplished. For districts with small student populations, it is very challenging. Nevertheless, six of the nine districts offering school-year programs segregated student achievement data to evaluate the effectiveness of their projects. Three showed academic gains in students who participated, (Big Horn #3, Carbon #2, Teton #1 Dual Immersion math) and three showed student growth in pre/post assessment of specific projects offered (Laramie #1, Fremont #1 OREO, Lincoln #2). It should be noted that quite a few of the programs had such low student participation numbers in specific grades that any kind of evaluation performed would not be considered statistically valid.

However, because summer programs occur uniquely without other kinds of concurrent instructional programming, the ability to analyze their effectiveness improves greatly. Seven programs received SEP grant awards for summer programs in 2010, thus should be able to provide distinct program effectiveness data. However, of these seven programs, only four completed analysis that segregated student performance from attendees/non-attendees in order to effectively measure academic growth (versus attendance, future enrollment, etc.) in keeping with the evaluation methodology proposed in their applications. Of the four that evaluated segregated student data, one showed modestly less loss of learning over summer among participants than non-participants (Big Horn #3), one showed improvement in post over pre-testing on the specific subject/project taught (Laramie #1), one showed very good academic growth in summer participants in math (Teton #1 Dual Immersion), and one showed definitive losses in academic growth in those who attended (Johnson #1). Again, some programs had such low student participation numbers that evaluation could not be considered statistically valid.

Following is a description of the methods outlined by each district in their application that they proposed to use to evaluate their program effectiveness, followed by actual information provided by that same district. There is no discussion below on

*qualitative* data such as participant surveys, which are consistently positive. Furthermore, the information presented below is limited to what documentation was available at the time this report was prepared. Districts were to have submitted final reports by June, 2010.

- ✓ Big Horn County School District #1 (summer and school-year programs) proposed to quantitatively assess students using three analyses: PAWS and MAP scores and GPA. Qualitative evaluation would be completed through surveys distributed to students and parents.

The district's evaluation of their summer program claimed participants showed less academic loss over summer (two-week program) than non-participants; students attending scored .04% lower on spring versus fall RIT scores, while non-attendees showed a MAP RIT loss of 3.2% over summer. However, the district did not elaborate exactly which grades or subjects were included in this analysis.

The school-year program effectiveness was also studied using MAP RIT scores. Students participating regularly in the enrichment school-year program demonstrated higher RIT score gains over the school year than non-participants (RIT score gains of 3.87 versus 1.45 – 35% more growth). Again, as with the analysis of summer information, the district did not distinguish grade levels in the analysis, but did clarify the content area scrutinized was reading. A study of student PAWS scores was not made; however, since SY09-10 PAWS administration was problematic, this is understandable.

- ✓ Carbon County School District #2 (school-year program only) anticipated using pre and post DIBELS and MAP reading and math assessment scores, plus evaluation of student writing portfolios.

Although the district did not analyze fall/spring MAP RIT scores of attendees and non-attendees, they did compile the average gain between the fall and spring composite DIBELS scores for all enrolled students. They then compared the average gain score of students who participated in Fantastic Fridays at least fifty percent of the time to students who did not participate or who only participated for less than fifty percent of time. Students who regularly attended Fantastic Fridays had an average DIBELS gain score that was 12.23 points higher than those who did not consistently attend.

- ✓ Fremont County School District #1 (summer and school-year programs) planned to use segregated MAP scores for each of their multiple programs, student performance on established rubrics for OREO, student performance on rubrics developed for each module project for STEM, and for their peer mentoring project (primarily school year), they would use core-area course grades, on-track (for graduation) monitoring tool, behavioral referral data, and percent of mentors/mentees with GPAs above a certain level.

The district did not submit analysis of the quantitative effectiveness of the summer programs offered.

For the school-year OREO program, module pre and post tests were given, and 90 percent of students scored 75 percent or higher on post tests. Seventy-nine percent of OREO participants completed journaling assignments, but if these were graded, the grades were not reported.

Only four students attended with only two completing all projects and journaling activities required in the high school STEM geosciences project. Three of the four students scored 85% or higher on their GPS performance assessment and 75% or higher on written assignments.

All mentors trained during summer participated in the school-year mentoring of freshmen with half also volunteering to tutor after school. All students mentored completed five-year plans which focused on short-term reachable goals for on-track graduation. All students mentored in school year 2009-10 remained enrolled through SY2010-11. Eighty percent of the mentored students maintained a C average or better and only four failed a single core-area class over the school year. Throughout the entire school year, 90 percent of the participants had no behavioral or attendance issues and remained on track to graduate.

- ✓ Johnson County School District #1 (summer program only) planned to use pre/post comparison of in-district standards in writing, speaking, fitness, music and performing arts in addition to segregated MAP student growth analysis in math and reading.

The district submitted a detailed analysis of summer academic growth using MAP RIT scores for students in grades kindergarten through ten in both math and reading, segregating attending from non-attending students by specific school. Results of program effectiveness, however, were quite disappointing.

Data indicated that although the program was made available to all interested students, it generally attracted those who were higher-performing academically. However, for elementary students, attendees' RIT scores between spring and fall fell considerably more than the RIT scores of students who did not participate in the program. In some schools this was dramatic, with participants losing more than twenty RIT points over summer, while non-participants lost five. High school students attending showed very little different from those who did not. The bright spot was the performance of middle school students, where participants showed either academic gain over summer (in math), or much less loss than non-participants (in reading).

These results are in rather stark contrast with analysis made for the same program the prior summer, and should probably be reviewed at the district level for anomalies.

- ✓ Laramie County School District #1 (summer and school-year programs) indicated they would administer pre and post tests to students for each specific activity/class to assess the effectiveness of instruction. Students would be required to maintain journals which would be assessed at the end of summer and school year by the language arts coach using Bloom's Taxonomy of Learning. Finally, they proposed segregating MAP RIT scores of participating students over the 2010-11 school year to measure academic growth.

The district did gather and analyze student pre/post testing ahead of and behind participation in specific classes. Over summer, students demonstrated an overall 36 percent increase in their knowledge of the materials presented in the various classes during summer, (i.e. environmental or atmospheric science, flight exploration, astronomy, robotics, geology, etc.), and a 28 percent increase of material presented in the after-school clubs during the school year. However, the district did not include assessment of student journals or analysis of MAP RIT score growth over either the summer or school-year periods.

- ✓ Lincoln County School District #2 (school-year program only) proposed to quantitatively evaluate their project by administering pre and post tests to assess student knowledge of American government and history, and a comparison made of the grades of attendees and non-attendees in current and subsequent social studies courses during the school year.

Students participating in Swift Creek's social studies program increased their scores on pre and post test assessment of American government and history from 42 to 94 percent, a significant positive growth. A comparison of grades between the two student groups was not completed.

- ✓ Sheridan County School District #1 (summer and school-year programs) indicated they would use pre/post MAP scores, evaluate student field journals, and collect teacher data on behavior referrals, and general attitude toward school of participants and non-participants.

The district submitted only qualitative analysis of program performance for both the summer and school-year programs.

- ✓ Natrona County School District #1 (school-year program only) proposed using scores on standardized tests (PAWS, MAP, and Body of Evidence common assessments) to quantitatively assess the effectiveness of their high school project at Star Lane Academy. They were also to measure its effectiveness

through analysis of quarter and semester grades in core subjects, as well as student GPA. Additionally they anticipated comparing attendance, tardiness, and behavior intervention referrals of participants with non-participants.

The district compared grades of students participating in the current school year with grades in the same core areas the prior school year (when the program was not available). Overall, in the core subjects of English, math, science and social studies, 61 percent of students improved their GPA the current year, 15 percent had the same, and 24 percent had a worse GPA. Students participating in the enrichment programming had fewer absences than their peers that did not participate.

Analysis of MAP RIT scores reading was not possible because the district does not assess students using MAP after ninth grade. RIT math scores of the students participating in the program improved an average of just over four points, but this change was not compared with non-participating students. Change in PAWS scores were not studied since only eleventh graders take PAWS, scores were not available as of the report deadline, and last year's PAWS scores were subject to technical problems of administration. Improvements on common assessment activities were not segregated between participants and non-participants.

- ✓ Teton County School District #1 Gateway Academy (summer and school-year) anticipated using pre/post MAP assessment for students attending their summer academy as well as the 21<sup>st</sup> Century Skills Assessment (also pre/post).

Although it was generalized, the report submitted by the district indicated that 80 percent of middle school students participating in the summer academy showed better than (generally) expected growth on math as evidenced through MAP RIT scores from spring 2009 to spring 2010. However, it went on to explain that 60 percent of their general population showed higher than expected growth. It also indicated that for their after-school program, all students showed better than expected growth in MAP RIT scores.

The district also assessed students using 21<sup>st</sup> Century Skills assessment, and noted that statistically, attendees were highly represented in the top scores. The district commented that there is concern that the 21<sup>st</sup> Century Skills assessment may over-represent general computer use as opposed to life/career and other skills. The assessment may or may not be used to evaluate program success in the future.

Other statistics of interest reported by the district included that preliminary enrollment data for school year 2010-11 showed almost double enrollment for introductory engineering, and an increase of six percent in high school students interested in pursuing paths in STEM careers. Middle school

students enrolled in the summer STEM academy tend to take engineering courses in high school. In the past two years, all students who participated in robotics in high school have gone into college declaring majors in science, engineering or technology fields.

- ✓ Teton County School District #1 Dual Immersion (summer and school year) project proposed measuring Spanish language proficiency of participants (compared to non-participants) through the Foreign Language Oral Skills Evaluation Matrix (FLOSOM), delivered pre and post sessions for both summer and school year programs. Math proficiency would be measured using Everyday Math assessment measures.

The district performed an in-depth evaluation of the Dual Immersion program and followed their proposed methodology carefully, deviating only by substituting MAP measurement of growth rather than Everyday Math for analysis of program effectiveness in math.

Over the summer camp, neither kindergarten nor first grade students showed statistically significant gains in Spanish fluency, but the scores of those not participating in the program showed a decrease in fluency of ten percent. Summer learning loss of fluency in Spanish was stemmed for attendees. Academic growth in math among attendees (both kindergarten and first grade) showed significant improvement, with RIT growth from 3 to 5.9 points, while non-attendees showed a learning loss of 0.8

Students attending the Dual Immersion school-year program did not show statistically significant growth in Spanish fluency from students who did not attend the program. But growth in math was more pronounced, with students attending showing more growth than students who did not, and in those who attended on a very regular basis (more than half the time) showing significantly higher growth in math than non-attendees.

## Recommendations

Not surprisingly, this program remains quite popular among districts as well as the parents, teachers, and students who experience the projects firsthand. Despite popularity, policymakers have continued to express their intention that the program retain rigor and accountability and operate outside the school funding block grant model. In 2010 legislators made a number of changes to SEP grant requirements, emphasizing the importance of using research-based strategies and measuring outcomes in SEP programs.

In 2011, funds for Student Enrichment Project grants were not appropriated, and no programs are currently in existence for the summer of 2011 or the 2011-12 school

year. Nevertheless, should SEP grant funds again be made available in the future, the following recommendations are made:

**Recommendations to Districts:**

- Carefully adhere to commitments made in the original application, particularly for program evaluation;
- Assure there is segregation of students attending and not attending programs when performing program evaluation;
- Should there be a significant departure from the program proposed, please consult with WDE personnel to alert them to the needed changes.

**Recommendations to the Department:**

- Modify the application process so that individual projects within districts require separate proposals from districts rather than allowing them to submit a single application with multiple projects;
- As part of the evaluation of proposed projects, include historical reports on program effectiveness from districts which previously participated in the grant. Research the validity of evaluations that indicate little or no merit and do not fund programs which show negative student academic growth and those districts which did not comply with program evaluation proposed in previous applications;
- Consider collection of individual student-level data of participants (in summer programs particularly) so evaluation of effectiveness could be made by the Department using Measurement of Academic Progress (MAP) data already submitted by districts to the state;
- Discuss the merit of considering the per student cost of projects in the evaluation process;
- Consider the pros and cons of funding programs which benefit only a small handful of students.