

St. Vrain Valley School District i3 Project Project Narrative

A. NEED FOR THE PROJECT AND QUALITY OF THE PROJECT DESIGN:

(1) Exceptional Approach to the Priorities:

St. Vrain Valley School District is the educational home of 26,724 students. The district is the ninth largest in the state. The district operates 48 schools that are spread over 411 square miles. The makeup of the schools include: 25 Elementary, 9 Middle, 1 Middle/Senior, 7 High, 2 Alternative, and 4 Charter. Located approximately 30 miles north of Denver, the District is geographically diverse. Its physical boundaries extend from the Continental Divide into the plains of Colorado. Adding to its scenic setting are historic downtown Longmont and the backdrop of Rocky Mountain National Park and Longs Peak. There are 13 different communities that makeup St. Vrain Valley School District. The project will target Skyline High School and its feeder schools to include Heritage and Trail Ridge Middle School, and Columbine, Loma Linda, Rocky Mountain, and Spangler Elementary Schools.

Saint Vrain Valley SD I3 Project Demographics							
	Number of Students	Free Lunch	Reduced Lunch	Number Hispanic	% Hispanic	Number ELL	% ELL
Skyline High	1251	41.0%	6.7%	562	45%	460	37%
Heritage Middle	407	73.8%	7.8%	300	74%	241	39%
Trail Ridge	615	42.7%	5.1%	249	40%	191	31%
Columbine	351	82.4%	3.2%	303	86%	168	48%
Loma Linda	412	64.1%	8.8%	275	67%	134	33%
Rocky Mountain	383	76.3%	6.9%	336	88%	220	57%
Spangler	386	85.2%	5.3%	320	83%	234	61%
Total	3805	59.2%	6.3%	2345	62%	1648	43%

The St. Vrain Valley SD has selected a group of schools which qualify as Title I Schools secondary schools (both middle and high schools) eligible for but are not receiving Title I funds

that, and if these schools were receiving Title I funds, the middle schools and high school would be in corrective action or restructuring under section 1116 of the ESEA. The four elementary schools are all title I schools which feed into the two middle schools which in turn feed into Skyline High School. We will take a targeted approach to reform which will include providing more time for students to learn by increasing instructional time for core academic subjects and integrating “student supports” into the school model to address non-academic barriers to student achievement.

Table 1 above depicts high poverty for the students of the seven schools to be served by the project. Nearly 2/3rds of the students or 65.5% receive Free or Reduced Lunch. The table also illustrates a high percentage of Hispanic students which is 62% and a high percentage English Language Learners which is 43%. Last year 75 Hispanic students dropped out of Skyline High School. The Hispanic and ELL students at Skyline High School have a drop-out rate of that is 85% higher than other populations and a graduation rate of 60%. These targeted groups will form the basis for the selection of Skyline High School and its feeder schools for this project. As cohort groups move through these schools the percentage of Hispanic and ELL students will rise at presently the High School is presently 45% Hispanic, but the rate increases in the middle schools which have are 58% Hispanic, and even more dramatically at the elementary level which are 81% Hispanic.

This proposed project addresses a largely unmet need for high-need students. As illustrated in table 1 above Skyline High School and its feeder schools have a significant Hispanic population which has a dramatic achievement gap between actual performance and the Colorado State Standards. The gap is pervasive between all grades levels and content areas. There is also a sizable gap in the graduation rate for Hispanic students. By focusing on our

Hispanic and ELL student population in all aspects of our educational process, we will be able to close the gap in both achievement and graduation.

	% of Skyline Students	9th Grade Reading	10th Grade Reading		9th Grade Math	10th Grade Math		10th Grade Science
Hispanic	45%	66%	56%		89%	94%		81%
ELL	37%	73%	67%		89%	96%		87%
FRL	48%	62%	50%		86%	89%		77%
	% of MS Students	6th Grade Reading	7th Grade Reading	8th Grade Reading	6th Grade Math	7th Grade Math	8th Grade Math	
Hispanic	58%	58%	66%	62%	63%	66%	73%	
ELL	46%	61%	75%	63%	63%	71%	71%	
FRL	59%	59%	70%	63%	62%	70%	71%	
	% of Elem Students	3rd Grade Reading	4th Grade Reading	5th Grade Reading	3rd Grade Math	4th Grade Math	5th Grade Math	5th Grade Science
Hispanic	81%	51%	74%	60%	41%	54%	64%	84%
ELL	49%	56%	77%	58%	40%	60%	64%	89%
FRL	83%	46%	72%	61%	32%	58%	62%	86%

The academic achievement of these schools shows a great need to significantly close the achievement gap and make significant improvements. Table 2 illustrates this great need. By high school more than 2/3rds of Hispanics and ELL students are not meeting reading standards, more than 90% are not meeting mathematic standards, and 85% are not meeting science standards.

Saint Vrain Valley SD is proposing an exceptional approach to priority four through a multi-faceted comprehensive strategy to address the unmet needs for the targeted high-need students we are seeking to guide on a path of academic achievement. We have designed a program that brings Data-Driven Decision Making and Information Technology supports to bear through-out the K-12 system of the targeted schools. The components of the program include a

sequential focus on content areas beginning in Elementary School with a focus on language arts, is enhanced in Middle School with a focus on mathematics, and then is offered to students in High School as a unique program that provides students with an alternative that will serve as a “school of choice” with a focus on Science, Technology, Engineering, and Mathematics.

The first major component of the program is Data-Driven Decision Making system facilitated through the use of the Galileo Online standards based assessment. This assessment tool will provide staff with valuable formative and benchmark assessment data that will inform instruction and success of the program as a whole. The assessment will provide the targeted schools effective ways to integrate research-based assessment, school information management systems, and curriculum. The assessment will allow the linkages of assignments, web-based grade book, and online testing with district goals and state standards for learning. The technology rich assessment program is a perfect fit for the Digital Learning Collaborative component we are offering. Staff would participate in data driven dialogue practices that would be helpful in defining student need and gaps in the curriculum.

A necessary component of the program will include technology rich professional development, supports, and tools for teachers. The Digital Learning Collaborative will provide teachers a two-year commitment to professional growth. Each participating teacher will work in a collaborative teams and provided peer mentoring to develop personal and professional proficiency with technology and innovative instructional practices, to allow for the effective implementation of our STEM programs, and will ultimately result in increased student achievement. Participating teachers will engage in an action research process where they identify areas of student need and apply technology resources as tools to increase student achievement. Each collaborative team; of one technology teaching leader and three teachers,

will focus on an identified need and work with curriculum experts on actively engaging students in learning through collaborative practices, inquiry, and challenge-based projects.

At the elementary school level we will focus on efforts to reduce the achievement gap and produce significant improvements on language arts. The component program Success for Every Students Program will provide high-needs elementary students more time to learn core academic content by augmenting the school year, and by increasing instructional time for core academic subjects by seven weeks, five days a week, four hours a week for a total of 35 additional half days. The core academic content will be delivered by a highly qualified teacher in small classroom environments of 1 teacher per 10 students. The summer intervention plan designed to support low performing elementary students will focus on the following four specific intervention components: targeted, intentional reading intervention to include Response to Intervention; English language acquisition; increased parent involvement; and early intervention. The program includes a focus on improving young student's social, emotional, and cognitive school readiness to prepare children for success in core academic subjects. The program will improve developmental milestones and standards and aligning them with appropriate outcome measures. The early intervention component will include coordination with early learning programs to improve alignment, collaboration, and transition.

The district is in the second year of focused effort on improving the mathematic achievement of students from Trail Ridge and Heritage Middle School and entering freshman at Skyline High School. The Mathematics: Response to Intervention (RtI) component of the program begins with diagnosing the math needs of middle school students. Students assessed as having high mathematics needs are invited to participate in an augmented school year Summer Mathematics Bridge Program for middle school students who will enter Skyline High School. During the regular school year and the augmented school year the program will provide a Mathematics

Navigator Tier I intervention to support at risk students in basic math skills to better prepare students for success in Algebra I. The intervention is delivered by classroom teachers and is grounded in research based strategies. The intervention includes: connection to prior knowledge, vocabulary instruction, mathematical discourse, differentiated instruction, explicit instruction to include error correction and identification of misconceptions, and questioning. Students are screened and specific math subject modules are identified by student need. Instruction during the intervention is explicit and systematic and includes providing models of proficient problem solving, verbalization of thought processes, guided practice, corrective feedback, and frequent cumulative review. Interventions include instruction on solving word problems that are based on common underlying structures. The established RtI model for mathematics that is consistent with the Colorado State requirements.

The final component of the program will integrate the learning of mathematics and science. We will offer students with a school choice alternative in high school through a Science, Technology, Engineering, and Math (STEM) certificate track. One of the key goals of SHS's STEM program is for the student representation to eventually mirror the demographics of the entire school. Technology is a ubiquitous component of modern work, life, society, and education. Skyline has a large Information Technology equity and access issue with 60% of our students not having a computer and/or internet at home. This will be a hurdle to overcome as more technology is brought into school and teachers are asked to use web-based platforms for assignments, notes, and information to their students. Therefore we will provide each student who enters the program with a laptop. The laptop will include necessary peripherals and software to include content filters. These programs have been designed to engage students in STEM especially for those at moderate risk to remain in school, and pursue post-secondary education and careers in science, technology, engineering, mathematics, or the arts. The STEM

program will provide a relevant, technology-based, career oriented curriculum to prepare students for the 21st century workforce. This innovative technology-based program will engage all participating students and produce critical thinkers and creative learners. Skyline High School currently has 110 STEM freshmen for the 2009-2010 school years who have begun their path towards a certification when they graduate. The STEM certificate programs will include a college preparation and transition course designed to assist students with preparing for college entrance examinations, addresses students' understanding, preparation, and expectations of college, assist student with expectations of college affordability, financial aid, and college application processes. Several courses will include supports from Colorado University to include supports from knowledgeable CU engineering students. We also have developed a relationship with Front Range Community College that provides juniors and seniors to take "Guaranteed Transfer" college classes on campus. The courses are taught by FRCC professors and are one semester in length. The students are able to earn up to one full year of college credit while still completing their high school requirements.

(2) Goals and Strategy:

Strategy: Our proposed strategy is to provide students with a sequence of focused interventions to reduce the achievement gap and to make significant improvements. The focused interventions will begin with language arts in elementary school, progress to mathematics in middle school, and expand to Science, Technology, Engineering, and Mathematics in High School. Data-Driven Decision Making and a robust Information Technology environment will bond the efforts through-out the students K-12 experience.

Goal 1: Encourage and facilitate the evaluation, analysis, and use of student achievement or student growth data by teachers to inform decision-making and improve student achievement, student growth, or teacher, principal, school, or LEA performance and productivity.

Objective 1: Provide 3,800 students and their teachers with an instructional improvement system that supports data-driven instruction.

Outcome 1.1: Reduce the Hispanic drop-out rate by 20%.

Outcome 1.2: Increase the graduation rate for Hispanic and ELL students by 5%.

Goal 2: Provide necessary classroom information technology tools, professional development, time, peer mentorship and collaborative supports for 24 teachers.

Objective 2: Support effective teachers in integrating technology into the classroom to improve instruction.

Outcome 2.1: Each teacher participating in the Digital Learning Collaborative has a peer mentor.

Outcome 2.2: Establishment of an effective and ubiquitous active learning environment for students participating in a STEM program.

Goal 3: Provide 400 students with a 35 half-day augmented school year for English Language Arts.

Objective 3: Increase 3rd, 4th, and 5th grade reading proficiency for Hispanic and ELL students in accordance with the Colorado State Assessment Program (CSAP).

Outcome 3.1: Increase 3rd, 4th, and 5th grade reading proficiency by 10% as demonstrated on the each schools CSAP report.

Goal 4: Provide 550 middle school students with enriched mathematics RtI program and an augmented school year for mathematics.

Objective 4: Increase 8th, 9th, and 10th grade mathematics proficiency for Hispanic and ELL students in accordance with the CSAP.

Outcome 4.1: Increase 8th, 9th, and 10th grade mathematics proficiency by 12% for Hispanic and ELL students as demonstrated on each schools CSAP report.

Goal 5: Provide 400 students; after four cohorts have entered the program, with an alternative path to graduation through a STEM certificate program.

Objective 5: Increase the graduation and college entrance rate for Hispanic and ELL students.

Outcome 5.1: Increase the college entrance rate for Hispanic and ELL students by 15%.

Outcome 5.2: Create a ubiquitous technology rich student-centered active learning environment for 400 students and 80 teachers.

Goal 6: Sustain, replicate, and disseminate the St. Vrain i3 Project.

Objective 6: St. Vrain's has a sustainment plan for the i3 Project, has provided redundant dissemination of information, and has replicated the program.

Outcome 6.1: The program is sustained beyond the five year grant cycle.

Outcome 6.2: St. Vrain's has disseminated information about the program to other districts, educational and educational research publications, Colorado and US Departments of Education, and other school districts.

Outcome 6.3: St. Vrain's has replicated the program or components of the program in other schools.

B. STRENGTH OF RESEARCH, SIGNIFICANCE AND MAGNITUDE OF EFFECT:

(1) Research-Based Findings or Reasonable Hypotheses:

At St. Vrain's Valley SD we have formed a hypothesis to learning for groups of students that include high percentages of English Language Learners. Research on mathematics supports the need for a foundation of language arts to understand symbols and problems¹, and research also supports the poor language skills correlates with poor math skills², especially with English Language Learners. Mathematics is an essential foundation to Science. Students need to have

¹ Improving Student Achievement in Mathematics by Addressing the Needs of English Language Learners, Leadership in Mathematics Education, No. 6, Fall 2009

² MacGregor M., Price E., An Exploration of Aspects of Language Proficiency and Algebra Learning, Journal for Research in Mathematics Education, 30 (4), 449-467, 1999

the necessary building block of mathematics and language arts to have the necessary foundation for learning science; to include technology and engineering. Therefore our project will first focus on improving the language arts achievement gap. This does not mean we do not continue to provide sequential learning in mathematics and science in all K-12 settings, but that we focus first on closing the language arts achievement gap. This will be the focus of the program at the elementary level, specifically utilizing the Success for Every Students Program. In middle school we will move our focused efforts on closing the achievement gap and producing significant improvements to mathematics through the Mathematics Navigator Tier I Interventions and the Summer Mathematics Bridge Program. In the High School after necessary foundations are built we will focus our efforts to reduce the achievement gap on Science, to include Technology, Engineering, and the continued integration of Mathematics. We will support these efforts with the Data Driven Decision Making Assessments and a Digital Learning Collaborative that will provide necessary supports and resources to teachers. This is supported by a five year study³ which showed that in all cases only schools that used data frequently to make decisions about instruction and regroup students by skill level schools successful in restructuring under NCLB indicates that all case study schools.

The proposed strategy is based on research findings or reasonable hypotheses, including related research or theories in education and other sectors. The Digital Learning Collaborative is supported by several research projects have proven that peer mentoring is a successful form of technology professional development for teachers. Two Computer Mentor Program^{4,5,6} case

³ Center on Education Policy. Improving Low Performing Schools: Lessons from Five Years of Studying School Restructuring Under No Child Left Behind, 2009

⁴ MacArthur, C. A., & Pilato, V. (1995). "Mentoring: An approach to technology education for teachers." *Journal of Research on Computing in Education*, 28(1)

⁵ Descamps, J. (1999, Fall). "Teachers helping teachers: the path to school improvement." *Edutopia*. Retrieved September 3, 2002.

⁶ Slobojan, M. T. (1997). Integrating technology with instruction: A case study of mentors and protégés. Doctoral dissertation. Widener University of Chester, PA.

studies determined that peer mentoring can offer advantages to other forms of technology training that break down barriers, offer support, and transform the classroom.

(2) Previous Attempts and Promising Results:

St. Vrain’s Valley SD believes there is evidence that the proposed strategy has been put into practice by the applicant on limited time scale and yielded promising results that suggest that more formal and systemic study is warranted.

The middle school/high school mathematics intervention has resulted in reducing Algebra I failures from 38% to 9%. The Success for Every Student program has produced increased reading proficiency in 3rd Grade Students. The number of students reading proficiently has increased from 71% to 84% at Indian Peaks Elementary and the number of Hispanic students reading proficiently at Loma Linda Elementary has increased from 45% to 55%, a 22% increase.

Table 3 below shows the overall results we have obtained from our efforts over the past year. These results are a positive trend that we wish to accelerate through the full force implementation of our hypothesis to produce positive results in Reading, Math, and Science.

Table 3 St. Vrain School District Improvements			
Grade	Content	2008 Percentage	2009 Percentage
3 rd	Reading	74	78
10 th	Reading	72	76
7 th	Math	52	59
9 th	Math	45	47
5 th	Science	47	48
10 th	Science	55	59

(2) Positive Impact:

The combined effects of this comprehensive program, if funded, will have exceptional and positive impact based on the measure magnitude of the effect on closing the achievement gap, producing significant improvement, decreasing dropout rates, increase graduation rates, and

increase college enrollment rates for Hispanic and ELL Students. We have confidence in our stated outcomes based on the initial success we have demonstrated with our efforts. The changes in CSAP scores from 2008 to 2009 demonstrate that the District is being successful in closing the achievement gap. Hispanic achievement increased on 15 tests, stayed the same on 5, and decreased on 4 tests. The achievement gap between white and Hispanic students decreased on 13 tests with an average decrease of 3%.

C. EXPERIENCE OF THE ELIGIBLE APPLICANT:

(1) Past Performance:

Saint Vrain Valley SD has built a tremendous private and public sector coalition to support the creation of the STEM Academy at Skyline High School. These grants are presently being implemented successfully and provide leverage and supports to create the Skyline High School STEM Academy. Saint Vrain Valley SD is presently managing a U. S. Department of Education Advanced Placement Incentive Grant for \$489,956 at Skyline High School. The grant provides funding over the next 3 years for interactive classrooms, computers, equipment, future center, tutoring, internships, and professional development. The district is also implementing a Colorado Department of Education grant for 1.2 million at two elementary and one middle school, and Skyline High School. The grant provides for Math development at the secondary level and English Language development at the elementary level. The program is achieving significant results to include a decrease in student failure rates for Algebra 1 which have decreased from 38% to just 9% in the first year. Skyline High School has successfully managed a Metro Denver WIRED Initiative which provides funding to help establish and improve the quality of laboratory education at Skyline High School and provided the necessary laboratory equipment for the AP Biology classroom as a support structure for the Skyline High School STEM Academy. The Western Digital Foundation provides the STEM Academy funding for

three mobile computer labs. This district has a sound fiscal system and proven financial viability and responsibility. Recently Moody's Investors Service upgraded the St. Vrain Valley School District's bond rating to Aa the highest rating the district has ever had.

(2) Information and Data that Demonstrates the Project will Significantly close the Achievement Gap and Significant Improvements:

Data-Driven Decision Making and Data-Driven Dialogue have been shown to significantly close achievement gaps. Our Success for Every student's is designed based on research that has shown that an augmented school year focused on literacy development has closed the achievement gap. The middle school and high school mathematics interventions have resulted in reducing Algebra I failures from 38% to 9%. The first year of our STEM Academy has shown promising results; albeit over a limited period, thus far efforts have shown improvements. One improvement is the increase in our students ACT results. Through the program efforts thus far we have decreased the drop-out rate of Hispanic students.

D. QUALITY OF THE PROJECT EVALUATION:

(1) The Methods of Evaluation are Appropriate:

Saint Vrain Valley SD will contract the services of an independent, third party evaluator; who is highly qualified with a Masters or Ph.D. and at least 5 years of experience in evaluating educational grants, to perform summative evaluation, formative evaluation, and monitoring of the grant program. The evaluation will be carried out independent of, but in coordination with the project director and key personnel of the grant program. We will follow the procurement rules set out in 34 CFR 80.36, the Colorado Department of Education, and our own board approved policies and procedures.

Our independent evaluator will develop an implementation planning element at the beginning of the evaluation process to ensure St. Vrain's monitors, controls, and meets its

obligations and deadlines under the terms of the grant award. We will work with our independent evaluator to ensure we are well prepared for audits and grantor reviews. The district along with the independent evaluator will cooperate with any technical assistance provided by the Department or its contractor.

The method of evaluation will be a Regression Discontinuity Design Study. The quasi-experimental study design will be based on the assignment of high schools and their feeder K-8 schools which have pre-program cutoff scores that reflect poor proficiency in Reading, Mathematics and Science. The pre-program cutoff scores are 65% Hispanic and ELL Students below proficiency in 9th Grade Reading, 90% Hispanic and ELL Students scoring below proficiency on 10th Grade Mathematics, and 80% Hispanic and ELL Students scoring 80% on 10th Grade Science. We believe this pre-intervention measure assesses need and has a known functional relationship with the outcomes the project is seeking to meet. Although Regression Discontinuity Design Studies normally assign participants and control groups based on individuals the control group and participant can be any definable unit of assignment⁷ such as, hospitals, counties, or schools as we have chosen to use. St. Vrain's has assigned Skyline High School and its' two feeder Middle Schools and four feeder Elementary Schools to the treatment group and the remaining seven High Schools, along with their seven middle and 21 elementary schools which score below this cutoff will be assigned to the comparison group.

(2) The Methods of Evaluation will Provide High-Quality Implementation Data and Performance Feedback:

The independent evaluator will conduct an ongoing formative evaluation during the period of the grant to ensure the methods of the program are consistent with the plan and effective in achieving the program goals. The independent evaluator will gather evidence on a quarterly

⁷ The Regression-Discontinuity Design, W.M.K. Trochem, Center for Social Research Methods, 2006

basis and then on an annual basis examine the results of the program to determine whether or not it is achieving the stated goals, objectives, and outcomes and whether or not these achievements can be attributed to the program. The independent evaluator will conduct a summative evaluation within one year of the end of the grant to produce a summative evaluation which makes a final determination on whether or not the program achieved the stated goals, objectives, and outcomes and whether or not these are attributed to the program.

The evaluator will have access to all Colorado Student Assessments Program (CSAP) data and information on the student test scores for 3rd through 10th grade in English and Mathematics, and for 5th and 10th grade in Science. This will serve as one of the primary collection tools. The CSAP is based on current research in both content and pedagogy most effective in helping students and teachers achieve better classroom results. The Colorado Academic Standards have been revised as of December 10, 2009. The revised standards include early school readiness and postsecondary competencies, as well as reflect both workforce readiness and 21st century skills. In addition to the updated state content standards, the Colorado Department of Education will also develop a new state assessment system that will be implemented during the 2011-2012 school year.

The project will implement the Galileo Online, a system of interim assessments developed by Assessment Technologies, Inc. We will utilize Galileo to provide structured and standardized benchmark assessments on a quarterly basis. The benchmark assessment will provide information to teachers, the i3 Leadership Team, to include principals and the Independent Evaluator that is useful for student progress monitoring and for both programmatic and classroom-level decision making. The Galileo Online will also provide teachers with frequent formative assessments to assist them in assessing student understanding at the classroom and individual student-level. The data from formative assessments will provide

teachers with information about students' performance on selected content standards that can then be used to modify instruction or provide students with additional support, if needed. The i3 Leadership Team along with the independent evaluator will use the benchmark assessment data to continuously improve the project. Galileo Online will also provide us with the ability to track progress within and across grades, determine growth trajectories, and adjust learning opportunities appropriately.

The independent evaluator will also use data mining with our record management department to query data, and collect relevant information. The evaluator will also use observation of programs to assist with the formative evaluation.

As successful outcomes are achieved, we will continue to replicate the methodologies within our system and will disseminate this information on our website. We will have quarterly meetings with the St. Vrain i3 Grant Leadership Team to review the status of the project, consolidate feedback, and make continuous quality improvements. We will make regular presentations about the project and its progress as we seek input from all parents at school parent-teachers' association meetings. We will work with the Department of Education to publish the results in appropriate state and national journals, train trainers across the state, and through statewide and national conferences. St. Vrain has solid and robust data relevant to academics, behavior, incidents, attendance, and mental health services present for the previous years that will serve as a baseline for the evaluation of this grant along with exemplary technical capability to manage and analyze data. St. Vrain will collect baseline data on the objectives stated above for the three previous school years. St. Vrain will facilitate the independent evaluator's collection of data on objectives and outcomes at the end of each quarter and one year following the completion of the grant period. St. Vrain will promptly and accurately cooperate with the Department of Education with any request to produce greater longitudinal data.

The evaluator will independently have access to all data collected. The program coordinator will provide the professional independent evaluator with all data within one month of the beginning of the project for baseline, and within one month after the end of the each quarter. The evaluator will then offer independent measures for the baseline report, each annual report, and for the summative evaluation one year after completion of the project report. The evaluator will also validate the data collection methodology and recommend improvements. The collaborative will review and implement all feasible recommended improvements.

(3) The Evaluation will Provide Sufficient Information:

The extent of evidence is moderate to large since the domain includes more than one school and the sample size is ten-fold of 350 students. The Galileo Online Assessment also provides teachers at each school with data driven dialogue practices that are helpful in defining student need and gaps in the curriculum.

(4) The Proposed Project Plan Includes Sufficient Resources:

The project will allocate 5% of funds to the independent evaluation. In addition to this the project will provide a Galileo Online Assessment license for each student in the program to provide for benchmark and formative assessments. The school district has internal resources which support the gathering and analysis of data. Our i3 Leadership Team includes the districts' Executive Director of Assessment, Curriculum and Instruction. The district also has a records management coordinator who is responsible for the gathering of data, to include graduation, drop-out rates, and other data connected to our outcomes.

E. STRATEGY AND CAPACITY TO FURTHER DEVELOP AND BRING TO SCALE:

(1) Number of Students Proposed to be Reached by Proposed Project:

The proposed project if funded will reach up to 3,800 students. These students include 2,345 students who are Hispanic and 1,648 who are English Language Learners.

(2) Saint Vrain Valley School District has the Capacity to Develop and Bring Project to Scale:

The district has many strong achievements. The St. Vrain Valley SD is home to nine of Colorado's Excellent rated schools. Half of the schools in the district are ranked as Excellent or High. Through our relationships with community colleges approximately 50% of our secondary students currently take an advanced level course(s). The education Foundation of St. Vrain Valley has awarded over \$1.3 million back to the District in classroom grants, community projects, technology upgrades and student scholarships.

The director of the program has 35 years of experience in the field of education to include teacher, principal, and administrator. She has supervised up to 82 personnel and a \$10 million budget.

(3) The Feasibility of the Proposed Project to be Replicated successfully:

The project is replicable in any K-12 system which serves a high proportion of English Language Learners. Although our project focuses on a high proportion of Hispanic students the program could also be adapted to serve other populations of non-English speaking populations. The program is a unique and effective use of resources that are present in most school district communities. There are no preventing factors that would preclude the project from succeeding in another school district. If a school district is too small to achieve a STEM Academy component it may be able to achieve the necessary scale through collaboration with other contiguous districts.

(4) Estimate of Cost of the Proposed Project:

The attached budget narrative outlines the details of the project costs. The cost of the project for the first year which includes phased-in equipment by cohorts and other start-up costs is \$1,092,304. The first year of this project will be the third and last year of funding from the

Colorado Department of Education for our middle school Mathematics RtI component. Therefore for the first year of this project there are no costs for this component. The second year costs include the drop of start-up costs, a continuation of phasing-in of equipment by cohorts, and the costs for the middle school Mathematics RtI component. The second year costs are \$973,858. The third has continued phasing-in of equipment by cohorts and to a lesser degree so does the fourth year, the costs for these years are \$964,695 and \$890,184 respectfully. There are no equipment costs in the fifth year which has a cost of \$782,840. The total project cost is \$4,703,880. We are requesting \$3,608,880 in federal funding and we have commitments of 30.34% of the requested federal funding in matching funds; for a total of a \$1,095,000 match from private sources.

The scale up costs for this program to reach 100,000 students is estimated to be \$25 million annually and 62 million and 124 million for 250,000 and 500,000 students respectively.

(5) The Mechanisms for Broad Dissemination of Information:

Saint Vrain will comply with the requirements of any evaluation of the program conducted by the Department of Education. We will establish a web site for our i3 project which will provide information on the program to include updated results from our independent evaluation. Finally, the grantee must make broadly available through formal (e.g., peer-reviewed journals) or informal (e.g., newsletters) mechanisms, and in print or electronically, the results of any evaluations it conducts of its funded activities. We will work with our university and business partners to provide a broader dispersion of our research.

F. SUSTAINABILITY:

(1) St. Vrain has the Resources and Support to Operate the Project:

St. Vrain's Valley School District successfully manages a \$190 million budget. The school district has great success in garnering success for our innovative programs. Our STEM

Academy has received grant and foundation supports totaling more than \$800,000 from 14 different public and private sources. Our middle school Mathematics RTI component program currently receives \$400,000 a year from the Colorado Department of Education until 2011-2012. The district will continue to garner support for our innovative programs from our many benefactors. The STEM Academy at Skyline has been fortunate to have been selected by the CU Boulder Department of Engineering to be a recipient of the fellows as part of the K-12 Engineering Program a grant funded through the National Science Foundation. St. Vrain's Valley SD has built a match that is over 30%. This demonstrates the exceptional ability we have to find additional funding to support projects which enhance, augment, and extend learning.

(2) The Potential and Planning for the Incorporation of Project Purpose, Activities, or Benefits:

The project could potentially yield results which could be incorporated in the other seven High Schools along with their seven feeder middle schools and 21 elementary schools. The project will also yield results on how to improve literacy, mathematics, and science for high-needs students and more specifically schools which serve high-need students who are English Language Learners.

G. QUALITY OF THE MANAGEMENT PLAN AND PERSONNEL:

(1) The Quality of the Management Plan:

St. Vrain's will establish a St. Vrain i3 Grant Leadership Team to lead, coordinate, control, and monitor the implementation of the grant. The team will consist of the Project Director, the STEM Academy Director, and the DLC coordinator, the Success for Every Students Program, and the Principal or her/his representative from all six schools involved in the project, along with the independent evaluator. Table 4 below outlines our management plan.

Objective and Milestones	Task/Activity	Start Task	Complete Task	Person Responsible
Objective 1: Provide 3.800 students and their teachers with an instructional improvement system that supports data-driven instruction.	Purchase Galileo Online Assessment for each student	Aug 1st each year of grant	Aug 30th each year of grant'	Tori Teague
	Purchase Galileo K-12 Online Teacher Data Driven Dialogue	8/1/2010	8/30/2010	Tori Teague
Teachers begin using formative assessments to inform instruction	Provide on-site Galileo K-12 Online training to teachers at each school.	9/1/2010	11/1/2010	Assessment Technology Incorporated
Independent evaluator conducts quarterly formative assessment and gather benchmark assessment information	Benchmark Assessments used to inform Independent Evaluator	Quarterly beginning 1/10/2011		Tori Teague, Independent Evaluator
Objective 2: Support effective teachers in integrating technology into the classroom to improve instruction.	Purchase laptop, projector, document camera, and sound amplification system for teachers participating in DLC	8/1/2010, 8/1/2011, 8/1/2012	8/30/2110, 8/30/2011, 8/30/2012	Michelle Bourgeois, Bud Hunt
Teachers are supported with tools and resources to integrate technology into the classroom	Selected Teams attend two day training to increase professional proficiency with technology and innovative instructional practices	8/15/2010, 8/15/2011, 8/15/2012	9/30/2010, 9/30/2011, 9/31/2012	Michelle Bourgeois, Bud Hunt
Peer Mentorship occurs for teachers.	Teams attend monthly meetings for peer mentorship, technology solutions and practice integration	Monthly on-going		Michelle Bourgeois, Bud Hunt
	Select Teams attend one day training to increase technology proficiency and the integration of technology into instruction	4/15/2011, 4/15/2012, 4/15/2013	5/15/2011, 5/15/2012, 5/15/2013	Michelle Bourgeois, Bud Hunt
	Each teacher attends eight hours of additional professional development on integrating technology annually	8 Hours annually		Participating Teachers
	Selected Teams attend second year two day training to increase professional proficiency with technology and innovative instructional practices	8/15/2011, 8/15/2012, 8/15/2013	9/30/2011, 9/30/2012, 9/31/2013	Michelle Bourgeois, Bud Hunt
	Teams hold monthly school-wide meetings to direct school-wide technology solutions and practice integration	9/1/2011 and ongoing		Michelle Bourgeois, Bud Hunt
	Select Teams attend second year one day training to increase technology proficiency and the integration of technology into instruction	4/15/2012, 4/15/2013, 4/15/2014	5/15/2012, 5/15/2013, 5/15/2014	Michelle Bourgeois, Bud Hunt

Objective and Milestones	Task/Activity	Start Task	Complete Task	Person Responsible
Objective 3: Increase 3 rd , 4 th , and 5 th grade reading proficiency for Hispanic and ELL students in accordance with the Colorado State Assessment Program (CSAP).	Identify at risk students to participate in augmented school year.	3/1/2011, 3/1/2012, 3/1/2013, 3/1/2014, 3/1/2015	5/1/2011, 5/1/2012, 5/1/2013, 5/1/2014, 5/1/2015	School Counselors, Teachers, Regina Renaldi
	Pre and post test each student using the DRA2 reading assessment to individualize student interventions.	5/16/2011, 5/14/2012, 5/13/2013, 5/12/2014, 5/11/2015	5/30/2011, 5/28/2012, 5/27/2013, 5/26/2014, 5/25/2016	Literacy Coaches
Aligned Curriculum and transitions created with early learning programs.	Improve alignment, collaboration, and transitions between early learning programs that serve children from birth to age three.	On-going	On-going	Director of Early Childhood Education
	Provide 3 weeks of increased instructional literacy for identified at-risk Pre-K and K students	6/13/2011, 6/11/2012, 6/10/2013, 6/9/2014, 6/8/2015	7/1/2011, 6/30/2012, 6/29/2013, 6/28/2014, 6/27/2015	Regina Renaldi, Summer School Teachers
Annual augmentation of school year for elementary students to increase language arts achievement.	Provide increased instructional time for literacy for seven weeks, five days a week, four hours a week for a total of 35 additional half days.	6/13/2011, 6/11/2012, 6/10/2013, 6/9/2014, 6/8/2015	7/29/2011, 7/27/2012, 7/26/2013, 7/25/2014, 7/24/2015	Regina Renaldi, Summer School Teachers
Objective 4: Increase 8 th , 9 th , and 10 th grade mathematics proficiency for Hispanic and ELL students in accordance with the CSAP.	Assess and select students for participation in Mathematics RtI	5/15/2011, 5/13/2012, 5/12/2013, 5/11/2014, 5/10/2015	6/6/2011, 6/4/2012, 6/3/2013, 6/2/2014, 6/1/2015	Heidi Ringer
	Provide Mathematics RtI augmented school year program.	6/13/2011, 6/11/2012, 6/10/2013, 6/9/2014, 6/8/2015	7/22/2011, 7/20/2012, 7/19/2013, 7/18/2014, 7/17/2015	Heidi Ringer
	Provide Mathematics Navigator Tier I Interventions during school year.	On-going	On-going	Heidi Ringer

Objective and Milestones	Task/Activity	Start Task	Complete Task	Person Responsible
Objective 5: Increase the graduation and college entrance rate for Hispanic and ELL students.	Request and select 100 applicants to the freshman class of the STEM Academy.	1/17/2011, 1/15/2012, 1/14/2013, 1/13/2014, 1/12/2015	5/1/2011, 5/1/2012, 5/1/2013, 5/1/2014, 5/1/2016	Heidi Ringer
	Purchase technology equipment for new accepted students	6/1/2011, 6/1/2012, 6/1/2013, 6/1/2014, 6/1/2015	8/30/2011, 8/30/2012, 8/30/2013, 8/30/2014, 8/30/2015	Heidi Ringer
College preparation and entrance.	Provide college transition assistance to students.	Beginning in spring of the junior year	On-going	School Counselors, Heidi Ringer
Objective 6: St. Vrain's has a sustainment plan for the i3 Project, has provided redundant dissemination of information, and has replicated the program.	i3 Leadership Team forms and meets to lead, coordinate, monitor, and control the i3 Project	Monthly on-going throughout the grant	On-going	i3 Leadership Team
Sustainment plan developed	Develop a sustainment and replication plan.	7/9/2012	7//2013	i3 Leadership Team
	Implement sustainment and replication plan	7/7/2013	8/30/2016	i3 Leadership Team
	Conduct formative and benchmark assessment and collection of data	Quarterly beginning 1/10/2011	On-going quarterly	Independent Evaluator
	Push and cooperate with the decimation of information and data	On-going	On-going	i3 Leadership Team

(2) The Qualifications of the Project Director and Key Project Personnel:

Ms. Regina Renaldi will serve as the project director. Ms. Renaldi holds a Master of Science Education: Policies, Foundations, and Administration and is licensed in the state of Colorado and Oregon as a School Administrator. She has 23 years teaching experience and 12 years administrative experience to include seven years as an elementary and intermediate school principal where she Led and supervised 82 certified and classified staff members in a 700 student,

year around school with quality programming for two early intervention, nationally recognized preschools, twenty eight K-6 classrooms, a before and after school day care program averaging 60 students per day, and multiple after school club opportunities for personal student interest. Her present position is Director of Priority Schools in which she is responsible for managing Title I, Title III to include English as a Second Language, Homeless Student Programming, and multiple grants and programs impacting at risk student populations in St. Vrain. Regina is a member of the Colorado Association of School Executives Association for Supervision and Curriculum Development. Ms Renaldi has many achievements to include leading an elementary school improvement process resulting in movement from “Average “ to “High” with “Significant Improvement” and “Improvement” on the Colorado State Department of Education School Annual Report and meeting targets identified for the No Child Left Behind Act and Adequate Yearly Progress for the past three years. As an intermediate school principal she was responsible for leading the school improvement process resulting in movement from "Satisfactory" to "Strong" on the Oregon Report Card Overall Rating System with 76% of Third and Fifth Grade students meeting or exceeding state standards in Reading and 81% of Third and Fifth Graders meeting or exceeding state standards in Math. Ms. Renaldi was selected to participate in the U.S. Department of Education/Vanderbilt College sponsored research study on “What Makes Schools Work”. She has many awards and recognitions to include the Lighthouse Award recipient for Douglas County School District.

Ms. Heidi Ringer serves as the STEM Program Director at Skyline High School. Ms. Ringer holds a Master of Arts in Administrative Leadership and Policy Studies and holds licenses in Colorado as a Professional Principal and Professional Teacher License with Endorsement In Secondary Mathematics. Heidi currently serves as Assistant Principal and Science, Technology, Engineering and Mathematics (STEM) & Visual and Performing Arts

(VPA) Academies Director where she leads the high school's new strategic initiative to establish a sustainable science, technology, engineering and math (STEM) program in the St. Vrain School District, providing accessibility to all students within its diverse population. She has served as a Mathematics teacher for ten years, to include six years as Mathematics Department Co-Chairperson. Heidi has received numerous awards and recognitions to include the 2005 Presidential Award for Excellence in Mathematics and Science Teaching, the 2006 St. Vrain Valley School District Gold Star Award, and the Sallie Mae First Year Teacher Award Recipient in 1996.

Michelle L. Bourgeois will lead our Digital Learning Curriculum effort. She has a Masters in Curriculum & Instruction, with five years teaching experience, 13 years as a technology coordinator and coach, and two years experience as a professional development specialist. Michelle has participated in three federal education projects to include a National Science Foundation grant for Math and Science.

Victoria Teague will lead our effort on Data-Driven Decision Making. Ms. Teague is presently the Executive Director of Assessment, Curriculum, and Instruction. Victoria has a Masters of Education and holds a teaching certification and a principal license. She also has four years experience as a principal, three as a vice-principal, three years as a professional development specialist, and three years as a teacher.

Bud Hunt will provide support for the integration of technology in the STEM, Data-Driven Decision Making, and Digital Learning Collaborative components of the program. Mr. Hunt is presently responsible for professional development in technology and instruction, long range planning, and just in time technology support and project assistance for students, teachers, and administrators in the district. Bud also has experience as a Technology Liaison and as a Teacher as a Researcher.