SAMPLE GRANT NARRATIVE

For MyMathLab

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TABLE OF CONTENTS

INTRODUCTION

Pearson (www.pearson.com) has been helping colleges, universities, and K-12 schools deliver innovative education options since 1996 and are the world's leading learning company, reaching more than 130 million learners worldwide.

Pearson works with more than 4,000 higher education institutions throughout North America and many more learning organizations globally providing educational materials, technologies, assessments, and related services to instructors and students of all ages.

Pearson is also a leading provider of electronic learning programs and of test development, processing, and scoring services to educational institutions, corporations, and professional bodies around the world. As a result of our expertise, the **Pearson Higher Education Support Services Grants Team** understands that the responsibility of writing grants for education funding is often difficult but also very necessary to accomplish, and because of that we have developed this solution summary to help you in your efforts to write a compelling and high quality grant application.

To assist you in responding to your grant opportunity, this document contains a compilation of Pearson learning tool solutions and summaries as they relate to the grant element provisions.

Pearson's Higher Education Support Services Grants Team can also provide a free review of your draft application featuring Pearson learning tool solutions and assess it against grant requirements. The document will be returned with embedded comments that indicate areas of strength and areas that should be revised.

To receive this assistance, please contact your Pearson Account Executive or e-mail your draft to HigherEdGrantexperts@pearson.com.

Please include the following information:

- Copy of the grant you are responding to.
- Name of Pearson Account Executive you are working with.
- Pearson solutions you are incorporating into your application.
- Draft application in Word (for review only).

HOW TO USE THIS PACKET-FAQs

What's a Help Packet?

The Help Packet is a resource designed to assist you in the grant-writing process. It is intended to stand as a companion to the Request for Proposal. The Pearson solutions and summaries in this document will provide you with ideas for how you might structure your response.

How do I use the Help Packet?

This Help Packet should be thought of as a model. The packet provides implementation ideas, especially for how Pearson Higher Education solutions meet grant requirements. However, because your institution's needs and project vision are unique, you should customize the summary solutions to reflect your specific plans. Use this document as you need: you may choose to read the entire document, or if you are stuck on a certain section you may choose to turn there first.

Can I cut and paste from the packet?

You may cut and paste small sections as needed. However, your project has the best chance of being funded if it is customized to your institution's unique needs. Use the narrative as a resource, not as a final product. As you use the narrative, revise it to reflect your unique needs, project goals, and coordinating programs.

For what stage in the grant-writing process is this packet intended?

Effective grant writing and planning involves several stages. This Help Packet can be used as a resource during several stages, such as gathering information, writing the narrative, and completing the application.

Should my finished application look like the Help Packet?

Your finished application should reflect formatting requirements outlined in the grant. You should use headings, bullets, and lists as appropriate to make the main ideas of your narrative clearly stated and easy to find. In particular, consider using the following:

- **Embedded headings.** Use embedded headings such as "Should my finished application look like the Help Packet?" above—a bolded fragment, statement, or question identifying the main idea for that section. You don't need one for each paragraph; just use them to correspond to the main sections of the narrative.
- **Tables.** Use tables, charts, or graphs for visual ease and summary.

STAGES OF GRANT WRITING

To help you succeed and develop a thorough application, the stages below will guide you through the grant writing process. Pearson Higher Education can provide assistance throughout these stages.

Stage 1: Reading the grant application documents

- ☐ Download all available documents from the state, federal, or foundation Web site.
- ☐ Identify format requirements such as margin settings, font size, and line spacing.
- ☐ Identify the number of copies needed to be submitted.
- ☐ Note the authorized signature(s) needed before submitting your document.
- ☐ Note the dates and times for completing an online application.
- ☐ Note all priority requirements.
- ☐ Identify if multiple-year budgets are to be included.
- ☐ Review the scoring rubric for criteria to cover during the writing stage.

Pearson Assistance: *Look for callout boxes throughout the Help Packet. These give reference to page numbers that identify pertinent information such as deadlines, formatting requirements, etc.*

Stage 2: Gathering information and research

Gather the following types of information:

- ☐ Demographic data
- ☐ Test score data
- ☐ Research to support the project design

Pearson Assistance: *Look for research citations embedded within the sample narrative. Refer to the Works Cited page for pertinent research documents.*

Stage 3: Writing the project narrative

- ☐ Include all stakeholders in creating responses to each component of your project.
- ☐ Incorporate demographic and test score data, as well as research, to make your application convincing and informative.
- ☐ Use the Help Packet sample narrative as a resource, not a final product.
- ☐ Use the Help Packet callout boxes for additional resources, tips for success, and grant page number references to aid you in completing your application.
- ☐ Use headings, tables, and lists to clearly convey the project's focus and to make priority items easy to find.

☐ Use the grant scoring rubric criteria in crafting component responses.

Pearson Assistance: *Use the Help Packet as a guide and model while crafting your response to the grant.*

Stage 4: Completing budget narrative and required forms

☐ Develop the budget narrative based on project activities.

☐ Recheck budget totals for accuracy.

Pearson Assistance: *Contact your Pearson Higher Education Account Executive for budget assistance.*

Stage 5: Reviewing your application

☐ Proofread the application for changes and revisions.

☐ Ensure that formatting requirements are consistent throughout the application narrative.

☐ Ask a qualified person to review the application (preferably someone who has not worked on the writing): give ample time to review the application and to identify areas that need to be strengthened.

☐ Use the reviewer's recommendation to revise the application narrative.

☐ Include all stakeholders in reviewing the final draft.

☐ Use the grant scoring rubric criteria to determine if your application meets all requirements.

Pearson Assistance: *The Pearson Higher Education Grants Support Services Team may be available to provide reviews for qualified applicants. Contact your Account Executive for more information.*

Stage 6: Submitting your application on time

☐ Gather all authorized signatures and mail the application.

OR

☐ Complete the online application and mail/fax authorized signature forms.

Pearson Assistance: *When you are notified of a grant award, contact your Pearson Account Executive to complete the ordering process.*

SAMPLE PROPOSAL NARRATIVE

This sample narrative aligns with generic grant requirements. Be certain to customize your response to your specific grant application.

1. Needs Assessment and Standards

Institution serves an at-risk population in multiple locations. Of these institution's locations, __ have been identified as in need of improvement for math. *Institution* recognizes the need to reverse this achievement trend and has drafted this technology intervention plan in response.

The *Institution's* planning committee, consisting of the Provost, Vice President of Academic Affairs, technology director, curriculum director, deans, faculty, board members, and parents, collaborated on this project to ensure systemic commitment to the project and alignment to district initiatives. Two of the initiatives in the *Institution* include providing students with individualized instruction to improve academic achievement and integrating technology into the curricula, assessment, and instruction. *Institution's* project will address those priorities and has support across all levels of administration, the leadership board, faculty, and other key stakeholders.

Writing Tip. Develop a planning committee to demonstrate systemic commitment to the project and that the grant project is well thought out. Customize the description to reflect who is on your committee.

The planning committee utilized data from the *describe data source* along with *resources for demographic data* to select the __ locations to participate in this project. These locations were selected because of their status as in need of improvement. In addition, the planning committee considered the leadership and faculty of all locations for their commitment and capacity to change. A thorough review of assessment scores, including disaggregated data, resulted in the planning committee's decision to provide intervention in mathematics instruction. *Institution's* location's_students' assessment scores in math are disproportionately lower when compared to the other locations' students' performance. Students from selected locations have historically scored well below standardized assessment averages on the *name test* with __% students failing to achieve proficiency in math.

Table 1: Needs Overview

Demographic Information	State Avg.	Institution Avg.	Location 1	Location 2
Full or reduced Tuition				
Students with Disabilities				
English Language Learners				
Level of Achievement in Math	**State Avg.**	**Institution Avg.**	**Location 1**	**Location 2**
% Freshman Students Below Proficiency on the *Year* Math Test				
% of Sophomore Students Below Proficiency on the *Year* Math Test				
% of Junior Students Below Proficiency on the *Year* Math Test				

Customize Table 1 to reflect your student demographics and the number of locations to be served. The table is a model of types of data that should be reported in your application. Statistical data should be used that further supports your need for grant funding to accomplish project goals. Information on state and district demographics and achievement can be found at these helpful sites:

- *Graduation Rate by Institution:* http://www.higheredinfo.org/dbrowser/?level=nation&mode=graph&state=0&submeasure=27
- *District Poverty Level*: http://www.ed.gov/programs/lsl/eligibility.html
- *District Statistics on ELL or SPED students*: http://nces.ed.gov/globallocator/
- *School District Data*: http://www.schoolmatters.com/

To help these students achieve academic proficiency, *Institution* requires a proven, research-based, authentic mathematics intervention. In particular, the planning committee identified the following achievement gaps that need to be addressed: problem solving, estimating and verifying answers and solutions, logical reasoning, using technology, and *include specific skills that need to be addressed among your students*.

The focus of the project, called *Title*, will be on Algebra, specifically Algebra 1 and Algebra 2. The goal is to increase our students' performance in math to prepare them for a successful future. Research has found that "…math mastery and other critical reasoning skills have become crucial to participate in the emerging economy," (Carnegie Foundation for the Advancement of Teaching, Barbara Chow, 2010). Students taking Algebra will have daily interaction with a digital curriculum to provide them

Title. Your project will stand out to reviewers with a title. It will also illustrate the level of dedication and effort put into your planning.

with the targeted, personalized intervention necessary to make academic gains. *Institution* has devised a concrete action plan to close the achievement gap at the targeted locations by:

- Utilizing standardized assessments, frameworks, and tasks.
- Collaborating to implement instructional activities.
- Leveraging technology in formative assessments and daily differentiation of instruction.
- Employing instructional activities aligned to grant outcomes.

Title's professional development will provide Algebra 1 and Algebra 2 instructors with the training, strategies, and support to effectively integrate technology into daily lessons. In addition, instructors and students will benefit from a fully digital math resource aligned to assessment standards. It will be utilized in the classroom, and at home to improve students' achievement in math and increase their technology literacy. This resource will employ formative assessments to differentiate the instruction for each student and provide instructors with comprehensive reports on students' performance.

2. Technology Need

The *Institution* planning committee utilized data from our *year* technology plan along with research from the International Society for Technology in Education's (ISTE) Technology Support Index to identify where to make improvements to the existing technology plan. They concluded that our faculty and students need access to a technology-rich curriculum that provides real-time feedback and assessments while individualizing instruction.

Analyzing Needs. For resources to help analyze your technology needs, visit http:// http://www.iste.org. ISTE will create a customized technology profile and suggest plans for improvement upon completion of a questionnaire.

The *Institution*, with the support of administrators, faculty, and the community has allocated significant resources over the years to acquire 21st Century technology throughout our buildings. Much of the hardware is in place, such as student laptops, interactive whiteboards, and student responders, but more is required to equip our students with the skills necessary for success in the increasingly technology-based workforce. Coupling our hardware with core curriculum that is technology-based will bridge this gap. According to a 2003 study, "…educators and employers believe that integrating ICT [Information and Communication Technologies] literacy into core subjects is the best way to teach. …ICT literacy is the mastery of learning skills by using 21st Century tools, according to the Educational Testing Service" (Partnership for 21st Century Skills, 2003). It is not enough for students to have access to technology, but they must utilize it in their

Hardware. If you will be writing for hardware, include this in your application. Paying for hardware through different funds demonstrates commitment to the project.

daily instruction and assignments to reap the benefits of the technology and be prepared for a future outside of the classroom.

Identify the Need

Faculty Needs. Faculty at participating schools completed an anonymous survey in *year* regarding their usage of instructional technology, including interactive whiteboards, student responders, curriculum-specific and cross-curriculum software, and student computers, and needs for additional technology in their classrooms. The purpose of the survey was to learn how often instructors use technology and research-based instructional practices to support student learning, what techniques are often employed, and if instructors require additional technology resources and/or support on the integration of technology to improve student achievement.

Survey Faculty. Conduct a survey and detail findings of faculty needs for technology in their classes, Additional questions can be found by viewing the link found in the Work Cited section

The *Institution's* planning committee reported that __% of instructors are frequent users of technology, spending 31% or more of their class time using technology-supported learning strategies. __% reported being moderate users with 21-30% of class time spent using technology to support learning and __% are sporadic users with 11-20% of class time spent using technology-supported learning strategies. The largest segment of instructors, __%, self-identified as using technology to support learning in 10% or less of their class time. The 2010 National Education Technology Plan by the United States Department of Education (ED) states that institutions of learning must "develop and adopt learning resources that exploit the flexibility and power of technology to reach all learners anytime and anywhere" (U.S. Department of Education, 2010). However, this is not the case in *Institution*: Much of our existing technology is used for administrative tasks, rather than as a complementary and integrated element of instruction. Thus, students are largely denied the opportunity to develop a strong foundation in technological literacy and benefit from best teaching practices available through proven educational technology programs. Although we have interactive whiteboards, we lack research-based digital math content to reach the needs of all students, especially considering the differences in learning styles, languages, and experience. *Institution's* existing math curriculum was purchased in *year* and does not include any technology components. The chosen solution will serve to supplement the current curriculum.

Customize. Use this narrative as a guide. Customize the description to reflect the specific needs identified at your location.

In addition, instructors expressed a need for real-time student performance data to help drive instructional decisions. By the time math instructors grade homework, quizzes, and tests and

provide feedback to students, the class has moved on to other lessons, leaving struggling students even further behind. There was an overwhelming response for technology to assist __% of instructors with grading, __% of instructors with on-demand reporting on individual performance, and __% of instructors with prescribing personalized instruction to improve student achievement. To address the needs of the growing achievement gap in participating locations and increase math achievement for all students, we require a technology program to instantly assess students' work and provide immediate feedback to differentiate instruction. A proven technology program can provide the formative assessments that *Institution* requires and support the ED's goal that schools "design, develop, and adopt assessments that give students, educators, and other stakeholders timely and actionable feedback about student learning to improve achievement and instructional practices" (U.S. Department of Education, 2010).

Professional Development Needs. The *Institution* is committed to using _% of this project's budget on intensive professional development to help our instructors integrate technology more effectively into daily classroom instruction. Results from the survey indicated that teachers with *number* or more years of experience in the classroom were less comfortable integrating technology into their instructional practices and didn't utilize technology as often in their classrooms as their less-seasoned colleagues. All teachers showed an interest for additional training to more fully integrate technology into their daily delivery of lessons with hands-on instruction and regular follow-ups to support the implementation of the new instructional strategies.

Faculty cited their colleagues as those whom they most often seek when they have questions about technology. This program will provide participating faculty with an opportunity for formalized peer groups so all peers can benefit from the experience and advice of others. Peer mentoring and coaching and collaborative study groups will be developed to support faculty. Each school's technology coach *(insert appropriate title, such as Technology Integration Specialist (TIS), Lead Technology Instructor etc.*) will facilitate these meetings. The planning committee concluded that math instructors in *Institution* are currently lacking access to necessary instructional tools to integrate research-based technology into their classrooms that supports student learning, provides faculty with immediate feedback on assessments, differentiates instruction, and facilitates academic achievement. It was further determined that math faculty require additional professional development to seamlessly incorporate technology into their lessons. *Title* addresses both of these district needs.

3. Academic Need

The 2010 release of the Nation's Report Card indicated only 26% of twelfth grade students in surveyed states were performing at or above the Proficient level in mathematics in 2009 with 36% performing below the Basic level (National Center for Education Statistics, 2010). These findings directly affect the readiness of incoming freshman at Institution, with __% of students are performing below the Basic level in math. Mastery of algebraic concepts plays a significant role in students' success across content areas. Algebra has long been considered a gateway course: success in Algebra 1 predicts success in high school and success in Algebra 2 predicts success in college. Algebra has recently been described as an indicator for success in the 21st Century (GreatSchools, 2010). Considering the significance success in Algebra plays for a student's overall academic and professional achievement, students taking Algebra 1 and/or Algebra 2 at participating locations of the institution will benefit from the implementation of a technology-based program to supplement the current curriculum through the project.

Customize. Describe the specific needs for Algebra intervention at your institution.

Student performance in Algebra courses at the participating locations has been steadily decreasing over the past 10 years. __% of students repeat Algebra 1 to earn a passing grade and __% of students fail Algebra 2. The majority of students that fail Algebra 2 choose not to repeat the class. Nationwide, there has been an increase in the number of students enrolled in Algebra I from 16% in 1986 to 29% in 2004 with some states reporting as high as 36% (National Center for Educational Statistics, 2010). This trend applies increasing pressure in Institution to quickly, and effectively, addresses the growing Algebra problem in our program.

Upon the planning committee's review of the Assessment standards and our students' performance on test, we selected the following over-arching standards to address through our technology intervention program:

1. Students will understand that Algebra represents mathematical situations and structures for analysis and problem solving.
2. Students will use symbolic Algebra to represent and explain mathematical relationships.
3. Students will apply order of operations, real number properties, and rules of exponents to simplify algebraic expressions.

Content Standards. Contact your Pearson Higher Education Account Executive to review the *My Math Lab* correlation to assessment's standards. Cite the standards that your project will address.

Identify the Need

The math proficiency level of students of ***Institution*** is lower than both the state and national average. This is especially concerning to the institution's leadership board since research indicates that due to college-level students' lack of basic mathematical literacy, they "are not prepared to face the economic and workforce challenges of an increasingly global, technological society" (National Council of Teachers of Mathematics, 2009). To succeed in Algebra, students require more individualized instruction. From recent research conducted by the US Department of Education, "Technology provides access to a much wider and more flexible set of learning resources than is available in classrooms and connections to a wider and more flexible set of "educators," including teachers, parents, experts, and mentors outside the classroom. Engaging and effective learning experiences can be individualized or differentiated for particular learners (either paced or tailored to fit their learning needs) or personalized, which combines paced and tailored learning with flexibility in content or theme to fit the interests and prior experience of each learner (US Department of Education, 2010).

Customize. Use this narrative as a guide. Customize the description to show the specific needs identified at your institution.

Students get frustrated by not receiving support when they need it. By the time students receive feedback or help on homework assignments, many have moved on without understanding or learning the content. Our faculty is equally frustrated by the lack of instructional time to review key concepts or to re-teach a lesson for each student that requires this level of support. Both students and faculty see technology as a means to provide the immediate support students require to propel their learning forward. Research confirms that they are on the right track; data has shown that the use of computers in education increase a student's academic skills and competencies (Organization for Economic Cooperation and Development, 2010).

Math instruction transformed with technology and research-based instructional practices increases the academic achievement of students. Students benefit from the additional support, differentiated instruction, guided tutorials, and formative assessments that a technology-based program provides. All students, but especially those performing at the Basic and Below Basic levels in math, could make considerable achievement gains with access to a computerized tutor. In this scenario, students repeat lessons when necessary and receive immediate feedback to each response to personalize student learning.

Technology Need

Improving the technology literacy of all students is an important outcome of this project. Our Leadership Board is committed to preparing our students for careers in the technology-driven workplace. *Institution's* students lack consistent exposure to technology. Results from instructor surveys, assessments, instructional observation, and student work demonstrate that the basic technology literacy needs of students in the targeted schools are not being met. These fundamental skills include *list skills, such as problem solving/decision-making, research, communication, productivity, collaboration, etc. that are not being addressed among targeted students*.

Customize. Use this narrative as a guide. Customize the description to show the specific needs identified at your institution.

By providing students with experience in a variety of these skills, technology literacy grows exponentially. The technology literacy of our students is currently low. *Institution* would like our students to benefit from an institutional-based technology program that exposes them to a variety of problem solving/decision-making strategies that encourage them to employ techniques professionals utilize in their work. The planning committee's belief is that when postsecondary institutions model, and promote, the use of 21st Century communication tools, such as e-mail, online discussion boards, and e-learning, and make usage of them a class requirement, the technology literacy of students will greatly expand. Technology is a vehicle for students to develop interpersonal and self-directional skills that drive productivity in and out of the classroom. By providing our students with core curriculum classes that teach how to collaborate online and face-to-face with peers on class projects, in study groups, and in discussions, the technology literacy of students will further develop. Experts confirm this is the best way to teach (Partnership for 21st Century Skills, 2003).

Summary of Need

The planning committee identified three themes as the primary focus for the program to address and solve as listed below.

- Need for academic improvement in math, specifically Algebra 1 and Algebra 2.
- Need for technology integration to drive academic achievement through personalized learning and to increase students' technology literacy.
- Need for high-quality professional development on the effective use of technology to support student learning.

4. Program Implementation

After examining our needs assessment, *Institution* concluded that this grant project must improve student achievement in Algebra and increase technology literacy. Further, faculty will be trained in the effective use of technology to facilitate student achievement. The *Title* planning committee reviewed several intervention programs and unanimously selected to implement the *MyMathLab Algebra 1 and Algebra 2* curriculum as our technology-based math intervention program. *Title* will close the achievement gap in the targeted locations by integrating technology into daily math instruction.

State Standards, Frameworks, Tasks, and Assessments

Support of assessment standards was an important factor in selecting a technology-based math program. The Algebra curriculum currently implemented in *Institution* is aligned to *Name of Standards* and the chosen intervention program also supports the state standards. In addition to aligning to assessment standards, the selected program supports two critical institutional initiatives. First, it provides support for individualized instruction and, second, it integrates technology into daily instruction. Through *Title*, *Institution* will be equipped to go beyond the assessment standards to offer a math program that provides extensive support for differentiating instruction, an instructor-friendly plan to integrate technology into daily instruction, and regular and immediate assessment of students' performance to produce data-driven instructional decisions.

MyMathLab. The main description of *MyMathLab Algebra 1 and Algebra 2* is included within this section of the Help Packet.

As identified in our needs assessment, *Institution's* faculty lacks on-demand access to student data to inform and differentiate daily instruction to ensure they are meeting the academic needs of students. The planning committee identified criteria necessary in a technology program to meet the assessment and monitoring needs to improve student achievement. Table 2 illustrates how the selected technology-based math intervention program will provide the monitoring necessary for faculty to make instructional decisions to impact students' academic progress and close the achievement gap.

Table 2: *MyMathLab Algebra 1 and Algebra 2's* Match to Institution's Required Criteria

Monitoring Needs	MyMathLab's Match
Online Homework Assignments	Homework is automatically graded and entered into online gradebook for tracking. Assignments can be created to align to specific assessment standards.
Online Tests	Quizzes and tests automatically graded and entered into online gradebook for tracking. Results generate personalized homework for each student.
Differentiated Instruction	A personalized plan created for each student based upon online test results. Faculty can further customize individual plans.
Support from Computerized Tutor	Students receive immediate feedback for all work with guided solutions, interactive videos led by a teacher, and animations.
Data-driven Decision Making	Student and class level performance tracked on practice exercises, homework, quizzes, and tests.
Reports	Extensive data-driven reporting is available for faculty at the student and class level.

Collaboration Among Faculty

Title requires that math faculty at targeted locations meet every-other week to collaborate in developing engaging and appropriately challenging lessons to improve students' math skills. During institution-wide collaborative study groups, faculty will meet via Web conference to design strategies for differentiating instruction that meets the needs of all students. In addition, they will allocate time in their meetings to analyze student reporting data from the intervention program to inform instructional decisions. Faculty will meet as a team to create additional lessons that develop students' abilities to apply core concepts and to think critically to solve problems. The technology coaches *(insert appropriate title, such as Lead Technology instructor, Instructional Technology Specialist*) from each location will lead these meetings and suggest additional ways technology can be integrated into instructional strategies.

Customize. Use this narrative as a guide. Customize this as to how your institution will facilitate collaboration among grant faculty.

Participating faculty will be released from instructional duties once per semester to observe other grant instructors in their classrooms and will utilize online tools as a vehicle for subsequent discussions. In addition, faculty will view the Instructor-to-Instructor professional development videos each week provided with the program. Faculty will discuss the strategies and suggestions provided in the videos during bi-weekly meetings.

Integrating Technology with Instruction

The selected program provides individualized, comprehensive instruction in algebraic concepts and skills to differentiate each student's learning experience. Through *Title*, faculty will have access to rich and flexible digital course materials that provide a straightforward way to manage and teach Algebra online and via technology available in the classroom. Students will have daily access to the selected program in their classes and any time they are online. Many of our students use the college library and computer labs, as well as local libraries will be able to access the program anywhere. While in their classes, students will be exposed to lessons that integrate technology into the daily instruction and improve academic achievement. One of the reasons *Institution's planning* committee selected the program for our project is due to how well it equips faculty to integrate technology into daily instruction. Faculty and students will have access to the following tools:

Personalized study plans. *Institution's* students will work in a personalized study plan generated from their performance on online quizzes and tests. The program links directly to interactive, tutorial exercises for topics a student has yet to master and provides exercises with new values for limitless practice. We expect students will access the additional multimedia learning aids to provide extra help where and when they need it. All of the work students complete in the study plans is tracked and available to the instructor.

Easy-to-use online homework. Instructors will assign students easy-to-use online homework. Students will utilize the embedded, interactive support in their online textbook, or eText. Assignments will be automatically graded and entered into the Instructor's online gradebook.

A computerized tutor. Through *Title*, students will receive immediate feedback when they enter incorrect answers. The program will present students with tracked tutorials and algorithmically generated exercises to provide step-by-step support when they need it the most.

Lesson-and-example-level videos and animations. In addition to working closely with their Algebra instructor, students will be able to access online videos and animations of a master teacher conducting lessons. The award-winning teacher featured throughout the program has over 25 years' experience as a math educator and appears in more than 3,000 videos students can access through the online program. Online PowerPoints will provide additional instructions of lessons to students. These resources will benefit *Institution's* students absent from class and/or students requiring a review of a lesson before completing homework.

Fully-interactive eText with embedded study tools. The exercises in the eText include guided solutions, sample problems, video clips, and animations to provide our students with the necessary learning aids when their instructor is not readily available. Helpful highlighting and note-taking tools further help students remember key algebraic concepts.

Ongoing Formative Assessment

Title requires that students will regularly participate in online, research-based, formative assessments. Researchers have found that online formative and summative assessments contribute to increased academic achievement. "Ongoing instant feedback provides the data to make important individualized adjustments to the instructional process" (Greaves et al., 2010). With *MyMathLab Algebra 1 and Algebra 2*, a personalized study plan is generated and continually updated for each student based upon the results of online quizzes and tests. The unique study plan directly links the student to interactive, tutorial exercises for topics not mastered and provides instructors with rich data to inform instructional decisions. The exercises provide access to powerful learning aids at point-of-use to provide instant feedback and support when a student enters incorrect answers.

One of the planning committee's criteria in selecting a technology-based intervention program was that it provides *Institution's* students with immediate feedback. The embedded formative assessment strategies of the selected program provide this critical information to students and couple it with access to instructional tools and learning aids in an online textbook.

Differentiated Instruction

MyMathLab Algebra 1 and Algebra 2 leverages technology to provide students with an intelligent tutor to further support instruction received by the instructor. Students have access to an award-winning teacher via online instructional videos, step-by-step tutorials, and immediate feedback on answers. Instruction is differentiated automatically and provided by a personal tutor available anywhere and anytime students can get online. In 2004, more than 55,000 students responded meaningfully to an online questionnaire that asked: *What would you like to see invented that that you think will help students learn in the future?* "No concept drew greater interest … than some sort of an intelligent tutor/helper. Math was the most often mentioned subject for which tutoring help was needed. Many students desired such a tutor or helper for use in school and at home" (US Department of Education, 2004). The selected program provides students with a math tutor they can access at school and at home. A 2002 study conducted to assess the return on educational technology investments found "that Algebra students who used (a computerized cognitive) tutor outperformed students in traditional classes, having achievement gains of up to

25% in skill and up to 100% in problem solving. Retention in mathematics classes and attendance also improved among the students using the tutor" (Ringstaff et al., 2002). *Title* will provide students with additional support in math instruction and monitor progress to create an individualized plan for achievement in math.

Classroom Activities

Implementation Strategies. Discuss implementation strategies with your Pearson Higher Education Account Executive to design a model that will work best for your district. Some suggestions include:

- Traditional: projector or interactive whiteboard
- Computer Lab/Mobile Laptop Cart: independent work and small group discussions
- 1:1 Institution: students access program in class and at home

The implementation modeled in this Help Packet is to use *MyMathLab* to supplement the Algebra curriculum with the support of interactive whiteboards and student access to computers in the classroom.

Through *Title*, students will become active participants in their learning as they engage authentically with the curriculum. Students will utilize the provided technology tools to access and analyze information online in the classroom and remotely. The change in the instructional model with the addition of technology and personalized study plans for each student will have a positive impact on students' math achievement.

Customize. Use this narrative as a guide. Customize it to reflect classroom activities with technology at your institution.

Technology will play a central role in Algebra 1 and Algebra 2 activities in and out of class. Whether at school or at home, students will go online daily to work on homework the instructor assigns. Computer labs at targeted locations will stay open beyond regular hours to accommodate students without Internet access at home. In addition, arrangements have been made at libraries, and other places on select locations' campuses to allow students extended access to computers. *Institution's* students will receive instantaneous feedback when they answer incorrectly and access their choice of multimedia tools to provide the engaging, effective support of a personal tutor. While in class, students will interact with *MyMathLab Algebra 1 or Algebra 2* on a daily basis.

Title uses technology to transform the way *Institution's* present Algebra curriculum. Faculty will leverage interactive whiteboards to supplement the delivery of their own lesson with videos and animations from the program to help present complex topics, such as cubic equations. Some students will work independently on sample exercises on laptops, while others will work

Elaborate. How will *MyMathLab* be implemented at your institution?

out the exercises on the interactive whiteboard. The majority of students' time in class, however, will be spent working through the curriculum at their own pace in their personalized study plan on laptops while the instructor remains heavily involved in work with small groups or individuals. In addition, students will spend time in class working online and offline on group projects as well as collaborating outside of the class on these projects throughout the year. Collaborative learning is considered to promote critical thinking and increase students' interest and motivation (Panitz, 1999). One such project will be for students to create mock investment planning firms where they will utilize algebraic formulas to account for factors like interest rates and risks and graph their performance over time.

Activities that create technology-transformed instructional activities have proven to be "the top-model predictor of improved high-stakes test scores, dropout rate reduction, course completion, and improved discipline" (Greaves et al., 2010). *Title* empowers instructors with an extensive suite of technology resources to facilitate engaging and diverse instructional activites that promote student learning. In addition to the classroom activities described above, faculty will utilize the following tools provided by *MyMathLab Algebra 1 and Algebra 2* to further integrate technology into their instruction:

- **Videos and Animations.** Projectors and/or interactive whiteboards will be utilized to introduce, or repeat, a lesson to the whole class or small groups. Instructors can select from a suite of videos that offer step-by-step examples, help students with their study skills, and provide preparation for chapter tests.
- **PowerPoint Slides.** Faculty will work in collaborative study groups to customize the provided PowerPoint lecture slides to facilitate instruction.
- **Student Organizer.** Faculty will model via PDF downloads how students are to use the Student Organizer to develop study and note-taking skills.
- **eText.** Faculty can project the interactive, online textbook to work on exercises as a class or in small groups. Students will also access their eText to follow along with the instructor and to work independently in their personalized study plan for differentiated learning, practice, and review.
- **Communication.** Online, daily collaboration among students has been identified as one of the top four key technology implementation factors linked most strongly to education success (Greaves et al., 2010). To further support communication between students and instructors, and promote collaboration between students, tools, such as announcements, discussion boards, and e-mail, available on the program's online communication page will be utilized regularly.

MyMathLab Algebra 1 and Algebra 2 support *Institution's* goals to improve student achievement in math and to integrate technology into the math curriculum. The specific strategies and timeline for the institution to achieve these goals through class activities are described in Tables 3 and 4.

Customize. Create a table to illustrate program strategies and a timeline unique to your

Table 3: Program Strategies and Timeline

Project Activity	Timeline	Indicator	Person(s) Responsible
Goal #1: Improve student achievement in Algebra 1 and Algebra 2.			
Objective 1.1: Student math achievement on *test* will improve, on average, by 10% in three years.			
Objective 1.2: Students will spend at least 50% of their class time working in an online, personalized study plan developed from formative assessments.			
1. Purchase and implement *MyMathLab (MML*) in all Algebra 1 and Algebra 2 classes.	*Date*	Purchase order, student enrollment in *MML*, *MML* student reports	Vice Provost, Technology Director and Coaches, Project Director, Instructors
2. Students receive daily math instruction via *MML*.	*Date*	Observations, instructor lesson plans	Instructors, Students
3. Instructors assign online homework, quizzes and tests, and students work on them daily.	*Date*	Instructor lesson plans, *MML* student reports, personalized *MML* study plans, math performance on *test*	Instructors, Students
4. Students regularly participate in online formative assessments, which provide them with immediate instructional support when necessary.	*Date*	*MML* assessments, student reports, personalized *MML* study plans	Instructors, Students
5. Faculty regularly review *MML* assessments, reports and study plans to make adjustments to classroom instruction and/or further modify curriculum for individual students.	*Date*	*MML* assessments, student reports, personalized *MML* study plans	Vice Provost, Project Director, Leadership Board, Technology Coaches, Instructors
Continue to describe how student achievement in Algebra 1 and Algebra 2 will improve through this project.			

Project Activity	Timeline	Indicator	Person(s) Responsible
Goal #2: Integrate technology into the math curriculum.			
Objective 2.1: Students will use technology to learn key Algebraic concepts.			
Objective 2.2: By the end of the academic year, at least 80% of Algebra students will demonstrate a proficient level of technology literacy.			
1. Revise class schedules to include adequate time for technology-based activities.	*Date*	Instructor lesson plans, school schedule	Vice Provost, Technology Director, Leadership Board
2. Students receive daily exposure to technology and hands-on time with technology via interactive whiteboards, student responders, and laptops in class.	*Date*	Observations, instructor lesson plans, *MML* student reports, technology skills test	Technology Coaches, Instructors, Students
3. Students daily work independently in their personalized study plan for differentiated learning.	*Date*	Personalized *MML* study plans, *MML* student reports	Instructors, Students
4. Students collaborate with each other in online discussion boards, group projects, and e-mail.	*Date*	Observations, instructor lesson plans, *MML* student reports, technology skills test	Instructors, Students
Continue to describe how technology will be integrated into the math curriculum in your district.			

Customize. Change the activity timeline in Table 3 to accurately reflect the goals, objectives, and activities your institution plans to accomplish with the grant.

5. Professional Development

Technology can be a powerful tool for transforming a low-performing institution into a high-achieving one when implemented with research-based instructional practices in the classroom. Technology alone will not lead students to academic excellence, but great gains will occur when well-trained faculty effectively enhance their instruction with proven technologies as proposed in *Title*.

The National Council of Teachers of Mathematics advocates that technology play a significant role in the teaching and learning of mathematics. “Effective teachers maximize the potential of technology to develop students’ understanding, stimulate their interest, and increase their proficiency in mathematics. When technology is used strategically, it can provide access to mathematics for all students” (National Council of Teachers of Mathematics, 2008). Our

institution's leadership board and key stakeholders are committed to not only improving students' academic achievement in math, but also in improving how well, and how often, faculty leverage technology to support student learning. To accomplish this, *Institution* will allocate __% of the budget to provide the project director and Algebra instructors, department heads, and technology coaches at participating locations with high-quality professional development.

Title will provide ongoing professional development through a number of methods. Professional development will be delivered online and in-person, peer coaching and mentoring, collaborative study groups, and instructor-to-instructor professional development videos. When faculty have access to a variety of professional development sources, the result is a higher quality of professional development than when it's received from a single source (Smylie et al., 2001). The collaborative design of the professional development program will develop a culture of inquiry, sharing, and knowledge building across the targeted locations. Faculty will post all lesson plans to an internal Web site created by the technology director for this specific purpose. While instructors will be responsible for carrying out the objective to effectively integrate technology into daily instruction, they will do so with the support and mentorship of the technology coaches, online professional development, peer coaching, and study groups. Technology coaches will be the point-of-contact for all things related to the program. Department heads will be in regular communication with technology coaches to contribute to the successful implementation of *Title*. Together, they will monitor the progress of the program at each location of the institution.

Customize. Use this narrative as a guide. Customize it to reflect the professional development plans and strategies to address the specific needs of your project.

Peer coaching and mentoring. Each location's technology coach will play an integral role in *Title* leading peer coaching and mentoring sessions. The purpose of peer coaching and mentoring is to utilize internal expertise to support the effective implementation of integration of technology to support student learning. The technology coach will also work with instructors to interpret student performance reports and model how reports are to be utilized to make data-driven decisions. Data from these reports will be analyzed further by key stakeholders. Classroom observations of grant instructors by peers will be one aspect of coaching and mentoring as will the viewing and discussion of professional development videos. Discussions arising from peer coaching and mentoring, assessment data, and observations will inform what, if any, adjustments need to be made to professional development plans.

Collaborative study groups. Study groups were created by *Title* to provide frequent opportunities for participating faculty to share instructional strategies and engage in thoughtful

follow-up discussions of the professional development provided from the Instructor-to-Instructor professional development videos. The study groups will meet twice each month under the guidance of each location's technology coach during the school year with a combination of virtual and face-to-face meetings. The study groups provide participating instructors with a valuable support system.

Instructor-to-Instructor professional development videos. Participating faculty will benefit from watching the award-winning educator and author of *MyMathLab Algebra 1 and Algebra 2* present strategies and suggestions for engaging students, preventing math errors, and teaching key topics in a series of online videos. Instructors will further be able to demonstrate their abilities to integrate technology into their instruction by creating videos of themselves teaching and post them to this portal for their colleagues to view. Author and peer videos will be viewed and discussed as one component of peer coaching and mentoring.

Title requires that participating faculty complete a minimum of __ hours of professional development throughout the grant period. Beyond the grant period, there will be ongoing peer coaching and mentoring sessions as well as continuation of the collaborative study groups. Studies have found that only after instructors participate in 30 to 100 hours of professional development is there a positive correlation to student achievement gains (Education Week, 2010).

Table 4 details the professional development strategies that will support *Title's* goal to provide quality professional development to grant faculty in the effective use of technology.

Table 4: Professional Development Strategies and Timeline

Project Activity	Timeline	Indicator	Person(s) Responsible
Goal #3: Provide professional development in effective use of technology.			
Objective 3.1: All grant faculty will have started the training and be able to identify at least four new strategies for integrating technology into their lessons by the end of the first quarter.			
Objective 3.2: Faculty will integrate technology into the daily delivery of lessons and students' assignments by the end of the school year.			
Create collaborative study groups across participating locations.	*Date*	*Title* notes	Project Director, Department Heads, Technology Coaches
All faculty participate in ongoing peer coaching and mentoring to foster a culture of inquiry, sharing, and knowledge building.	*Date*	Online discussion boards, e-mails, notes from Algebra Team Leader	Technology Coaches, Faculty

Faculty meet twice a month online and/or face-to-face in collaborative study groups to share ideas, provide support, and reflect on PD Trainings and instructional strategies to create a culture of inquiry.	*Date*	Online discussion boards, e-mails, study group-created lesson plans, shared lesson plans	Technology Coaches, Faculty
Faculty independently view *MML* Instructor-to-Instructor professional development videos and discuss them in collaborative study groups.	*Date*	Attendee and comment log of Web conferencing sessions	Faculty
Faculty utilize multiple technology resources to deliver multi-media lessons.	*Date*	Observations, faculty lesson plans	Project Director, Department Heads, Technology Coaches, Faculty
Faculty observe other grant instructors and discuss their observations via online discussion boards.	*Date*	Online discussion boards	Technology Director, Project Director, Department Heads, Technology Coaches, Faculty
Continue to describe professional development strategies unique to your project.			

6. Leadership

Title's goal of improving academic achievement in Algebra by increasing technology integration cannot be realized without effective leadership. Leadership is a critical factor impacting the effective use of technology in classrooms as is how they model the use of technology in classrooms (National Center for Education Statistics, 2000). This project promotes site-based leadership, therefore the projector director, *Name*, will act as a facilitator rather than as a manager. *Describe the qualifications of your selected project director. Why was this person selected to lead this project?*

Project monitoring. Ongoing project monitoring will enable leadership to determine if they are meeting *Title* goals and direct them to necessary adjustments to help get on target to meeting the goals. The project director will work closely with department heads at each of the participating locations as well as each location's technology coach. Department heads and technology coaches will meet with the project director via Web-conference every-other Tuesday to provide status reports for each of the institution's participating locations. Department heads and technology coaches will report on instructor observations, lesson plans, professional development activities, and detailed

Customize. Use the narrative and table as a guide. Write specifics for your institution.

student reports from the technology-based math intervention. *Name* will provide updates via e-mail to the evaluator every month.

Title's planning committee designed this project to extend best-practices in technology integration across institution-wide. Table 5 outlines key activities for institution's leadership.

Table 5: Leadership Activities

Activity	Timeline	Person(s) Responsible
Promoting exemplary use of technology		
Conduct a faculty survey to establish a baseline of technology integration. Progress monitoring faculty surveys and classroom observations will be completed mid-year and continue to guide professional development support. End of the year faculty surveys and classroom observations will be used to determine changes in instructor practice from the beginning to the end of the year.	*Date*	Project Director, Evaluator
Provide new technology resources for Algebra instructors and students to utilize.	*Date*	Vice Provost, Project Director, Technology Director, Department Heads
Establish a "Tech Innovator of the Month" to highlight instructors and staff who promote exemplary use of technology in the classroom. The innovator will receive a $10 gift card.	*Date*	Project Director
Adjust schedule to allot time for technology-based activities in Algebra classes.	*Date*	Key Leadership, Department Heads
Provide Algebra instructors with additional planning and preparation time to accommodate professional development activities required with *Title*.	*Date*	Key Leadership, Department Heads
Delegate Algebra instructors to lead a presentation on how technology transformed their classroom instruction to other faculty at their school during the term.	*Date*	Project Director, Department Heads
Modeling technology integration in daily work		
Leadership team will thoughtfully and intentionally incorporate technology into presentations to faculty, the school board, and community members, including PowerPoint, clickers, and interactive whiteboards.	*Date*	Key Leadership, Department Heads
School administrators will leverage the math intervention's technology reports to inform decisions.	*Date*	Key Leadership, Department Heads

Technology Coaches will conduct model presentations to demonstrate how to present math concepts in ways that elicit students' responses by utilizing technology available in the classroom.	*Date*	Technology Coaches
All levels of school administration will regularly e-mail each other, faculty, and other members of the community as a frequent method of communication.	*Date*	Vice Provost, Project Director, Technology Director and Coaches, Department Heads
Creating a school culture that expects all teachers to use technology		
Administrators will have access to all reports automatically generated by the digital tools to inform project planning.	*Date*	Project Director, Department Heads, Technology Coaches
Department Heads will lead by example by participating in ongoing professional development, including peer coaching and mentoring, collaborative study groups, and professional development videos.	*Date*	Department Heads
The Institution's key stakeholders will conduct quarterly visits to targeted locations to observe *Title*.	*Date*	Vice Provost and Leadership Board
Create internal Web site instructors are required to use for posting of all lesson plans.	*Date*	Project Director, Technology Coaches
Incorporate effective use of technology in instruction into faculty evaluations.	*Date*	Vice Provost, Technology Director, Department Heads
In year two of the project, Algebra instructors will begin mentoring other math instructors in effective technology integration strategies.	*Date*	Project Director, Faculty
Advocating in the community for integration of technology in instruction		
Create and maintain a Web site to document *Title* activities, goals and outcomes.	*Date*	Project Director
Post monthly letters on Web site describing their vision, goals, and strategies with technology in the classrooms.	*Date*	Vice Provost, Technology Director, Department Heads
Host bi-annual open-houses to community to highlight how technology has transformed instruction in selected school's locations.	*Date*	Department Heads, Technology

		Coaches
Campaign local businesses to ask for monetary support of technology integration.	*Date*	Vice Provost, Technology Director, Department Heads
Partner with the public libraries, and local community centers to offer extended computer access to *Institution's* students.	*Date*	Vice Provost, Department Heads
Continue to describe leadership activities specific to your project.		

The enactment of *Title* will enable leadership throughout *Institution* to embody the recommendations proposed by the Technology Standards for School Administrators in a 2001 Collaborative. The potential of technology will be realized as will be the role leadership plays in ensuring administrators, faculty, and students have access to technology and receive the tools, time, training, and support to benefit from technology. (Collaborative for Technology Standards for School Administrators, 2001). The institution's leadership will work closely to seamlessly implement the new technology-based intervention, monitor instructor delivery and student usage of the new tool, facilitate collaboration among participating teachers, and evaluate student achievement gains.

7. Coordination of Activities

Title has the support of stakeholders across *Institution*. The program is made possible through a combination of strategic partnerships across multiple locations of the institution.

Customize. Describe how funds and activities will be coordinated across your district to demonstrate capacity and set the stage for sustainability of the program.

The institution is committed to advancing our students' academic achievement and technology literacy as well as faculty effectiveness through technology. The coordination of programs is intrinsic to the implementation and maintenance of this grant project. Financial support for *Title* to provide additional instructional and technological resources for use in all Algebra 1 and Algebra 2 classes at participating locations is demonstrated in the district's commitment of $*insert amount* in *list coordinating funds* to further support this important initiative. The Vice Provost and Technology Director have additionally received the support of the following local businesses, *insert other contributors*, in the amount of $*insert amount* to help sustain the program.

The programs cited below in Table 6 will be coordinated with this project.

Table 6: Program Coordination

Existing Program	Funding Source/dollars per year	Coordinated Funding and Activities

Existing Program	Funding Source/dollars per year	Coordinated Funding and Activities

This program will continue for a minimum of __ years through the coordination of funds and future *Title I*, *Title II, Part A*, and *insert appropriate funds*. The continuation of the program will allow us to comprehensively assess the ongoing and long-term impacts of *Title* on student achievement, technology literacy, and instructor performance.

8. Program Evaluation

To monitor the efficacy of *Title* in improving student achievement *Institution* has established guidelines for evaluating the impact of the selected educational technology and the professional development. The subsequent program evaluation will look at formative and summative evaluations as well as collect and analyze qualitative and quantitative information to assess *Title's* impact on teaching, learning, and achievement. We anticipate that an evaluation will demonstrate the following:

- Academic proficiency in Algebra 1 and Algebra 2 improves
- Use of technology increases students' math achievement and technology literacy
- Faculty effectively use technology to support student learning

Institution will utilize several tools and measures to collect the data to evaluate this grant project under the expertise of the Technology Director. The Technology Director, *Name*, was selected to serve as the evaluator because of her experience in collecting and analyzing data, her unique access to key resources and personnel, and her formal training and research in the areas of technology integration and student and faculty technology literacy. *Name* is well-qualified to be the evaluator for this program. *Describe and cite what qualifies your evaluator. Include specific credentials relevant to the role.*

Table 7 provides an overview of the formative and summative evaluations as well as the qualitative and quantitative data that will be collected and analyzed to assess the effectiveness of *Title* in accomplishing the project goals. The evaluator will receive updates from the project manager once a month and will present her analysis of progress made in reaching the goals to leadership once per quarter. The quarterly reports will include recommended modifications to professional development activities or other aspects of *Title* to ensure *Institution* is on target to achieve its goals.

Customize. Tailor a chart to reflect the goals, indicators, benchmarks, and measures to be utilized in your institution's project.

Table 7: Program Evaluation

Indicators	Benchmarks	Measures
Goal #1: Improve student achievement in Algebra 1 and Algebra 2.		
Test scores in Algebra 1 and Algebra 2 will improve for students across all sub-groups.	In 3 years, math scores will improve, on average, by 10% with at least a 7% reduction in the number of students scoring in the lowest quartile.	• *Test* scores in math • Grades in Algebra 1 and Algebra 2 • *MML* Student performance reports • Increase in number of students taking math beyond Algebra 2
Students will spend at least 50% of class time working in an online, personalized study plan developed from formative assessments.	100% of students will be working in a personalized study plan within 4 weeks of starting the class.	• Grades in Algebra 1 and Algebra 2 • Student study plan reports from *MML* • *MML* performance reports
Indicators	**Benchmarks**	**Measures**
Goal #2: Use of technology increases students' math achievement and technology literacy.		
Students will actively use computers for assignments, projects, communication, and differentiated instruction on a daily basis.	Students will use computers at school for a minimum of 40 minutes per day in their Algebra class.	• Percentage of students using computers at least 40 minutes per day in Algebra • Student activity reports in *MML* • Number of e-mails sent and discussion board comments posted in *MML*
Students will demonstrate increasingly higher technology literacy	By the end of the school year, at least 80% of students will demonstrate a proficient level of technology literacy.	• Survey responses from students • Student results from a skills test assessing performance on a variety of technology tasks
Indicators	**Benchmarks**	**Measures**
Goal #3: Faculty effectively use technology to support student learning.		

Algebra 1 and Algebra 2 teachers will be trained to incorporate technology into their teaching.	By the end of the first quarter, all grant instructors will have started the training and be able to identify at least four new strategies for how technology could be integrated into their lessons.	• Number of instructors receiving training via peer coaching and mentoring, study groups, and videos • Instructor lesson plans • Survey responses from instructors
Instructors will develop multi-media lessons utilizing a range of resources to effectively integrate technology into lessons and student work.	By the end of the academic year, instructors will integrate technology into the daily delivery of lessons and students' assignments.	• Instructor lesson plans • Observations and/or videos of teachers in the classroom • Instructor and student surveys • Student work

Evaluating Academic Proficiency

Students' academic achievement in math, particularly Algebra 1 and Algebra 2, will be measured in qualitative and quantitative data obtained from performance on *Test*, grades earned in Algebra 1 and Algebra 2, student work, student reports from the technology-based math intervention, teacher and student surveys, and the number of students advancing to a math course beyond Algebra 2.

Baseline data for students' math performance on *Test*, technology literacy, and number of students taking a math class beyond Algebra 2 are detailed below in Table 8 along with the anticipated goal. Data is further delineated by participating school.

Table 8: Student Goals

	Baseline Data	2011-2012 Goal	2012-2013 Goal
Percent of Students in Freshman and Sophomore Years Proficient in Math			
Location 1			
Location 2			
Percent of Students in Freshman and Sophomore Years in the Lowest Quartile in Math			
Location 1			
Location 2			
Percent of Students in Freshman and Sophomore Years Proficient in Technology Literacy			
Location 1			
Location 2			

	Baseline Data	2011-2012 Goal	2012-2013 Goal
Percent of Students in Freshman and Sophomore Years Proficient in Math			
Location 1			
Location 2			
Percent of Students in Freshman and Sophomore Years in the Lowest Quartile in Math			
Location 1			
Location 2			
Percent of Students in Freshman and Sophomore Years Proficient in Technology Literacy			
Location 1			
Location 2			

Evaluating Students' Technology Literacy

Institution adapted rubrics the International Society for Technology in Education (ISTE) created in their National Education Technology Standards (NETS) for Students to evaluate our students' technology literacy (International Society for Technology in Education, 2005). The NETS were utilized to create an assessment students will be required to take twice per year to evaluate their performance on various technology tasks. The test will be used to determine students' technology proficiency at the onset of the school year and administered again in the spring to assess growth in technology literacy. Examples of student work, observations, and student online surveys will be evaluated regularly to monitor students' ongoing performance to increase technology literacy. Appraisal of these items along with results of the technology literacy skill test will be utilized to determine technology literacy gains experienced as a result of *Title*.

Technology Standards. Review the NETS at http://www.ncrel.org/tech/nets/rubrics.htm and incorporate these standards into the evaluation of your students' technology literacy.

Students will participate in an online survey each quarter asking them a number of questions related to *Title*. Examples of some of the questions students will respond to include the following:

- On a scale of 1-10, rate how your technology skills have improved as a direct result of your teacher's use of technology in Algebra.
- On a scale of 1-10, rate how often you utilize technology during your Algebra class.
- Describe how technology has impacted your motivation in Algebra.
- Describe the extent to which technology has improved your understanding of Algebra.
- What technology are you using as part of your Algebra program that you were not using prior to this class?

Responses from teacher online surveys will also be considered to assess students' effective use of technology to support their learning.

Evaluating Instructors' Use of Technology

Summative and formative evaluations will measure outcomes of the professional development activities on instructors' effective integration of technology. Instructors will participate in an online survey each quarter asking them a number of questions related to *Title*. Examples of some of the questions instructors will respond to include the following:

Customize. Tailor the surveys to reflect the goals you are trying to accomplish at your institution.

- On a scale of 1-10, rate how your technology skills have improved as a direct result of:
  - Peer coaching and mentoring activities.
  - Collaborative study groups.
  - Instructor-to-Instructor professional development videos.
- On a scale of 1-10, rate how your students' use of technology has increased in the class.
- To which percentage has your usage of technology in classroom instruction increased?
- Describe how technology has changed any of your instructional practices.
- Describe the extent to which technology has improved your students' performance and/or motivation.

Responses from student online surveys will also be considered to assess instructors' effective use of technology to support student learning.

Scheduled observations of instructors in the classroom, random walk-throughs, and reviews of lesson plans will be led by key stakeholders with outcomes reported to the school's technology coach and discussed on the bi-weekly Web-conferencing sessions with the project director. Department heads and technology coaches will be looking for the depth of technology integration in lessons, variety of technology utilized, and frequency of technology use in daily lessons. They will also be monitoring how students respond to the instructional strategies and the manner, and frequency, with which students use technology during class.

Table 9 provides baseline data on instructors' usage and knowledge of instructional technology across each school and anticipated goals for each year.

Table 9: Teacher Goals

	Baseline Data	2009-10 Goal	2010-11 Goal
Percent of Faculty Integrating Technology into 75% or More of Daily Lessons			
Location 1			
Location 2			
Percent of Faculty Integrating Technology into 50-74% of Daily Lessons			
Location 1			
Location 2			
Percent of Faculty Integrating Technology into 25-49% of Daily Lessons			
Location 1			
Location 2			
Percent of Faculty Reporting Increase in Knowledge of Instructional Technology			
Location 1			
Location 2			
Percent of Faculty Reporting Increase in Effective Use of Technology to Student Achievement			
Location 1			
Location 2			
Percent of Faculty			
Location 1			
Location 2			
Percent of Faculty			
Location 1			
Location 2			

Long term, *Institution* will look to increased class attendance, graduation rates, enrollment rates, math courses completed, high measures of critical thinking, use of sophisticated communication skills leveraging technology, and the ability to collaborate with others across multiple mediums as further indicators of the ongoing impact of *Title* on our students' achievements.

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