



CYBERBEE: Formula for a Winning Proposal

By Linda C. Joseph - Posted Sep 1, 2004

With federal mandates such as No Child Left Behind stretching school budgets, it is essential to find additional funding sources, especially for technology initiatives. Grants are one option, but where do you start? CyberBee has written numerous grants ranging from a few thousand dollars from private foundations to several million dollars from federal programs such as Enhancing Education Through Technology Title II-D. Much has been learned from these experiences. The examples presented below are general and do not represent an entire grant, which might be several pages in length. These samples of grant language, funding sources, and Web sites are shared in the hope that more teachers will consider writing a grant as an alternative way of providing technology resources and professional development to their schools.

Preparation

Writing a grant sounds like a daunting task. However, one well-written grant that can be altered for different Requests for Proposal (RFP) will leverage your efforts to gain the most benefits.

Before you begin to write your grant, you need to collect data such as student demographics, achievement test scores, continuous improvement plans, and information about community partnerships. Local and state curriculum and technology standards should form the foundation of your grant proposal. After gathering this information, create a profile of your school.

Organize a project team to write and manage the grant. The team should be made up of individuals who have expertise in curriculum, technology, research, and evaluation and should also include a member of the community. If you are writing a grant that focuses on raising math achievement scores, then a representative from the math department should be on the team. Ideally, each team member should write one section, with one person assembling the grant in the proper format. If you are submitting the grant online, formatting may not be an issue.

Needs Statement

The needs section of the grant should be data driven and descriptive of the school. Why should your school project be funded? What are the lowest-performing content areas that need improvement in your school program based on achievement tests? If the yearly technology survey indicates only 30 percent of your teachers are integrating technology in their classroom curriculum, what professional development could be offered to increase that number? What other data is available to support where you want to go with your vision statement?

An opening needs statement might read as follows:

USA Elementary School is a K-5 school serving a population of 335 students. The ethnic distribution of students is currently 3 percent Asian, 20 percent Hispanic, 34 percent black, and 43 percent white. USA Elementary School offers two ESL programs at the primary level and intermediate level. Students are integrated into regular education classrooms and pulled out to work with our ESL teachers during the day. USA Elementary School also has both Primary and Intermediate Transitionally Developmentally Handicapped Units whose students work within the regular education classroom and are serviced through pullout programs.

A needs assessment examined academic achievement in both math and literacy via the state proficiency test. In 2003, only 44 percent of students passed in math. The Math Achievement Test and other assessment data confirmed similarly low success across nearly every grade. Based on our findings, we decided to focus on math, where we need the most help. Technological capacity within the school was measured using the 2003 Technology Assessment Survey. In terms of technology, results show USA Elementary School teachers have both limited resources to use computers in the classroom and not enough training to use such tools or instructional strategies effectively.

Continuous Improvement Plan

Many schools and districts have goals and strategies for improving student achievement, called continuous improvement plans. The district will often set a goal to reach, and the individual schools will devise strategic action plans to meet those goals based on data from state proficiency tests, subject area achievement tests, and surveys from teachers and parents. In the grant, you should focus on one or two goals.

District Goal: By 2013-14, all students will reach high standards, at a minimum proficiency or better in mathematics. Strategy: Technology that Impacts Teaching and Learning: Use technology to impact the quality, content, and structure of teaching and learning in a school that is focused on results.

To meet these needs, USA Elementary School's project will focus on two goals: Goal 1) Improve measurable student achievement in math and technological literacy by focusing on the weakest content strands; estimation, number relations, and problem solving using an online math enrichment software program and management system. Goal 2) Improve teacher ability to integrate technology into the curriculum through professional development that targets specific curriculum and technology standards.

Capacity to Implement

Have your teachers participated in courses or workshops that would enhance the project? Have you had any experience implementing initiatives at your school? What technology resources do you currently have in place?

Our teachers are eager to enhance their knowledge in how to integrate technology into the math curriculum. Nine teachers at USA Elementary School have been involved in a math and science inquiry program at the local Center of Science and Industry. All of our teachers, including Gifted and Talented, Special Education, and other support staff, have participated in a variety of district-sponsored workshops.

In addition, USA Elementary School has the basic technology infrastructure to support the project. The school has a ratio of one computer for every five students in the classroom, a T-1 connection to the Internet, a data projection system, productivity software, and network capacity for delivering multimedia content. Wireless laptops purchased through the grant will allow more flexibility in our capacity to implement.

With the professional development, math content, and wireless laptops provided through this project, our teachers will have the ability to move forward in offering students rich experiences with technology integration into the math classroom.

Research

What research supports your vision? Searching technology journals such as *Teaching and Learning with Technology* and Web sites such as Regional Education Laboratories can yield a wealth of information related to your plan.

Early adopters of online learning have found that information technologies can serve to enhance six kinds of quality learning, distributive learning, authentic tasks and complex inquiry, dialogic learning, constructive

learning, public accountability, and reflexive and critical thinking (Bass, 1998).

Well-designed, Web-based mathematical models engage students in exploration of mathematical relationships and concepts. This example illustrates the pedagogical directions outlined in the Principles and Standards of School Mathematics document (NCTM, 2000). In the case of mathematics teaching, there is evidence that mathematical objects, inherently abstract, become more concrete when modeled onscreen (Lester, 2002, p.2).

Professional Development

How will you gain teacher buy-in to the project? Will you target a small group of teachers or the entire staff? Who will provide professional development and how often? What best practices can you model from other schools that have implemented a similar project? Will teachers be paid and receive graduate credit?

The professional development plan will be aligned with the Web-based math curriculum and online learning management system for integrating technology into the classroom. The plan includes on-site coaching, instructor-led, just-in-time, and leadership sessions along with Web-based training and hands-on learning in curriculum design, integration, best practice strategies, lesson planning, assessment reporting and parent communication.

A leadership team meeting with USA Elementary School's project team will be held in August and an initial meeting with all target teachers will be held in September. From these initial meetings, a professional development schedule and training outline will be developed that match the teachers' needs and project goals, and monthly school leadership team meetings will be scheduled.

The instructional technology department will conduct the leadership Team session, computer laptop training, and facilitate USA Elementary School's monthly leadership team sessions and just-in-time professional development to increase technology literacy. The XYZ vendor will provide 2 days of training using the online math content and management system. In addition, XYZ vendor will provide mentoring and modeling for 9 days throughout the school year.

Evaluation

The evaluation section is one of the most difficult to write. Goals and indicators need to be identified that are realistically measurable. If you have enough funding, use a professional evaluator for the project. It is well worth the additional cost. Most teachers do not have the time or perseverance that an evaluation requires.

Student achievement data for students will include measured change in proficiency test and math achievement scores for students participating in online math curricula. Achievement will also include data compiled within content modules and ongoing assessments per grade level as recorded by the online management system. This will include formative and summative assessment data for all students.

Disaggregated student technological literacy will be measured against current state standards through an initial formative skills assessment and regularly monitored through skills inventory assessment designed by the evaluator, both aligned to state standard benchmarks and indicators, and will be compared with academic achievement results. The year-end assessment will combine formative and summative inventory assessments with student usage logs, teacher observation surveys, and student surveys that include knowledge and attitudinal measures.

Evaluation tools will be developed to assess the impact of professional development offered to teachers. Online management tools will track the number of teachers participating in face-to-face and online professional development for graduate credit. In addition, teachers will be surveyed regarding their use of online content with students and their views on its effectiveness.

Parents will be surveyed to assess their degree of involvement and satisfaction with online communication as a new connection with the school and their child's learning.

Budget

The budget narrative should accurately reflect the vision of the proposal. Budgeted items should clearly align with the needs of the project.

USA Elementary School will allocate funds for the online math and management subscription licenses, professional development and computer hardware. XYZ vendor will manage installation and support. XYZ will maintain hardware, manage data storage, perform software upgrades, monitor system security, and provide 24/7 server support. The budget reflects costs for on-site, instructor-led training and coaching and Web-based training from XYZ vendor. Monies are requested to fund a salaried position for a curriculum consultant to provide 9 days of professional development support. Fees for evaluation services from XYZ evaluation services are included. Evaluation services include monthly on-site consultations, development, distribution, and collection of assessment instruments and reports.

Timeline

The timeline should also be realistic. If you include every detail, grant readers might wonder how you will be able to accomplish all of the tasks. In a table, list the date, action, and person(s) responsible.

Timeline		
Date	Action	Person(s) Responsible
August	Leadership Team Meets	Instructional Technology Department

Other sections of grant proposals may include Continuation, sustaining the grant after funding has ended; and Partnerships, such as businesses or organizations that will share responsibilities in the project.

Writing Tips

Here are a few tips for a winning grant. Be sure to read the Request for Proposal thoroughly. Guidelines differ for each funding agency or foundation. If a rubric is included, match your proposal to it. Have several people not associated with the grant writing read your proposal for clarity and continuity. Do not assume the reader knows specific software programs, vendors, or other technical jargon for K-12 education. Meet the submission deadline with all of the required elements. This may include a page with the signature of the superintendent or a letter of support from partner organizations. Allow enough time in advance to obtain these items. The grant writing process may be the easiest part of the project. When the grant is awarded, much more work will need to be done to accomplish your project goals. Managing a grant is time-consuming. However, the reward for you will be the gratitude of students and parents when technology combined with curriculum make a difference in student achievement.

Be sure to visit the *MultiMedia & Internet@ Schools* home page [\[http://www.infotoday.com/MMSchools\]](http://www.infotoday.com/MMSchools) with active links to all of the Web sites mentioned in this article. Then fly over to CyberBee [\[http://www.cyberbee.com\]](http://www.cyberbee.com) for more curriculum ideas, research tools, and activities to use with your students and staff.

SELECTED RESOURCES FOR TECHNOLOGY GRANT WRITING

eSchool News

<http://www.eschoolnews.com/erc/funding/>

Features a grants clearinghouse and funding news. A subscription to its twice-monthly e-mail newsletter, Grants & Funding Alert, is \$35.

From Now On

<http://www.fno.org/>

Explore Jamie Mckenzie's site From Now On to find recent research on educational technology that may be included in grant writing. Explore ideas for effective staff development and best practices in teaching.

George Lucas Educational Foundation

<http://www.glef.org/>

Edutopia Online disseminates stories about innovative practices in schools, including professional development, project-based learning, and technology integration. It offers two free publications, *Edutopia Magazine* and GLEF Blast eNewsletter.

Journal of Technology in Education

<http://scholar.lib.vt.edu/ejournals/JTE/>

The *Journal of Technology Education* is sponsored by Virginia Polytechnic Institute and State University and provides online issues of e-journals dating from 1996-2003. Each issue contains practical and relevant research articles for educators and librarians.

National Center for Technology Planning

<http://www.nctp.com/>

This site is a clearinghouse for articles about technology planning. Dr. Larry S. Anderson, who wrote a *Guidebook for Developing an Effective Instructional Technology Plan*, founded the NCTP in 1992. The book and other materials may be ordered on the Web site.

Regional Educational Laboratories

<http://www.relnetwork.org>

The Regional Educational Laboratory Program, administered by the Office of Educational Research and Improvement, is currently researching ways for transforming low-performing schools into high-performing learning communities. One of its goals is to explore innovative ways that current and emerging technologies can be used to address specific education problems, particularly those relating to disadvantaged and underserved populations.

Technology Grants for K-12 News

<http://www.technologygrantnews.com/>

Although this site offers more with a paid subscription, it does provide information regarding grants that are currently available to schools and organizations.

T.H.E. Journal Online

<http://www.thejournal.com/>

Subscribing to the three e-mail newsletters will provide loads of information. T.H.E. Focus offers an in-depth

look at a specific area of educational technology, Eduhound Weekly highlights great Web sites, and T.H.E. Newsletter provides news updates, including grants. On the Web site you will find articles about scientifically based research, professional development, and new ways to use technology in the classroom.

U.S. Department of Education

<http://www.ed.gov/index.jhtml>

Information regarding federal grants, professional development, and improving student performance is found on this site. Lesson ideas and teaching resources from federal agencies are provided for teachers in all subject areas.

Linda Joseph is the author of Net Curriculum: An Educator's Guide to Using the Internet, published by CyberAge Books. The recipient of numerous awards, in addition to her work in the Columbus Public Schools and the Library of Congress, Linda is a part-time instructor for Ohio State University. Communications to the author may be addressed to her at Columbus Public Schools, 737 East Hudson Street, Columbus, OH 43211; 614/365-5277; ljoseph@iwaynet.net.
