



Suggestions for Grant Writing

Seeking Funding

Obtaining money to assist you in funding your existing program or help you to initiate something new in curriculum can be easy. Many companies are anxious to lend their name and financial resources to your endeavors. You must organize and write your proposals so that the people evaluating your request will easily find everything that they need to know. There are many resources to assist you including books, workshops, web sites, consultants, newsletters, and articles in magazines. Take the time to locate some of these as you plan your strategies.

In writing your grant first decide what the need is that you would like to address and how you intend to use the funds to change or improve the situation. Administration support is a top priority. Many grants will want to know how your school is willing to provide assistance for what you plan to do. Then look for grants that will fit the profile of your proposal. Pay attention to what is funded and what is not funded. For example, workshops are not always funded as part of a curriculum materials proposal.

Most grants will not cover everything that you request. Apply for more than one endowment, even if there is an overlap in each of the applications. You will not get every one for which you apply. The key is to have an application that is well thought out, has good goals and objectives, and lists supportive reasons that this grant is needed. Your work will be reduced if the application and ideas can be used for more than one request. Two examples of need are 1) having underrepresented students or 2) trying a new methodology of teaching to reach more students. Your proposals will be strengthened if you have corroborating research to support them.

Second, you will want to make a list of what you would buy with the money:

- textbooks - student and teacher editions, as well as supplements;
- materials/supplies - chart paper, acetates, algebra tiles, videos...;
- workshops - registration, substitutes, travel;
- technology - graphing calculators, computer programs,
- furniture - tables, chairs, file cabinet; and
- miscellaneous - funds for parent night, newsletters, etc.

Guidelines for Grant Seekers

After you have defined your need and found sources for funding (see end of article), it is time to make a personal contact. Know something about the foundation you are considering. A letter of inquiry or phone call is advisable to determine whether the grant-giver's interests match your ideas and to find out what they require. Keep these things in mind: purpose of the grant, problems you want to address and plans to solve them, who will benefit, and how you will assess the success of your project. Important parts of the process to ask about are: what ideas the foundation funds, are there any budget constraints, is there a timeline for requesting funds, and who are eligible grant seekers.

Ask your contact to send you a Request for Proposal (RFP) and read it *very carefully*. "The RFP tells you the goals and objectives of the funding program, what grantees are expected to achieve and deliver, how proposals will be evaluated, and all of the specifics about length of the proposal, number of copies to send, and the deadline" (Tracy Crow, Eisenhower National Clearinghouse Publishing). Highlight key parts as you read through the RFP.

How to Write Grants

There are many books and workshops, both general and specific, about grant writing. Additionally, some organizations have put together materials about how to do this effectively. Examples include a guide to help grant seekers written by the Corporation for Public Broadcasting, advice on Project Design developed by the Environmental Protection Agency, ideas on 'Pitfalls to Avoid' by New Mexico State University and a Persuasive Writing Strategies: Editing Checklist put together by the Communication Training Consultants. Here is a summary of their advice

- Give a big picture or overview first then the data.
- Focus the reader on your objectives.
- Clarify the purpose of your project and write a mission statement.
- Determine the broad project goals, then identify the specific objectives that define how you will focus the work to accomplish these goals.
- Describe in detail the activities that will take place in order to achieve the desired results.
- Make sure your methods are realistic.
- Describe WHY you have chosen these activities. Justify them over all other approaches you could have taken.
- Show your knowledge of the bigger picture.
- Include a timetable of major milestones.
- Make sure that you fill out the application completely and clearly, answering every question.

When writing your proposal, focus on your needs, not your wants. Have data or research to support your issue. Describe your project in as local a context as possible and do not paint too gloomy a picture. Ask for the maximum amount of funding even though you might not get it.

Remember to include the demographics of your school or district and tell who will benefit from your project. Explain the special challenges or problems faced by this group and explain how you will address these needs.

Your evaluation of the success of your project should be built into your proposal. Show how you will achieve each of your objectives and how that achievement will be measured (tests, surveys, retention, anecdotal information).

If there is no formal grant application make sure that your proposal includes the following; a clear description and purpose of the project, how it will work, who will benefit, how it will be assessed, a detailed budget including in-kind support and future funding strategies, a timeline, names and vitae of people involved in the project including who is the contact person, an example of the materials that you are going to use, and legal and tax status.

Try to include *key words* from their information packet. Use specific, everyday language. Make sure the it is appropriate and NOT filled with jargon. Do not use abbreviations until they are defined. You might think that everyone knows what 'NCTM' (National Council of Teachers of Mathematics) is, but not all readers of grants will be mathematics teachers.

To create a pleasing visual impact keep these ideas in mind; use one sentence paragraphs to highlight key messages avoid large blocks of text, select fonts (and points) for ease of reading, and do not overuse vertical lists. Also, limit your sentences to 20 words or less.

Make sure that your project goals are broad and your objectives are specific, clear and attainable. Rarely will you be successful with 'ALL students' as defined in the NCTM Standards, so don't have that as a goal. Also, clearly stated objectives should use illustrative verbs (analyze, speak, recognize).

Try to have an idea that will make your project stand out among all the other requests. You want the grant readers to remember *your* proposal. An acronym for your program that is clever will stay in the minds of the readers (i.e. PLUS-Positive Learning for Underrepresented Students is short, mathematical and descriptive).

Finally, have someone from outside the grant writing team read your proposal, not someone who has been assisting you all along. If you can have an English teacher check for clarity and correctness, that will help with readability. If you have the time, the Department of Energy developed a self-assessment for grants that you can find at their web site (www.t2ed.com/) called 'GRANTSAT'.

Other resources for grant writing include:

- Corporation for Public Broadcasting (www.cpb.org/grants/grantwriting.html)
- Environmental Protection Agency (EPA at www.epa.gov)
- Minnesota Council on Foundations (www.mcf.org/mcf/grantwriting.htm)
- University of Michigan (www.research.umich.edu/research/proposals/)
- New Mexico State University (www.nmsu.edu/techprof/).

Resources for Funds

Good resources for monetary support are large local companies. If you have the home office for a major corporation in your area, you can call and ask to speak to someone with their Education Foundation. Find out if they give grants for educational purposes and, if so, who is in charge of this. Talk to the person in that department to get more information about WHO is eligible to apply, WHAT the grant covers (workshops, texts, technology...), HOW to apply for the grant, WHEN is the deadline (if there is one) to apply, and WHERE to get the information and send the application. Make sure that you follow all of the guidelines. Call your contact person whenever you have questions. It never hurts to have them become familiar with you and your name.

If you do not have a home office but do have a large corporation in your area, follow the above procedure or check out their web page for information. Most companies like to support local issues as opposed to supporting someone across the country. Companies to call might include beverage (Coke, Coors,...), banks (Bank of America, Citibank,...), insurance (Prudential, John Hancock,...), communication (GTE, Bell,...), automotive (Ford, Mitsubishi, Toyota,...), appliances (General Electric, Black and Decker,...), electronics (Toshiba, Sony,...), corporate retailers (Sears, Penneys,...), fuel (Texaco, Shell,...), real estate (Coldwell Banker, Century 21,...), airlines (TWA, United,...), building (Home Depot, Ace,...), office supplies (Staples, Office Depot,...), restaurant chains (McDonalds, TGIF,...), local newspapers and cable companies (Adelphia, Century), grocery stores (Safeway, Albertsons,...), toys (ToysRUs, KayBee,...), utilities (Edison, PGE,...), computer companies (Intel, Microsoft,...)

- GE Fund 203-373-3216
- GTE Foundation 203-965-3620
- Hitachi Foundation 202-457-0588
- Archer-Daniels-Midland Foundation 217-424-2570
- Grace Foundation 407-362-1487
- Toshiba Foundation 212-596-0600

Other resources are through the Federal Government - the Department of Education (www.edu.gov or 1-800-USA-LEARN), the National Science Foundation (www.nsf.gov), the Eisenhower National Consortium (www.enc.org/focus/) and NASA (<http://quest.arc.nasa.gov/top/grants.html>).

Consider contacting Universities. Some colleges will publish information about fellowships, grants, scholarships, and classes. Eastern Washington University publishes a booklet of courses, workshops, seminars, conferences, grants and awards, and specialized in-service offerings in and out of the state of Washington. For more information about the booklet, phone Michele at 800-635-0520 or visit their web site at <http://mscb.ewu.edu>.

An unlimited source of funds is through Public Charities, Private, Corporate, Independent, Family, Profit and Non Profit Foundations. A Foundation is an organization established to provide funding or support to particular activities. The money usually comes from endowments or contributions. A corporate foundation mostly supports ideas that will relate to the profits of their company. Math and science education are fields that are more likely to be funded because math and science literacy is important for employees as well as consumers.

These foundations can be found by searching on the world wide web. Search under 'grants' 'education' 'foundations' 'mathematics'. If you know of a company (see previous paragraphs for ideas) visit their web site and look for their giving programs. Some web sites and phone numbers are:

- The *Foundation Center* (<http://fdncenter.org/>) has a comprehensive and up-to-date database on foundations and corporate giving programs. Their web site also has great guidelines and examples. For information and a free brochure call 800-424-9836.
- School grants and opportunities including a newsletter (www.schoolgrants.org).
- Capitol Publications offers titles related to grant writing at 800-221-0425.
- Corporate Giving Watch has news and information on corporate giving programs at 301-816-0210.

- Government Assistance Almanac has information on all types of grants at 313-961-1340.
- Council on Foundations at www.cof.org/.
- The Grant Seeker's Directory of K-12 Funders will cost you \$60 but has lots of good information.
- Other sites include - <http://discoveryschool.schoolgrant.org>, <http://planet.rtec.org>, www.tenet.edu/announce/grant.html, www.morriscatholic.org/grants and www.oorfarm.com.

Local School Districts sometimes have an education foundation or Parent Teacher Association/Organization that will have moneys for things that are not in the school's budget. Local clubs and organizations like American Association of University Women (AAUW), Delta Kappa Gamma, Phi Delta Kappa, Soroptomists, Lions and Rotary assist in educational programs. They each will have a specific interest that they focus on. For example, AAUW focuses on programs that help girls to be successful in math and science as well as female teachers who want to further their education.

Remember to consider professional sports teams (www.nfie.org, 1-202-822-7840), amusement parks, local and state professional organizations (state Math Councils), and NCTM (www.nctm.org/about/MET).

I have received money ranging from \$200 to \$10,000 from nine of the fourteen grants that I have written. Foundations that service the local area and have ideas about education that best fit your needs are most responsive. On the following pages is an example of a grant that was funded. It is not perfect, but it will give you an idea of what the final product might look like.

There are funds out there to assist you. If you take time , employ effort, organize writing, and execute your plan, it will happen.

Proposal for Toshiba America Foundation Grant

Section 1. Endorsement

Section 2. Proposal Cover Page

Section 3. Objectives/Planned Outcomes

We would like to improve the success and retention rate of the Algebra II students at Post Falls High School (PFHS) by piloting College Preparatory Mathematics (CPM) Educational Program materials. The students that are selected for the pilot courses will:

- study mathematics concepts for the course by using manipulatives and technology;
- develop an understanding about and connections between Algebra, Geometry, and Trigonometry;
- explore large problems and investigations both independently and collaboratively;
- become confident in their mathematical abilities;
- learn to communicate and reason mathematically;
- see the value and importance of mathematics in every day life; and
- be successful and continue in mathematics at the next level by improving their test scores and grades in Algebra II.

Section 4. Methods/Strategies

The CPM materials have proven to be successful with students of different ability levels, races, and gender. For one school year a mathematics consultant from the CPM Educational Program will co-teach and mentor two mathematics teachers at PFHS. One will teach Algebra 1 and the other will teach Geometry using the CPM materials and methodologies. Not only will the teachers acquire several strategies for teaching mathematics that can be used in their other mathematics classes, but the students will see and learn mathematics using techniques developed to reach the learning styles of all students. The students will develop an understanding of mathematics because of the philosophy of the program that "Mastery takes time". This means that the students will see parts of a concept modeled in a variety of ways. They will see this topic repeated in different ways over a period of time adding pieces as they develop their knowledge. They will then put the pieces together and apply the concepts that they learned as they solve real life problems.

For example, factoring is a topic that most adults remember somewhat. The students will begin with a patterning problem to develop an ease with number relationships, particularly sum and product relationships used to factor. Then they will use manipulatives, particularly algebra tiles, to look at the next pieces, combining like terms and distributive property. As they work with the tiles on binomial multiplication the concrete is taken to the abstract through generic rectangles, a method for organizing information. Finally combining the diamond techniques, use of manipulatives, and the generic rectangle, the students learn factoring. With this knowledge the students solve an amusement park problem that requires factoring several times. The students also learn how solutions to factoring are used in graphing parabolas. The students will be asked periodically to do group presentations either orally or on posters. This will develop their communication skills.

They will work in groups of three or four, and sometimes in pairs, as they develop their collaboration skills. They will see the value and importance of mathematics as they develop critical thinking and problem solving skills. The students will develop responsibility as a learner by working on note taking, questioning, and study skills.

Section 5. Discussion of Alternatives

Direct instruction is the most common method of teaching mathematics. It has not always been successful with Algebra 1 students. Nationally the failure rate is over 40% for Algebra 1 students. By trying new methods like collaborative learning, using manipulatives and technology, and evaluating with alternative forms of assessment, the teachers will be better able to reach more students as they help them acquire mathematical power and knowledge. Six week units were rejected as short term. In order for lasting effect the model had to last for a full school year. Many methods can be modeled, tried, adapted, and mastered throughout the year. Computer based programs were not feasible because of the limited equipment and knowledge needed for their use.

Section 6. Project Management

The mathematics department head who is also the Geometry teacher will purchase all supplies and materials. The mathematics consultant will schedule team teaching opportunities and meetings between the two teachers and the consultant. All issues that come up will be solved by the team with final approval by the mathematics department head.

The first month the mathematics consultant will meet every morning with one or both of the teachers to talk about strategies, manipulatives, classroom management issues, assessment, or to discuss what is going on in the classrooms. During successive months, she will meet with the teachers at least ten times a month for collaboration and discussion. Each quarter the students will be assessed and the success of the method implementation will be evaluated. Students' achievement and teacher's comfort and satisfaction with the new methods will determine whether the program is to continue the next quarter.

Section 7. Budget

Materials	Grant	In Kind
Supplemental materials from CPM for Geometry 35 Student Version @\$21+SH+1 Teacher Version@\$50	\$824.00	
Supplemental materials from CPM for Algebra 35 Student Version @\$19+SH+1 Teacher Version@\$40	\$745.25	
Algebra Tiles 35 sets@\$3.50/set+tax		\$128.63
Manipulatives and supplies for both classes (chart paper, scissors, rulers, graph paper, poster pens, string...) Approximately \$200 per class	\$400.00	
70 Binders/dividers for notes @\$2.50 ea+tax	\$183.75	
Consultant fees 100 days @ \$50 per day		\$5000.00
Workshop on Strategy Implementation which will be open to the math. dept.		\$2400.00
Administration costs 12%		\$1777.14
Sunburst Software-class set + tax <i>Green Glob</i> <i>Super Supposer</i>	\$626.29	
TI 82 Graphing Calculators 30@\$89.95+tax		\$2833.43
TOTAL	\$2,779.29	\$12,139.20

Section 8. Evaluation

At the end of the year the teachers will give a final examination to the pilot class that is the same final given by the teachers teaching the same topics without the CPM materials. Comparison of scores will determine if student achievement improved with the new methods. Records will be kept on the numbers of successes and failures in the regular and the pilot classes at each quarter. This data will be compared to see if the new materials are making an impact in the classroom.