Developmental And Readiness Education (DARE) Taskforce

Funding Proposal Form 2013-2014

DARE Mission: Developmental Education at De Anza College equitably allows students of every background to take ownership of their education and to succeed in their educational goals by providing the necessary integrated resources, services, and learning environment.

This form is designed to assist the DARE Taskforce in reviewing proposed projects and determining funding allocation based on the Basic Skills Initiative categorical fund objectives. Please provide complete and detailed responses to the questions below. Additional information may be required prior or after approval. Submit completed forms to Jennifer Myhre and Rowena Tomaneng at myhrejennifer@deanza.edu and tomanengrowena@fhda.edu and a copy to each of the following: 1) the secondary contact person for this proposal; 2) to your chair/program coordinator, and 3) your Dean. Please see the Funding link at the DARE website for complete information about funding procedures and review criteria: www.deanza.edu/dare/. The 2013-2014 funding deadlines are as follows:
- Deadline for proposals for Winter 2014 quarter projects: Friday November 15, 2013
- Deadline for proposals for Spring 2014 quarter and Summer projects: Friday January 17, 2014
- Deadline for proposals for Fall 2014 quarter projects: Friday May 9, 2014
- Deadline for proposals for Winter 2015 quarter projects: Friday October 24, 2014

Please note that if your proposal is funded, you will be asked to submit a report on your activities within two weeks of the expected completion date. The form for this report is available on the DARE website.

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<th>Name of Program or Department:</th>
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<tr>
<td>Name of Project:</td>
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<tr>
<td>Concept Videos for Algebra</td>
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<td>Submission Date:</td>
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<td>Expected Project Completion Date:</td>
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<tr>
<td>Primary Contact:</td>
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<tr>
<td>(name, e-mail and phone #)</td>
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<tr>
<td>Secondary Contact:</td>
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<td>(name, e-mail and phone #)</td>
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Basic Skills Initiative Funding Category: Circle one of the categories to the right

- A. Program, Curriculum Planning, and Development
- B. Student Assessment
- C. Advisement and Counseling Services
- D. Supplemental Instruction and Tutoring
- E. Course Articulation/curriculum alignment
- F. Instructional Materials and Equipment
- G1. Coordination
- G2. Research
- G3. Professional Development
1. Briefly describe the project/activity for which funds will be used and identify the targeted student population. Explain why you selected this student population and course levels if applicable.

In this project we will create 3 concept videos in our Algebra sequence. Our Algebra course outlines and SLO’s emphasize relevant real-world application. However, gaining the ability to understand and model real-life applications must start with an understanding of the concept of the Mathematical topic. For a number of reasons concept development is rarely occurring in the Algebra courses. Most Algebra courses and videos demonstrate procedures for solving various problems.

Learning Algebra requires more than a presentation of many procedures. Too often, Algebra students feel as if each problem requires a new procedure rather than the same approach learned earlier. More so, applications become formidable enemies once presented outside the section containing the correct procedure. By the end of a quarter, small variations of a problem-type can create severe math panic and anxiety since the small change looks like an entirely new problem! If instead, Algebra students were presented with the overall concept that naturally occurs in our real-world perhaps new variations of a problem would not invoke panic, but be recognized as a problem solved using the same concept approach. Many students struggle with word problems taken outside their sections because they do not know where to start.

2. If your project requires collaboration with other programs and/or departments on or off campus, please explain by identifying the programs and/or departments and describing the nature of your collaboration. Collaboration is highly encouraged.

We would begin collaborating immediately with the MPS program. That is, even if the videos are not yet perfected, instructors in this program will be informed that they can use the videos as soon as they are available. Secondly, these videos can be used by instructors teaching in the Algebra sequence to clarify the difference between concepts and skills. These videos will be made available to all Algebra students. Since many math concepts are needed in other non-math courses, such as business, economics and computer programming, we will inform other department chairs of their free, easy access.

3. What are the student learning outcomes and/or program level outcomes for your project? Is this a short-term project? If there is potential for long term, what are your plans for sustaining the project? Include your timeline for achieving these outcomes.

Program Outcomes:

One of the PLO’s is to demonstrate and apply a systematic and logical approach to modeling and solving mathematical problems. The concept videos should improve student’s ability to apply the correct approach and not mix up different procedures.

Another PLO, to use correct notation and mathematical precision in communicating mathematics, will be another enhanced result from creating these concept videos. It is difficult if not impossible to communicate mathematics unless the notion of the topic is first understood.
Student Learning Outcomes:

In all three of our Algebra courses starting with Pre-Algebra our SLO’s ask that students be able to apply knowledge, skills, correct formulas, procedures or various models to solve problems. These videos will improve student’s ability to

1. Apply what they have learned to word problems, not necessarily skills.

2. Observe how Mathematical concepts are all around us and how concepts can be applied to different real-world problems.

The three videos will be completed by the 2nd week of the Spring 2015 quarter. One video will be presented at a math meeting or to the Developmental Group so that anyone teaching Algebra in the Spring, Summer or Fall quarter is aware of the videos and can gain access. Other departments will be informed of the videos in the Fall 2015 quarter. The final report will be submitted to the DARE committee by the end of the Fall Quarter 2015.

If the videos improve student success we hope to invite other instructors to create similar videos. We will ask that instructors create the script while we support the effort.

4. How will you assess your student learning outcomes and/or program level outcomes? Explain your methods for evaluation, baseline, and data collection. Please specify what surveys or other quantitative data you will collect to measure these outcomes.

PLO’s: We will calculate

a) Percent of instructors who decided to show videos,

b) Instructors opinion whether the videos enhanced their lecture,

c) Instructors opinion on whether videos had any effect (positive/negative) on their students learning the given topics.

SLO’s We will send a short survey to students which will lead to

a) Percent of students who would like to see more of these videos,

b) Percent of students who felt their topic understanding improved,

c) Percent of students who felt their ability to apply the topic improved,

d) Percent who felt they were better able to appreciate how the mathematics we learn in the classroom is naturally present in our daily lives.
5. How will you document and disseminate your results to the DARE Taskforce, your department and your division? (In particular, DARE is looking for re-usable documents or resources that can be shared on campus, such as best practices lists, professional development materials, guides or handbooks, etc.)

   a) There will be a final summary report containing statistics from the PLO and SLO surveys and the interpretation of these statistics as they apply to student success in our Algebra courses,

   b) The DARE committee will receive access to these videos,

   c) An email will be sent to all department chairs explaining what these videos are, how they might be used in non-math courses and how to attain access,

   d) A presentation will either be given to the division or math department with instructions how to access these videos.

6. Provide a budget breakdown of costs of the project and include the following categories: Staffing Needs, Materials and Supplies, Events/Workshops, Speakers, etc. (Please note that food is not something that DARE can fund.)

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<tr>
<th>Description</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Staffing Needs: Desilets Writes the Script/Narrates/Edits</td>
<td>$1500.00 (3 Videos @ 500 Each)</td>
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<tr>
<td>Staffing Needs: Desilets Creates Surveys/Conducts Statistical Analysis/Writes the Summary Report</td>
<td>$400.00</td>
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<tr>
<td>Staffing Needs: Andrea B. Computer Animations/Linking Programs/Editing Videos</td>
<td>$600.00</td>
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<tr>
<td>Staffing Needs: Andrea B: Assist in Computer Survey/Disseminate Videos to Dept.</td>
<td>$100.00</td>
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SIGNATURES:

Approval from the Department Chair/ Program Coordinator and the Dean is requested prior to submission. Please provide the names of the authorizing individuals below as well as the date approval was granted.

LENORE DESILETS
Proposer
Signature
11/25/2014
Date

Roberta Bloom
Department Chair/ Program Coordinator
Signature
11/25/2014
Date

Jerry Rosenberg
Dean
Signature
11/25/14
Date