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Application Summary

Competition Details

Competition Title:	IRA Applications for 2021-2022								
Category:	Internal Funding								
Award Cycle:	2021-2022								
Submission Deadline:	11/12/2021 11:59 PM								

Application Information

Submitted By:	Brooke Ernest
Appplication ID:	886
Application Title:	Mathematics Education Speaker Series: Moving toward a more effective and more equitable practice
Date Submitted:	03/21/2021 9:59 PM

Personal Details

Applicant First Name:	Brooke
Applicant Last Name:	Ernest
Applicant Department:	Mathematics
Email Address:	jessica.ernest@csuci.edu
Phone Number:	(805) 377-4025
Additional Applicant Name:	
Additional Applicant Email:	
Additonal Applicant Department:	

Application Details

Proposal Title

Mathematics Education Speaker Series: Moving toward a more effective and more equitable practice

Total Amount Request from IRA

3,000

Brief Activity Description

Mathematics Education is a discipline focused on research related to all aspects and levels of learning mathematics. Two of those aspects are the better understanding of how mathematics learning occurs and informing educational practices to increase learning. As such, it is a discipline with tremendous potential for informing practices on our own campus, and in our community, to increase the effectiveness of mathematics teaching, the success of our students, and (critically) to train mathematics teachers to more effectively teach in our communities. In spite of its potential – and its critical lessons for academic work – Mathematics Education is frequently misunderstood (or ignored) as simply the distilled experience or folk wisdom of mathematicians who teach. Consequently, the rigorous research is implicitly dismissed as just another observation about how we can teach. That loss is immense, as without looking to mathematics research, traditional methods for teaching mathematics – methods that have been shown to be less effective and less equitable – continue to be pervasive.

Given the frequent misunderstanding about Mathematics Education, I would like to organize a series of presentations by notable academics in the field of Mathematics Education that will be aimed to better explain different areas in the discipline, and how it can inform our teaching and our views on what it means to understand mathematics. The series will target students, both undergraduate and graduate, in appropriate classes and will also target faculty who work with our students. Each presentation will be delivered in seminar format with ample interaction and will highlight an area of research in the discipline, helping students to better understand how rigorous research can guide teaching practices. While each presentation will focus on research, it will be geared to a broad audience, with the goal of initiating discussion about how such research can inform, and ultimately improve, teaching practices.

The presentations will take place across the academic year. I plan on inviting two presenters each semester, for a total of four presentations over the course of the year. Each presentation will be organized as a stand-alone event (allowing us to invite students from many different classes, focusing on students training to be mathematics teachers, but also Math majors and minors, and any other interested students). We will also focus on the events as a coherent series so that those students who are particularly interested in learning about the field will be able to attend all of them and engage in discussions (which I would hope to be "progressive" in nature, building on understandings across the year).

Presenters will be chosen from among my own networks in the discipline of Mathematics Education and will be collectively chosen to represent critical areas of research across the breadth of the discipline. The goal overall will be to give attendees a sense of the breadth of the discipline – in terms of research questions, research methods, findings, as well as potential applications. Given the uncertainties that are likely to continue next year associated with travel and in-person presentations, I am tentatively planning to have two of the presentations in-person, and two presented via Zoom. (In both cases, we will arrange for ample interaction, including question and answer and discussion.)

Given the plan to have two Mathematics Educators presenting in-person, and two to present via Zoom, I am requesting funding in different amounts. Specifically, I am requesting \$2000 for two in-person presentations (\$1000 each), and \$1000 for two Zoom presentations (\$500 each). In either case, the amount will be provided to the presenter as an honorarium with the expectation that they handle all travel and related expenses. The total request for the series is \$3000.

Activity or Event Date

09/1/2021

List all classes that relate to proposal

Series would be advertised to numerous Math and Education courses (Math 318, Math 492, Math 499, Math 565, Math 599, EDCI 610, EDCI 641, EDSS 531, EDSS 541)

Learning Outcomes & Relation to Course Offering

Students interested in teaching mathematics from several different programs - Mathematics (undergraduate and graduate), Single Subject Credential, Education - will be invited and encouraged to attend. As such, the presentations could serve as a central part of seminars in those programs, and a great enrichment opportunity for students engaged in training to teach mathematics. For each of those groups of students, the learning outcomes will be an exposure to the field of Mathematics Education and an understanding of how we can critically analyze teaching and learning processes to find ways to improve them. That exposure will show them there are many way to teach mathematics other than the traditional way, and will also alert them to a body of research that exists for them to find potential solutions to teaching challenges that they are facing in their training or subsequent careers.

Is this activity off campus?

No

Off Campus - Describe benefit brought back to campus

CSU Channel Islands IRA Proposed Budget

IRA Activity Budget (No Travel) - 2020-2021

Please layout in detail when various components of your plan will be completed in order to achieve key milestones. This information will be use to forecast the spending of IRA within the fiscal year. Total Requested \$\$ PS: all purchases/services need to be received and billed to CI before June 30th to account for the current **IRA Activity Title** Name of Sponsor fiscal year or special arragments will need to be made. Mathematics Education Speaker Series Brooke Ernest \$3,000 IRA Planning Budget Calendar 2020-2021 **Operating Expenses Budget** Comments/Notes July August September October November December January February March April May June Grand Total \$ Honoraria (Price set by CI) \$ Honoraria (Price set by CI) \$ 3,000.00 Speaker fees for multiple speakers/organizations; fees se by us. I hope to have 4 speakers (2 in person, 2 on Zoom Professional Svcs/ Speaker Fees (Price 500.00 1,000.00 500.00 \$ 1,000.00 \$ \$ set by vendor) \$ Special Consultants (existing CI employees) \$ Other Consultants /Other Professional \$ Services \$ Independent Contractor(s) \$ Printing Advertising (such as in a magazine or publication) \$ \$ Copier Chargeback Event Signage (wayfinding on day of \$ event) Event or Parking-related Staffing \$ Rentals or Leases ¢ Promotional Items (with logo) \$ Awards \$ Registration- Conferences & Meetings \$ Supplies & Services- Other \$ Supplies & Services- Other \$ Parking (please describe) \$ Other (specify) \$ Other (specify) . 500.00 \$ Total \$ - \$ - \$ - \$ 1,000.00 \$ - \$ - \$ 500.00 \$ - \$ 1,000.00 \$ - \$ - \$ 3,000.00

CSU Channel Islands IRA Proposed Budget

IRA Activity Budget (No Travel) - 2020-2021

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IRA Activity Title	Name of Sponsor	\$\$	<u>PS: a</u>	PS: all purchases/services need to be received and billed to CI before June 30th to account for the current fiscal year or special arragments will need to be made.										
Enter the title here	Enter your name here	total amount											*formulas will ca	culate totals
IRA Planning Budget Calendar 2020-2021														
Operating Expenses Budget	Comments/Notes	July	August	September	October	November	December	January	February	March	April	May	June	Grand Total
Honoraria (Price set by CI)														\$-
Honoraria (Price set by CI)														\$ -
Professional Svcs/ Speaker Fees (Price set by vendor)														\$ -
Special Consultants (existing CI employees)														\$-
Other Consultants /Other Professional Services														\$ -
Independent Contractor(s)														\$ -
Printing														\$ -
Advertising (such as in a magazine or publication)														\$ -
Copier Chargeback														\$-
Event Signage (wayfinding on day of event)														\$ -
Event or Parking-related Staffing														\$-
Rentals or Leases														\$ -
Promotional Items (with logo)														\$ -
Awards														\$ -
Registration- Conferences & Meetings														\$-
Supplies & Services- Other														\$ -
Supplies & Services- Other														\$ -
Parking (please describe)														\$ -
Other (specify)														\$ -
Other (specify)														\$ -
* you can add lines to your budget by inserting lines here														\$ -
Total		\$ -	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-