

# Collaborative Research: Resource of Open Problems for Education (ROPE)

## Budget Justification

Dana C. Ernst

### A. PERSONNEL

PI Ernst requests one month's summer salary and the associated fringe benefits each year for 3 years. We have assumed a salary increase of 3% per year. During the funding period, the PI will work intensively on the specific tasks listed in the project description and other related items.

Subtotal: \$23,169

### B. OTHER PERSONNEL

None.

Subtotal: \$0

### C. FRINGE BENEFITS

Fringe benefits were calculated using NAU formulas for benefit rates for FY 2013 (19.9%).

Subtotal: \$4,611

### D. EQUIPMENT

None.

Subtotal: \$0

### E. TRAVEL

Travel funds are requested to allow the PI to attend national mathematics meetings to disseminate information about ROPE to allow for face-to-face team meetings. Travel to the collaborative PIs' institutions is also anticipated for meetings with the Advisory Group and External Evaluator. In Years 2 and 3, funds are included to support undergraduate travel to the Joint Mathematical Meetings where they will have a demonstration of ROPE.

**Year 1:** The PI is requesting a total of \$5550.

- \$4300 for travel to both the Joint Mathematics Meetings and MathFest.
- \$625 for travel for meeting Advisory Group and other co-PIs.
- \$625 for travel for meeting with External Evaluator and other co-PIs.

**Year 2:** The PI is requesting a total of \$7550.

- \$4300 for travel to both the Joint Mathematics Meetings and MathFest.
- \$625 for travel for meeting Advisory Group and other co-PIs.
- \$625 for travel for meeting with External Evaluator and other co-PIs.
- \$2000 for travel for two undergraduate students to Joint Mathematics Meetings.

**Year 3:** The PI is requesting a total of \$6330.

- \$4300 for travel to both the Joint Mathematics Meetings and MathFest.
- \$2000 for travel for two undergraduate students to Joint Mathematics Meetings.

Subtotal: \$17,438

### F. PARTICIPANT SUPPORT COSTS

None.

Subtotal: \$0

**G. OTHER DIRECT COSTS**

None.

Subtotal: \$0
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**H. TOTAL DIRECT COSTS**

The total direct cost is the sum of summer salaries, fringe benefits, and travel for years 1–3.

Subtotal: \$45,218
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**I. INDIRECT COSTS**

Indirect costs are calculated based on Northern Arizona University's Colleges and Universities Rate Agreement, which stipulates an on-campus rate of 50% MTDC in year 1 and 52% in years 2 and 3, with exclusions for tuition, equipment, and subawards greater than \$25,000.

Subtotal: \$23,255
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**J. TOTAL DIRECT AND INDIRECT COSTS**

This is the sum of items H and I.

<b>Total: \$68,473</b>
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**M. COST SHARING**

None.

Subtotal: \$0
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