Grand Rapids Community College

Grants and Resource Development Department
Instructional Improvement and Professional Development (IIPD)
Grant Report Form

IIPD grant recipients must report on grant-funded activities in order to remain eligible for future IIPD grant program consideration. All grant recipients are required to submit a summary report of the completed project or activity to the Grants Department at the time that they submit their IIPD Reimbursement Form.

Name: Dr. Matthew M. Douglas
Job Title/Department: Department of Biology
Phone: 234-3893
Email Address: mdouglas@grcc.edu
Date IIPD Award was received: 2014 Summer (month/year) May

Purpose of Grant: To determine if the “eastern” and “western” populations of monarch butterflies are distinct.

1. Describe the new avenues of instruction, including changes in curriculum, teaching strategies or other changes that are resulting from your grant-funded activity.

   My grant-funded activities during the extensive camping trip throughout the Southwest, West, and northern tier states have helped me delineate the extent of overlap of the eastern and western monarch populations. Documentation and photographs and captured specimens will help me show students biological variation within a species over a geographic range. These accounts will allow me to change and update the “Monarch Laboratory” currently being used in Biology 154

2. How will the grant-funded activity result in an impact on student learning and enhancements to student success?

   The results of this study (including the yet-to-be-completed genetic study) will help my students understand geographic isolation and parapatric speciation. This information is obviously not in current textbooks, so it gives students the ability to observe that scientific research is an ongoing endeavor and that sometimes what we think we know we really don’t

3. What steps are you taking to assess the impact of this activity on student learning?

   I will incorporate the new material into the “Monarch Laboratory” and ask students to create a time line of what was “known and factual” at different points along the time line (they will see that the information changes considerably as research has continued over the last 40 years).

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4. How are you engaging others in the learning process and disseminating activity results with the wider campus community?

NOTE: If shared learning activities have not yet taken place, an addendum to this report must be filed with the Grants Department describing shared learning activities prior to applying for another IIPD grant, as required by IIPD Guidelines.

I will share this information at the Frederik Meijer Garden in the spring of 2015 and offer a GRCC-wide seminar for all interested in the Winter Semester.

5. Describe how the grant-funded activity is supporting the objectives of your department and your existing job responsibilities.

The objectives of our department are to promote the intellectual development of the faculty and enhance student retention. The research conducted this summer does just that and provides a greater understanding of the migration of the monarch butterfly.

6. How has this grant helped in fostering your professional development goals?

Every one of my IIPD-sponsored trips has helped me to greatly increase my knowledge of biodiversity on this planet and to understand the fragility of the biosphere within which we exist. This message is certainly not lost on my students, who understand through anecdotal stories and observations the significance of this statement, rather than reading about it through second-and third-hand sources in a textbook. There is no substitute for this kind of instruction.

7. Please add any other comments you would like to include in this report.

I would like to thank the IIPD committee for supporting my biodiversity research over the years and for allowing me to share these exciting experiences and observations with my zoology students.

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