

# THE DELTA INTERNSHIP PROGRAM: A GUIDEBOOK



This guidebook is for graduate students and post-docs intending to apply to the Delta Internship Program. It is also for their dissertation research advisors and for faculty and instructional staff who partner with Delta interns in their projects.



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This team reviewed many internship programs across the nation. The following programs were particularly useful in creating the Delta Internship Program and guidebook:

- Michigan State University's Certification in College Teaching Program
- The University of Wisconsin-Madison's Technical Communication Internship Program
- Duke University's Certificate in Teaching College Biology Program
- Indiana University's Future Faculty Teaching Fellowships Program
- University of Illinois at Urbana-Champaign's Advanced Graduate Teacher Certificate Program
- Virginia Commonwealth University's Preparing Future Faculty in the Professions Program
- UC Davis and San Francisco State University's Professors of the Future Program

Copies of this guidebook are available at the Delta website ( [www.delta.wisc.edu](http://www.delta.wisc.edu) ).

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## **Delta Internship Program Goals**

The Delta Internship Program gives Science, Technology, Engineering and Math (STEM) graduate students and post-doctoral researchers practical experience to develop their skills and interests in teaching and learning, as they work in partnership with a faculty or instructional staff member either on the UW-Madison campus, or in another institutional setting. The program has five goals:

1. Interns further develop their teaching and learning skills and interests by doing a teaching-as-research project.
2. Through their projects, participants gain practical experience applying the concepts of teaching-as-research, including an emphasis on learning-through-diversity and learning communities.
3. Doing a project results in improved intern [and partner] understanding of how to improve student learning through the use of teaching-as-research, including an emphasis on learning-through-diversity and learning communities.
4. Participants benefit from hearing about the diversity of projects and experiences of other interns.
5. Intern and partner(s) continue to both be involved in the Delta learning community and use teaching-as-research after the internship.

NOTE: For simplicity, faculty and instructional staff partners will be referred to throughout the rest of the guidebook as “partners.”

## Overview of the Delta Internship Program

Delta Internships provide an opportunity to improve learning through teaching-as-research. They are also a required component of the Delta Certificate in Research, Teaching and Learning. Internships occur in either a traditional academic setting or an informal educational setting. Internship experiences are available either on the UW-Madison campus or off campus, and encompass a range of activities including, but not limited to:

1. Adding an evaluation component to an existing course or laboratory;
2. Curriculum (re-)design and implementation;
3. Instructional material design and implementation; and
4. Developing the instructional potential of STEM research for the classroom or through an outreach project.

For example, past intern projects, as well as possible projects include:

1. Adding an evaluation component to an existing course or laboratory. A possible project might be to add real-time formative evaluation to an existing course to improve instruction. One could use an on-line assessment instrument (Student Assessment of Learning Gains or SALG; <http://www.wcer.wisc.edu/salgains/instructor/>) to do this.
2. Curriculum (re)design and implementation. An intern created a new curriculum for a summer engineering program that integrated chemistry, math, physics and technical communication into a single engineering design project. The effectiveness of this integrative approach for improving learning was evaluated.
3. Instructional material design and implementation. An intern worked at a local technical college to develop an on-line learning object to help students understand topics related to fuel cell technology. He then used this tool in the classroom at that institution and evaluated whether it improved student learning.
4. Develop the instructional potential of STEM research for the classroom or through an outreach project. An intern designed a museum exhibit to explain concepts in nanotechnology to the public. She also evaluated learning that resulted from interacting with the exhibit.

Graduate students and postdoctoral researchers can elect to participate in the program once they have completed the semester long teaching and learning course prerequisite. Although completion of the internship is a requirement of the Delta Certificate, intent to achieve the certificate is not a requirement for participation.

For more information about the Delta Certificate and its requirements, or to view information about current internship opportunities go to: [www.delta.wisc.edu](http://www.delta.wisc.edu).

## **Program requirements: Information for interns**

The Delta Internship Program provides you, the intern, with the opportunity to work in partnership with a faculty or instructional staff mentor who is interested in teaching and learning. As an intern, you will gain practical experience by implementing a teaching-as-research project in the classroom or another setting. You will also interact with your peers and hear about their unique experiences through a concurrent seminar. In addition to producing materials during your internship (e.g., an instructional material) you will have the opportunity to prepare materials for your teaching and learning portfolio.

The requirements for successful completion of the Delta Internship Program include:

1. Completion of the semester long teaching and learning course prerequisite
2. Application to and acceptance into the program
3. Preparation and acceptance of a teaching-as-research proposal, developed in cooperation with your partner
4. Addressing issues of Human Subjects approval
5. Participation in an internship with your faculty or instructional staff partner(s)
6. Participation in the Internship Program Seminar
7. Writing the Reflective Statement and a Final Summative Report
8. Evaluation of the internship

Each of these requirement areas is described in greater detail below. Please also review Appendix H – Expectations of and advice to interns, partners and dissertation research advisors.

## 1) Completion of the teaching and learning course prerequisite

Students are required to successfully complete a semester long teaching and learning course prior to their internship. Acceptable courses include, but are not limited to the following:

- A Delta teaching and learning course
- Other campus courses that focus on teaching and learning

The Delta program themes of teaching-as-research, learning-through-diversity and learning communities are an integral part of all Delta courses. Since it is expected that an intern will bring an understanding of these themes and how they apply to effective teaching and learning to their internship experience, an acceptable alternative campus course will need to address the same ideas.

Additional information about current Delta course offerings can be found on the Delta web site at: [www.delta.wisc.edu](http://www.delta.wisc.edu). Information about the Delta program themes can be found in Appendix I. Please contact the program staff at [internship@delta.wisc.edu](mailto:internship@delta.wisc.edu) to discuss whether a particular campus course meets the program requirements.

Students are encouraged to begin thinking about their internship while fulfilling the course prerequisite. For example, some past participants have explored an internship topic as a means of satisfying a project requirement in their Delta course. Following the Delta course they have continued working on the project with their partner as a Delta intern in a subsequent semester. If you are interested in this approach, then:

1. Discuss the idea with your Delta course instructor(s);
2. Go to the Delta web site to find out more about the project;
3. Get in touch with the contact person for the project; and
4. Contact the Delta Internship Program ([internship@delta.wisc.edu](mailto:internship@delta.wisc.edu)) with your questions.

## 2) Application to and acceptance into the program

To apply to the program, an intern will need to submit the following items:

- On-Line Application form (<http://delta.wisc.edu/application.aspx>)
- Curriculum vitae
- Form containing dissertation research advisor's signature in support of your participation (also available on-line at [http://delta.wisc.edu/programs/internship/internship\\_guide/intern\\_signature\\_form.pdf](http://delta.wisc.edu/programs/internship/internship_guide/intern_signature_form.pdf))

The next step is to identify a faculty or instructional staff partner and define a project.

**NOTE:** Partners and projects can be identified by interns, or prospective interns can be matched with partners and projects by the program.

### 3) Teaching-as-research proposal

As part of the application process, the intern should submit a brief proposal outlining the internship experience. Section I of the proposal should be jointly developed by the intern and partner; the entire proposal should be written by the intern. It should be no more than 5 single-spaced pages in length (12 pt font) and should include the following items:

#### SECTION I: PROJECT DESIGN

1. Provide a description of the classroom or informal science education-related issue/challenge you are addressing.
2. What is your Teaching-As-Research question?
3. What is known (in the literature) about this learning issue?
  - a. What have others tried? What has worked, and what hasn't?
4. Describe your planned approach
  - a. Identify your desired learning goals and outcomes. What will students/participants be able to know, value and do (knowledge, attitudes and skills) as a result of your intervention?
  - b. Evaluation. Describe how students/participants will demonstrate what they know, value and can do.
    - i. What assessment techniques/approaches will you use?
    - ii. Will the data that you plan to collect allow you to "answer" the Teaching-As-Research question(s) that you posed?
  - c. What instructional strategies, resources and learning experiences will you use to help students/participants reach your learning goals and outcomes?
5. Integrating the Delta pillars.
  - a. Provide examples of specific teaching & learning approaches & activities that you plan to use to develop and use learning communities to promote learning in your project.
  - b. Provide examples of specific teaching & learning approaches & activities that you plan to use to engage participant diversity to promote learning.
6. Project logistics:
  - a. What roles and responsibilities will both you and your partner have in the project?
  - b. Provide a proposed timeline for project activities

#### SECTION II - PERSONAL

1. What are your previous teaching experiences?
2. What are your current career aspirations?
3. What do you hope to gain from the internship experience that will advance you toward your career goal(s)?

#### SECTION III – CONCEPTUAL UNDERSTANDING

1. What is your understanding of each of the three terms below AND how would you use each concept to improve learning?
  - a. Teaching-as-Research
  - b. Learning-through-Diversity
  - c. Learning Communities

How have you developed your understanding of diversity? Please provide an example.

#### **4) Addressing issues of human subjects approval (Institutional Review Board)**

As a Delta Intern, you are **REQUIRED** to take the University's Human Subjects Protection tutorial. You can access the University's web site at <http://info.gradsch.wisc.edu/research/compliance/humansubjects/> for more information on this subject. There is a link to an on-line version of the tutorial at step #2. You need to take the tutorial sometime during the semester in which you are taking the internship seminar, UNLESS you intend to publish the results of your teaching-as-research project.

If you intend to publish the results of your teaching-as-research project, then you **MUST** complete the tutorial **BEFORE** the project begins. Delta Internship Program staff can serve as a Principal Investigator on your project to expedite the process.

Contact the program staff at [internship@delta.wisc.edu](mailto:internship@delta.wisc.edu) with any questions you have about your need to apply for IRB approval or exemption.

#### **5) Teaching-as-research continued: Working with a partner**

Students have the option of either identifying their own faculty/instructional staff partner and internship experience (pending approval of Internship Program staff) or of seeking assistance from the program. Listed below are basic criteria for Delta internship experiences:

- Students and partners collaborate to define a teaching and learning question, and then develop, implement and evaluate a solution to improve learning.
- The experience will be based on the three program themes: teaching-as-research; learning-through-diversity; and learning communities.
- Experiences can occur at UW-Madison, at other colleges and universities or in the community.

Experiences can encompass a range of activities including, but not limited to:

- Adding an evaluation component to an existing course or laboratory;
- Curriculum (re)design and implementation;
- Instructional material design and implementation;
- Developing the instructional potential of STEM research for the classroom or through an outreach project.

Projects can also occur in a number of settings including, but not limited to:

- R1 university
- Liberal arts college
- Technical college
- 2 & 4 year comprehensive
- Informal science education/outreach venue
- K-12

## 6) Participation in the Internship Program Seminar

For the Internship Program seminar, interns meet, ideally during the semester in which they are doing their projects. Participants reflect on their experiences, provide constructive feedback on each others activities and discuss relevant topics (e.g., How to assess student learning; evaluation of learning in outreach projects; communicating your findings to others, things you wish you knew about teaching..., etc.). The seminar also provides a forum to help participants reflect on translating their experiences into material for their teaching and learning portfolio.

## 7) Final Requirements for the Delta Internship

The Delta Internship Seminar is but one part of the Internship experience. Once you complete the seminar and your project you will still need to do four activities to officially complete the internship. It is our intent that you address the first three requirements either in advance of, or through the process of, completing your Delta Certificate defense. The activities include:

1. Submitting a final version of your **Power Point slides** that describe your project and findings. This should include data from your project, etc. You can satisfy this requirement by including the slides as an integral part of your Delta Certificate defense presentation.
2. Writing a final **Reflective Statement** that addresses the following question: "*How has your internship experience influenced your understanding of Teaching-As-Research, Learning through Diversity and Learning Communities?*"
3. Writing a **Final Summative Report** that is intended to summarize your experience in a useful format so that your partner can incorporate your innovations into her/his own future teaching, informal science education or outreach activities. Think of this report as a record of your teaching and learning activities that others can build upon, similar to a research paper in your discipline. You may make substitutions for this report, for example a paper about your experience that you plan to submit for publication.

**NOTE:** *Both the reflective statement and summative report should be incorporated directly into your Teaching & Learning portfolio as reflection and artifact.* The documents do not have to be turned in separate from the portfolio. See the Delta Portfolio Guidebook for more information on how to incorporate materials into your Delta Teaching and Learning Portfolio as an artifact with an accompanying reflection.

4. Filling out an end-of-Internship **on-line survey**. You will be given more information about this when you complete the other requirements.

Additional information about each of these requirements can be found below and in the Internship Program Guidebook or by contacting the program at [internship@delta.wisc.edu](mailto:internship@delta.wisc.edu).

NOTE: All of the requirements of the Internship Program must be completed in advance of, or as part of, the Delta Certificate review.

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### PowerPoint slides that convey your Internship Project

Slides should cover the following:

1. Statement of problem as well as question or hypothesis (plus photo of yourself; optional)

2. Approach (e.g. module, learning activity, technology)
3. Assessment & summary of project (TAR; your data)
4. Journey (Briefly describe what kind of experiences led you to the internship. What is your next step, professionally?)

As you participate in Delta, each program, course or activity provides you with an opportunity to reflect on your experiences and your thinking about teaching and learning. The slides that you create will provide a summary of your internship project that you can use to do the following:

- Incorporate into your Delta Certificate defense;
- Incorporate into a job talk or interview for a future position;
- Provide your internship partner with a summary to use to tell others about your work together;
- Provide your degree research advisor material to use in presentations or proposal writing to address things like broader impact requirements;
- Provide others in Delta with a representation of your work that they can in turn use to highlight work of individuals like yourself in the Program.
- Last, these slides could become figures in your Final Summative Report for the internship.

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### Writing the Reflective Statement

The Reflective Statement should address the following question: ***"How has your internship experience influenced your understanding of teaching-as-research, learning-through-diversity and learning communities?"*** The document should be 1 page in length, single-spaced with a paragraph about each of the three concepts, Teaching-As-Research, Learning through Diversity and Learning Communities.

You will find a number of guiding questions below that may be helpful to you as you write. You do not need to address these questions in your reflection. They are simply provided to help you focus your thinking about a particular topic.

**NOTE:** We encourage you to write this reflection to accompany your summative report, and to incorporate both into your teaching and learning portfolio.

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### Writing the Final Summative Report

This report is intended to summarize your experience in a useful format so that your partner can incorporate your innovations into her/his own future teaching, informal science education or outreach activities. Think of this report as a record of your teaching and learning activities that others can build upon, similar to a research paper in your discipline. You are encouraged to write the Summative Report in a way that is most useful to you. For example, if you plan to submit a paper about your experience for publication, write your Summative Report in that format. Or, if you intend to include a chapter in your thesis about your activities and research in science education, use that document as your Summative Report. The summative report should be incorporated directly into your Teaching & Learning portfolio as an artifact of your internship experience.

The Summative Report should be a minimum of five single-spaced pages in length, and not more than ten single-spaced pages. Also, for consistency across interns and projects, if you do not plan to submit a manuscript detailing your project for publication, a chapter for your thesis, etc., then this report needs to include the following:

- Project title
- Abstract
- Introduction, including:
  - The teaching issue or problem that you addressed
  - What was known about the issue/problem from the literature
  - Your Teaching-As-Research question
- Your approach
  - What were your desired learning goals and outcomes for participants? (What should your students be able to know, value and do (knowledge, attitudes and skills) as a result of your intervention?)
  - What instructional strategies, resources and learning experiences did you use to help students reach your learning goals and outcomes?
  - Describe the specific approaches & activities that you used to develop and use learning communities to promote learning.
  - Describe the specific approaches & activities that you used to engage participant diversity to promote learning.
- Evaluation
  - What were your key evaluation questions?
  - What assessment techniques/approaches did you use?
  - How did you analyze your data?
- Results
  - Describe the results of your project.
- Discussion, including:
  - Summarize the findings of your project.
  - Interpret your results relative to current findings in the literature.
  - Do your results “answer” the Teaching-As-Research question(s) that you posed?
    - Were your assessment approaches (e.g. pre-test or surveys) appropriate/effective?
  - Lessons learned, including—
    - What worked well?
    - What changes and revisions, if any, would you suggest for the next time around?
- Conclusions
- Literature that informed your project
- Appendices (may contain supporting materials (e.g., syllabus, activities, etc.)).

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### Guiding Questions for the Reflective Statement and Final Summative Report

These guiding questions may be helpful to you as you write either the Reflective Statement or Final Summative Report. You do not need to address these questions in either document. The questions are simply provided to help you focus your thinking about a particular topic.

Teaching-as-Research – implementation through the internship

Objective: Describe what you learned from applying the principles of teaching-as-research in your internship. For example:

- What problem or observation about teaching and learning did you address?
- What were your goals for student/participant learning?
- How did you assess whether your learning goals were met?
- What did you learn from your assessment of student/participant learning?
- Was the assessment tool you used appropriate/effective?
- What will you change about your materials, as a result of your evaluation?
- What will you change about how you approach teaching/informal science education/outreach as a result of your evaluation?

## Learning Community

Objective: Describe how a learning community has contributed to your experience. For example:

- What specific approaches did you employ to develop and use learning communities with your participants?
- What was it like to interact every other week in the seminar with a group of your peers who were also engaged in teaching-as-research?
  - Did working with this group contribute to your experience? Explain.
- What was the experience of working with a faculty partner like?

## Learning-through-Diversity

Objective: Describe your understanding of learning-through-diversity and how you addressed diversity in your internship. For example:

- What aspects of diversity did you see in your participants (students or otherwise)?
- What did you do to utilize existing diversity (in your participants) to enhance learning for all?
- What specific teaching and learning approaches and activities did you use to be an effective teacher for students with different backgrounds than your own?
- Did you identify any new diversity resources (campus and beyond) as a result of your experiences? What was useful about each?
- If you developed any materials, how do they allow learners to benefit from the diversity in your setting?

## **8) Observation and evaluation of the experience**

To improve the experience for interns and provide information that will improve the quality of the Internship Program, the internship will be evaluated in a number of ways. For instance, intern understanding will be evaluated in the context of the seminar. Interns will also be asked to complete a final program evaluation.

It is hoped that the partner will observe the intern and provide constructive feedback on the implementation of the project. Interns are also encouraged to ask a peer in the seminar and/or program staff to observe them (e.g., while implementing a new instructional material in the classroom, or doing an outreach presentation) and provide constructive feedback. Guidelines for peer observation can be found in Appendix F.

## **Contributions from the Internship to your Teaching and Learning Portfolio**

Your internship experience has the potential to provide multiple artifacts for your teaching and learning portfolio. Examples of artifacts include the following materials: those created during your internship (e.g., syllabus, lecture outline, exam questions, handouts, prototype description for an outreach project, evaluation instruments for both formal and informal science education projects, etc.); and those created by others who observed your teaching/outreach (e.g., observation by your partner and peers, student/participant evaluations, etc.). In a portfolio, artifacts are accompanied by reflections. An artifact is designed and included in your portfolio to catch the interest of the reader, so that they want to read the accompanying reflection.

You will need to be selective about what you include from your internship experience in your portfolio. For example, you could use the definitions of teaching-as-research, learning-through-diversity and learning communities from the Delta web page as an artifact, and the final Reflective Statement detailed above as an accompanying reflection. In the end, the artifact(s) you select will allow you to discuss your internship experience in more depth, as you lead someone through your teaching and learning portfolio.

For more information on the Delta Research, Teaching and Learning Portfolio go to: [www.delta.wisc.edu](http://www.delta.wisc.edu) and click on the "Online resources" link to download a copy of the Teaching and Learning Portfolio Guidebook.

## **Program requirements – information for partners**

Delta Internship Program staff are happy to meet with faculty and instructional staff interested in becoming a partner and mentor to a Delta intern. Examples of productive meetings include: 1) Working with the program to define a project that is relevant to your own teaching interests. The program will then help match an intern to the project. 2) Alternatively, the program will work with you and an intern to better define a project.

The Delta Internship Program provides you, the partner, with the opportunity to work one-on-one with a graduate student or post-doctoral researcher interested in teaching and learning. The internship experience is an opportunity for graduate students and post-docs to put into practice their developing skills in teaching and learning as they work on a real world teaching-as-research project with you. The experience may also be a chance for interns to observe first-hand what it is like to teach in another institutional setting.

Projects include three key ideas: teaching-as-research (e.g., How do you know that students are learning, and how do you design activities to get at this?), learning communities (e.g., How do you develop interactions, with functional roles, around achieving your learning objectives?), and learning-through-diversity (e.g., How do you understand and use student backgrounds to benefit the learning of all students?). More on these ideas can be found in Appendix I.

Interns provide a valuable resource to partners. In addition to being experts in their STEM field of study, interns will be enthusiastic colleagues with new ideas about teaching and learning. Working with an intern is an opportunity to build connections either with-in or to the University of Wisconsin-Madison and ultimately to make a difference in someone's life and influence the teaching professional development of future faculty.

The intern's requirements for successful completion of the Delta Internship Program include:

1. Completion of the semester long teaching and learning course prerequisite
2. Application to and acceptance into the program
3. Preparation and acceptance of a teaching-as-research proposal, developed in cooperation with you, the partner
4. Addressing issues of Human Subjects approval
5. Participation in an internship with you, the partner
6. Participation in the Internship Program Seminar
7. Writing the Reflective Statement and a Final Summative Report
8. Evaluation of the internship

Expectations for faculty or instructional staff partners with respect to each of these requirement areas, as applicable, are described in greater detail below. Please also review Appendix H – Expectations of and advice to interns, partners and dissertation research advisors for information that will be useful to you.

## **1) Completion of the teaching and learning course prerequisite**

Interns are required to successfully complete a semester long Delta course offering or its equivalent prior to beginning their internship. An intern will bring an understanding of the Delta program ideas including teaching-as-research, learning-through-diversity and building learning communities, to their internship experience.

Students are encouraged to begin thinking about their internship while fulfilling the course prerequisite. For example, some past participants have explored an internship topic as a means of satisfying a project requirement in their Delta course. Following the Delta course they have continued working on the project as a Delta intern in a subsequent semester.

Additional information about current Delta course offerings can be found on the Delta web site at: [www.delta.wisc.edu](http://www.delta.wisc.edu).

## **2) Application to and acceptance into the program**

Interns will identify you as a faculty or instructional staff partner in their application to the program. Note: Prospective interns can also be matched with partners and experiences by the Delta Program. If you are interested in working with an intern, contact the program at [internship@delta.wisc.edu](mailto:internship@delta.wisc.edu) to discuss project ideas.

## **3) Teaching-as-research proposal**

Part of the application process is submission of a teaching-as-research proposal by the intern. The first section of the proposal should be jointly developed by the intern and partner and written by the intern. This section includes topics related to project design. More information can be found in the intern section of this guidebook (beginning on pg. 5).

## **4) Addressing issues of human subjects approval (Institutional Review Board)**

Delta interns are REQUIRED to take the University's Human Subjects Protection tutorial. If you and the intern intend to publish the results of your teaching-as-research project, then YOU and the intern MUST complete the tutorial BEFORE the project begins.

You can access the University's web site at <http://info.gradsch.wisc.edu/research/compliance/humansubjects/> for more information on this subject. There is a link to an on-line version of the tutorial at step #2.

Contact the program staff at [internship@delta.wisc.edu](mailto:internship@delta.wisc.edu) with any questions you have about your need to apply for IRB approval or exemption.

## **5) Teaching-as-research continued: Working with an intern**

Listed below are basic criteria for Delta internship experiences:

- Students and partners collaborate to define a teaching and learning question, and then develop, implement and evaluate a solution to improve learning.
- The experience will be based on the three program themes: teaching-as-research; learning-through-diversity; and learning communities.
- Experiences can occur at UW-Madison, at other colleges and universities or in the community.

Experiences (see pg. 2 for examples) can encompass a range of activities including, but not limited to:

- Adding an evaluation component to an existing course or laboratory;
- Curriculum (re)design and implementation;
- Instructional material design and implementation;
- Developing the instructional potential of STEM research for the classroom or through an outreach project.

Projects can also occur in a number of settings including, but not limited to:

- R1 university
- Liberal arts college
- Technical college
- 2 & 4 year comprehensive
- Informal science education/outreach venue
- K-12

## **6) Participation in the Internship Program Seminar**

For the Internship Program seminar, interns meet to reflect on their experiences, provide constructive feedback on each others activities and discuss relevant topics (e.g., how to assess student learning; evaluation of learning in outreach projects; communicating your findings to others, things you wish you knew about teaching..., etc.).

Partners are encouraged to attend the seminar at least once during the time that they are working with an intern. Meeting is an opportunity for interns and partners to share ideas and learn from the experiences of others. There are a number of commonalities between projects that bear discussing. For instance, the utility of the product produced through the internship, wrapping up the internship by publishing, making connections within departments, etc.

## **7) Writing the Reflective Statement and a Final Summative Report**

To complete the program, interns will create a Reflective Statement and a Final Summative Report. The Reflective Statement is meant to address how the intern's thinking and practices have changed as a result of the experience. The Summative Report is intended to be something that you, as a faculty or instructional staff partner, can use the next time you use the products of the internship in your own teaching, informal science education or outreach activities. It can take the form of a manuscript or report, and will detail the experience, materials created, and suggestions for improving the use of the materials (see pp. 8-9 for more details).

## **8) Observation and evaluation of the experience**

To improve the experience for interns and partners, and to provide information that will improve the quality of the Internship Program, the internship will be evaluated in a number of ways. For instance, as a partner, you will be asked to complete a final program evaluation that might take the form of a short telephone conversation with program staff.

It is hoped that you will observe the intern and provide constructive feedback on the implementation of the project. Guidelines for peer observation can be found in Appendix F.

## **Program requirements – information for dissertation research advisors**

The Delta Internship Program provides your graduate student or postdoctoral researcher the opportunity to work one-on-one with a faculty or instructional staff partner and mentor on a teaching-as-research project. Projects include three key ideas: teaching-as-research (e.g., How do you know that students are learning, and how do you design activities to get at this?), learning communities (e.g., How do you develop interactions, with functional roles, around achieving your learning objectives?), and learning-through-diversity (e.g., How do you understand and use student backgrounds to benefit the learning of all students?). More on these key programmatic ideas can be found in Appendix I.

The internship experience is a chance for your graduate student or postdoctoral researcher to get practical experience teaching, where, for example, they have responsibility for curriculum design, implementation and evaluation. Depending upon the placement, interns may also get to observe first-hand what it is like to teach in another institutional setting. Their involvement is likely to lead to improved performance in the laboratory because they will sharpen their skills in - time management, communication, etc. In addition, the teaching-as-research approach, through its use of hypothesis generating, testing and evaluation, will reinforce these particular skills, and is consistent with progress toward the dissertation.

The intern's requirements for successful completion of the Delta Internship Program include:

1. Completion of the semester long teaching and learning course prerequisite
2. Application to and acceptance into the program
3. Preparation and acceptance of a teaching-as-research proposal, developed in cooperation with a partner
4. Addressing issues of Human Subjects approval
5. Participation in an internship with a faculty or instructional staff partner(s)
6. Participation in the Internship Program Seminar
7. Writing the Reflective Statement and a Final Summative Report
8. Evaluation of the internship

Each of these requirement areas is described in greater detail in the section on Program Requirements – information for interns (beginning on pg. 3). Your support of your student's participation in the Delta Internship Program is indicated by your signature on the intern's application form (see Appendix E). In addition, Appendix H details program expectations of, and advice to interns, partners and dissertation research advisors. We encourage you to read through it.

Please contact the Internship Program at [internship@delta.wisc.edu](mailto:internship@delta.wisc.edu) if you have any questions, comments or concerns regarding your student's involvement. Suggestions are always appreciated.

## **Appendix A: FAQs for interns**

### **1) Who can participate in the Delta Internship Program?**

Graduate students and post-doctoral researchers are welcome to participate upon completion of a semester long Delta course or its equivalent.

### **2) What will I be doing in my internship?**

Delta Internships provide an opportunity to improve learning through teaching-as-research. Internships can be created around a project started in a Delta course. The program has also developed a number of exciting opportunities. Internship projects can include, but are not limited to:

- Adding an evaluation component to an existing course or laboratory;
- Developing an informal science education or outreach project;
- Curriculum (re-)design and implementation; and
- Instructional material design and implementation.

Go to [www.delta.wisc.edu](http://www.delta.wisc.edu) and click on the "Internships" link to learn more about opportunities at UW-Madison and other local and regional institutions.

### **3) How much time will an internship take?**

Interns can expect to spend on average about 3-5 hrs per week during a semester. This will include meetings with a faculty or instructional staff partner and attendance at the program seminar.

### **4) Is this a paid experience?**

Funding for Delta internships varies among opportunities. Go to [www.delta.wisc.edu](http://www.delta.wisc.edu) and click on the "Internships" link for more information.

### **5) Why is the seminar required?**

The seminar is a place for interns to share their experiences and learn from one another. It is also a venue for reflection. Only through peer feedback and interaction in a community of practice, as occurs in the seminar, can interns fully develop their projects.

### **6) Do I have to register and take an internship for credit?**

The concurrent program seminar, which meets every other week, is a required component of the internship. Graduate students can register for the seminar as a one credit course. Post-doctoral researchers interested in an internship are welcome and should contact the Delta Internship Program for further information.

### **7) How is a Delta internship different from a TA position?**

Interns work in partnership with a faculty or instructional staff mentor on a teaching and learning issue in undergraduate education, informal science education and outreach, etc. The key idea is that the intern designs and implements a solution to this issue in the classroom or an outreach setting, and analyzes the learning that occurs as a result of the solution (teaching-as-research). Interns also attend a concurrent seminar and create materials for their teaching portfolio.

### **8) Can my upcoming TA experience count as a Delta internship?**

Absolutely, however, since a Delta internship requires that interns work in partnership with a faculty or instructional staff mentor to implement teaching-as-research, the intern will need to engage in the TA experience in this way. Also, a participant will be registered for the Internship Program seminar. The internship experience meets the requirements of the seminar course and will be in addition to the student's TA responsibilities.

## **Appendix B – FAQs for faculty and instructional staff**

### **1) What is the Delta Internship Program?**

The Delta Internship Program ( [www.delta.wisc.edu](http://www.delta.wisc.edu) ) is a project of the Center for the Integration of Research, Teaching, and Learning (CIRTL) at UW-Madison. The program supports graduate students and postdocs who are interested in getting practical teaching or informal science education and outreach experience. Key to the program is having interns work actively in partnership with a faculty or instructional staff member to advance their training as future faculty.

We want to develop internship opportunities with faculty and instructional staff like you!

### **2) Why should I become involved?**

- Working with an intern is a way to help you further define a problem in teaching and learning, implement a solution, and assess its effectiveness for improving learning;
- You have the opportunity to work one-on-one with a UW-Madison graduate student or post-doctoral researcher who is very interested in teaching and learning;
- Interns are experts in their Science, Technology, Engineering or Mathematics (STEM) field of study;
- Interns are enthusiastic colleagues with new ideas about teaching and learning in the classroom and/or outreach setting;
- Working with an intern is an opportunity to build connections within the University of Wisconsin-Madison, between departments and programs;
- This is an opportunity to make a difference in someone's life and influence future faculty development.

### **3) What does an internship experience look like?**

Generally, interns and partners collaborate to define the teaching and learning problem, devise and implement a solution and evaluate whether learning is improved because of their efforts. The experience is based on the program theme of Teaching-as-Research, which encompasses using the diversity of participants to enhance learning and using learning communities as a tool to improve learning. Internships typically take 1-2 semesters to complete.

Internships can include, but are not limited to:

- Adding an evaluation component to an existing course or laboratory;
- Curriculum (re)design and implementation;
- Instructional material design and implementation;
- Develop the instructional potential of STEM research for the classroom or through an outreach project.

### **4) What will be expected of me as a partner?**

As a partner, you will need to be:

- Actively engaged in defining the problem and creating a solution (through ideas, feedback, etc.);
- Interested in the intern's activities and willing to provide guidance as well as constructive criticism;
- Supportive, available and able to maintain regular meetings to discuss progress on the project and any difficulties encountered.

## **Appendix C: Internship Requirement Checklist**

### **1) Application materials (forms available on-line at [www.delta.wisc.edu](http://www.delta.wisc.edu)):**

materials	date completed
Application form	_____
Curriculum vitae	_____
Dissertation advisor's signature(s)	_____
Project proposal	_____
Human Subjects approval	_____

### **2) Internship experience:**

materials	date completed
Internship Seminar	_____
Final Reflection	_____
Summative Report	_____

### **3) Observation and evaluation:**

- Partner observation of activity (encouraged)
- Peer or program staff observation of activity (optional)
- Intern evaluation of program (on-line survey)

Please submit application and required forms electronically at  
[http://delta.wisc.edu/programs/internship/internship\\_guide/internship\\_forms.html](http://delta.wisc.edu/programs/internship/internship_guide/internship_forms.html)

## Appendix D: Additional Documentation

Please attach the necessary additional documentation (see below) with your on-line application:

	<i>Internship</i>	<i>Certificate</i>
<i>Curriculum vitae (CV)</i>	Yes	Yes
Project Proposal with timeline	<i>Proposed internship project and timeline for implementation</i>	<i>Proposed pathway and timeline through Delta activities</i>
Signatures/Letter of intent form(s)	<i>Form signed by degree research advisor and intern</i>	<i>Form signed by certificate applicant only</i>

*Please refer to the Internship Guidebook and/or Certificate Guidebook for additional program application forms, descriptions, and requirements. Guidebooks can be down-loaded by clicking on the Internship or Certificate Program links at [www.delta.wisc.edu](http://www.delta.wisc.edu)*

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FOR STAFF USE ONLY:

Date received: \_\_\_\_\_

Received by: \_\_\_\_\_

Notes:

## Appendix E: Signatures of intent form

This form can be printed out from the Delta web site: [www.delta.wisc.edu](http://www.delta.wisc.edu).

I have read and understand the requirements of the Delta internship program. I realize that this program will be pursued in addition to the continued pursuit of my regular graduate degree requirements.

\_\_\_\_\_  
Delta intern's signature

\_\_\_\_\_  
date

\_\_\_\_\_  
Print Intern Name Here

I have read and understand the requirements of the Delta internship program. I realize that this program will be pursued in addition to the continued pursuit of my student's regular graduate degree requirements and I support her/his involvement in the program.

\_\_\_\_\_  
Dissertation research advisor's signature

\_\_\_\_\_  
date

\_\_\_\_\_  
Print Advisor Name Here

### SUBMISSION PROCESS

You have three options for submitting this form:

**Mail to:**

Delta Program  
c/o 284 Russell Labs Mailroom  
1630 Linden Drive  
Madison, WI 53706

**Deliver to:**

Delta Program  
Science House  
1645 Linden Drive  
Madison, WI 53706

**Online:** Scan form into a PDF format and attach this PDF file, along with your other documents, to the on-line application form.

## Appendix F: Guidelines for peer review of internships

Adapted from the Peer Review of Teaching (PRoT) Menu of Options (MOO) site at the University of Wisconsin-Madison (<http://www.provost.wisc.edu/archives/ccae/MOO/index.html>).

There are several **general guidelines** that apply to all forms of **peer review of teaching**. First, any review is context-specific. Second, it is essential that the reviewer and the instructor being reviewed agree in advance about the focus of the review and the criteria to be used. Finally, It is important that the reviewer share or be informed about and open to the teaching approach taken by the instructor.

What is the **process**?

1. **Meet** with the colleague you are reviewing **prior to conducting the review**.
2. Understand the **purpose** of the review.
3. Understand the **aspect(s) of teaching** you are reviewing.
4. Select and become familiar with appropriate **peer review technique(s)** (e.g., observing teaching).
5. Understand in what way and to whom you should deliver **feedback**.

Additional detail about the **process**:

1. **Meet** with the colleague you are reviewing **prior to conducting the review**. During the pre-review meeting, you can discuss:
  - a. The purpose of the review and the aspect(s) of teaching you will be considering
  - b. Your colleague's teaching philosophy, course objectives, syllabus (means of meeting the course objectives), and assessment of student learning
  - c. The review technique, including in what form and to whom feedback will be given
  - d. Other questions/concerns
2. Understand the **purpose** of the review.
  - a. Is your colleague seeking to improve his/her teaching and student learning?
3. Understand the **aspect(s) of teaching** you are reviewing. Some examples follow:
  - a. Are you being asked to observe the instructor in the classroom with the students? If so, what aspect are you evaluating: lecture style/presentation, effective use of small group discussions/exercises to achieve course goals?
  - b. Are you being asked to review syllabus materials and assignments to ascertain whether the content is appropriate, current, and properly sequenced?
  - c. Are you be asked to evaluate the student response to the class by: 1) observing what the students are actually doing in the classroom and how they are interacting with the instructor and/or each other, 2) interviewing students, 3) ascertaining if students have achieved certain goals or have enjoyed their experience in the course as a result of the teaching, or 4) obtaining information from students in some other way?
  - d. Are you being asked to review instructional objectives and goals to ascertain if they are sensible and achievable, to observe how the instructor gives feedback to students, to review examinations, to examine the conceptual framework for a course, or to decide if the course material is integrated, representative, and intellectually rigorous?
  - e. Are you being asked to evaluate how the course fits in with the overall curriculum?

4. Select and become familiar with appropriate **peer review technique(s)**.
  - a. Observing teaching
    - i. Summary of the Technique: The observers and the instructor set up a pre-observation meeting to discuss the teaching goals and methods for achieving those goals. They also set the date/time/place for the observation and determine what kind of introduction the instructor will give the students. The observers then observe the teaching activity, having prepared a possible list of characteristics to look and listen for. After the visit, the observers share the summary of their experience in a meeting with the instructor to discuss their observations. This post-observation conference is a key part of the developmental potential of this technique.
  - b. PROMPTS, sample questions which might be asked during the post-observation conference:
    - i. How do you think the class went? What do you think worked very well in this class? How can you use what worked well in your next class?
    - ii. If you could teach the same class again, what would you do differently? What would you do the same way? What will you find funny about this class in two years? What will you remember about this class in two years?
    - iii. I noticed that you [describe strategy, i.e., called students by name, moved all around the classroom, lectured from your notes, did not answer students questions]. Why did you choose that strategy? Did the students respond as you had expected? Were you satisfied with the student response?
    - iv. What were your objectives in doing [describe strategy]? Did you feel that you were successful in meeting these objectives? Please explain.
    - v. Did you model the things you wanted to?
    - vi. You seemed [describe perceived attitude, i.e., negative, positive, distracted, enthusiastic} about [describe activity]. What was going through your mind?
    - vii. What do you think would happen if you [describe strategy]?
    - viii. Could you have asked something different besides, [quote question] to get the response you desired?
    - ix. What do you think your strengths are? How can we build on your strengths?
    - x. Why did you react [describe reaction]?
    - xi. What areas do you want to improve? How might you do that?
    - xii. What did you learn from teaching this class?
    - xiii. What made this class different from others you have taught?
    - xiv. How did you feel about your students during this class?
    - xv. When you said, [quote something said], I felt [describe your reaction].
    - xvi. Was this a typical class? How was it the same? How was it different?

5. Understand in what way and to whom you should deliver **feedback**.
  - a. Feedback may be delivered verbally or in written form (e.g., letter, standardized form). It is recommended that you begin with areas of strength before engaging in a discussion of areas that require improvement. Feedback should be as specific as possible.
  - b. Some **characteristics of effective reflective feedback** include:
    - i. Focuses on observed **behavior** rather than on the person.
    - ii. Refers to what an individual does rather than to what we think s/he is.
    - iii. Is **descriptive** rather than judgmental. Avoiding judgmental language reduces the need for an individual to respond defensively
    - iv. Is **specific** rather than general.
    - v. Is directed toward behavior which the receiver can **change**.
    - vi. Involves **sharing information** rather than giving advice, leaving the individual free to change in accordance with personal goals and needs.
    - vii. Considers the **amount of information** the receiver can use rather than the amount the observer would like to give. Overloading an individual with feedback reduces the likelihood that the information will be used effectively.

## **Appendix G: Internship opportunities**

For a listing of current opportunities, go to: [www.delta.wisc.edu](http://www.delta.wisc.edu) and click on the "Internships" link.

Or contact:

The Delta Internship Program  
The Science House  
1645 Linden Dr.

Phone: (608) 265-9969  
FAX: (608) 261-1494  
e-mail: [internship@delta.wisc.edu](mailto:internship@delta.wisc.edu)

## **Appendix H: Expectations of and advice to interns, partners and dissertation research advisors**

(adapted from MSU Certification in College Teaching Guidebook)

### **Intern Expectations:**

The partner will be:

- Supportive and available
- Actively engaged in defining the problem and creating a solution (through ideas, constructive feedback, etc.)
- Interested in the student's teaching and provide guidance
- Engaged and provide constructive criticism

### **Partner Expectations:**

The intern will:

- Be actively engaged in defining the problem and creating a solution (through ideas, constructive feedback, etc.)
- Maintain regular meetings to discuss progress on the project and any difficulties encountered
- Respect advice given
- Be independent, self-motivated and responsible in managing her/his teaching and research obligations

### **Dissertation Research Advisor Expectations:**

The intern will:

- Maintain regular meetings to discuss her/his research and internship progress, and any difficulties that may arise
- Be independent, self-motivated and responsible in managing her/his research and teaching obligations

### **Tips for partners:**

- Think broadly about what you have to offer interns
- How can you help the student develop her/his teaching skills? As a professional and future faculty member?
- Treat interns as colleagues
- Encourage interns to ask questions and provide feedback about your teaching
- Set up regular meetings
- Discuss different topics in teaching and learning
- Work toward open communication between you and the intern
- Discuss expectations and responsibilities (this includes the amount of time you have available and the amount of guidance you can offer the intern)
- Discuss the amount of time interns are expected to devote to their experience
- Be actively engaged in defining the problem and creating a solution. Offer: ideas; constructive criticism and praise with specific suggestions for improvement; mention what support will be available (access to computers, copiers, etc.); review campus/department policies and resources available for students; review standards for professional behavior; inform interns about campus resources for teaching and learning

**Tips for interns:**

- Be actively engaged in the project
- Bring things you learn in Delta courses and other places into your teaching
- Try new things, experiment
- Ask questions of the partner: about his/her teaching experiences; experience as a faculty member; teaching techniques
- Actively observe your partner's teaching: What is he/she doing? How are students responding?
- Keep a reflective journal: Make note of what you try in your teaching. What works and what doesn't work?

## **Appendix I: Core principles of the Delta Program**

### **Teaching-as-research**

Teaching-as-research involves the deliberate, systematic, and reflective use of research methods to develop and implement teaching practices that advance the learning experiences and learning outcomes of students/participants and teachers/facilitators.

Participants (those graduate students, post-docs, and faculty who take part in the suite of Delta activities) will learn to apply a research approach to their teaching practice.

Conceptual steps in the teaching-as-research process are:

1. Learning foundational knowledge (What is known about the teaching practice?)
2. Creating goals for better student/participant learning (What do we want our students/participants to learn?)
3. Defining measures of success (What evidence will we need in order to determine whether students/participants have achieved learning goals?)
4. Developing and implementing teaching practices (What will we do [in and out of the classroom] to enable students/participants to achieve learning goals?)
5. Collecting and analyzing "data" (How will we collect and analyze information to determine what students/participants have learned?)
6. Reflecting, evaluating, and iterating (How will we use what we have learned to improve our teaching?)

Throughout our teaching practice, we use the following points as touchstones to remind us why the concept of teaching-as-research is valuable:

- The application of teaching-as-research is meant to lead participants to an on-going process of discovery and change.
- The application of teaching-as-research is meant to create inclusive learning environments that are effective for diverse audiences.
- The application of teaching-as-research will take place within a learning community-- a collaborative environment that promotes shared learning and active participation, modeled after approaches to research.

## Learning Communities

Learning Communities bring people together for shared learning, discovery, and the generation of knowledge. Within a learning community, all participants take responsibility for achieving the learning goals. Importantly, learning communities are the process by which individuals come together to achieve learning goals. These learning goals can be specific to individual courses and activities, or can be those that guide an entire teaching and learning enterprise.

The following four core ideas define the learning community process:

- **Shared discovery and learning.** Collaborative learning activities where participants share responsibility for the learning that takes place help develop a learning community. Rather than relying on traditional “expert centered” lecture formats, instructors should include collaborative learning techniques so learners can see their contribution to the learning goals.
- **Functional connections among learners.** Learning communities develop when the interactions among learners are meaningful: when they are functional and necessary for the accomplishment of the “work” within the courses or learning activities (rather than serving as “window dressing” or simply as a “feel good” activities). Moreover, meaningful connections must extend throughout the learning community—among students, postdocs, faculty, and staff—rather than simply among cohort- or role-related peers.
- **Connections to other related learning and life experiences.** Learning communities flourish when implicit and explicit connections are made to experiences and activities beyond the course or program in which one participates at any given moment. These connections help situate one’s learning in a larger context by solidifying one’s place in the broader campus community of learners. These connections decrease one’s sense of curricular and personal isolation.
- **Inclusive learning environment.** Learning communities succeed when the diverse backgrounds and experiences of learners are welcomed in such a way that they help inform the group’s collective learning. Whenever possible, activities should be sought that help participants reach out and connect with others from backgrounds different from their own.

## Learning-through-diversity

The literacy and engagement of all students in STEM is a priority goal for U.S. higher education. Delta seeks to contribute to this goal by enabling present and future STEM faculty to enhance the learning of all students whom they teach irrespective of, but not limited to, preferred learning styles, race, ethnicity and culture, gender, sexual orientation, disabilities, religion, age or sociodemographic backgrounds.

Delta's contributions to diversity in STEM are founded on the principle that excellence and diversity are necessarily intertwined. Faculty and students bring an array of experiences, backgrounds, and skills to the teaching and learning process. Effective teaching capitalizes on these rich resources to the benefit of all, which we call "Learning-Through-Diversity".

At the same time, Delta recognizes the reality that existing social and educational practices do not always promote equal success for all learners. Thus, creating equitable learning experiences and environments requires intentional and deliberate efforts on the part of present and future faculty. Delta is committed to developing a national STEM faculty who model and promote the equitable and respectful teaching and learning environments necessary for the success of Learning-through-Diversity.

To achieve these goals, Delta provides development experiences, programs and resources that promote the abilities of present and future faculty to:

- Know the diverse backgrounds of their students and their implications for learning.
- Identify curricular, teaching and assessment practices that promote learning for all.
- Draw upon the diversity of their students to enhance and enrich the learning of all.
- Recognize existing inequities, and promote an equitable, inclusive and respectful climate for learning.

These aims require specific attention of the instructor to:

- **Instructor-student interactions.** Such as inclusion and engagement of the ideas of all students; respectful teaching behaviors; accessibility for all students; mentoring of teaching assistants.
- **Student-student interactions.** Such as respect for the ideas of all and recognition of their value; welcoming and respectful inclusion in collaborative work; accessibility outside the learning environment.
- **Student-content interactions.** Such as how students experience content; how content can be varied; and how exploring of novel contexts for presentation can enrich the experience of students and instructors alike.

## **Appendix J: Delta graduate course offerings**

Graduate courses are an integral component of the Delta experience. Class projects make use of the resources and programs throughout Delta. Additionally, graduate students can fulfill requirements for a Delta Research, Teaching and Learning Certificate or distributed minor through their participation in Delta graduate courses.

### **Past Delta courses have included:**

#### **Teaching Science and Engineering: The College Classroom**

Learn the basics of effective teaching as well as forefront ideas in college education. Develop a teaching philosophy, design a course curriculum, and investigate what your students have learned.

#### **Diversity in the College Classroom**

Learn how to teach effectively to diverse student audiences. Consider the complex issues of diversity and how to address them effectively in your courses.

#### **Instructional Materials Development**

Work in partnership with faculty/staff to design and implement high quality instructional materials.

#### **Informal Science Education for Scientists: A Practicum**

Communicate your work to a wide array of audiences by examining informal communication strategies.

#### **Effective Teaching with Technology**

Incorporate technological tools into your teaching practices. Develop and evaluate technology-based instructional materials.

#### **Teaching Science and Engineering: International Students, International Teachers**

Discuss international perspectives on teaching and learning.

Information about current Delta course offerings can be found on the Delta web site at [www.delta.wisc.edu](http://www.delta.wisc.edu).

## **Appendix K: UW policies affecting interns and partners**

(source: Technical Communication Internship Handbook, University of Wisconsin-Madison)

### **Insurance**

Health and accident: Students are responsible for their own insurance.

Liability and malpractice protection: Protection is extended to include interns under s.8956.46(1) of the Wisconsin Statutes. You may call the Office of Risk Management (262-0379 or 262-8925) for more information.

Unemployment compensation: Interns are not covered.

Worker's compensation: Regular guidelines of the Act cover employed interns. Rulings have generally stated that the concept of "training in lieu of pay" covers unpaid interns.

### **Compensation**

Any financial arrangements will be between the intern and the cooperating institution or organization.

### **Discrimination and sexual harassment**

In accordance with applicable federal and state law and with University policy, UW-Madison does not discriminate on the basis of age, race, color, religion, sex, national origin or ancestry, sexual orientation, arrest or conviction record, marital status, handicap, political affiliation or veteran's status with regard to treatment of employees and students in educational programs or activities which it operates. Harassment of interns by supervisors or co-workers on the basis of any protected status is prohibited by the University. It is our policy to prevent and eliminate forms of unlawful harassment in employment and educational settings.

Institutions and organizations participating in the internship program are reminded of our policy of compliance with affirmative action and equal employment opportunity regulations. Inquiries concerning this policy may be directed to the appropriate campus admitting or employing unit or to the Office of Affirmative Action and Compliance, 175 Bascom Hall.

For further information about any of the above information, please contact the Internship Program at [internship@delta.wisc.edu](mailto:internship@delta.wisc.edu).

## **Appendix L: Resources, campus and beyond**

### **The National Institute for Science Education**

<http://www.wcer.wisc.edu/nise/>

The National Institute for Science Education was created and funded by the National Science Foundation for five years from 1996-2001. The NISE Web site contains information on all NISE projects and includes copies of publications, contacts, and links to related Web sites.

### **Student Assessment of Learning Gains**

<http://www.wcer.wisc.edu/salgains/instructor/>

This free site is designed for instructors of all disciplines who would like feedback from their students about how the course elements are helping their students to learn. The evaluation tool is provided in an on-line format and is offered as a service to the college-level teaching community.

### **The Writing Center at The University of Wisconsin-Madison**

<http://www.wisc.edu/writing/>

In addition to providing one-on-one help, the Center provides a number of topics about integrating writing into your course: 1) Designing an Effective Syllabus; 2) Assessing Your Course; 3) Conferencing with Your Students; 4) Designing Effective Assignments; 5) Responding, Evaluating, Grading; 6) Student Peer Review; 7) Teaching Oral Communication Skills; 8) Teaching Students to Organize Their Papers; 9) Teaching Students To Revise; and 10) Teaching the Conventions of Your Field.

### **Center for the Integration of Research, Teaching, and Learning (CIRTL)**

<http://cirtl.wceruw.org/>

CIRTL promotes the development of a national faculty in science, technology, engineering, and mathematics (STEM) committed to implementing and advancing effective teaching practices for diverse student audiences as part of their professional careers. CIRTL is designing, implementing, and evaluating programs for STEM future faculty development. CIRTL is also creating a network of research universities that will extend the development and implementation of such programs. Delta is a project of CIRTL on the University of Wisconsin-Madison campus.

### **CIRTL Diversity Institute**

<http://cirtl.wceruw.org/DiversityInstitute/>

Creating inclusive classrooms for women, underrepresented minority students, international students, and students with disabilities is a process of both self-reflection and communication. The CIRTL Diversity Institute offers a number of resources developed for STEM faculty and instructors, including: Self-Guided Workshops, a Literature Review, a Case Book, and Resource Book. Resources are available on-line.

Please contact the program at [internship@delta.wisc.edu](mailto:internship@delta.wisc.edu) with suggestions of other resources you would like to see represented in future editions of this guidebook.

## **Appendix M: Delta Internship Program contact information**

[www.delta.wisc.edu](http://www.delta.wisc.edu)

Delta Internship Program

Phone: (608) 265-9969

FAX: (608) 261-1494

e-mail: [internship@delta.wisc.edu](mailto:internship@delta.wisc.edu)

Campus location:

The Science House

1645 Linden Dr.

Mail to:

1630 Linden Dr.

284 Russell Labs Mailroom

Madison, WI 53706

