

# DELTA TEACHING AND LEARNING PORTFOLIO GUIDEBOOK

A teaching and learning portfolio serves in partial fulfillment of the requirements for a Delta Certificate in Research, Teaching, and Learning

*Thoughtfully  
Presenting  
Yourself for a  
Successful  
Faculty Career*



The Delta Program is a project of the Center of the Integration of Research, Teaching, and Learning (CIRTL). CIRTL is an NSF-sponsored initiative committed to developing and supporting a learning community of STEM faculty, post-docs, graduate students, and staff who are dedicated to implementing and advancing effective teaching practices for diverse student audiences. For more information, please call us at 261-1180 or visit <http://www.delta.wisc.edu>.

Written by Mary Jae Paul for the Delta Program in Research, Teaching, and Learning, Copies of this guidebook are available on the Delta website (<http://www.delta.wisc.edu/>).

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## What is a Teaching Portfolio?

Your teaching portfolio is a means to document, reflect upon, and improve your teaching and your students' learning. You can use it to examine what you have learned through both personal experience and professional development activities, and thereby to develop and analyze more effective approaches to your teaching.

Your teaching portfolio will also be among your most valuable resources for demonstrating your teaching abilities and accomplishments to other people (potential employers, for example). Materials from your portfolio will allow others to see beneath the surface of your teaching practice and understand the thinking and decision-making that directs your practice. The process of developing your portfolio will help you to develop and articulate your core values of teaching and learning and support the practice of these values with evidence. Presentation of your portfolio will allow you to practice discussing your teaching in a thoughtful and convincing manner. Ultimately your portfolio establishes your commitment to your personal development in teaching and to enhanced student learning.

Effective teaching portfolios include two basic components:

1. Written reflective statements, such as thoughts about student learning, teacher practice, teaching-as-research, diversity, and learning community<sup>1</sup>
2. Evidence of practice such as lesson plans, data about student learning, instructional materials, and other documents that support the ideas in your reflective statements

A typical teaching portfolio might include:

1. A Teaching and Learning Philosophy
2. Statement of teaching responsibilities/experiences
3. Outline of learning goals or objectives for a given course
4. Reflective Statements about teaching and student learning
5. Discussion of the relationship between goals, teaching strategies, assessments, and more broadly your philosophy of teaching and learning
6. Evidence: Documentation and analysis of student learning outcomes

For Delta Certificate Candidates, because the certificate is the capstone of your experience with the Delta Program, it is important to reflect on the experiences that led to the Delta Certificate as a part of the Teaching and Learning portfolio. In order to maintain fidelity with our parent organization, CIRTl, Delta aligns that reflection with the CIRTl learning outcomes. For those writing a Teaching and Learning portfolio as a capstone to completing the Delta Certificate program, you are required to include a completed CIRTl Learning Outcomes Matrix in your portfolio. See Appendix D for a copy of the CIRTl Learning Outcomes Matrix.

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<sup>1</sup> Please see appendix A for more information

## Why Make a Portfolio?

There are several reasons to take the time to create a portfolio. These include:

- Documenting teaching accomplishments
- Reflecting on and taking ownership of your development in teaching and learning
- Tracking how you integrate what you learn in professional development activities into your teaching practice and decision-making
- Demonstrating your successes and challenges in promoting learning by all students
- Presenting your contributions to improved student learning through teaching-as-research
- Recording the meaningful change you make in your teaching and resulting changes in student learning

## Purpose of the Portfolio

Do you wish to use your portfolio as a *formative* (ongoing) measurement of development (as a record of experiments, analysis, and improvement strategies) or as a *summative* (one-time) measurement of merit or achievement (as when portfolios are used by others to evaluate performance), or both? You might consider developing a larger, formative portfolio for your personal teaching development, then using that to prepare a more discriminating, concise portfolio for search or review committees highlighting your teaching growth and accomplishments.

Related to this, it is important to keep your target audience in mind while creating or editing your portfolio. Portfolios should be developed with their specific *audience* in mind. Various portfolio audiences might include:

1. You
2. Mentors
3. Potential employers/search committees
4. Review/tenure committees
5. Colleagues with whom you may be discussing your development as a teacher

## Sections of the Teaching and Learning Portfolio

### I. The Philosophy of Teaching and Learning

The teaching and learning philosophy is an essential part of the teaching portfolio, and will serve as the common thread connecting all other components. Even though it's called a Teaching and Learning *Philosophy*, this one opportunity to include evidence to back up your ideas. Throughout your philosophy, it is imperative that you give specific examples that support your statements. Show the reader(s) that your actions in teaching have followed the philosophy that you put forth. It's important to note that for many job applications, only the teaching philosophy is requested. The philosophy needs to be stand-alone at the same time that it gives the reader a sense of what they might see in your portfolio if they requested it. There are several things you may want your teaching philosophy statement to demonstrate, depending upon the audience for whom your portfolio is intended:

#### Clarify what good teaching is:

- What is the function of teaching? What should the objectives of teaching be?
- Which student learning goals are fundamental to good teaching?
- What T&L theories and literature inform your beliefs about good teaching?
- What personal goals do you have for teaching development?
- What is your view of learners, including their roles and expectations?
- What goals and expectations do you have for the student-teacher relationship?

#### Provide your rationale for teaching approaches:

- Why do you conduct classes the way you do?
- What are various ways that you teach in the specific content areas?
- How do you take into account teaching to diverse audiences?
- How do you try to establish a particular kind of classroom climate?

#### Organize evaluation of your teaching:

- What are the products of good teaching?
- How do you evaluate your teaching and student learning and why (include summative and formative examples)?
- How have you recorded and track changes in teaching over time?
- How have you reflected on past teaching evaluations and incorporated feedback going forward?

#### Connect your teaching to the bigger picture:

- What is the function of higher education in our society? To train? To educate?
- What is the importance of my particular discipline? How is it significant to my students' futures?

## II. Reflective Statements

*Reflection* containing analysis and insight that fuel your process of discovery and teaching improvement is what distinguishes your portfolio from a pedagogical scrapbook. Information about this process, in the form of reflective statements, is the core of your portfolio. Often they tend to include one or more of these features:

- Self-evaluation with respect to a teaching and learning experience;
- The relation of teaching practice to student learning;
- Connections between ideas and practice; and
- Ideas for future changes in practice.

Here are several examples of topics for reflective statements:

- How do you work with students who are academically struggling?
- Describe a successful teaching experiment. How do you know it was a success? Why did it work?
- Describe a teaching flop. How do you know it failed? Why did it not work?
- What do your syllabi say about your teaching style?
- How do you teach about a topic like the carbon cycle when students don't know what carbon is?
- How has your teaching changed in the last five years? Are these changes for the better? How can you tell?
- How do you know your students are learning?

A possible organizational structure for reflective statements includes three components: (1) context description, (2) analysis and reflection, and (3) conclusions and planning. For a given topic (e.g., a significant teaching experience), describe your teaching and learning goals, activities, and/or outcome evidence, thus providing the basis for reflection. Then break apart the evidence in order to search for successes, failures, and insights for improvement. Conclusions and Planning involve discussion of your findings, including how they impact both you and your students, and their implications for your future teaching. In more detail:

### Description

This section covers basic questions such as who, what, when, where, and how in order to clearly describe the teaching and learning context from which reflections and evidence are drawn. For example:

"[Course name] is an introductory course comprised of approximately 400 undergraduate students, primarily freshmen and sophomores. Students also attend optional lab sessions of 18-20 students supervised by a teaching assistant. A grade of B or higher in this course is required for any student wishing to declare a major in the department. My goals for students in the course are [Content mastery? Critical thinking? etc.], which we seek to accomplish through [active learning activities? Group

work? Lecture]. We assess whether or not students have achieved these goals through [Multiple choice exams? Essay tests? Etc.]”

### **Analysis**

You should next analyze the evidence that will be the basis for your conclusions and future teaching plans. You should identify both positive and negative findings from your data; reporting both successes and failures is essential if your portfolio is intended to serve as a teaching improvement tool. Equally important is accurate assessment of the quality and significance of the evidence.

### **Conclusions and Planning**

This step involves a reflective synthesis of your findings, including how they impact on both you and your students. Reflective pieces about artifacts selected for the portfolio (more on this below) requires a justification for why a certain artifact provides evidence of a claim you have made about student learning, a personal value you bring to the classroom, or a specific teaching accomplishment. Equally important are the implications of your findings or achievements for your future teaching practice and the next step in your process.

## **III. Artifacts as Evidence**

As you develop your reflective statements, you need to select those documents, materials, and data that best represent your teaching responsibilities, support your instructional approaches, and demonstrate your effectiveness in terms of student learning. These documents, materials, and data are called *artifacts*. These items should correspond with your reflective statements about personal teaching philosophy, methods, strategies, and objectives. It is important to note that your portfolio is not expected to contain all of these items. Rather, you are expected to choose thoughtfully those items that most aptly provide an accurate representation of your teaching philosophies and abilities.

There are primarily three sources of documentation that can provide evidence for teaching portfolios. They are listed in Appendix B and include:

- 1) Products of good teaching;
- 2) Instructional materials developed and used;
- 3) Materials developed by the individual, including descriptive material on current and recent teaching responsibilities and practices and descriptions of steps taken to evaluate and improve teaching; and
- 4) Material or assessments from others.

There are two approaches to evidence selection. Many recommend a “mastery approach”: start by identifying your basic teaching and learning values and reflecting on your teaching practices, then select evidence that best represents these values, skills, and accomplishments. However, you may also use an “inquiry approach”, in which you examine the artifacts from your teaching first, then extract the basic values and philosophies you believe emerge from those artifacts.

Student achievement of your learning goals is the ultimate basis for the validity and reliability of your portfolio. Whenever possible, select and connect your evidence directly to student learning. In addition, all evidence used in your teaching portfolio should support one or more of your reflective statements.

Among the things you might want to collect are:<sup>1</sup>

**Evidence of student learning:**

- Copies of student work: Be sure to ask permission first, and present the work anonymously (quizzes, exams, assignments, surveys)
- Syntheses of learning outcomes data from your assessment tools, perhaps annotated with relevance and implications
- Notes on what you did when you see significant improvement in a student's work

**Documentation of your professional development:**

- Notes/records of what you do to improve your teaching, like attending workshops, asking peers to observe and consult about your teaching, working on course development, requesting students' comments during the semester
- Written observations from peer observers, with the names and positions of all peer observers, the course(s) observed, and dates
- Disciplinary conferences on teaching and learning that you attend, what you learned, and how you applied it

**Student evaluations<sup>2</sup>:**

- Copies of your student evaluation with summaries of the main findings, student comments that relate to teaching strategies or methods you will discuss, and the course numbers and titles, the number of students enrolled and number responding, core questions and answers, and a summary or average of numerical ratings

All of these artifacts should be connected to a reflective statement (with a whole reflective statement, or part of one). See Appendix B for more examples.

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<sup>1</sup> Taken from the University of Virginia Teaching Resource Center web site, <http://trc.virginia.edu/tc/2003/PortfolioWorkshop.htm>

<sup>2</sup> Student evaluations have a checkered history in terms of their reflection on the effectiveness of teaching. We encourage you to consider use of the Student Assessment of Learning Gains tool at <http://www.wcer.wisc.edu/salgains/instructor/>, including the writings by Elaine Seymour presented there.

## Demonstrating Your Skill Development

A goal of a teaching portfolio is to advance and demonstrate your teaching skills. The skills of a successful teacher are many and complex, but here for simplicity we organize them in three domains: intellectual, motivational, and interpersonal. These skills can be demonstrated in many ways and in many different parts of your portfolio. You can select from these skills or identify some of your own when deciding on which skills you want to focus in your portfolio:

### Intellectual Skills

- *Teaching approaches*: How have you identified your learning goals? How do you integrate a variety of well-organized teaching strategies to achieve those goals? How do you assess student needs and flexibly respond to those needs? How do you intend for your strategies to promote learning for all students?
- *Innovation*: Do you try to find new information on teaching approaches and try them? Do you integrate new ideas in a planned, deliberate way? Do you willingly take risks to find successful innovations? How do your innovations promote student learning, and for which students?
- *Experimental Design*: Do you perform meaningful and significant measures of student learning? Can you identify the impact of your teaching strategies and innovations? Can you distinguish their impact on individuals with different learning styles, different interests and different motivations?
- *Knowledge*: Do you stay current in your field and share new knowledge with students in your classes? How do you make new knowledge seem more interesting and relevant to your students?

### Motivational Skills

- *Commitment to teaching*: Do you make yourself available to your students? Do you establish an effective learning community for you and your students? How does this influence your students' learning?
- *Goals orientation*: Do you explicitly outline your goals and expectations for students? How does this impact student learning?
- *Integrated perception*: Do you help students link classroom experiences to the broader context of their lives? How do students benefit from making these connections?
- *Positive action*: Do you help students achieve by motivating them with a desire to succeed? How do you determine when your students are motivated and learning?
- *Reward orientation*: What rewards do you receive from teaching? How do you reward successful student performance? How do students respond to your reward structure?

### Interpersonal Skills

- *Objectivity*: Can you handle tough situations calmly and objectively, concentrating on the solution rather than the blame? Have your students indicated how your objectivity benefits them?

- *Active listening*: Do you paraphrase student questions and concerns for clarification? Are you able to attend to non-verbal cues and demonstrate that what your students have to say is valued? Have your students indicated how your active listening skills benefit them?
- *Rapport*: Do you achieve and maintain a favorable relationship with students? How does this impact their learning experiences in your courses?
- *Empathy*: Can you reach out to students in need and recognize student feelings? Can you express care while asserting high expectations? How do your students benefit from these traits? How can you tell?

You want to consider a selection of these skills that are most appropriate for the purposes and audience of your portfolio.

## Portfolio Organization

There are several approaches to organizing your portfolio, but all portfolios should include a title page, date, and table of contents, as well as a brief introduction about the organization of the portfolio. If your teaching portfolio is separate from your curriculum vitae, a copy of your vitae can be included in the introduction. This helps the reader understand your experience. The organization of your portfolio is tied to its purpose, as well as whether the portfolio construction and evaluation is going to be used as part of an ongoing, developmental process (the formative approach) or as a one-time assessment of qualifications (the summative approach). Three popular ways to organize your portfolio are:

- **By Theme/Topic**: Many agree that portfolios should be organized around a theme derived from your Teaching and Learning Philosophy and your fundamental beliefs about teaching and learning. Your portfolio materials can then be sorted and separated into sections by topic, depending upon the purpose of the portfolio. For example, many Delta Certificate candidates organize their portfolios around the Delta Pillars.
- **By Reflection/Evidence**: Another way in which to retain a cohesive portfolio is to feature reflective statements in a narrative section of the portfolio, then place materials that serve as evidence to reflective statements in an appendix. This approach integrates your portfolio materials in such a way that one piece of evidence can be used to support multiple narratives, and one reflective statement or narrative essay can reference several pieces of evidence for support.
- **As an Interview Outline**: If your portfolio is to be distributed to potential employers, it can also be organized as an interview supplement. Contents can be selected and streamlined based upon anticipated interview questions so that each response has a corresponding item in the portfolio that you can reference during the interview. In addition, you can design a brochure that summarizes the portfolio to include with application materials.

## Presentation of the Portfolio

If you plan on packaging your portfolio for others to see, pay attention to the attractiveness of your portfolio's appearance, including layout, color scheme, and font selection. You want to be sure that the captions that accompany pictures, photographs, or scanned artifacts such as certificates are attractive and consistent. You should also take care that the layout of your portfolio is not too busy or cluttered, the fonts and font sizes you select are clear and easy to read, and that your colors are muted and easy on readers' eyes.

You can store your teaching portfolios on paper, as an electronic .pdf or .doc file, or integrate it into your personal website. For larger paper portfolios, three-ring binders and page protectors are often used to package the contents. Paper and electronic documents design a cover page that serves as an attractive introduction to the portfolio. Binder kits with tabbed pages are also helpful for organization: tab dividers and colored pages are two ways to clearly differentiate between different sections of your portfolio.

Electronic portfolios offer several advantages over paper ones. They tend to be less linear, so that individuals who are looking at them may navigate through them according to their own personal interests. Video clips can also be used to show teaching techniques it may take several pages to explain on paper.

You also want to pay attention to the nature of your portfolio's information. Read through your portfolio often to check the cohesion and continuity of the information contained in its pages. Do you provide brief explanations for evidence that is not self-explanatory? Do you provide highlights for lengthy or detailed pieces of evidence? Have you divided your portfolio into sections that will seem logical to a reviewer or colleague? Do the style and organization of your portfolio emphasize qualities that appropriately address its purpose?

## Help with the Portfolio

Creating a portfolio through conversation with a mentor (such as your academic advisor) is considered a key component to the portfolio process. We encourage you to select one or more faculty or academic staff members with whom you have worked to provide guidance, feedback, and support to you as you develop your portfolio.

Sharing your portfolios with peers and mentors is a good way to get feedback on its style and readability. Giving an actual presentation of the portfolio to peer mentors or an assessment committee is another way you can get feedback on your portfolio. Creating situations where you can engage in a dialogue with a group of colleagues about your portfolio may increase the likelihood that you and your colleagues walk away with new insights, information, and ideas about teaching.

Delta participants are encouraged to select a mentor from their Delta learning community. Collaborating with a mentor on a portfolio allows more objective input to help bring balance to your subjective reflections, contributes to the clarity and cohesion of the portfolio by offering a fresh perspective, and reduces the solitude you may encounter while completing your portfolio.

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## Appendix A: Core Principles of the Delta Program

The Delta Core Principles, often referred to as the Pillars, are at the foundation of all that Delta does: Teaching-as-Research, Learning Community, and Learning-through-Diversity.

### Teaching-as-Research

At the core of improving teaching and learning is the need to accurately determine what students have learned as a result of teaching practices. This is a research problem, to which STEM instructors can effectively apply their research skills and ways of knowing. In so doing, STEM instructors themselves become the agents for change in STEM teaching and learning.

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 outcomes of students and teachers.

Participants in teaching-as-research 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 objectives for student learning. (What do we want students to learn?)
3. Developing an hypothesis for practices to achieve the learning objectives. (How can we help students succeed with the learning objectives?)
4. Defining measures of success. (What evidence will we need to determine whether students have achieved learning objectives?)
5. Developing and implementing teaching practices within an experimental design. (What will we do in and out of the classroom to enable students to achieve learning objectives?)
6. Collecting and analyzing data. (How will we collect and analyze information to determine what students have learned?)
7. Reflecting, evaluating, and iterating. (How will we use what we have learned to improve our teaching?)

The application of teaching-as-research is meant to lead STEM instructors to a continuous process of discovery and change throughout their careers.

### Learning Community

Learning Communities bring people together for shared learning, discovery, and the generation of knowledge. Within a learning community (LC), 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 are central to the learning community process:

- **Shared discovery and learning.** Collaborative learning activities where participants share responsibility for the learning that takes place help the development of a learning community. Rather than relying on traditional "expert centered" lecture formats, practitioners 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, 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 entire learning community-for example, among students, post-docs, 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. These connections help situate one's learning in a larger context by solidifying one's place in the broader campus community of learners and life experiences. 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.

## Diversity

The literacy and engagement of all students in science, technology, engineering, and mathematics 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 socioeconomic 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 practitioner to:

**Practitioner-participant interactions** - such as inclusion and engagement of the ideas of all participants; respectful teaching behaviors; accessibility for all participants; mentoring of less experienced practitioners.

**Participant-participant interactions** - such as welcoming and respectful inclusion in collaborative work; respect for the ideas of all and recognition of their value; accessibility in activities that occur outside of the primary learning environment.

**Participant-content interactions** - such as how participants experience content; how content can be adapted and varied; and how exploring novel contexts for presentation can enrich the experience of participants and practitioners alike.

## Appendix B: Teaching and Learning Development Activities at UW

### Delta

The Delta Program, a project of the Center for the Integration of Research, Teaching, and Learning (CIRTL), is a teaching and learning community for graduate students, post-docs, academic staff, and faculty that will help current and future faculty succeed in the changing landscape of science, engineering, and math higher education. Through the ideas of Teaching-as-Research, Learning Community, and with an integrated care for diverse audiences, the Delta Program supports current and future science (natural and behavioral), technology, engineering and math (STEM) faculty in their ongoing improvement of student learning.

You are invited to learn more about Delta and get involved in the many exciting opportunities in graduate courses or in our internship program. Visit Delta's web site at [www.delta.wisc.edu](http://www.delta.wisc.edu) for more information. Please see our [Delta Course Catalog](#) for more information on courses and programs Delta offers.

### The Institute for Biology Education (IBE)

If you teach a biology or biology-related course on the UW campus, [IBE](#) has many opportunities for graduate student and postdoc teaching and professional development as part of their [University Educators](#) group. They offer consultations, classroom observations, learning communities, resources, and programming aimed at enhancing learning in courses you teach and using your research to promote learning.

### Writing Across the Curriculum (WAC) and Writing Center Workshops

During the academic year and summer, the L&S [WAC](#) program offers workshops and classes for faculty and TAs with the intention of helping to find effective ways to use writing assignments in their content courses. Along with that, [the Writing Center](#) offers non-credit [workshops](#) throughout the semester. These workshops are free and open to currently registered UW-Madison students.

### UW Teaching Academy

The [Teaching Academy](#) at UW offers several events that promote teaching and learning on campus including, the [Fall Kickoff Symposium](#), [Winter Retreat](#), a [co-sponsored Spring Symposium](#), and a [Summer Institute](#). Additionally, the Teaching Academy invites nominations for Teaching Academy Fellows and Future Faculty Partners that work more closely with the Academy to promote teaching and learning on campus.

### DoIT Academic Technology/Student Software Training

[DoIT Academic Technology](#) offers idea for ways your teaching needs might be helped through technology, help and support with classroom technology, and technology that can help you evaluate your effectiveness in teaching and learning.

DoIT's [Software Training for Students](#) (STS) offers free technology training to all students that can help you in and out of the classroom. STS has a number of workshops, personalized support and online resources.

## **Appendix C: Evidence for Teaching and Learning Portfolios**

### **Products of good teaching and/or student learning:**

- Students' scores on teacher-made or standardized tests, possibly before and after a course has been taken, as evidence of learning;
- Student laboratory workbooks or logs; essays, creative work, and project or fieldwork reports;
- Examples of graded student essays along with the instructor's comments on why they were so graded;
- Successive drafts of student papers along with instructor's comments on how each draft could be improved;
- Student publications or conference presentations on course-related work;
- A record of students who select and succeed in advanced courses of study in the field;
- A record of students who elect another course with the same professor;
- Evidence of effective supervision of Honors, Master's or Ph.D. theses;
- Setting up or running a successful internship program;
- Documentary evidence of the effect of courses on student career choice;
- Information about the effect of the instructor and his or her courses on student career choices or documentary evidence of help given by the professor to students in securing employment or graduate school admission; or
- Evidence of help given to colleagues on teaching improvement.

### **Material developed by you:**

#### **Descriptive Material on Current and Recent Teaching Responsibilities and Practices:**

- Statement of teaching responsibilities, including course titles, numbers, enrollments, and a brief statement about whether the course is required or elective, graduate or undergraduate;
- A reflective statement by the instructor, describing his or her personal teaching philosophy, strategies and objectives, methodologies;
- Representative course syllabi detailing course content and objectives, teaching methods, readings, homework assignments;
- List of course materials prepared for students;
- Description of curricular revisions, including new course projects, materials, and class assignments;
- Instructional innovations and assessment of their effectiveness;
- A personal statement by the instructor, describing teaching goals for the next five years;
- Information on professor's availability to students;
- Report on identification of student difficulties and encouragement of student participation in courses or programs;

- Description of how films, computers or other non-print materials were used in teaching; or
- Steps taken to emphasize the interrelatedness and relevance of different kinds of learning.

Description of Steps Taken to Evaluate and Improve Your Teaching:

- Maintenance of a record of the changes resulting from self-evaluation;
- Evidence of having read journals on improving teaching and implement acquired ideas;
- Review of new teaching materials for possible application;
- Exchange of course materials with a colleague;
- Research on one's own teaching of a course;
- Involvement in an association or society concerned with the improvement of teaching and learning;
- Attempts to use instructional innovations and evaluate their effectiveness;
- Use of general support services, such as Educational Resources Information Center, in improving one's teaching;
- Participation in seminars, workshops, and professional meetings intended to improve teaching;
- Participation in course or curriculum development;
- Pursuit of a line of research that contributes directly to teaching;
- Preparation of a textbook or other instructional materials; or
- Editing or contributing to a professional journal on teaching one's subject.

**Material developed by others:**

From Students:

- Written comments from a student committee to evaluate courses and provide feedback;
- Unstructured (and perhaps unsolicited) written evaluations by students, including written comments on exams and letters received after a course has been completed;
- Student course or teaching evaluation data which produce an overall rating of effectiveness or suggest improvements;
- Documented reports of satisfaction with out-of-class contacts;
- Interview data collected from students after completion of a course; or
- Honors received from students, such as "Teacher of the Year".

From Colleagues:

- Statements from colleagues who have observed teaching either as members of a teaching team or as independent observers of a particular course, or who teach other sections of the same course;
- Statements from colleagues who have reviewed the instructor's teaching materials, such as course syllabi, assignments, testing and grading practices;

- Written comments from those who teach courses for which a particular course is a prerequisite;
- Evaluation of contributions to course development and improvement;
- Statements from colleagues from other institutions on such matters as how well students have been prepared for graduate studies;
- Honors or recognition such as a distinguished teacher award or election to a committee on teaching;
- Requests for advice or acknowledgment of advice received by a committee on teaching or similar body; or
- A statement by the department chair assessing the instructor's contribution to teaching in the department.

From Others:

- Documentation of teaching development activity through the campus center for teaching and learning;
- Statements about teaching achievements from administrators at one's own institution or from other institutions;
- Alumni ratings or other graduate feedback;
- Comments from parents of students;
- Reports from employers of students (e.g., in a work-study or "cooperative" program);
- Invitations to teach for outside agencies;
- Invitations to contribute to the teaching literature; or
- Other kinds of invitations based on one's reputation as a teacher (for example, a media interview on a successful teaching innovation).

## Appendix D: CIRTL Learning Outcomes Matrix

### Associate Level

Teaching –As-Research Associates can do the following:	How this outcome was met :
<i>Know that a body of literature and knowledge exists concerning high-impact, evidence-based teaching practices.</i>	
<i>Define and recognize the value of the Teaching-as-Research process, and how it can be used for ongoing enhancement of learning.</i>	
<i>Know how to access the literature and existing knowledge about teaching, learning and assessment, in a discipline or broadly.</i>	
<i>Describe and recognize the value of realistic well-defined, achievable, measurable and student-centered learning goals.</i>	
<i>Describe several assessment techniques and recognize the value of their alignment with particular types learning goals.</i>	
<i>Describe and recognize the value of evidence-based effective instructional practices and materials.</i>	
<i>Describe a “full-inquiry” cycle</i>	

<p>Learning Communities</p> <p>Associates can do the following:</p>	<p>How this outcome was met:</p>
<p><i>Know that a body of literature and knowledge exists associated with learning communities and their impact on undergraduate learning.</i></p>	
<p><i>Define the characteristics of undergraduate learning communities (LCs).</i></p>	
<p><i>Describe the impact of LCs on student learning.</i></p>	
<p><i>Describe and recognize the value of LC strategies that promote positive interdependence between learners so as to accomplish learning goals.</i></p>	
<p><i>Describe and recognize the value and issues of establishing LCs comprising a diverse group of learners.</i></p>	
<p><i>Describe techniques for creating a LC within a learning environment.</i></p>	
<p><i>Recognize the value of and participate in local professionally-focused learning communities associated with teaching and learning.</i></p>	

Learning through Diversity Associates can do the following:	How this outcome was met:
Know that a <b>body</b> of literature and knowledge exists associated with diversity and its impact on accomplishing learning goals.	
<b>Define and recognize</b> the scope of diversity in learning environments, of both students and instructor. <sup>1</sup>	
<b>Recognize the impact</b> of diversity on student learning, in particular how diversity can enhance learning, and that inequities can also negatively impact learning if not addressed.	
Describe how an instructor's beliefs and biases can influence student learning.	
Recognize the value of drawing on diversity in <b>the development of their teaching plans</b> (including content, teaching practices and assessments) to foster learning.	
Describe <b>several learning-through-diversity (LtD) techniques</b> and strategies (e.g. creating a welcoming environment, learning communities).	

## Practitioner Level

Teaching –As-Research Practitioners can do the following:	How this outcome was met in the Delta Certificate:
<i>Develop a deeper understanding of the knowledge concerning high-impact, evidence-based teaching practices.</i>	
<i>Develop a Teaching-as-Research plan for a limited teaching and learning project</i>	
Execute a Teaching-as-Research plan for a limited teaching and learning project	
Show the integrated use of Teaching-as-Research, Learning Community and Learning-through-Diversity to accomplish learning goals.	

<p>Learning Communities</p> <p>Practitioners can do the following:</p>	<p>How this outcome was met in the Delta Certificate:</p>
<p><i>Develop a deeper understanding of the knowledge concerning LCs and their impact on undergraduate student learning.</i></p>	
<p><i>Integrate one or more LC strategies into a teaching plan so as to accomplish learning goals and learning-through-diversity</i></p>	
<p><i>Implement one or more LC strategies for students in a teaching experience.</i></p>	
<p><i>Contribute to local professionally-focused learning communities associated with teaching and learning.</i></p>	
<p><i>Show the integrated use of Teaching-as-Research, Learning Community and Learning-through-Diversity to accomplish learning goals.</i></p>	
<p>Learning through Diversity</p> <p>Practitioners can do the following:</p>	<p>How this outcome was met in the Delta Certificate:</p>
<p><i>Develop a deeper knowledge of the body of literature concerning diversity and its impact on accomplishing learning goals.</i></p>	
<p><i>Examine own beliefs and biases, including how they may influence their students' learning.</i></p>	

<p><i>Determine the diverse backgrounds among a group of students, and consider the opportunities and challenges of the findings on each student's learning.</i></p>	
<p><i>Create a teaching plan that incorporates content and teaching practices responsive to the students' backgrounds.</i></p>	
<p><i>Integrate one or more LtD techniques and strategies in a teaching plan so as to use students' diversity to enhance the learning of all.</i></p>	
<p><i>Implement one or more LtD strategies in a teaching experience.</i></p>	
<p><i>Show the integrated use of Teaching-as-Research, Learning Community and Learning-through-Diversity to accomplish learning goals.</i></p>	