Mathematics Education Master Portfolio

**School of Education, Purdue University**

**Overview:**

Masters Portfolios are purposeful, thematic collections of selected student work that exhibit to the student and others the student's progress, achievement and effort in their Master’s degree over time. The portfolio provides an opportunity to demonstrate general graduate competencies and to provide evidence of a graduate’s ability to apply instruction to meet the needs of diverse learners and apply technology to enhance student learning.

1. Table of Contents
2. Table summarizing the primary and additional competencies and/or focus areas met by each artifact (see sample table at end of appendix)
3. Narrative Overview: About 3-5 pages. Introduction of the collection. What have you learned in your masters program? Explanation of how the courses you have taken have developed your thinking.
4. Student Artifacts. Typically 4-6 artifacts (from coursework, field experiences, conferences, etc). For each, provide a 1-2 page Artifact Narrative summary of the artifact and how it demonstrates the graduate competencies and/or special focus areas, and how it contributes to your overall professional development.

**Review:**

The student will electronically submit the portfolio and participate in an oral defense of the portfolio after each committee member has reviewed materials to discuss the rationale for their artifact selections. The portfolio must be submitted to the committee at least two weeks prior to the oral defense.

**Competencies and Focus Areas:**

The artifacts you chose for your portfolio must meet each of the six graduate competencies and two focus areas at least once in a substantive way. It is likely that one artifact will address more than one competency or focus area.

Examples provided below are designed to show some possible ideas of materials from your program that could be used, but elements of the portfolio are not limited to this list.

***Graduate Competencies:***

* **Synthesize knowledge:** 
  + The candidate will read and synthesize educational literature related to his/her discipline; describe fundamental theories of human learning; and apply knowledge of human learning, diversity, and effective pedagogy to the solution of practical problems in his/her discipline.
* **Create & Discover knowledge:** 
  + The candidate creates and discovers knowledge to further the state of the art and science of education. The candidate will describe common research methods in his/her discipline, read and evaluate educational research, adhere to ethical standards for the responsible conduct of research, and apply research findings to the solution of practical problems in his/her discipline.
* **Communicate knowledge:** 
  + The candidate speaks, writes, and employs relevant media to effectively communicate knowledge on substantive topics to others. The candidate will communicate effectively in oral and written formats including the ability to communicate content from his/her discipline through the design and delivery of effective teaching/learning activities that integrate content and pedagogy, adapt instruction and support services to the needs of diverse learners, and assess appropriately learning outcomes.
* **Think critically and reflectively:** 
  + The candidate is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community). The candidate will develop a personal vision of inclusive educational practice, identify the relationship of his/her discipline to the broader field of education, and critically evaluate theory and practice.
* **Engage in professional development:** 
  + The candidate actively seeks out learning opportunities to grow professionally. The candidate will demonstrate the disposition for life-long learning and continuous professional development.
* **Participate actively in the profession:** 
  + The candidate actively participates in the profession through such means as communicating scholarly discoveries, offering learning opportunities to others, and engaging in efforts to serve the greater good. A key feature of Teacher Education at Purdue as a research extensive university. The candidate will identify communities of practice within his/her discipline and participate within these communities according to the ethical standards of the discipline.

*Focus Areas:*

* **Adapt instruction to diverse learners:** 
  + The candidate understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners. The candidate plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals.
* **Apply current and emerging technologies:** 
  + The candidate effectively applies relevant technologies to enhance students’ learning experiences, and actively seeks out opportunities to capitalize on emerging technologies.

SUMMARY TABLE

Using APA format where possible, list all portfolio artifacts under the appropriate category (Education Courses, Other Courses, etc). For each item, put an “X” under the graduate student competencies or focus areas in the table that your artifact or experience addresses in a substantive way.

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| **Artifact** | **Synthesize Knowledge** | **Create Knowledge** | **Communicate Knowledge** | **Thinking Critically & Reflectively** | **Engage in Professional Development** | **Participate Actively in Profession** | **Diversity** | **Technology** |  |
| Education Courses | | | | | | | | | |
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| Other Courses | | | | | | | | | |
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| Presentations, Conference Participation,  and Publications | | | | | | | | | |
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