

Section IV
**Assessment 3: PEDAGOGICAL AND PROFESSIONAL KNOWLEDGE, SKILLS,
AND DISPOSITIONS**

**Attachment E: Pedagogical Knowledge and Field Experience Assessment Rubric for the
Department Portfolio**

Appendix B: Pedagogical Knowledge Portfolio Required Items

1. Description of the Assessment

All teacher candidates must prepare and submit a portfolio that includes pedagogical knowledge and field experience items from their required mathematics education courses at the completion of their program. Prior to the beginning of each semester, faculty members are given a list of required portfolio items to be assigned and collected within each designated course. The items are assigned as homework problems, group assignments, projects, or given as test questions. They then are collected by the instructor and stored in each teacher candidate's mathematics file that is stored in a central location in the Mathematics Building.

During their last year of study, the teacher candidates compile and submit their pedagogical knowledge and field experience portfolios. This portfolio contains pedagogical knowledge and field experience materials from their senior-level mathematics education seminar (Math 475 - Issues and Trends in Mathematics Education) and their teaching methods course (ESEC 385 - Secondary Mathematics Methods). At the completion of the academic year, the Mathematics Department members assess each portfolio using the rubric found in Attachment E.

Assessment Administration: Each portfolio item is assessed in its individual course and collectively evaluated during the Mathematics Department Portfolio Assessment.

2. Alignment of NCTM Standards and Indicators with this Assessment

Each course has a specific set of required items for inclusion into the teacher candidates' portfolios. A description of each item and its alignment is located in Appendix B: Pedagogical Knowledge and Field Experience Portfolio. At the end of each item, a code appears which indicates its alignment with an NCTM indicator (NCATE) and/or an indicator from the New Hampshire Council of Teacher Education (NHCTE).

As noted in Appendix B, indicators from the standards were addressed as:

Dispositions: 7.1, 7.2, 7.3, 7.4, 7.5, 7.6

Knowledge of Mathematics Pedagogy: 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7, 8.8, 8.9

3. Data Findings

A committee of mathematics and mathematics education faculty assessed the teacher candidates' content knowledge portfolios using a common rubric (see Attachment E). All candidates were able to meet expectations at the proficient level or higher. One candidate's portfolio met expectations for the exemplary level for the second assessment and one candidate's portfolio met exemplary expectations for the first assessment.

Pedagogical Knowledge and Field Experience Assessment

Number of Teacher Candidates	Not Proficient	Proficient	Exemplary
4	0	3	1

4. Data Interpretation

The fact that all the teacher candidates met or exceeded the requirements for the Mathematics Department Portfolio indicates that the teacher candidates were successful in comprehending the pedagogical knowledge material within each specific course and in being able to successfully compile a thorough, effective portfolio. In addition, the candidates reported finding value in being able to relate their classroom assignments to their field experiences and to reflect on the entire process.

Since all teacher candidates received an evaluation of at least proficient on the Pedagogical Knowledge and Field Experience Portfolio, the Mathematics Department found the assessment rubric to be adequate and was pleased with the pedagogical knowledge understanding of the teacher candidates.