

21st Century Teachers Elementary Mathematics Final Report

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Summary of Activities:

This team met several times and accomplished its goals. The purpose of the work was to create a new course (E345: Mathematics and Language Literacy for Young Children) and to revise the existing course E343 to serve as the follow-up course to E345 with a focus on the upper elementary grades. Through two workshops with teachers from IPS schools we designed the field component of the courses in order to more closely align the theoretical work to that which occurs in the field. The participants in the workshops raised several issues that were critical to the design of the course, particularly with respect to the field experience components.

It soon became obvious in our work that the absence of a language educator on the team would hinder the design of the new course E345, since it is a course on literacy in both math and language. As a result Melinda Stainbrook was invited to join the team. This proved to be very important since she helped the team stay committed to the integrated nature of the course.

Meetings:

First meeting – get to know each other and plan the summer activities.

Second meeting – design the first workshop with teachers. This was a four hour working session in which the team planned the first workshop and assigned tasks to the team members.

Sub group meetings – members of the team met in small groups to organize the materials for the first workshop.

Workshop 1 (June) – Lead mathematics teachers (identified by IPS administrators) from all of our Anchor schools were invited to a workshop in which we discussed the role of the mentor teachers and described our program in detail. The workshop included a discussion of the Standards underlying the program, as well as an opportunity to explore Standards-Based Assessment. From this workshop we had a good idea of the type of structure that teachers would like to see in the field experience activities.

June and July – team members drafted the materials for the first course E345 (syllabus and Field Experience Handbook) and discussed the different components of the second course in the sequence E343. It was important to sort out how the courses would address the different developmental levels of children and how the content standards would be split into two courses. Team members also developed performance-tasks that would specifically address the first Principle of Teacher Education, content knowledge of interns. These tasks constitute a new component and requirement for both courses.

Workshop 2 (August) – Lead mathematics teachers (identified by IPS administrators) from all of our Anchor schools were invited to a second workshop in which we discussed the Field Experience Handbook and the field experience requirements. The workshop included an introduction for teachers to the use of invitations (open-ended investigations). We explored the possibility of invitations being developed by the interns in collaboration with the teachers, as the main project in E345.

August – Team members finalized the Field Experience Handbook and the syllabus for E345, and produced an outline of the syllabus for E343. Also, team members presented the syllabus and Field Experience Handbook to the rest of the Block 1 instructors. This has spurred other instructors to build activities that will be added to the first iteration of the Handbook.

Attachments:

Syllabus for E345

Sequence of Experiences in Mathematics: Blocks One and Two

Field Experience Handbook

Performance Tasks

Workshop Agenda