

Practicum experience

Each student will spend six hours in an elementary school classroom, three periods observing and three periods working with one or two children in the classroom. You may already know a teacher with whom you can work. If not, choose a school that will be convenient for you to visit. Speak to the principal and explain that you are studying to be an elementary school teacher and would like permission to visit a classroom, observing a math lesson three times and then working with one or two children for three lessons. Briefly describe what you would like to do and give her/him the attached letter. If you have difficulty in finding a teacher to work with, let me know as soon as possible.

The first part of the classroom experience will involve observing three math lessons. During these lessons you want to consider the observation questions listed below. Give a lot of attention to the children's mathematical thinking and note any questions you have about particular student's understanding of the lesson topics. This classroom observation will be the subject of some class discussion and an assignment so please be sure to complete your observations by Oct. 24th , the end of the 7th week of classes.

The second part of the classroom experience will be your work with one or two children in the classroom. In this part during the first meeting with the children you will explore the children's understanding of the operation of multiplication (grades 3-6) or subtraction (grades 1-2). For the last two meetings you will carry out lessons intended to further develop the children's understanding of the operation you are considering.

Finally, you will write a typewritten analysis of your mathematical work with the children. Be sure to keep careful notes from your work with the children in order to have the information available when you write your practicum report. This report is due November 21nd and will be discussed in detail in class.

How to assess the student: the first hour of your teaching

Investigating your student's understanding is an important part of preparing to teach. Although it is not realistic that you (or any teacher) do extensive interviews with each of your students before embarking on teaching a new topic, the information you glean from conducting this interview should provide you insight into the possible ways to listen to student 'mathematically' by tuning in to their mathematical ideas. The information gained from this sort of listening will help you make decisions about your teaching.

- Before interviewing the student, go through the questions and tasks in the interview. Review the purpose (s) of each, asking yourself what you expect to learn about the student from their responses. This will help you plan questions to follow-up and probe what the student says.
- Conduct your interview. Remember that your goal will be to ask questions that help you gain understandings about the student's mathematical reasoning. Take notes about what the student

says and does. Keep anything the student writes down or draws during the interview (this means you should provide paper and pencil for the student if needed.)

- As soon as possible after the interview, jot down any insights that occurred to you, including your present hunches about what the student understands and what types of problem solving strategies they used. Develop a plan for the next stage in the student's mathematical development as a result of your assessment. Have several back-up plans for the next two hours of teaching so that you can be flexible enough to follow the student's needs.

What the practicum report must include

The grading on the Practicum Report will be based on the depth of your analysis of the child's mathematical thinking and interaction during the lessons presented. These points will serve as a rubric for the assessment of the practicum report.

- A brief description of your observations in the class with some reference to your student.
- Class characteristics such as school, grade level, number in class, special interests or considerations.
- Your evaluation of the student's understanding of the operation or concept considered based on the student's comments and work.
- Your plan for the next stage in the student's mathematical development with a brief outline and rationale for the lessons or work that you plan to present to the student.
- A description of the mathematical discussion and learning that took place during the lesson or work outlined above along with the student's dialogue and questions/responses to the mathematical discussion
- An analysis of the student's response including a discussion of how the student's understanding appeared to change during the lesson or work and why this change took place, or a discussion as to why the student's understanding did not appear to change and why; what worked or didn't work mathematically in the lesson and how the lesson might be improved. This is much more than a narration of what happened during the teaching experience.

Suggestions for the report

In addition to the required items mentioned above you might describe:

- Your goal for the lesson
- The specific concept you were trying to teach
- Examples you used in your teaching.
- How did the student work on that topic
- Did they make connections with previously learned material?

- Was your lesson student or teacher centered?
- What were some of the indicators that the student was "engaged"?
- What was the behavior like?
- What went well? What would you do differently?
- Was the student focused on the algorithm, a model for that algorithm or an application for that algorithm?
- Did you get a reading on that student's attitude about mathematics?
- How did you check for understanding? How could you tell if the student was confused?
- What did the student take away from the lesson?

Please focus on analysis rather than the narrative of the lessons. Include some dialogue from the student. Reflect on what went well and what did not. If the student were asked what they did in math today what would they say? What did you enjoy about this experience? What did you not enjoy?