PREPARING AND BRINGING A PILOT VIDEO OF AN 8TH GRADE MATHEMATICS LESSON

FOR THE JUNE 7-10 2011 MEETING

Videotaped lessons will be part of the data collected. We would like each of the national teams to bring one pilot video to the meeting in June in Washington D.C.

The pilot video should be of a mathematics lesson taught to eight graders. It would be ideal if the lessons videotaped by each national team are on the same mathematics topic (for example on linear equations). But given the tight time frame for making these videos this is not required for the pilot videos.

The videos should be shot with a single camera, focused mostly on the teacher, but including shots of students asking questions and of teacher-student interactions.

These pilot videos will be unedited—the camera should be turned on just before the lesson starts (the class bell rings) and not turned off until the lesson ends.

The rationale for including video in this study is explained in the attached document, “Videotaping Plans and Possibilities.”
VIDEOTAPING PLANS AND POSSIBILITIES

Overview

In each participating country, the national research team will videotape mathematics lessons taught by beginning teachers in fourth-grade, eighth-grade, and eleventh-grade classrooms. These videos will serve various purposes in the research including (1) as parts of longitudinal case studies of beginning teachers in each country during their first three years of teaching; (2) as illustrations of teaching approaches typical of each country; (3) as cues for interviewing beginning teachers about their notions of best practice.

The Content and Format of the videos

The topics of the lesson for each grade level will be the same across the countries to allow for greater comparability. For example, the fourth grade lessons can be on adding fractions, the eighth grade lessons on linear equations, and the eleventh grade lesson on differential equations.

In addition to the video of the lesson itself, there will be an accompanying video with two sections: (1) a pre-lesson video in which an interviewer asks the teacher to explain the planning process that went into the lesson and her lesson play, and (2) a post-lesson debrief, in which the interviewer asks the teacher to reflect on how the lesson went and to explain decisions she made during the lesson.

The videos will be shot with one camera, with the focus mostly on the teacher. The videos will last the length of the lesson.

We are estimating that the videos will be about 1 hour in length: 40 minutes of a lesson plus ten minute pre- and post-lesson interviews. The videos can later be edited down to about 20 minutes.

Uses of the videos in this project:

1) As case studies of how beginning teachers in each of the participating countries are working through the challenges of bringing the pedagogical and mathematics knowledge they learned (or didn’t learn) in their teacher preparation program to their classroom teaching. This will be a small N, qualitative study of 9 beginning mathematics teachers per country—three per grade level. These nine teachers would be videotaped several times over their first three years of teaching.

2. As interviewing cues for a larger N study. Edited (20 minute) versions of these videos will be shown to beginning teachers in each country and used as cues for eliciting reactions about their beliefs about both content and pedagogical strategies for teaching mathematics.
One format would be to have these videos on a website where beginning teachers can go to watch a video and then respond to a set of prompts and closed and open-ended questions. Another format would be to conduct focus-group sessions with beginning teachers who can discuss a video made in their country plus videos made in one or more other countries.

One possibility would be for the research team to select one video per grade level that will be a common stimulus/cue for interviewing in all of the study. For example, in each country beginning teachers would be shown one video made in their own country, at their grade level, and then the video of a lesson at their grade level from another country. These focus group discussions would be video-taped for qualitative analysis of key themes that are characteristic of each country and that are found across the countries. Likert-scaled questionnaire items can also be given to the focus-group participants after they watch the videos and before the discussions begin, with questions about how they rate the teacher’s pedagogical and mathematics knowledge and what they liked and didn’t like about the teacher’s approach.

3. As visual examples of what mathematics teaching by new teachers looks like in each country, at three grade levels. These videos will be useful for providing concrete examples that can ground discussion of key issues across the national sites. They can also be used in presentations, both for scholars and for policy makers, of findings from the study. And they can be re-edited for use in teacher preparation courses.

4. For instrument development: these videos, by giving concrete examples of what mathematics teaching of beginning teachers looks like at each grade level in each country, can be used to develop quantitative instruments (questionnaires, etc.).

The teachers will be in their second year of teaching, so they will be still new to the profession (still in the induction phase) but the past the initial shock of finding their voice in the classroom and negotiating first-year politics of the school.

The decision will be made at the international project meeting about how many videos to make in each country per grade. A reasonable number might be 3 per grade level, for a total of 9 videos per country, and if six countries participate, 54 videos at all (which would be a useful data set and archive).

**Logistics**

The TEDS teams will set parameters for the videotaping and provide an example of a video to guide the national teams in their video-making. We will also provide specs on what kind of camcorder, microphones, and media to be used for the video shooting. The video making in each country will be the responsibility of each national research team, who will have to identity a videographer. The instructions and expectations will be such that the video-making won’t require professional video making skills.