FIRSTMATH Meeting: June 8, 2011

Present: Honduras, Germany, Italy, Bulgaria (2), Toni, Lee, South Africa, Brazil (5), Chile, Poland (2), Silver, Saudi Arabia, Reckase, Jeanne Wald, Jouni, Crespo, Pat, Katherine (Math for America), Thailand (2), Chinese Taipei (2), Wendy, Mexico (2), Teresa, Patrick, India, NEA, Tobin

Introduction

Presentations

1) USA – teacher education and development, history, education system (K-16), only states can certify teachers, induction, etc. (Focus on Nebraska, Maryland, and Virginia). (Wendy, Pat, Toni).

2) Germany – teacher education and beginning teachers, history, edu system, etc. (Sigrid).

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Coffee Break

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3) Thailand – mathematics teacher education, overview of edu system. (Supattra, Tanyakarn).

Question (Germany): He used many words on white board, why write down words?

Response: Example one, after he give rule of multiplication/division rule. Put on left side. He write the question and then he showed the solution.

Germany: what’s he writing there (on video). So verbal!

Response: example one to find ratio that equal ration of thirty fifteen. By using multiplication rule or division rule, fraction is thirty over fifteen. Student have to give two ratio, equal to thirty and fifteen.

TT: using material that’s his own lesson plan, students have own textbooks? What’s he copying…rules and procedures?

Response: prepare before teaching, student have textbook, not same example, similar, student can revise content in textbook. Want students to write down in notebook.

TT: he wants students to go right into work.

Response: right.
Silver: Is this an example of student centered instruction in Thailand?

R: no, teacher centered.

TT: If you were judging lesson, what would you say characterizes this one…can u see difference between him and more experienced teacher would teach.

R: maybe not different, teacher centered is very traditional for thai culture. Student didn’t ask much question and he doesn’t ask question of students. May ask question after class, not much diff between beg and expert teacher. Depend on type of school – this is a demonstration in school under chululongkorn university – good school. Number of student 32/33 public school around 50 student per class.

Pat; you said teachers have other responsibilities besides teaching. He’s teaching class of 30 some students. How many classes would he teach per day of math?

R: He would teach 17 hours per week, teaching math. Lower secondary and upper secondary.

Pat: what else do?

R: homeroom for class, or credit union in school…math teacher.

Namita: private school system. What percentage of students go to private versus gov’t school.

R: most go to gov’t school, private school expensive. Private school usually catholic, learn English program, very expensive. Public school free education. For this school, demonstration school. Parent have to pay some part (under university).

Namita: would this teacher or most of the elite go to a public school or a private school? Would this teacher or most elite in Thailand gone to public school.

R: almost all go to public school.

Sandra: the teacher he graduated from famous institution, any sense about the teacher social class, background, in relation to students. We say in states most of teachers are middle class and white. What majority teachers like. Surprised seeing low salary, surprised seeing male teacher.

R: most teachers female. From teds-m, 75 percent female, 25 male. For the school teacher, mostly female. Teacher profession, middle class profession. For thai culture the student will be a teacher, high respect for teacher in Thailand, even though low salary. And high security job.

R: even though teacher centered he try to answer question (watching video).

TT: clear we need to watch full hour to see how he’s teaching, interacting with students, and communicates concepts.
R: we use two camera, one at back, other at front.

Pat: strikes me how neatly organized and structured boardwork is, students dutifully working. Students raise hands sometimes. When I think in state, not so organized!

TT: well organized. Referring to bruns yesterday, seem to be on task all the time.

Pat: when I was saying yesterday concerned about copying, not this kind, it was about teacher reciting word problem, and children laboriously taking dictation as though language class but it’s a math class. Board filled with objects from state and teacher had no place to right. Wasn’t organized math. Even though teacher centered, there’s math.

TT: bothers me, teacher centered vs. student centered. Lot of things going on in mind, for students may feel student centered, this guy seems dynamic, organized. Explain more content.

Thai: in Thailand, usually one notebook, another notebook or homework that they send to teacher to check it, score something.

Joe: I like you did pre and post interviews. You said you think experienced teacher video would look like this. Do you think interviews would look different? Even if lesson looks same, I wonder if quality of pre and post interviews would look different.

Thai: I think so, esp for experienced teacher.

Joe: it seemed eighty percent. We only see classroom video at one point in time, we notice national diff. we would need to see that same teacher over time and pre and post over time to get a sense of teacher professional development.

Sigrid: how typical this for novice teachers (he graduated from elite school and is in a demonstration school), would lesson look different then?

Thai: lesson look different, background in knowledge different. High rank university.

Sigrid: very important, shows us what we should and shouldn’t focus on in study. Diff kinds of novice teachers and development. What we see isn’t what we really want to know. Formal structure. Isn’t where novice teachers dev, its more cognitive…

TT: I like seeing this, this is a third year teacher from one of the institutions, high SES teacher, you want to see this, a more rep sample, is what you’re saying?

Sigrid: part of what im saying. That’s not all. I want to say its dangerous only to focus on surface characteristics. Surface characteristics not really related to student achievement. Cant distinguish between novice etc teachers. Other quality characteristics imp to distinguish between diff levels of expertise.

Joe: its what part of video we attempt to take.
TT: this is one of substantial samples.

Joe: what compare video to? Teacher writing at board, yes, formally, but more than that. Diff between beginning and experienced teacher, its also wait time, quality of questions, call on one student versus another.

Silver: the three videos (US, Germany, Thai) presents diff glimpses of novice teachers teaching. Diff in nature of mathematics. Diff mathematics at play. At diff times of year, diff grade levels. The interesting parts of each of these clips, illustrate real limitations of any kind of coding system that only pays attention to things like if students are engaged, anything at that level is going to gloss over anything want to focus on/capture. Interesting – focus not on teacher or student centered, but really how intellectual work….whose doing it and hows it being shared. US and GER teachers want students to do work, and teacher ended up doing work. Thailand less clear. Seems work is happening in a different way, distributed more to students. If look at whole less clearer idea of how work is getting done. That’s where a teacher might learn how to teach. I have to figure out how to get htem to be thinking more/doing more. That perspective might be more important as a lens to look at these, than other things that we’re trying to characterize.

TT: I would send my kids to that teacher!

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Lunch

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DISCUSSION

TT: assumption is that we are in agreement with “what” – looking at questions of FIRSTMATH study. Imp to have collaborative force. Countries join, particular national concerns and interests. IEA thinks about this: core study, national options. Discussing what it will take to do videotapes (Brazil said diff, Poland said diff (images involved), other places where videos acceptable, teachers benefit from this). Idea is to begin to think about, what are the diff tasks that we want to commit to doing. You won’t be data collector people. Studies are collaborative. Begin with common framework – questions powerful enough to brought us together. Questions went through couple of revisions through NSF. Panels of scholars have looked at a preliminary proposal, first review got was fantastic. They didn’t give us all the money. How do this? How expensive? Gave half a million to try to figure things out. Fact-finding study. Invite people, they come. Let’s figure out sample. Lori will help us figure out a sampling strategy. What do we do after we decide to do this study – what do with instruments. There’s also a lot of work to be done to get instruments into shpe. Each country will have to contribute items. TEDS had tons of meetings to pilot items, make sure everybody had a say. Studies are completely collaborative and capacity building. Empowering for the people we collected data from. How are these going to be a benefit. In teds worked hard to figure out how communicate teacher prep institutions will
answer surveys. Have to show everyone (forms, human subjects), have to give them letter. So how do you do this? How persuade people it’s important to answer. All countries succeeded in Canada. Not a high enough response rate for data to be incorporated into TEDS database. Takes a lot of public relations work. Take a lot of work from inside. Encourage them to answer questions. Cant just take data and run. Faculty has to talk about this, treat people as people. Part of work need to do. All questions that national science foundation raised. What would work in your context, that’s what we want to know. Not only if we can get the teachers. But what would work in your country. What synergies could u build? What other forces or levers can you bring together, things that may already happening, that people might help you. We may be able to bring together certain forces (Poland) and have it done at once. Risks but they are experienced. Careful with contaminating and all that. Open up for questions.

Namita: I agree, speaking only for myself and India, we are here because we resonate with research questions as laid out. We are on board with the ‘what’. I also think if we move on to next step- how when and who. Lets talk about how. Seems we already have some idea of what the how wil be, this is carry over of tedsm, this is my understanding, this is at two levels. 1) already notion of what relationship between various national studies is going to be like. See it as a comparative case study, comparison between various group in a country. Zero to five years on job, mathe, etc, look within a country, looking within country diff in know based on teacher training, learning across countries how this might be influenced by sys, structure, policies, lots of comparison within and across countries. Diff than across national study, comparing novice teachrs in india and Italy. That comparison doesn’t make sense. Novice teachers in india are a particular way for historical and sys reasons, imp to know knowledge level of teachers, imp in other contexts. Take those learnings and apply in country context. Our participation way for getting more info to improve teacher prep educ sys. 2) also talking about instruments and tools, carry over teds m. understanding possibility of contributing items of this. Im discomforting we are talking about it at granualar level…research ques and methodology might be diff at country level. I’d like to see discussion of how we move from research questions to methodology, what is focus on tests in overall frame.

Sigrid: follow up first part of reasoning, that takes up a lot of thinking I did yesterday and today, what is value added sample then. Purpose of teds-m where want to compare knowledge with country with another one, if main focus is within country comparison, but research question look at dev and diff in cohorts or whatever, don’t believe value added is as high as it is in other studies. Only make sense if diff dev is biased by some selection process or whatever. We could test that but we don’t get such a lot of info from rep samples. Rep samples make it hard. Trade off, we lose too many countries and too much information with rep samples.

Lori: have an idea. Rep sample is…I’ll ask you what your ideas. I have a huge bias against self selection and voluntary surveys, can go wrong in innumerable ways. As a researcher, footnotes at table, not want to have done wrong survey.

Sigrid: I’m worried about random part of representative sample. If we have criterion, I could think about many ways to make it happen, problem is randomly draw from list and expect people to involve. I understand your pain! But we have to be aware, 99.7 percent of all studies are with non-representative samples, we get so much info out of them. Careful about conclusions make.
Im not a policy person. I wouldn’t make recommendations to policy folks. My research is looking at what goes on there, its about relationships! Describing situation, biased…lessed difficult in relational studies.

Lori: if I would say give up notion of rep sample, I would say lets have a sample rep of 7 states than to completely give up notion of representivity. The chances of self-selection bias are overwhelming.

Sigrid: assumption relationship is non-linear. Self selection is a process…different parts of scale. Influence of OTL on outcomes, etc.

TT: this was the kindof thinking when did study previous to teds, I was upset about this, still spending a lot of time and a lot of money and doing a lot of working on something non-defensible, lot of research in educ is considered sloppy! Not very good, we don’t take trouble to follow methodology of social sciences. I know studies not for everyone. Not possible maybe in some countries. Sigrid you said same thing when we started teds…go back and persuade people. Matter of thinking what is priority here. I have done all kinds of research, qual and quan, rep, non-rep, im not going to invest any time of this caliber that can’t be defended publically. I don’t want to have anyone doubt quality of research, esp as we move into sophisticated data collection etc. teds-m ground-breaking study, national rep samples. Regarding comparative namita, some people do think…waht get out of comparisons. I don’t think comp research helpful in allowing people to see things from diff perspectives. I happen to think you can compare people and things with certain characteristics. Know about infl of context, certain things can compare. I think this study does both. Allows you to know nationally what is happening, with group of collaborators, what kind of features can compare with others (figure it out), we began doing with videos. The contribution of comp study, creates a space for people to collaborate, otherwise wouldn’t happen. Creates force around people dealing with imp issues, if you don’t see it anyother way, if say teachers don’t have importance conditions of teachers work in schools, and looking at learning going on as teachers progress in five years of teaching and what bring with them….not only testing the hypothesis, bringing attention to underserved group in education system. In latin America teachers paid little and work hard. Policy study, it has to be rigorous. Im pleased u are raising these questions, people should make decisions, no question in my mind of imp of group of teachers, imp for study like this, another group that has been underserved and underestimated, hope teds will allow teacher education has no affect on knowledge teachers get. I hope we can get that. Teds already having impact on policy. Norway colleagues have already performed…

Chile: I understand what Sigrid is saying, problem to find teachers to answer questionnaire and so on. Many study in chile hard to find people and voluntary teachers. In this study was meant to be up to our account…the solution is perhaps more time (design), solution with time. To make acceptable to teachers, give money give something…so they’ll answer. Use gift to teachers. They are low salary.

South Africa: reflect on what lori said yesterday: normally start research with question and sample. Shouldn’t one start at end, what report look like and what’s it for. Go backwards in how proceed…or maybe its both ways, start and end points. If we start discussion of what report will look like and who is it for, help us to clarify issues. Perhaps should serve purpose of theory
building and policy making. Shouldn’t only be policy making study. As think about report again, comparative dimension one aspect of it. Someone challenged me once, why national boundaries define study. There are beginner teachers, in comp studies, tend to focus on differences. International pride dominates the discussion. Theorizing about teachers and engaging about them, not defined by national boundaries, but I think context is important, both as a collective and within national boundaries. How we construct the report in how we construct decision making. Teachers without borders!

Taiwan: taiwan’s case, rep sample, possible, depends on what we ask them to do. Easy to get rep sample, but participation rate is worrying. If do videotape, teachers don’t like very much (easier to do questionnaire?). some daily things they do, they don’t want other people to know. If we want to have videotape for a certain times, not only once, they think will influence there teaching. In Taiwan they have pressure about their teaching both ways. If we want to have a rep sample for videotape items that would be a problem.

TT: I think from yesterday, a videotape might not be the preferred data collection technique for full rep sample. I heard some enthusiasm from observations.. get inside black box. Enthusiasm for smaller, intensive, sample of sample, wehre video can be used across countries, the model that joe was telling us about yesterday. 9 teachers per country. Negotiate with teacher. Could maybe have surveys, observations, and then decide want to have some videotaping, how do that? How do we get from a to b in a way that’s defensible.

Lori: if have small sample of videotaping. Qualitative part of it, rather than quantitative. I think it is a wonderful bit of value-added. I endorse it but I cant get margin of error.

TT: usually we talk about teachers and teacher practice form deficit perspective. What if we select people to videotape represent best practice. Selecting you for all things we have done for tests and observations. Exemplary beginning teacher. Can we videotape you. If think later on, what do with this. Opportunities for professional development. Can add some questionnaire lichert something collect data and use it for professional development, much the way pilots do it!

South Africa; idea of videotaping, one doesn’t have to leave it for prof dev, but for indepth interview, shaping influences for getting them to be an exemplary teacher, that could be a rich narrative, could contribute to theory generation or so.

Saudi Arabia: I think videotaping – 9 teachers – my country will work for half. Single sex education. Female schools and male schools. Easy for us to do side of males for other side its impossible to videotape them (females). One issue. Otjer issue – the people who will be videotaped are they the best or the typical or the lower..later on how can we represent the findings of these videotapes as might be mentioned. Put it on internet? Look at it to see what? To see excellent or typical teachers? Might be hard.

TT: let me give you an example from mexico. The bank had implemented a reform. They have been spending a lot of money (textbooks, teacher guides) spent millions in training for teachers. Asked each state to take me to see best teachers. Not problematic. Talk with them. Pre and post observation interview. Looking at mathematics, language and writing. Went great. She was
talking reform talk. Talking about student centered teaching. Went inside the classroom, she was
good in terms of involving students in the discussion, but the weakness she had in math
knowledge, trying to teach place value. From example chose, I knew in trouble, chose long long
number, I thought, why so many threes? Im not a mathematician or math educator. I could see
issue. It got worse and worse. The issue of teacher edu is quite different. One issue in mexico, we
miss math knowledge. We thought for long time, don’t need much more. Normal schools do a lot
of pedagogy. Introduce math pedagogy. Math pedagogy without fundamental math knowledge
end up doing remedial work. I asked for best teacher, taught class, I could still see main probls of
teacher education reflected in her practice. Not because of exemplary practice, people will try to
do best they can. Can tell a lot about that. What would be point to ask…show me your worst
teacher. That’s the whole idea. Then can compare within country exemplary teachers can see
patterns that repeat. In mexico pattern may repeat, fund know of math. Have to be fair, teacher
from rural area vs. urban area.

Poland: Poland we have other problem…we have perfect mathematicians going to school, but
get into trouble they cant teach. Im afraid too much emphasizing math pedagogy. Lot of
problems that novice teachers have. What we see in video, not they don’t have ideas, they have
problems including putting into practice. What didn’t manage to do in teds, ped content know
and classroom managmenet and skills. In observations and such, could be missing from
instruments.

TT: definitely! Pleased u mentioned. Aside from using items from teds, minimal, see whether
they work, no intention to completely replicate teds instruments for study. People have said
several times…balance of knowledge items and math ped items in teds…we will have to reverse
that. We don’t have that many items from teds anyways. We will have to look at teaching
practice. Do they help them teach better. We will have to alter some of that. We still need to
measure knowledge of mathematics. We need to develop more of the items in mathematics
pedagogy. Monica was talking about measuring pedagogy. Several countries did pedagogy thing.
Test of pedagogy, mexico did the best in pre-teds. If teach something in program….mexican
teachers came out high on pedagogy but not so high on math knowledge.

Italy: may be focus more on PCK and being on task or some other things, trying to support
pedagogical content knowledge, and be a little more general in capacity of being a teacher in
class. In Poland had strong mathematicians and subject matter especially. Have no idea how to
teach. General idea to manage class, but specific subj matter…

Brazil: two issues. First one about sample. Lori’s definition of what a good list could be. Almost
impossible to attempt those conditions give data we have. To get a list of novice teachers
representative list, would be diff for us given data we have, diff to get there, almost impossible.
Difficult procedure, given instruments we have now. Once have such a list, diff to get them…not
about…to get them to participate in any initiative, top down initiative coming from state. Don’t
have good relationship with union. Not participate with tests, we’ll see this as another way to see
what we’re doing and to test us. Won’t allow us. Very delicate….kind of care should have.
Second thing: I still don’t see very clearly what results will be received…how they could
contribute to policy making. When I come back there, I say to my gov’t we should do it because
xyz. I understand comparative perspective useful, it still isn’t clear to me the format, result restitution and knowledge instruments and make conclusions about my teachers.

TT: your comment is very good and very important to consider, you already have in mind the stakeholders. Who will open doors. Countries be able to understand that. If you know for example the teacher unions be obstacle, I know difficult to involve unions. My dream would be this study owned by teachers. Teachers actually speak to policy. Can the teachers own the study? How to put together teachers, you own it, you present it to policy makers? Is from regional secretariat (brazil guy). How do you do that? Challenge for all of us. The reason why people might want to fund this, there may be some crucial changes in improvement of teaching force. Teachers becoming like professionals. Doctors and lawyers study selves all time. Groups speak to policy. Ideal, probably naïve view in some cases. But if this was being done to me, im a teacher educator, someone said, as a teacher educator, we can understand ourselves, we can study ourselves, we can tell you what our issues are you know, we own this, and improve our own practice. I think its linked in terms of relevance to policy. Think of teachers as able to use this themselves, relevant for themselves. Involves some organizing, getting together, doing study, rep sample, some will and wont participate.

Brazil: other possibility, instead of doing it by gov’t, do it by university, they have better links to teachers and schools. Will have same rep sample better links but smaller links.

TT: Do first a survey to find actual sample, available data was all hosts. Have to find beg teachers. Universities, some did it in TEDS-M, that’s the group that did the study.

Namita: We have some ideas of how we’re going to test knowledge, whether its content or pedagogical content. What are ways we are going to test beliefs, enacted practice, what are ways?

TT: beliefs we did it in TEDS, we’ll share items with you. We’ll develop more. Pretty much for instruments would be smart to take what did in TEDS. Aside from knowledge tests, more flexibility than others. Costs so much money and so much effort. Tomorrow presentation, Sigrid will talk with you with beliefs items, use in teds m. items are good. I did research in sri lanka, questions from there not in teds m, not relevant to teds m like absenteeism. Beliefs items should reflect cultural differences. Struggling with practice…Sandra will talk to us about what she’s doing, enacted practice. Ed will talk about work that Patricio herts etc are doing with cartoons and such. Observations are also a possibility, videos possibility, reported questionnaires, possibility. Area is wide open for creativity and hard work. Mark reckase, discuss all these areas, what will it take to do all these questions and these areas…let me ask: if life was fantastic and able to get good lists and rep samples we have everything in place and questionnaires and items behaving and researchers are behaving, now what do we do. If have test, how envision applying test to teachers…in mexico what all did for p-teds bring teachers together and do six hour tests. Using mechanism that exists in mexico. That same mechanism used to implement, bring teachers together, answer questionnaires, this was teacher education, class/school context not important, bringing people together made a lot of sense. Same with sri lanka, teachers came together and talked. Other possibilities, we go to the schools. How do you imagine this happening?
Implementation? Wendy suggested computer adaptive tests. Wonderful idea to me. How manage?

Chile: to do two stage sampling: geographical (first) country is divided, select some of this normally. Then for teachers.

TT: go to school.

Chile: need to have some people..good administration, depends on country…less parts where to go. Typical.

TT: advocating go to school.

Chile: yes, I think its cheaper.

TT: we are planning to have high school contacts questionnaire, principal will have to answer, electronic era, diff to get response, maybe more than one reason to go to school. Activities.

South Africa: where to administer depends on what instruments are. If classroom observation we have to go to school.

TT: tentatively making decision.

SA: if there, no choice but to go to school.

TT: encouraged by colleagues experience who have done observation already in schools. People have been there, they are in, im encouraged by part they’ve been successful, good point. We decide to go to schools, can do observation, can do pre and post interviews. Yesterday, instruments of teachers.

Lori: regular household surveys, no list available, partition up to diff areas, prohibitive to have list of schools. Otherwise have to fall back on old methods, taking population and area for proxy for num of teachers per schools, with in area take subsample, depends on collection methodology. In some countries only answer if in place, only respond if you answer online. Depends on how people answer. There are options, want to go with best and then go down. Ways to do it.

TT: area method talking about, may be appropriate for some countries not others. Magic of statistics Canada, can do comparisons…

Mark: three examples this morning, influential, differences in contexts across countries, what kind of info need from this kind of study for it to be useful and can make argument in country we can do this. International study, one part of it is you get international comparisons, depend on how design this. In past try to avoide the “horse race” rank ordering instead of being descriptive, instead of just differences/similarities. Look at within country look at diff in countries with practices and experiences and how teachers change over time. Change within teacher cohorts as
they gain experience and how is more experienced teacher diff than new teacher. One of those changes is desirable and undesirable. Likely that teachers will loose math knowledge with experience (seems odd). They forget certain parts they learned...they have a deeper understanding...interactions with students, have difficulties. Issue of what is enhanced and what isn’t...get new teacher to enhance proper themes...possible outcome of this. When I talk tomorrow, ask questions, what is it the kind of info that you want to get that will be useful to you so when get result, we participated in this and this what we learned. If we don’t design it in the beginning to provide that, oh well not what I wanted, ive been looking at examples, what I would like to know. I would like to know how teachers gain experience from working with students. Im trying to dev methodology to highlight that. What use to enhance improvement of teachers...what need to get from this study that would make you want to participate, if this is what you’re gong to get...this info I want to get. Meeting about try to figure out how to do that so the study gets end result that’s useful to everybody.

TT: when trying to get funding for teds...we dev proposal at MSU and proposal was implemented, understanding of what study was supposed to be, proposal made for countries...people use parts and adapt parts and submit proposal to foundations in country to get funds. Several countries used it and was fine. Some modified. That was the idea. In these studies different levels of funding. Funding for collecting data in country. Proposal was consistent in that way. Provided to all participating countries. Core foundations have different requirements, that’s the idea, everybody shares in this, we all work together.

Saudi Arabia; the instruments, although I don’t know how many instruments we will use. But, I don’t see any problem with surveys or observations. I can see challenges to administer tests for teachers. That’s difficult. Has to be at one time. Difficult, to give test. Do it in school, give it to individual teachers, test will be exposed.

TT: just stay till answer and then take back. You stay with them!

Saudi: how many days to do this.

TT: a similar situation in TEDSM, administrators of test went to TE institutions. For hour and a half sat there, answered survey, everything in survey for future teachers. Then taken away. Very controlled. All at the same time.

Saudi: have control over preservice teachers. Have no control over inservice teachers.

TT: we did training sessions for teds m for how do it. Maybe a situation where, david in mexico, have inservice sessions in district office, applied to all at same time. Observations and questionnaire at different time.

Saudi: very big country, don’t know want representative sample, have to have teachers from all over, that will be very difficult.

TT: u cannot invite them to travel for one day
Saudi: I don’t think so. District offices.

TT: somebody has to go there! This study is not for everyone. There’s a standard methodology, different populations, diff in schools, somebody has to monitor, verify this is the person for representative sample. Not a friend…all kinds of safeguards. May not be possible for some places.

Saudi: possible but difficult.

Toni: u can do it in several different places.

TT: some went to programs in teds. Only thing that was a standard was that people who answered test were monitored. People who answered got number, gave to test administrator, booklet put away. Standard. Part of capacity development. As system of teacher education, want to understand ho weffectively system working this can do it. Step towards accountability. Part of this capacity development. How build capacity to study own system.

Lori: cheating an issue. Have and tell teachers there are different versions of test. Testing same content but diff numbers. Knowing diff tests.

Saudi: taking content of tests and sharing with other teachers. Information sharing (not necessarily cheating) can talk about it. If have two versions of test that would go a long way people even bothering to share with each other.

Chile: I think its like measures…household surveys, go to house of people, have interviewer, you prepare him and he goes and asks and so on, some people you prepare for that and send them to many places and they monitor or whatever. Same time do tests, etc. organization have to prepare people and send people. Prepare people in the district who can do it.

South Africa: the decision about trying to work out the exp of teachers when they go into school and adapt. The decision taken was to do a cross sectional study. Alternative could be a longitudinal study, teachers in training, they would’ve already taken a knowledge (math based) test, other data one needs to collect. The decision to do cross sectional and longitudinal and sampling issue.

TT: interesting idea, may want to try to do longitudinal. Well this is teds-m before doing firstmath, see what they do, that would be a complete study of teacher education. Follow people but maybe lose them very quickly. See how use their knowledge, problem is we are not making it a requirement to participate in firstmath. To participate in firstmath and be comparable need to measure teachers. Beginning teachers is year one, need to get to next year and next year. Data application will take two months. Application of data will take two months, one year or six year point.

Lori: consider pros and cons of following people over time, longitudinal surveys, looking at changes, seeing how teachers change through time, what improve over time. The objective, what makes a good teacher right now. Costs of longitudinal studies are so prohibited, cant find people.
In stats Canada we are killing longitudinal studies, high attrition, only 30 percent of surveys left, the benefits of longitudinal study, just issues of tracing and wait for things and doesn’t measure objectives, make it an unfeasible option.

TT: Were u trying to find graduates for teds in Taiwan?

Taiwan: we had census and we only had three countries, and secondary future teachers, easy to count them and get info from them. Primary small in one country. Hard to get information.

Lori: what proportion did you find, how much time passed since teds?

Taiwan: about three years. Percentage for teds m, for secondary level about 60+ percent.

Poland: most of countries impossible data sources enormous, cant keep data of people, we don’t know what they are. I think there are some difficult questions of feasibility that need consideration. Standardization of test situation, as a group, or one to one test. I think there’s advantage of using computers, adopted tests, authentic use of video materials of test, then there’s a question, to what extent countries go in with this kind of status. May not be feasible in many countries. Cost of all this, if it would be conducted in some way. The other group became other components. Get subsample for observations…or small samples for video study.

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Break

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Presentations Continued

4) Chinese Taipei – mathematics teacher education, history, system overview, mathematics curriculum, etc.

Teacher with good marks in video, 35 students usually in classes. She’s teaching eighth grade in video, first time teaching this grade level. Taught two topics: relationship between size and angle in triangle other is hinge (related to two triangles).

TT: suggestion, lets watch what present, and be mindful of time, then ask questions.

5) Bulgaria (Iliana) – Bulgaria overview, democratic changes, education system, teacher education, etc.

Poland: who scores tests?

Response: all students take tests, ministry of education scores.

Typically 25-30 students in the classroom.
Video: wanted to be teacher a long time, demonstrate lesson.

6) Chile (Nancy) – education system overview, global statistics, political context, etc.

Video: poor school.

Pat: how many children in class?

Chile: generally 35 students.

7) Mexico (Cervantes) – education system overview (including mexico city), etc.

Video: math lesson linear equations. Lower secondary (grade 8). Teacher has only been teaching for two years.

35 students in class.