

APPENDIX C
DISTRICT VISIT PROTOCOL

Study of Secondary Math Teachers from Alternative Routes to Certification

Visit to _____ [District]

Talking Points

Introductions and overview

Introduce self

Distribute business cards

Get attendees' names, affiliations

Ask them to please fill in the Sign In Sheet, so we have record of participants

Thank everyone for attending (and whoever set it up, for doing so)

Distribute, discuss agenda

Please feel free to ask questions at any time.

Describe purpose of meeting, give study overview, mention research team

Here today to describe an important new research study sponsored and fully paid for by the U.S. Department of Education and, we hope, help your district move toward a positive decision about supporting the study.

Study concerns the effectiveness of secondary math teachers from two programs: Teach For America and the set of Teaching Fellows programs (or similarly named programs) established by a group called The New Teacher Project.

Main research question is what impact secondary math teachers from these programs have on student math achievement. The study gets at this issue by comparing them to other teachers who teach the same subjects to similar students. (More on this in a minute.)

In addition, the study will explore how various differences in teachers' backgrounds (e.g., training, other experiences; demographics; math content knowledge) are related to any differences in effectiveness.

The reason we are appealing to your district now is its past/current/future use of secondary math teachers from Teach For America and/or the local Teaching Fellows program.

Organization selected to lead the study for ED is Mathematica Policy Research, with Chesapeake Research Associates and Branch Associates as partners. All three have extensive experience conducting studies for ED, helping produce answers to important education questions of the day for national, state, and local officials.

If known, refer to the team's past involvement with this particular district

Briefly review history of contact with district so far on this new study—who we've spoken to, when, what steps (if any) have been taken so far

Provide some background/context for why ED wants this study done

Let me answer a few key questions you might have, to put this proposed study in context.

First, why do a study of *any* teachers from these programs?

In recent years, the number and proportion of teachers entering the profession from alternative routes to certification have increased dramatically. And while some people argue one way or another about whether that's a good thing, there's little solid information on the relative effectiveness of alternatively certified teachers.

TFA and Teaching Fellows programs are worth studying because they are distinct, interesting, and have a large number of participants. Although they differ in some ways—*e.g.*, (a) *TFA mainly recruits brand new college graduates, while Teaching Fellows programs focus on career-changers; (b) TFA directs participants into existing alternative certification programs, while Teaching Fellows programs are set-up within and in partnership with districts*—they share one important distinction: they target some of the best and brightest people out there; they are highly selective.

TFA goes after high-achieving graduates from some of the country's top colleges/universities; TNTP goes after high-achieving people who have been working in a wide variety of fields.

Both put their applicants through a fairly rigorous screening process—for example, involving challenging interviews or sample teaching lessons. And this distinguishes them from the large majority of alternative certification programs in existence today, which rarely require an undergraduate GPA over 2.5 and rarely involve more than a simple written application for admission.

Also, they are by far the biggest of the selective programs out there, with thousands of teachers placed in numerous districts around the country. So, ED realized that if they wanted to study teachers who take highly selective routes to alternative certification, they'd have to study TFA and Teaching Fellows teachers.

Finally, worth noting that while it was Department of Education's idea to sponsor this study, both TFA and TNTP are very interested in research on their own program participants and both strongly support this study.

Second, why focus on math teachers at the secondary level?

There are shortages of such teachers nationwide, so schools/districts may want to know where they can find qualified candidates, what programs to look to. Education Department wants to know whether certain types of programs or routes to certification are worth fostering or promoting.

Math is a vital skill for national economic competitiveness, and secondary math scores of American students lag behind those of peers in many other industrialized countries. (Much more so than at elementary level.)

Most studies of alternatively certified teachers have focused on the elementary level—including Mathematica’s study of TFA teachers and another study of less selective alternative certification programs. A study of NYC Teaching Fellows included middle school, but no good studies have included high school teachers.

Any questions before I go into study details?

Describe key study details

Now I’d like to describe the study in a bit more detail, then discuss whether/how we might include schools from your district in this study during the 2009-2010 school year.

At its core, study compares student test scores for matching teachers in a given school, with one teacher from Teach For America / the _____[TNTP] program and the other from a different route to certification, but where they teach the same math course to similar students, typically (but not necessarily) during same period.

For example, the two teachers might both teach basic 6th grade math during 3rd period, or both might teach algebra during 5th period. (Same two teachers might even have 2-3 courses in common, in which they could form 2-3 matches. Also one teacher might form a match with two or more different teachers.)

(If we can find enough teacher matches like this, teaching enough courses, across the country, then we can produce definitive findings on the effectiveness of teachers from these different routes to certification. Goal is roughly 450 matches nationwide, about half in middle schools, half in high schools.)

Here’s what participation in the study would involve for your district and schools. Describe the 7 major study activities chronologically:

Study Activity #1. Now through next spring we need to identify secondary schools that expect to have one or more eligible teacher matches in place next school year, and are willing to help us.

Here’s the process we [are using / propose to use] to do that:

First, send to principal a notification letter from Dept. of Ed. / study description, and Teach For America / the _____[TNTP] program support letter—similar materials as sent to district.

Second, call to briefly explain the study and tentatively explore suitability—e.g., by asking a few key questions about teacher backgrounds and potential teaching assignments next year.

Third, if merited, schedule in-person meeting to go over details that are too complex to cover on phone, seek voluntary agreement to cooperate.

During the visit we would talk about which teachers would likely teach which courses during which period of the day, and how students are assigned to courses or large groups.

We would also ask the teachers who we and the principal *think* might make up a match to answer about 3 questions on a 1-page background form. (Principals don't always know what kind of training program or route their teachers took toward initial certification, or how many years they've been teaching.)

IF NOT ALREADY STARTED: Any questions/concerns about that? Any sense of how schools will react to our contacting them? What's the ideal timeframe for schools being able to give us good information about which teachers will be teaching which courses/sections next year?

Study Activity #2. Spring through beginning of fall 2009 we would **work with each school to ensure that students assigned to the matched teachers' courses are similar to one another – on average, allowing for a fair comparison. This is the key to the whole study;** if two 6th grade math teachers don't have students with similar characteristics, the results comparing their test scores will not be scientifically credible; skeptics would just argue that student outcomes are a function of pre-existing student characteristics, and not the teachers' teaching skills.

No one would see a comparison between gifted students in an honors 8th grade math section and students in a regular 8th grade math section as fair. Even if schools say their objective in assigning students to specific classrooms or larger grade-level groups is to create balance, they might not achieve it, because (1) they can only account for so many factors, and some things that could affect student outcomes—like motivation—can't necessarily be measured, and (2) subjectivity could creep into it.

So for this study we have to use a process called “random assignment” to ensure that the students assigned to matching teachers are comparable. This is similar to what is done to test new drugs, where study volunteers are randomly assigned to either try the new drug or to take a placebo, a treatment group and a control group. It's like a lottery, and it's the same process we have used with great success in several other major education studies we have conducted for the Department of Education, including the TFA study and the alternative certification study.

You may wonder how this can work with secondary schools' diverse and complex scheduling processes, but we have a plan that will avoid our upsetting the process.

In cases where the teacher match teaches the same course at the same time, the school will use its normal process to assign students to the designated classrooms. Then an official sends the original course rosters to Mathematica, and we'll use a computer program to simply reshuffle or re-assign this group of students to the teachers in the match, e.g., the TFA/Teaching Fellows teacher or to the non-TFA/Teaching Fellows comparison teacher.

In cases where students are assigned to one of a few similar groups or families within a school, where the goal is balanced groups, and if the TFA/Teaching Fellow teacher teaches a certain course to students in one family and an eligible comparison teacher teaches the same course to students in a different family, we could use random assignment to create the families.

In both cases, we can ensure that the study classes/families are balanced by up to two factors such as gender, grade level (if appropriate), academic ability, or other student characteristics. We can also allow a small percentage of exceptions to random assignment, to accommodate special needs.

We would do this in two stages. First, in spring or summer 2009, whenever schools are at the right stage in their scheduling process. **Second**, because we know that after course schedules are initially set, student mobility can affect course enrollments—with some students not returning to the school and other new ones showing up—**just before and during first 2 weeks of fall semester we would work with schools to deal with class roster changes due to student mobility. It's a straightforward process we call "rolling" random assignment.**

School staff would call a toll-free number, give us a new student's name and any key characteristics (e.g., sex, poverty), and the subject they need to take (e.g., algebra 1), and we will use an instantaneous lottery process to determine which teacher the student should be assigned to. We will ensure one class does not get substantially larger than another and all remain balanced on other key factors used during initial random assignment.

We're known from experience that if we can explain these procedures to principals and work with schools' scheduling staff, we can make this work.

Any questions/concerns?

Study Activity #3. Shortly after that, **we would do what we call a "roster check."** This involves our getting lists of the course enrollments for the study classrooms, to verify that the students we assigned there are still enrolled, and there hasn't been any crossover between teachers who comprise a match. If students have left the school, we will want to find out where they have transferred to; if at another school in this district, we will attempt to collect outcome data from them. Roster checks are quick and easy for school staff.

Study Activity #4. **Slightly later in fall 2009 semester we would seek parental consent to administer a math test to participating high school students.** Will say more about the test in a minute, but our approach to parent notification would be as follows. We'll send a letter to each parent saying that their child's class is part of a national study involving one math test, and that if they do not want their child to take the test, all they need to do is return the form or call a toll-free number and we won't include the student in that aspect of the study. This is known as "passive consent," and it's a process we have used in many other studies.

Any reaction to this proposal? Any firm district policies that might push us in another direction?

Study Activity #5. We need to collect some information from teachers participating in the study. **First, at some point in the school year**, most likely in fall 2009 but possibly not until spring 2010, **we will very likely ask all participating teachers to take a test designed to assess their own math content knowledge.** Details of this study activity have not yet been finalized by ED. It would likely take place outside of regular school hours (not interfere with teaching responsibilities), and though they are free to say “no,” we will compensate them financially for completing the assessment (amount to be determined).

Second, in spring 2010 we will ask teachers to complete a 30-minute online survey on their background and training, and their teaching and training experiences. We’ll pay them \$30 as a thank-you for filling it out.

Study Activity #6. **In spring 2010 we will administer a subject-specific math test to just the high school students participating in study.** There will be four different multiple-choice tests, one each for general math, algebra 1, geometry, and algebra 2. The tests have been developed by the Northwest Evaluation Association, and used in many districts.

They are computer-based adaptive tests. The “adaptive” part means that an algorithm considers how well a student is doing on the test and adjusts subsequent questions accordingly. For example, if a student is doing poorly on an algebra 1 test, it will adapt to start asking more general math questions. This adaptivity can make low-achieving students feel better (because they don’t keep struggling with tough questions), and also can keep all students more engaged. Because we know schools may not have the computer resources to accommodate this testing, we will bring in and set up enough laptop computers for all students to have one, loaded with the test software. We will also bring trained staff to proctor the class and trained technicians to deal with any hardware or software issues.

Because we understand the sensitivity of additional testing versus regular instruction, the goal is for students to be able to complete the test in just one regular class period. And it would be scheduled in consultation with school staff, to avoid conflicting with regular teaching or testing activities.

Any questions about this?

Study Activity #7. Now, what about an outcome measure for middle school students? **In summer/fall 2010 we will ask schools/districts to provide spring 2010 standardized math test scores for middle school students participating in the study.** Basic math achievement tests administered to meet NCLB requirements will be a good measure for the large majority of middle school students, and avoids our having to increase the testing burden on students.

At the same time, we will also request prior year achievement test data for all participating students (as a retrospective baseline measure). For most students in grades 6-9 this may be their test score from spring 2009. For students in upper high school grades, we may have to go back more than one year to get a prior score, if testing is not done annually. Although we trust random assignment to produce the best possible comparison groups, including on students’ average prior achievement levels, we can use data on actual

prior achievement levels in our statistical analyses to improve the accuracy of our impact estimates.

Finally, our data request will include basic background / demographic data found on student records.

That's the final study activity that would involve school or district staff, or students. The primary activities that we are asking school staff to do are (1) provide the rosters we need in order to do initial random assignment, and deal with the rosters we send back after re-shuffling them, (2) deal with us to implement rolling random assignment, (3) help with roster checks to verify student enrollment at a couple points, help with scheduling testing for high school students, and help provide student records.

We hope this proposal eliminates anyone's potential concern about burden associated with the study.

I would also like to point out some features that may be part of other studies you've considered, but are not part of our plan:

No new/additional testing for middle school students; we collect scores from the standardized tests that districts already use

No teacher/classroom observations

No curriculum changes

No surveys or interviews of students or principals or district officials

No requirement that teachers teach particular courses

No new training or professional development for teachers

In summary, real key is finding schools with eligible matching teachers. Once that match is identified and the classrooms are included in the study, we pretty much stay out of the way; teachers are not asked to change their teaching approach in any way and we collect test scores and aggregate up across schools and districts to compare their relative effectiveness.

Get initial assessment of interest or possible issues.

How does this study sound to you?

Level of interest?

What questions or concerns do you have? Are they major or minor?

What would you need to hear to make it seem (more) palatable?

Always seek explanation for reluctance / lack of interest. Seek to address them, or at least express possible flexibility. Points for possible emphasis:

Study will produce new, much-needed info on relationship between teacher preparation and background, and student math achievement

Without good research, ED will not know whether/how to support different training programs, and district officials/principals won't have solid basis for decisions, either

Teach for America / _____[TNTP] program reps strongly support this study; they really want to know how effective their teachers are

Study takes just one year of involvement with schools/district

Absolute minimal amount of additional testing

If it turns out district is unalterably opposed to any new testing at high school level, we could consider using only middle schools there
Minimal other data collection
No interference in classrooms/instruction
No cost to district
No distractions for principals
Our team's experience in doing studies like these; we are sensitive to school issues

Questions we would like answered about your district

Math achievement testing and record keeping

We would want standardized math test scores from before the year of the study, to control for prior achievement levels before students were assigned to one of the study classrooms/teachers.

What is the top grade level at which your district administers an annual standardized math test?

IF GRADE 8 OR HIGHER (HIGH SCHOOL STUDENTS) ARE TESTED: Since what year has testing been done at that level?

IF LOWER THAN GRADE 9 (LOWER THAN FIRST YEAR OF HIGH SCHOOL) OR IF HIGH SCHOOL TESTING IS SO NEW THAT PRIOR-YEAR SCORES WOULD NOT BE AVAILABLE FOR FRESHMEN: When students move from middle school to high school, from 8th to 9th grade, are their final 8th grade test scores automatically included on their transcript/permanent record and forwarded to their new school? (If we wanted to know spring 2008 test score for a student currently in 9th grade, or spring 2007 test score for a student currently in 10th grade, would that score be available from the high school? Or would we have to go back to their middle schools)

What is the timeframe for spring testing? (Approximately which week of which month does it take place?)

Propose possible next steps, for outcome of this meeting.

OK, as for next steps, we are not necessarily seeking final decision right now, on the spot. We know districts have different processes for deciding on research requests. Eventually, if the district decides to support this study, we would want to have both the district and a study team representative sign a “workplan”—essentially, a memorandum of understanding—that lays out their respective responsibilities for the various study activities. And we'd also want each participating school to sign something acknowledging their role in the study.

For now, there are some options for how we could move forward.

IF NOT ALREADY STARTED CALLING SCHOOLS:

ONE OPTION is—we could start calling schools soon, to explore which of them might be eligible for consideration.

Although we know from Teach For America / the _____[TNTP] program which of your secondary schools they've placed math teachers into, there's no way for us to know whether those schools might have eligible teacher matches unless we talk directly to school officials about potential course schedules and verify teachers' backgrounds. (Some of the Teach For America / the _____[TNTP] program teachers may not even be there any more.)

This would be most efficient for *you*, because we would not take up any more of district officials' time until we gained a sense of how well district schools might work for the study. It's also easier on schools to start thinking about the study sooner, rather than deal with it in a condensed time period toward the end of the year, when things are busy.

We could get a simple e-mail or a verbal "OK" from the district, just for contacting schools, in case schools question our legitimacy or approval to be contacting them.

We would *not* say district has approved the whole study, but would say it has approved calls to explore school suitability. We would later come back to you and tell you what we learned and—if schools look promising—then start any formal research approval process that is necessary.

Would you have any concerns/objections to this approach?

If they approve this approach, go to Closing section

SECOND OPTION – if you prefer that we submit a formal research application before district approves exploratory calls to schools, we can certainly do that.

Some districts we've worked with on similar evaluations have used their discretion to *wave* a formal research application because (1) we're working on behalf of the U.S. Department of Education (it's not like a local education graduate student project), and (2) all aspects of the study are being reviewed by both the U.S. Office of Management and Budget (OMB) and an independent Institutional Review Board (IRB). (And we're happy to provide documentation of each of their approvals, once they're available.)

But we are certainly willing to submit an application before going further.

If that's the preference: inquire about the process (required documents/ presentations/ timeline/ etc.), then go to Closing section.

THIRD OPTION – if research application is not required, what steps/process would be involved in the district deciding whether or not to support?

IF ALREADY STARTED CALLING SCHOOLS:

Summarize progress, what we've learned so far, etc.

Make any necessary requests for district-level information/assistance.

If appropriate, raise issue of formal research request process, as under Second Option, above.

Definitely ask about steps/process for district reaching decision on study and signing workplan, as in Third Option, above.

Closing

Thank you all very much for your time and consideration.

Whichever is applicable:

We'll wait and hear back from you with a decision.

We'll let you know what we learn from calls to schools and get back to you.

We'll get started on the research application right away.

We look forward to continuing the discussion of your district's possible participation.

If you have any more questions, you know how to reach me.