# Appendix F Proposed Main Study Teacher Questionnaire

| **************************************  |
|---|
| BTCNFRM1  |
| There are four sections of the HSLS teacher questionnaire:  |
| Section A: The first section asks questions about your background.  |
| Sections B and C: These sections ask about your instruction. Section B is for math teachers. Section C is for science teachers.   |
| Section D: The final section is related to your beliefs about teaching and your opinions about your school.   |
| [If (Y_TCHTYP=1 or 3) and (at least one course is preloaded in Y_MRCRS1-6) then display:] These are the courses we plan to ask you about in Section B. Please confirm that you teach these classes by checking the box for each class you teach (this may not be a complete list of all the courses you teach). |
| BTMCLSS1<br>[Y_MCRS1]   |
| BTMCLSS2<br>[Y_MCRS2]   |
| BTMCLSS3<br>[Y_MCRS3]   |
| BTMCLSS4<br>[Y_MCRS4]   |
| BTMCLSS5<br>[Y_MCRS5]   |
| BTMCLSS6<br>[Y_MCRS6]   |

| B | ГΜ | CI | $_{LN}$ | O |
|---|----|----|---------|---|
|   |    |    |         |   |

Check here if you do not teach any of the above courses.

| Routing logic: go to BTAINTRO.  |
|---|
| BTCNFRM2  |
| [If (Y_TCHTYP=2 or 3) and (at least one course is preloaded in Y_SRCRS1-6) then display:] These are the courses we plan to ask you about in Section C. Please confirm that you teach these classes by checking the box for each class you teach (this may not be a complete list of all the courses you teach). |
| BTSCLSS1<br>[Y_SCRS1]   |
| BTSCLSS2<br>[Y_SCRS2]   |
| BTSCLSS3<br>[Y_SCRS3]   |
| BTSCLSS4<br>[Y_SCRS4]   |
| BTSCLSS5<br>[Y_SCRS5]   |
| BTSCLSS6<br>[Y_SCRS6]   |
| BTSCLNO Check here if you do not teach any of the above courses.  |
| Routing logic: go to BTAINTRO.  |

| BTCNFRM3  |
|---|
|   |
| Routing logic: go to BTAINTRO.  |
| *******************   |
| Section A: Background ************************************  |
| BTAINTRO  |
| This questionnaire will begin by asking you about your background.  |
| Routing logic: go to BTSEX.   |
| BTSEX   |
| Are you male or female?  1=Male 2=Female  |
| Routing logic: go to BTLATINO.  |
| BTLATINO  |
| Are you of Hispanic or [Latino/Latina] origin?  |
| Conditional wording: If BTSEX=2 (female) fill "Latina"; else if BTSEX=1 (male) or missing fill "Latino". 1=Yes 0=No |
| Routing logic: go to BTRACE.  |
| BTRACE  |
| What is your race?  |

| BTWHITE<br>White   |
|--|
| BTBLACK<br>Black/African American  |
| BTASIAN<br>Asian   |
| BTPACIFC Native Hawaiian or Other Pacific Islander   |
| BTAMINDN<br>American Indian or Alaska Native   |
| BTHIDEG  |
| What is the highest degree you have earned?  1=Do not have a degree  2=High School or equivalent  3=Associate's degree  4=Bachelor's degree  5=Master's degree  6=Educational specialist or professional diploma  7=Doctorate or first professional degree |
| Routing logic:   |
| If BTHIDEG = 4 or higher, than go to BTBAYEAR If BTHIDEG = 3 go to BCMTHCOL If BTHIDEG = 1 or 2 BTCERTIF   |
| BTBAYEAR   |
| In what year did you receive your bachelor's degree?  BTBAYEAR (please enter in YYYY format)   |

Routing logic: go to BTSCH01.

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#### BTSCH01

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[IF web mode and iteration=1]

[if MBCHECK = 1]

What is the name of the school at which you plan to enroll before July 1, 2008? Telsel

What is the name of the school at which you were most recently enrolled between July 1, 2005 and June 30, 2008?

[endif]

[ELSE IF WEB MODE AND ITERATION > 1]

At what other school have you been enrolled between July 1, 2005 and June 30, 2008?

To code your school:

- 1. Enter all or part of the school name, and its city and state, if known, then click "Search for School" to display a list of matching schools.

  If your school is outside the US and its territories, enter the school name and city, select "Foreign Country" from the state list, and click "Search for School."
- 2. Click on the name of your school in the resulting list.

#### [DISPLAY ENTRY FIELDS HERE]

Hints: Do not use abbreviations or acronyms such as ASU for Arizona State University. Entering a school name with the city and state will help to limit the number of schools displayed.

[ELSE if (TIO mode) and iteration =1]

What is the name of the school at which you were most recently enrolled, and in what city and state is it located?

[ELSE if (TIO mode) and iteration > 1]

At what other school have you been enrolled between July 1, 2005 and June 30, 2008, and in what city and state is it located?

PLEASE BEAR WITH ME AS I CODE THIS - IT SHOULD JUST take A SECOND.

#### [ENDIF]

-9=Select One

1=Alabama

- 2=Alaska
- 3=Arizona
- 4=Arkansas
- 5=California
- 6=Colorado
- 7=Connecticut
- 8=Delaware
- 9=District of Columbia
- 10=Florida
- 11=Georgia
- 12=Hawaii
- 13=Idaho
- 14=Illinois
- 15=Indiana
- 16=Iowa
- 17=Kansas
- 18=Kentucky
- 19=Louisiana
- 20=Maine
- 21=Maryland
- 22=Massachusetts
- 23=Michigan
- 24=Minnesota
- 25=Mississippi
- 26=Missouri
- 27=Montana
- 28=Nebraska
- 29=Nevada
- 30=New Hampshire
- 31=New Jersey
- 32=New Mexico
- 33=New York
- 34=North Carolina
- 35=North Dakota
- 36=Ohio
- 37=Oklahoma
- 38=Oregon
- 39=Pennsylvania
- 40=Rhode Island
- 41=South Carolina
- 42=South Dakota
- 43=Tennessee
- 44=Texas
- 45=Utah
- 46=Vermont
- 47=Virginia

| 48=Washington  |
|--|
| 49=West Virginia   |
| 50=Wisconsin   |
| 51=Wyoming   |
| 52=Puerto Rico   |
| 53=Canada  |
| 54=American Samoa<br>55=Guam   |
| 55=Guam<br>56=Fed State Micronesia   |
| 57=Marshall Islands  |
| 58=Northern Mariana Isl  |
| 59=Palau   |
| 60=Virgin Islands  |
| 61=American Military   |
| 62=Mexico  |
| 63=Foreign Country   |
| 1=4-year   |
| 2=2-year   |
| 3=Less-than-2-year   |
| 1=Public   |
| 2=Private not-for-profit   |
| 3=Private for-profit   |
| Routing logic: If a foreign school or don't know, go to MBSCH01A ("Don't know" coding screen) to fill in name of school. |
| Else if MBCHECK=1 and the current iteration =1 go to MBETYP01.<br>Else go to MBCREN01.                                   |
| BTBAEDUC   |
| Was this bachelor's degree awarded by [institution name]'s department of education?                                      |
| 1=Yes  |
| 0=No   |
| Routing logic: go to BTBAMAJR.   |
| BTBAMAJR   |
| What was your major or field of study for your bachelor's degree?  |
| Please type your major in the space below and click on "Search for major".   |

### BTBAMAJR Major/field of study

| Routing logic: go to BTBA2ND.  |
|--|
| BTBA2ND  |
| Did you have a second undergraduate major or minor field of study?  1=Yes 0=No   |
| Routing logic: if yes go to BTBAMAJ2; if no or missing go to BTMASTER.   |
| BTBAMAJ2   |
| What was your second undergraduate major or minor field of study?  |
| Please type your second major or minor in the space below and click on "Search for major".  BTBAMAJ2 Second major/minor field of study |
| Routing logic:   |
| If BTHIDEG = 5 or higher, than go to BTMAYEAR If BTHIDEG = 3 go to BCMTHCOL If BTHIDEG = 1 or 2 BTCERTIF                               |
| BTMAYEAR   |
| In what year did you receive your [fill with highest graduate degree earned from BTHIDEG] degree?                                      |
| BTMAYEAR (please enter in YYYY format)   |
| Routing logic: go to BTSCH02.  |
| BTSCH02  |

What is the name of the college or university where you earned your [fill with highest graduate degree earned from BTHIDEG] degree?

- -9=Select One
- 1=Alabama
- 2=Alaska
- 3=Arizona
- 4=Arkansas
- 5=California
- 6=Colorado
- 7=Connecticut
- 8=Delaware
- 9=District of Columbia
- 10=Florida
- 11=Georgia
- 12=Hawaii
- 13=Idaho
- 14=Illinois
- 15=Indiana
- 16=Iowa
- 17=Kansas
- 18=Kentucky
- 19=Louisiana
- 20=Maine
- 21=Maryland
- 22=Massachusetts
- 23=Michigan
- 24=Minnesota
- 25=Mississippi
- 26=Missouri
- 27=Montana
- 28=Nebraska
- 29=Nevada
- 30=New Hampshire
- 31=New Jersey
- 32=New Mexico
- 33=New York
- 34=North Carolina
- 35=North Dakota
- 36=Ohio
- 37=Oklahoma
- 38=Oregon
- 39=Pennsylvania
- 40=Rhode Island
- 41=South Carolina
- 42=South Dakota

- 43=Tennessee
- 44=Texas
- 45=Utah
- 46=Vermont
- 47=Virginia
- 48=Washington
- 49=West Virginia
- 50=Wisconsin
- 51=Wyoming
- 52=Puerto Rico
- 53=Canada
- 54=American Samoa
- 55=Guam
- 56=Fed State Micronesia
- 57=Marshall Islands
- 58=Northern Mariana Isl
- 59=Palau
- 60=Virgin Islands
- 61=American Military
- 62=Mexico
- 63=Foreign Country
- 1=4-year
- 2=2-year
- 3=Less-than-2-year
- 1=Public
- 2=Private not-for-profit
- 3=Private for-profit

Routing logic: Go to BTMAEDUC.

# **BTMAEDUC** Was this [fill with highest graduate degree earned from BTHIDEG] degree awarded by [institution name]'s department of education? 1=Yes 0=NoRouting logic: go to BTMAMAJR. **BTMAMAJR** What was your major or field of study for your [fill with highest graduate degree earned from BTHIDEG] degree? Please type your major in the space below and click on "Search for major". **BTMAMAJR** Major/field of study Routing logic: If Y TCHTYP = 1 (math) or 3 (math & science) then go to BTMTHCOL; Else if $Y_TCHTYP = 2$ (science) go to BTSCICOL. **BTMTHCOL**

In which of the following branches of mathematics have you taken one or more college-level courses?

- Algebra (e.g., Abstract Algebra, Linear Algebra, Groups/Rings/Fields)
- Applied mathematics (e.g., Dynamical systems, Game theory, Information theory, Mathematical modeling, Mathematical physics)
- Calculus/Analysis/Differential equations
- Discrete mathematics/Combinatorics/ Graph theory
- Foundations/Philosophy/History of mathematics/Logic
- Geometry/Trigonometry/Topology
- Number theory
- Probability/Statistics

## **BTSCICOL** Which of the following college-level courses have you taken [Check all that apply.] • General/introductory biology/life science [If Yes to introductory course] Anatomy/physiology Botany/plant physiology Cell biology **Ecology** Entomology Genetics/Evolution Microbiology Zoology/animal behavior General/introductory chemistry [If Yes to introductory course] Analytical chemistry **Biochemistry** Organic chemistry Physical chemistry Any course in the Earth/space sciences [If Yes] Astronomy Environmental science Geology Meteorology Oceanography Physical Geography General/introductory physics [If Yes to introductory course] Electricity and magnetism Heat and thermodynamics Mechanics Modern/quantum physics Nuclear physics **Optics** Engineering (any) • Physical Science go to BTCERTIF. **BTCERTIF**

Which of the following describes the [mathematics/science] teaching certificate you currently hold in THIS state?

- 1=Regular or standard state certificate or advanced professional certificate
- 2=Certificate issued after satisfying all requirements except the completion of a probationary teaching period
- 3=Certificate that requires some additional coursework, student teaching, or passing a test before regular certification can be obtained
- 4=Certificate issued to persons who must complete a certification program in order to continue teaching
- 5=I do not hold any of the above certifications in this state

| Routing logic: If BTCERTIF=5 then go to BTALTCERT.  Else if BTCERTIF <> 5 and Y_TCHTYP = 1 (math) or 3 (math & science) then go to BTMGRCRT;  Else if BTCERTIF <> 5 and Y_TCHTYP = 2 (science) go to BTSGRCRT. |
|--|
| BTMGRCRT   |
| In which grades does this certificate allow you to teach math in THIS state?   |
| BTMTHEL<br>Any grade, kindergarten - 5th   |
| BTMTHJR<br>Any grade, 6th - 8th  |
| BTMTHHI Any grade, 9th - 12th  |
| BTMTHNOA None of the above   |
| Routing logic: If Y_TCHTYP=3 then go to BTSGRCRT; else if Y_TCHTYP=1 then go to BTALTCRT.  |
| BTSGRCRT   |
| In which grades does this certificate allow you to teach science in THIS state?  |

**BTSCIEL** 

**BTSCIJR** 

Any grade, kindergarten - 5th

```
Any grade, 6th - 8th
  BTSCIHI1
  Any grade, 9th - 12th (biology/life sciences)
  BTSCIHI2
  Any grade, 9th - 12th (chemistry/physics/physical science)
  BTSCIHI3
  Any grade, 9th - 12th (earth/space sciences)
  BTSCIHI4
  Any grade, 9th - 12th (other science)
  BTSCIHI4_OTHER
  Specify:
  BTSCINOA
  None of the above
Routing logic: go to BTALTCRT.
BTALTCRT
.....
Did you enter teaching through an alternative certification program?
    1=Yes
    0=No
Routing logic: if Y_TCHTYP = 1 or 3 go to BTMPRETC;
else if Y_TCHTYP = 2 go to BTSPRETC.
BTMPRETC
 _____
Did you work in a field or a job in which you used college-level math before becoming a
teacher?
    1=Yes
    0=No
Routing logic: if Y_TCHTYP=3 go to BTSPRETC;
else if Y_TCHTYP = 1 go to BTK12YRS.
```

| BTSPRETC   |
|--|
| Did you work in a field or a job in which you used college-level science before becoming a teacher?  1=Yes 0=No  |
| Routing logic: go to BTK12YRS.   |
| BTK12YRS   |
| Including this school year, how many years in total have you taught at the following grade levels?   |
| BTK8YRS Years taught grades K-8: (Please enter zero if you have never taught grades K-8)   |
| BT912YRS Years taught grades 9-12:   |
| Routing logic: If Y_TCHTYP=1 (math) or 3 (math and science) go to BTMTHYRS; else if Y_TCHTYP=2 (science) go to BTSCIYRS.   |
| Please add the following clause to the hard check (will update specs when form is checked back in): Else if BT912YRS=0 or BTK12YRS=0 then display "Please count this year when reporting number of years taught; that is, years taught 9-12 and years taught K-12 should be at least 1." |
| BTMTHYRS   |
| Including this school year, how many years have you taught math at the high school level (grades 9-12)?  |
| BTMTHYRS years   |
| Routing logic: If Y_TCHTYP=3 (math and science) then go to BTSCIYRS; else if Y_TCHTYP=1 then go to BTSCHYRS.   |
| BTSCIYRS   |
| Including this school year, how many years have you taught science at the high school level (grades 9-12)?   |

| years  |
|--|
| Routing logic: go to BTSCHYRS.   |
| BTSCHYRS   |
| Including this school year, how many years have you taught [math/science/math, science,] or any other subject at this school?  |
| Conditional wording: if Y_TCHTYP=1 fill "math"; else if Y_TCHTYP=2 fill "science"; else if Y_TCHTYP=3 fill "math, science,";   |
| BTSCHYRS years   |
| Routing logic: go to BTPENSN.  |
| BTPENSN  |
| Are you currently collecting a pension from a teacher retirement system or drawing money from a school/system sponsored 401(k) or 403(b) plan which includes funds you contributed as a teacher?  1=Yes 0=No |
| Routing logic: If Y_TCHTYP=1 (math) or 3 (math and science) go to Section B (BTBINTRO); else if Y_TCHTYP=2 (science) go to Section C (BTCINTRO).   |
| ******************   |
| Section B: Math department and instruction  ***********************************  |
| BTBINTRO   |

Now we have some questions regarding your math instruction and the math department at your school.

Routing logic: go to BTMTHTCH.

#### \_\_\_\_\_\_

#### **BTMTHTCH**

\_\_\_\_\_\_

Indicate the extent to which you agree or disagree with each of the following statements about grades 9-12 math teachers at this school.

#### BTMTCHR1

In this school, grades 9-12 math teachers set high standards for teaching.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMTCHR2

In this school, grades 9-12 math teachers set high standards for students' learning.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMTCHR3

Grades 9-12 math teachers in this school believe all students can do well.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMTCHR4

In this school, grades 9-12 math teachers make expectations for instructional goals clear to students.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMTCHR5

Grades 9-12 math teachers in this school have given up on some students.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMTCHR6

Grades 9-12 math teachers in this school care only about smart students.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMTCHR7

Grades 9-12 math teachers in this school expect very little from students.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMTCHR8

Grades 9-12 math teachers in this school work hard to make sure all students are learning.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

Routing logic: if BTMCLNO=1 or (no items are checked in BTMCLSS1-6) then go to BTMTCHAS; else go to BTMTHCRS.

\_\_\_\_\_

#### **BTMTHCRS**

\_\_\_\_\_\_

The following questions are in regards to the T\_MCRSx course you are teaching.

Which of the following best describes the content of T\_MCRSx?

Conditional wording: SecB\_loop should loop 1 iteration for each math course stored in T\_MCRS1 -- T\_MCRS6. Please fill T\_MCRSx with T\_MCRS1 for first iteration of SecB\_loop (if T\_MCRS1 is non-missing), T\_MCRS2 for second iteration of SecB\_loop (if T\_MCRS2 is non-missing), etc.

PreAlgebra Review/Remedial Math Integrated Math I, II, or III Algebra I, part 1 and part 2

Algebra I

Algebra II

Geometry

Trigonometry

Algebra III

**Analytic Geometry** 

Calculus

Calculus AP (AB)

Calculus AP (BC)

**Computer Science** 

Computer Science AP (A)

Computer Science AP (AB)

Statistics/Probability

Statistics AP

Routing logic: go to BTMTHADD\_1.

BTMTHADD\_1: Which of the following best describes the achievement level of students in this class compared with the average 9<sup>th</sup> grade student in this school? [select one]

- A. Higher achievement levels
- B. Average achievement levels
- C. Lower achievement levels
- D. Widely differing achievement levels

Routing logic: go to BTMTHADD\_2

BTMTHADD\_2. About what percentage of the students in this class are not adequately prepared to tackle the material you plan to cover? [25% or fewer, 26-50%, 51-75%, more than 75%]

go to BTMTHADD 3

BTMTHADD\_3. In this class, do you plan to have students work in small groups? [Yes/No]

If YES, then BTMTHADD\_4, otherwise go to BTMTHADD\_5

BTMTHADD\_4: Primarily, how do you assign students to groups?

- 1. Intentionally create groups so students will be of similar ability levels.
- 2. Intentionally create groups so students will be of different ability levels.
- 3. Create groups without regard to ability level (e.g., alphabetically, randomly).
- 4. Groups are chosen by the students.

#### go to BTMTHADD 5

BTMTHADD\_5. Think about your plans for this mathematics class for the entire course. How much emphasis will each of the following **student objectives** receive? [None; Minimal Emphasis; Moderate Emphasis; Heavy Emphasis]

• Increase students' interest in mathematics

- Learn mathematical concepts
- Learn mathematical algorithms/procedures
- Develop students' computational skills
- Develop problem solving skills
- Learn to reason mathematically
- Learn how mathematics ideas connect with one another
- Prepare for further study in mathematics
- Understand the logical structure of mathematics
- Learn about the history and nature of mathematics
- Learn to explain ideas in mathematics effectively
- Learn how to apply mathematics in business and industry
- Learn to perform computations with speed and accuracy
- Prepare for standardized tests

Routing logic: If SecB\_loop has looped through for each math course pre-loaded in T\_MCRS1,T\_MRCRS2, etc., then go to BTMTCHAS;

Else if SecB\_loop has not looped through for each math course pre-loaded in T\_MCRS1, T\_MRCRS2, etc., then go to BTMTHCRS.

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#### **BTMTCHAS**

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To what extent do you agree or disagree with each of the following statements about how high school (grades 9-12) math teaching assignments are made in this school?.

#### BTMTCAS1

Advanced courses are assigned to teachers with the most seniority.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMTCAS2

Advanced courses are assigned to teachers with the strongest math background.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMTCAS3

All or most math teachers are assigned at least one section of advanced courses.

- 1=Strongly agree
- 2=Agree
- 3=Disagree

#### 4=Strongly disagree

#### BTMTCAS4

Non-college prep courses are assigned to teachers new to the profession.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMTCAS5

Non-college prep courses are assigned to teachers whose students do not perform well on standardized tests.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMTCAS6

All or most math teachers are assigned at least one section of a non-college prep course.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

Routing logic: go to BTALGREM.

\_\_\_\_\_

#### BTALGREM

\_\_\_\_\_

How do you rate the remedial help in your school for students who are struggling in Algebra I?

#### BTALGRM1

Availability of tutoring or other remedial assistance

- 1=Poor
- 2=Fair
- 3=Good
- 4=Excellent

#### BTALGRM2

Quality of tutoring or other remedial assistance

- 1=Poor
- 2=Fair
- 3=Good
- 4=Excellent

Routing logic: go to BTMTHDPA.

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#### **BTMTHDPA**

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To what extent do you agree or disagree with each of the following statements about the math department in this school?

#### BTMDPT01

Math teachers in this department share ideas on teaching.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMDPT02

Math teachers in this department discuss what was learned at a workshop or conference.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMDPT03

Math teachers in this department share and discuss student work.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMDPT04

Math teachers in this department discuss particular lessons that were not very successful.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMDPT05

Math teachers in this department discuss beliefs about teaching and learning.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMDPT06

Math teachers in this department share and discuss research on effective teaching methods.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

Routing logic: go to BTMTHDPB.

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#### **BTMTHDPB**

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To what extent do you agree or disagree with each of the following statements about the math department in this school? (continued)

#### BTMDPT07

Math teachers in this department share and discuss research on effective instructional practices for English language learners.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMDPT08

Math teachers in this department explore new teaching approaches for under-performing students.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMDPT09

Math teachers in this department make a conscious effort to coordinate the content of courses with other teachers in this school.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMDPT10

Math teachers in this department are effective at teaching students mathematics.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMDPT11

Math teachers in this department provide support to new mathematics teachers.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTMDPT12

The math department's chair or curricular area coordinator's behavior toward the staff is supportive and encouraging.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

Now we have some questions regarding your science instruction and the science department at your school.

Routing logic: go to BTSCITCH.

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#### **BTSCITCH**

\_\_\_\_\_

Indicate the extent to which you agree or disagree with each of the following statements about grades 9-12 science teachers at this school.

#### BTSTCHR1

In this school, grades 9-12 science teachers set high standards for teaching.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSTCHR2

In this school, grades 9-12 science teachers set high standards for students' learning.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSTCHR3

Grades 9-12 science teachers in this school believe all students can do well.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSTCHR4

In this school, grades 9-12 science teachers make expectations for instructional goals clear to students.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSTCHR5

Grades 9-12 science teachers in this school have given up on some students.

- 1=Strongly agree
- 2=Agree
- 3=Disagree

#### 4=Strongly disagree

#### BTSTCHR6

Grades 9-12 science teachers in this school care only about smart students.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSTCHR7

Grades 9-12 science teachers in this school expect very little from students.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSTCHR8

Grades 9-12 science teachers in this school work hard to make sure all students are learning.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

Routing logic: if BTSCLNO=1 or (no items are checked in BTSCLSS1-6) then go to BTSTCHAS; else go to BTSCICRS.

|          | <br> |  |
|----------|------|--|
| BTSCICRS |      |  |

\_\_\_\_\_

The following questions are in regards to the [T\_SCRSx] course you are teaching.

Which of the following best describes the content of [T\_SCRSx]?

Conditional wording: SecC\_loop should loop 1 iteration for each science course stored in T\_SCRS1 -- T\_SCRS6. Please fill [T\_SCRSx] with [T\_SCRS1] for first iteration of SecC\_loop (if T\_SCRS1 is non-missing), [T\_SCRS2] for second iteration of SecC\_loop (if T\_SCRS2 is non-missing), etc.

General Science

Life Science

Physical Science

Principles of Technology

Integrated Science I, II, or III

Anatomy/Physiology

Biology I

Biology II

Biology AP

Chemistry I

Chemistry II

Chemistry AP

Earth Science

**Environmental Science** 

**Environmental Science AP** 

Engineering (any kind)

Physical Science

Physics I

Physics II

Physics AP (B)

Physics AP (C: Electricity and Magnetism)

Physics AP (C: Mechanics)

Routing logic: go to BTSCIADD\_1.

BTSCIADD\_1: Which of the following best describes the achievement level of students in this class compared with the average 9<sup>th</sup> grade student in this school? [select one]

- A. Higher achievement levels
- B. Average achievement levels
- C. Lower achievement levels
- D. Widely differing achievement levels

Routing logic: go to BTSCIADD\_2.

BTSCIADD\_2. About what percentage of the students in this class are not adequately prepared to tackle the material you plan to cover? [25% or fewer, 26-50%, 51-75%, more than 75%]

Routing logic: go to BTSCIADD\_3

BTSCIADD\_3. In this class, do you plan to have students work in small groups? [Yes/No]

Routing logic: If YES, then BTSCIADD\_4 otherwise go to BTSCIADD\_5

BTSCIADD 4: Primarily, how do you assign students to groups?

- 1. Intentionally create groups so students will be of similar ability levels.
- 2. Intentionally create groups so students will be of different ability levels.
- 3. Create groups without regard to ability level (e.g., alphabetically, randomly).

4. Groups are chosen by the students.

Routing logic: go to BTSCIADD\_5

BTSCIADD\_5: Think about your plans for this science class for the entire course. How much emphasis will each of the following **student objectives** receive? [None; Minimal Emphasis; Moderate Emphasis; Heavy Emphasis]

- Increase students' interest in science
- Learn basic science concepts
- Learn important terms and facts of science
- Learn science process/inquiry skills
- Prepare for further study in science
- Learn to evaluate arguments based on scientific evidence
- Learn how to communicate ideas in science effectively
- Learn about the applications of science in business and industry
- Learn about the relationship between science, technology, and society
- Learn about the history and nature of science
- Prepare for standardized tests

Routing logic: If SecC\_loop has looped through for each science course pre-loaded in T\_SCRS1, T\_SRCRS2, etc., then go to BTSTCHAS;

Else if SecC\_loop has not looped through for each science course pre-loaded in T\_SCRS1, T\_SRCRS2, etc., then go to BTSCICRS.

#### -----

#### **BTSTCHAS**

\_\_\_\_\_\_

To what extent do you agree or disagree with each of the following statements about how high school (grades 9-12) science teaching assignments are made in this school?

#### BTSTCAS1

Advanced courses are assigned to teachers with the most seniority.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSTCAS2

Advanced courses are assigned to teachers with the strongest science background.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSTCAS3

All or most science teachers are assigned at least one section of advanced courses.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSTCAS4

Non-college prep courses are assigned to teachers new to the profession.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSTCAS5

Non-college prep courses are assigned to teachers whose students do not perform well on standardized tests.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSTCAS6

All or most science teachers are assigned at least one section of a non-college prep course.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

Routing logic: go to BTSCIDPA.

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#### **BTSCIDPA**

\_\_\_\_\_

To what extent do you agree or disagree with each of the following statements about the science department in this school?

#### BTSDPT01

Science teachers in this department share ideas on teaching.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSDPT02

Science teachers in this department discuss what was learned at a workshop or conference.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSDPT03

Science teachers in this department share and discuss student work.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSDPT04

Science teachers in this department discuss particular lessons that were not very successful.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSDPT05

Science teachers in this department discuss beliefs about teaching and learning.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSDPT06

Science teachers in this department share and discuss research on effective teaching methods.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

Routing logic: go to BTSCIDPB.

#### **BTSCIDPB**

\_\_\_\_\_\_

To what extent do you agree or disagree with each of the following statements about the science department in this school? (continued)

#### BTSDPT07

Science teachers in this department share and discuss research on effective instructional practices for English language learners.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSDPT08

Science teachers in this department explore new teaching approaches for underperforming students.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSDPT09

Science teachers in this department make a conscious effort to coordinate the content of courses with other teachers in this school.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSDPT10

Science teachers in this department are effective at teaching students in science.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSDPT11

Science teachers in this department provide support to new science teachers.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTSDPT12

The science department's chair or curricular area coordinator's behavior toward the staff is supportive and encouraging.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

| Routing logic: go to SectionD (BTDINTRO).  |
|--|
| ********************   |
| Section D: Beliefs about teaching and school  **********************************                                   |
| BTDINTRO   |
| The questions in the final section are related to your beliefs about teaching and your opinions about your school. |
| Routing logic: go to BTBOYGRL.   |
| BTBOYGRL   |

In general, how would you compare males and females in each of the following subjects?

#### BTBYGRL1

English or Language Arts

- 1=Females are much better
- 2=Females are somewhat better
- 3=Females and males are the same
- 4=Males are somewhat better
- 5=Males are much better

#### BTBYGRL2

#### Math

- 1=Females are much better
- 2=Females are somewhat better
- 3=Females and males are the same
- 4=Males are somewhat better
- 5=Males are much better

#### BTBYGRL4

#### Science

- 1=Females are much better
- 2=Females are somewhat better
- 3=Females and males are the same
- 4=Males are somewhat better
- 5=Males are much better

Routing logic: go to BTPROBLM.

BTPROBLM

To what extent is each of the following a problem in this school?

#### BTPROB01

Student tardiness

- 1=Not a problem
- 2=Minor problem
- 3=Moderate problem
- 4=Serious problem

#### BTPROB02

Student absenteeism

- 1=Not a problem
- 2=Minor problem
- 3=Moderate problem
- 4=Serious problem

#### BTPROB03

Student class cutting

- 1=Not a problem
- 2=Minor problem
- 3=Moderate problem
- 4=Serious problem

#### BTPROB04

Teacher absenteeism

- 1=Not a problem
- 2=Minor problem
- 3=Moderate problem
- 4=Serious problem

#### BTPROB05

Students dropping out

- 1=Not a problem
- 2=Minor problem
- 3=Moderate problem
- 4=Serious problem

#### BTPROB06

Student apathy

- 1=Not a problem
- 2=Minor problem
- 3=Moderate problem
- 4=Serious problem

#### BTPROB07

Lack of parental involvement

- 1=Not a problem
- 2=Minor problem
- 3=Moderate problem
- 4=Serious problem

#### BTPROB09

Students come to school unprepared to learn

- 1=Not a problem
- 2=Minor problem
- 3=Moderate problem
- 4=Serious problem

#### BTPROB10

Poor student health

- 1=Not a problem
- 2=Minor problem
- 3=Moderate problem
- 4=Serious problem

#### BTPROB11

Lack of resources and materials for teachers

- 1=Not a problem
- 2=Minor problem
- 3=Moderate problem
- 4=Serious problem

Routing logic: go to BTLIMITA.

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#### **BTLIMITA**

\_\_\_\_\_

In your view, to what extent do the following limit how you teach?

#### BTLIMT01

Students with different academic abilities in the same class

- 0=Not applicable
- 1=Not at all
- 2=A little
- 3=Some
- 4=A lot

#### BTLIMT02

Students who come from a wide range of socio-economic backgrounds

- 0=Not applicable
- 1=Not at all
- 2=A little
- 3=Some
- 4=A lot

#### BTLIMT03

Students who come from a wide range of language backgrounds

- 0=Not applicable
- 1=Not at all
- 2=A little
- 3=Some
- 4=A lot

#### BTLIMT04

Students with special needs (e.g. hearing, vision, speech impairment, physical disabilities, mental or emotional/psychological impairment)

- 0=Not applicable
- 1=Not at all
- 2=A little
- 3=Some
- 4=A lot

#### BTLIMT05

Uninterested students

- 0=Not applicable
- 1=Not at all
- 2=A little
- 3=Some
- 4=A lot

#### BTLIMT06

Low morale among students

- 0=Not applicable
- 1=Not at all
- 2=A little
- 3=Some
- 4=A lot

#### BTLIMT07

Disruptive students

- 0=Not applicable
- 1=Not at all
- 2=A little
- 3=Some
- 4=A lot

#### BTLIMT08

Shortage of computer hardware/software

- 0=Not applicable
- 1=Not at all
- 2=A little
- 3=Some
- 4=A lot

#### BTLIMT09

Shortage of support for using computers

- 0=Not applicable
- 1=Not at all
- 2=A little
- 3=Some
- 4=A lot

#### BTLIMT10

Shortage of textbooks for student use

- 0=Not applicable
- 1=Not at all
- 2=A little
- 3=Some
- 4=A lot

Routing logic: go to BTLIMITB.

# BTLIMITB In your view, to what extent do the following limit how you teach? (continued)

#### BTLIMT11

Shortage of other instructional equipment for students' use

- 0=Not applicable
- 1=Not at all
- 2=A little
- 3=Some
- 4=A lot

#### BTLIMT12

Shortage of equipment for your use in demonstrations and other exercises

- 0=Not applicable
- 1=Not at all
- 2=A little
- 3=Some
- 4=A lot

#### BTLIMT13

Inadequate physical facilities

- 0=Not applicable
- 1=Not at all
- 2=A little
- 3=Some
- 4=A lot

#### BTLIMT14

High student/teacher ratio

- 0=Not applicable
- 1=Not at all
- 2=A little
- 3=Some
- 4=A lot

#### BTLIMT15

Lack of planning time

- 0=Not applicable
- 1=Not at all
- 2=A little

| 3=Some<br>4=A lot   |  |
|---|--|
| BTLIMT16 Lack of autonomy in instructional decisions 0=Not applicable 1=Not at all 2=A little 3=Some 4=A lot        |  |
| BTLIMT17 Lack of parent/family support 0=Not applicable 1=Not at all 2=A little 3=Some 4=A lot                      |  |
| BTLIMT18 Inadequate opportunities for professional learning 0=Not applicable 1=Not at all 2=A little 3=Some 4=A lot |  |
| BTLIMT19 Inadequate administrative support 0=Not applicable 1=Not at all 2=A little 3=Some 4=A lot                  |  |
| Routing logic: go to BTINSTRU.  |  |

BTINSTRU

\_\_\_\_\_\_

Please indicate the extent to which you agree or disagree with each of the following statements as it applies to your instruction.

#### BTINSTR1

The amount a student can learn is primarily related to family background.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTINSTR2

If students are not disciplined at home, they are not likely to accept any discipline.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTINSTR3

I am very limited in what I can achieve because a student's home environment is a large influence on his/her achievement.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTINSTR4

If parents would do more for their children, I could do more for my students.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTINSTR5

If a student did not remember information I gave in a previous lesson, I would know how to increase his/her retention in the next lesson.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTINSTR6

If a student in my class becomes disruptive and noisy, I feel assured that I know some techniques to redirect him/her quickly.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### **BTINSTR8**

If I really try hard, I can get through to even the most difficult or unmotivated students.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### **BTINSTR9**

When it comes right down to it, I really can not do much because most of a student's motivation and performance depends on his or her home environment.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

Routing logic: go to BTPRNCPL.

#### BTPRNCPL

\_\_\_\_\_

Please indicate the extent to which you agree or disagree with each of the following statements about your school's principal.

#### BTPRINC1

The principal deals effectively with pressures from outside the school that might interfere with my teaching.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTPRINC2

The principal does a poor job of getting resources for this school.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTPRINC3

The principal sets priorities, makes plans, and sees that they are carried out.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTPRINC4

The principal knows what kind of school he/she wants and has communicated it to the staff.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTPRINC5

The principal lets staff members know what is expected of them.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTPRINC6

The principal is interested in innovation and new ideas.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

#### BTPRINC7

The principal usually consults with staff members before he/she makes decisions that affect us.

- 1=Strongly agree
- 2=Agree
- 3=Disagree
- 4=Strongly disagree

Routing logic: go to BTSTAFF.

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#### **BTSTAFF**

\_\_\_\_\_\_

Indicate the extent to which you agree or disagree with each of the following statements. Teachers at your school...

#### BTSTAFF1

- ...help maintain discipline in the entire school, not just in their classroom.
  - 1=Strongly agree
  - 2=Agree
  - 3=Disagree
  - 4=Strongly disagree

#### BTSTAFF2

- ...take responsibility for improving the school.
  - 1=Strongly agree
  - 2=Agree
  - 3=Disagree
  - 4=Strongly disagree

#### BTSTAFF3

- ...set high standards for themselves.
  - 1=Strongly agree
  - 2=Agree
  - 3=Disagree
  - 4=Strongly disagree

#### BTSTAFF4

- ...feel responsible for helping students develop self-control.
  - 1=Strongly agree
  - 2=Agree
  - 3=Disagree
  - 4=Strongly disagree

#### BTSTAFF5

- ...feel responsible for helping each other do their best.
  - 1=Strongly agree
  - 2=Agree
  - 3=Disagree
  - 4=Strongly disagree

#### BTSTAFF6

| feel responsible that all students learn.   |  |
|---|--|
| 1=Strongly agree  |  |
| 2=Agree   |  |
| 3=Disagree  |  |
| 4=Strongly disagree   |  |
| BTSTAFF7feel responsible when students in this school fail.  1=Strongly agree  2=Agree  3=Disagree  4=Strongly disagree |  |

\*

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END

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Congratulations, you have completed the HSLS questionnaire!

On behalf of the U.S. Department of Education, thank you for your time and cooperation. We greatly appreciate your participation in this study.

Routing logic: end teacher survey.

Routing logic: go to END.