

## Online Appendix

### Appendix A: Student Survey Items

The 8<sup>th</sup> grade student survey questions that comprise our expanded controls in equation (1) are the following:

1. Is there a computer in your home? If there is, how do you mainly use it?
  - a. There is no computer in my home.
  - b. There is a computer in my home, but I do not use it
  - c. I use the computer in my home mainly for schoolwork.
  - d. I use the computer in my home mainly for things other than schoolwork.
  - e. I use the computer in my home about the same for schoolwork and other things.
2. Have you been involved with any school-based or community programs, classes or activities designed to help you plan and prepare for continuing your education beyond high school?
  - a. I have not yet thought about my plans beyond high school.
  - b. *Yes*, I have participated in these types of programs, classes, or activities designed to help plan and prepare for college, and I *do* plan to continue my education beyond high school.
  - c. *Yes*, I have participated in these types of programs, classes, or activities designed to help plan and prepare for college, but I *do not* plan to continue my education beyond high school.
  - d. *No*, I have not participated in any programs, classes, or activities, but I *do* plan to continue my education beyond high school.
  - e. *No*, I have not participated in any programs, classes, or activities, and I *do not* plan to continue my education after high school.
3. Which best describes the math course you are taking or have taken *this year*?
  - a. Basic or General Math
  - b. Pre-algebra
  - c. Algebra
  - d. Geometry
  - e. Integrated Math
  - f. I am not taking/have not taken a math course this year.
4. Which best describes the science course you are taking or have taken *this year*?
  - a. General Science
  - b. Life Science
  - c. Earth Science
  - d. Physical Science (chemistry and/or physics)
  - e. A course that combines life, earth, and physical science (Integrated Science)
  - f. I am not taking/have not taken a science course this year.
  - g. Other

5. Which best describes the science course you took *last year*?
  - a. General Science
  - b. Life Science
  - c. Earth Science
  - d. Physical Science (chemistry and/or physics)
  - e. A course that combines life, earth, and physical science (Integrated Science)
  - f. I did not take a science course this year.
  - g. Other
6. Have you taken a course in Technology Education (using tools and machines to solve real-world problems) in the seventh or eighth grade?
  - a. Yes, as a separate course in seventh grade.
  - b. Yes, as a separate course in eighth grade.
  - c. Yes, as part of a science course in seventh grade.
  - d. Yes, as part of a science course in eighth grade.
  - e. Yes, both as a separate course and as a part of a science course in seventh and eighth grades.
  - f. No, I have not taken a course in Technology Education.
7. Approximately how much time do you spend on English homework *each week*?
  - a. I don't have any homework in English.
  - b. English homework is assigned, but I don't do it.
  - c. Less than 1 hour each week
  - d. Between 1-3 hours each week
  - e. Between 3-5 hours each week
  - f. More than 5 hours each week
8. Approximately how much time do you spend on math homework *each week*?
  - a. I don't have any homework in math.
  - b. Math homework is assigned, but I don't do it.
  - c. Less than 1 hour each week
  - d. Between 1-3 hours each week
  - e. Between 3-5 hours each week
  - f. More than 5 hours each week
9. Approximately how much time do you spend on science homework *each week*?
  - a. I don't have any homework in science.
  - b. Science homework is assigned, but I don't do it.
  - c. Less than 1 hour each week
  - d. Between 1-3 hours each week
  - e. Between 3-5 hours each week
  - f. More than 5 hours each week

The following two questions were only administered to the 2003 and 2004 cohorts:

10. What is the highest level of school completed by your mother or female guardian?
  - a. She did not finish high school.
  - b. She graduated from high school.
  - c. She graduated from a two-year college, business school, or technical school.
  - d. She graduated from a four-year college.
  - e. She has an advanced degree (such as a master's or doctorate).
  - f. I don't know.
11. What is the highest level of school completed by your father or male guardian?
  - a. He did not finish high school.
  - b. He graduated from high school.
  - c. He graduated from a two-year college, business school, or technical school.
  - d. He graduated from a four-year college.
  - e. He has an advanced degree (such as a master's or doctorate).
  - f. I don't know.

We use question 2 to create our 8<sup>th</sup> grade measure of whether or not a student plans to attend college after high school by combining response options b and d and setting them equal to 1 and setting all the other response options equal to 0.

We use responses to questions 10 and 11 to construct a measure of (either) parents' highest level of education, which we use in our forecast bias tests.

The 10<sup>th</sup> grade student survey questions that we use to construct our high school outcomes are the following:

1. Which best describes the math course you are taking or have taken *this year*?
  - a. General Math or Applied Math
  - b. Algebra I
  - c. Geometry
  - d. Algebra II
  - e. Integrated Math
  - f. Advanced Math (trigonometry, pre-calculus, and/or discrete mathematics).
  - g. I am not taking/have not taken a math course this year.
2. Which best describes the math course you took *last year*?
  - a. General Math or Applied Math
  - b. Algebra I
  - c. Geometry
  - d. Algebra II
  - e. Integrated Math
  - f. Advanced Math (trigonometry, pre-calculus, and/or discrete mathematics)
  - g. I did not take a math course last year.

3. Which best describes your current plans for what you will do *after you finish high school*?
- a. I plan to attend a four-year college.
  - b. I plan to attend a community college, business school, or technical school.
  - c. I plan to work full-time after graduating from high school.
  - d. I plan to join the military after graduating from high school.
  - e. I have other plans.
  - f. I have no plans right now.