# APPENDICES

**User's Guide and Toolkit for the Surveys of Student Engagement: The High School Survey of Student Engagement (HSSSE) and the Middle Grades Survey of Student Engagement (MGSSE)**

By Jonathan Martin and Amada Torres

## APPENDIX A. Sample HSSSE and MGSSE Questions

Below are some examples of the questions included in the HSSSE and the MGSSE:

Q4. To what extent do you agree or disagree with the following statements related to your high school?
(Scale: Strongly disagree, disagree, agree, strongly agree)

a. Overall I feel good about being in this high school
b. I care about this high school
c. I feel safe in this high school
d. My opinions are respected in this high school

Q5. How much do each of the following classroom activities and assignments interest and engage you?
(Scale: Not at all, very little, some, very much)

a. teacher lectures
b. discussions and debates
c. individual readings

Q7. How much has your experience at this school contributed to the development in the following areas:
(Scale: Not at all, very little, some, very much)

a. writing effectively
b. speaking effectively
c. thinking critically (reasoning, asking "why"?)
d. developing creative ideas and solutions
e. reading and understanding challenging material

Q10. During this school year, how often have you been picked on or bullied by another student?
(Options: Never, rarely, sometimes, often)

Since the MGSSE was based on the HSSSE, the questions are very similar. However, the language for the MGSSE has been adapted to be relevant to students in fifth through ninth grades. For example, questions would replace "this high school" with "this school."

## APPENDIX B. INTERPRETING YOUR HSSSE OR MGSSE MEANS COMPARISONS REPORT

The Means Comparisons Report is one of the sections of your HSSSE (or MGSSE) report. It allows you to compare your students' responses with the responses of the NAIS cohort and public school participants in a statistically sound manner. This report provides you with the average (mean) response to each question from both your school's students and the rest of the HSSSE (or MGSSE) participants.

Please note that the NAIS and public school cohorts are aggregates of students from several states that vary greatly by these demographic characteristics:

- School size
- Diversity
- Location
- Services/programs

The schools also vary greatly in terms of how much and in what ways students are engaged. Therefore, this report is an excellent resource for comparisons with the larger HSSSE or MGSSE sample. However, it does not indicate whether any particular school is doing well or not in the area of student engagement. Therefore, you need to investigate these data closely within the specific context of your own school.

Below you will find a screenshot and a description of each column of your means comparison report. The legends will help you interpret results.

| ① Q18b. I put forth a great deal of effort when doing my school work (1=Strongly Disagree, 2=Disagree, 3=Agree, 4=Strongly Agree) ② | ③ Grade | Your School Mean ④ | NAIS Mean | NAIS Prob | NAIS Effect | HSSSE Public Mean | HSSSE Public Prob | HSSSE Public Effect |
|---|---|---|---|---|---|---|---|---|
| | 9th | 4.00 | 2.97 | *** | 1.80 | 3.29 | *** | 1.44 |
| | 11th | 4.00 | 2.92 | | | 3.25 | | |
| | 12th | 3.17 | 2.95 | | 0.27 | 3.20 | | -.04 |
| | Total | 3.50 | 2.96 | * | 0.71 | 3.25 | | 0.35 |

① **Survey Item Question Stem.** The items from the *High School Survey of Student Engagement* appear in the same order as they appear on the survey instrument.

② **Response Categories**. The value of each response in the survey is indicated in the scale legend. In general, each question will have a scale of 1 to 4.

③ **Grade**. Responses to each item are reported by grade level, 9th - 12th. If your school does not have data for a particular grade then the grade will not be represented in your data or the comparison data.

④ **Mean**. The mean is the arithmetic average of student responses on a particular item. Means are provided for your school's student respondents and for the NAIS Cohort and HSSSE Public respondents. The response categories for each question from the survey are listed in the box of the table alongside the question stem. This mean reflects the average of the category code.

The HSSSE and MGSSE reports allow you to compare your school with larger groups of HSSSE or MGSSE schools. One way to know whether there is a difference between your school and the other HSSSE or MGSSE respondents is by computing the probability of statistical significance, that is, the probability that your school mean is different from the mean for all other HSSSE or MGSSE respondents. A probability level less than 0.05 indicates that there is a less than 1 in 20 chance that the difference in means is due to sampling error or random chance. That is, your school is statistically different from the larger public sample at a significance level of $p < 0.05$. Assuming that the numbers below correspond to your HSSSE school results, there are statistically significant differences between mean values of your school and the HSSSE public and NAIS cohort respondents for ninth-, 11th-, and 12th-graders with probability values greater than 0.05. The smaller the probability level, the smaller the likelihood that the difference is due to chance.

| | | Your School | NAIS | ⑤ | | HSSSE Public | ⑥ | |
|---|---|---|---|---|---|---|---|---|
| *Q18b. I put forth a great deal of effort when doing my school work (1=Strongly Disagree, 2=Disagree, 3=Agree, 4=Strongly Agree)* | *Grade* | Mean | Mean | Prob | Effect | Mean | Prob | Effect |
| | *9th* | 4.00 | 2.97 | *** | 1.80 | 3.29 | *** | 1.44 |
| | *11th* | 4.00 | 2.92 | | | 3.25 | | |
| | *12th* | 3.17 | 2.95 | | 0.27 | 3.20 | | -.04 |
| | *Total* | 3.50 | 2.96 | * | 0.71 | 3.25 | | 0.35 |

⑤ **Probability level**. The level at which the difference in means is considered to be attributed to chance. Items with mean differences that are larger than would be expected by chance alone are indicated with one, two, or three asterisks to represent the three significance levels ($p<.05$, $p<.01$, $p<.001$). A probability level of 0.01 would indicate that the difference between means has a less than 1 in 100 chance of being attributed to sampling error or random chance. This would be considered a statistically significant difference at a level of $p = 0.01$.

⑥ **Effect size**. An indicator of practical significance. That is, how different are the mean values after accounting for the variability of all scores in both your school and the HSSSE Public and NAIS Cohort schools? Effect size is important to consider for a number of reasons, one of which is that the size of the sample does not impact the largeness or smallness of the effect size.

Next to the significance level, you will find a column referring to effect size. Effect size indicates the practical significance of the mean difference between groups being compared. It is calculated by dividing the mean difference between your school and the larger HSSSE or MGSSE samples by the overall variation across all scores in your school and other HSSSE or MGSSE respondents. Here are some general guidelines for determining the relative importance of the effect size:

- 0.20 is a small effect.
- 0.50 is a medium effect.
- 0.80 is a large effect.

These indicators were developed by Jacob Cohen[1] and are commonly used in research in the social sciences. In educational research, it is most common to find effect sizes between 0.10 and 0.40. Although possible, it is not common to find effect sizes greater than 0.50 in educational research. This is often due to the wide range of participant responses in the data collected. A wide range of responses results in a large denominator in the equation described above, and thus a small effect

1 Jacob Cohen, *Statistical Power Analysis for the Behavioral Sciences,* 2nd ed. (Hillsdale, NJ: Lawrence Erlbaum Associates, 1988).

size is produced.

## APPENDIX C. FAQs FOR EDUCATORS

1. ***Who developed and manages the surveys?*** The surveys are owned and managed by their original developer, the Center for Evaluation and Education Policy (CEEP, pronounced "keep") at Indiana University. CEEP also owns and operates the widely used National Survey of Student Engagement (NSSE) for college and university students.

2. ***What is the purpose of the surveys?*** The purpose of the surveys is to support continuous improvement by user institutions and to improve student learning and well-being. They are also used by some schools for accreditation, planning, and marketing.

3. ***When are the surveys administered?*** Participating schools choose when to administer the surveys within a window provided by Indiana University. Normally, the surveys are administered during the spring, between March and May.

4. ***What equipment will our school need to provide? How are the surveys delivered?*** The surveys are usually taken online, so students need access to the Internet.

5. ***How much student time is required?*** Both surveys are available online or on paper, and most students complete the surveys within 15 to 20 minutes. Schools typically assign 30 minutes or so to administering the HSSSE or MGSSE.

6. ***Can schools publish, promote, and market their results?*** Yes, there are no limitations on how schools can use their HSSSE or MGSSE data.

7. ***Are individual student responses identified and reported?*** No, the surveys are administered anonymously; students never put their names on the surveys.

8. ***How much do the surveys cost?*** The cost of participating in either the HSSSE or the MGSSE through the NAIS study includes a participation/user fee and a survey fee based on the number of students participating in the survey. On registration, each school pays a nonrefundable participation/user fee of $400 for each survey (HSSSE and/or MGSSE). Each school also pays a survey fee per student, based on the number of students participating in the survey. The online survey is $1.50 per student, and the paper/pencil survey is $2 per student. (Although the questionnaires are free, NAIS schools pay for the individual reports and benchmarking reports, plus additional items.)

## APPENDIX D. FAQs FOR PARENTS

1. ***Who developed and manages the surveys?*** The surveys are owned and managed by their original developer, the Center for Evaluation and Education Policy (CEEP, pronounced "keep") at Indiana University. CEEP also owns and operates the widely used National Survey of Student Engagement (NSSE) for college and university students.

2. ***What is the purpose of the surveys?*** The purpose of the surveys is to support continuous improvement by user institutions and to improve student learning and well-being. They are also used by some schools for accreditation, planning, and marketing.

3. ***How do I find out more about the kinds of questions asked on the HSSSE and the MGSSE?*** A sample of the HSSSE is available here: http://ceep.indiana.edu/hssse/nais/rt_2012Survey_website.pdf. A sample of the MGSSE is available here: http://ceep.indiana.edu/hssse/nais/Scantron_MGSSE_3_7_16.pdf.

4. ***When are the surveys administered?*** The surveys are administered during the school day by the school administration at a time of its choosing.

5. ***How much student time is required?*** Usually about 30 minutes.

6. ***Are individual student responses identified and reported?*** No, the surveys are administered completely anonymously, and there is no way for the school to determine any individual student's response.

7. ***Will I receive a report of my child's response to the survey?*** No, the surveys are used only for group data, and there is no individual student survey report.

8. ***Will the school's HSSSE or MGSSE survey results be made public to the parent body?*** No, the survey results are provided confidentially to the school administration for its work of continuous improvement.

9. ***How will the school use the results of the surveys?*** [The school should answer this question in its own words.]

## APPENDIX E: SUGGESTED RESOURCES

Bill & Melinda Gates Foundation. "Feedback for Better Teaching: Nine Principles for Using Measures of Effective Teaching." Measures of Effective Teaching (MET) Project brief, 2013.

Boudett, Kathryn Parker, Elizabeth A. City, and Richard J. Murnane, eds. *Data Wise, Revised and Expanded Edition: A Step-by-Step Guide to Using Assessment Results to Improve Teaching and Learning.* Cambridge, MA: Harvard Education Press, 2013.

Bryk, Anthony, Louis M. Gomez, Alicia Grunow, and Paul G. LeMahieu. *Learning to Improve: How America's Schools Can Get Better at Getting Better.* Cambridge, MA: Harvard Education Press, 2015.

Ferguson, Ronald. "Can Student Surveys Measure Teaching Quality?" *Phi Delta Kappan* 94, no. 3 (2012): 24–28.

Fredricks, Jennifer A., Phyllis C. Blumenfeld, and Alison H. Paris. "School Engagement: Potential of the Concept, State of the Evidence," *Review of Educational Research* 74, no. 1 (2004): 59–109. http://www.isbe.net/learningsupports/pdfs/engagement-concept.pdf

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Hattie, John. *What Works Best in Education: The Politics of Collaborative Expertise*. London: Pearson, 2015.

Kuh, George D., Stanley O. Ikenberry, Natasha A. Jankowski, Timothy Reese Cain, Peter T. Ewell, Pat Hutchings, and Jillian Kinzie, eds. *Using Evidence of Student Learning to Improve Higher Education*. San Francisco: Jossey-Bass, 2015.

Marks, Helen M. "Student Engagement in Instructional Activity: Patterns in the Elementary, Middle, and High School Years." *American Educational Research Journal* 37, no. 1 (2000): 153–184. http://gtnpd46.ncdpi.wikispaces.net/file/view/marks.pdf/538414934/marks.pdf

Murphy, Joseph F., and Daniela Torre. *Creating Productive Cultures in Schools: For Students, Teachers, and Parents*. Thousand Oaks, CA: Corwin, 2014.

National Association of Independent Schools (NAIS) and the Center for Evaluation and Education Policy (CEEP) at Indiana University. "Surveys of Student Engagement" (HSSSE and MGSSE documents). http://ceep.indiana.edu/hssse/nais

National Survey of Student Engagement (NSSE). Multiple resources; especially see those listed below. http://nsse.indiana.edu.

"A Guide to Contextualizing Your NSSE Data: Cognitive Interviews and Focus Groups." 2007; updated 2010. http://nsse.indiana.edu/html/context_results.cfm

"Guidelines for Display of NSSE Results on Institution Web Sites." http://nsse.indiana.edu/pdf/Guidelines%20for%20Displaying%20NSSE%20Data%202014.pdf

"How Institutions Use NSSE." http://nsse.indiana.edu/html/how_institutions_use_NSSE.cfm

"Sharing NSSE Results." http://nsse.indiana.edu/html/sharing_NSSE_results.cfm

Wiggins, Grant, and Jay McTighe. *Schooling by Design: Mission, Action, and Achievement.* Alexandria, VA: Association for Supervision and Curriculum Development (ASCD), 2007.

## APPENDIX F. ACKNOWLEDGMENTS

Our thanks to the following educators who participated in the preparation of this guide:

- Dan Alig, The Lovett School (Georgia)
- Chris Bigenho, Greenhill School (Texas)
- Jackie Bonenfant, Milton Academy (Massachusetts)
- Kevin Breen, Marshall School (Minnesota)
- Emily Breite, Mount Vernon Presbyterian School (Georgia)
- Erin Duffy, Seacrest Country Day School (Florida)
- Karen Eshoo, Vistamar School (California)
- Peter Gow, Independent Curriculum Group (Massachusetts)
- Marsha Little, The Lovett School (Georgia)
- Michelle Lyon, Parish Episcopal School (Texas)
- Patricia Muller, Center for Evaluation and Education Policy, Indiana University
- Jack Phillips, The American School in London (United Kingdom)
- Laura Ross, Greenhill School (Texas)
- Tyler Thigpen, Harvard Graduate School of Education (Massachusetts)
- Andy Watson, Albuquerque Academy (New Mexico)

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