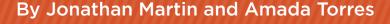


User's Guide and Toolkit for the Surveys of Student Engagement: The High School Survey of Student Engagement (HSSSE) and the Middle Grades Survey of Student Engagement (MGSSE)





INTRODUCTION

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

INTRODUCTION

This *User's Guide and Toolkit* contains essential information for school administrators interested in administering HSSSE or MGSSE. The *Guide* explains why student engagement is important and provides steps and strategies that will help you prepare for and launch the surveys, interpret your school's numbers, and use them to drive improvement.

This *Guide* includes the following sections:

- I. What Is Student Engagement and Why Is It Important?
- II. Improving Student Experience, Growth, and Learning
- III. Data-Informed Decision Making: A Short Primer
- IV. About the HSSSE and the MGSSE
- V. Launching and Managing the HSSSE-MGSSE: Key Steps to Make It Successful
- VI. Interpreting Your HSSSE and MGSSE Results: Nine Noteworthy Tips and Techniques
- VII. Sharing and Communicating HSSSE and MGSSE Results: Five Strategies
- VIII. Using the HSSSE and the MGSSE to Drive Improvement

Appendices:

- Appendix A. Sample HSSSE and MGSSE Questions
- Appendix B. Interpreting Your HSSSE or MGSSE Means Comparisons Report
- Appendix C. FAQs for Educators
- Appendix D. FAQs for Parents
- Appendix E. Suggested Resources
- Appendix F. Acknowledgments

I. WHAT IS STUDENT ENGAGEMENT AND WHY IS IT IMPORTANT?

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I. WHAT IS STUDENT ENGAGEMENT AND WHY IS IT IMPORTANT?

Although there is considerable variation in how "student engagement" is defined and measured, the term is generally used to describe *meaningful student involvement throughout the learning environment*. Thus, "student engagement" is best understood as a relationship between the student and the following elements of the learning environment:

- The school community
- The adults at school
- The student's peers
- The instruction
- The curriculum

Student engagement is a multidimensional (multifaceted) construct that can be measured with all the dimensions dynamically interrelated. Student engagement typically includes three dimensions:

- Behavioral engagement, focusing on participation in academic, social, and co-curricular activities
- *Emotional engagement*, focusing on the extent and nature of positive and negative reactions to teachers, classmates, academics, and school
- Cognitive engagement, focusing on students' level of investment in learning

Student engagement is a function of both the individual and the construct. It varies in intensity and duration. For example, a student may feel very engaged one semester but not so much the next; another student might enjoy some of his or her classes but be bored in others.

Student engagement is increasingly viewed as one of the keys to addressing problems such as low achievement, boredom and alienation, and high dropout rates.¹

¹ Jennifer A. Fredricks, 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; online at http://www.isbe.net/learningsupports/pdfs/engagement-concept.pdf.

I. WHAT IS STUDENT ENGAGEMENT AND WHY IS IT IMPORTANT?

Engaged students are more likely to perform well on standardized tests and are less likely to drop out of school. The conditions that lead to student engagement (and reduce student apathy) contribute to a safe, positive, and creative school climate and culture.

Research indicates that student engagement declines as students progress from upper elementary grades to middle school, reaching its lowest levels in high school. Some studies estimate that, by high school, 40 to 60 percent of youth are disengaged.² Given the serious consequences of disengagement, more and more educators and school administrators are interested in obtaining data on student engagement and disengagement for needs assessment, diagnosis, and preventive measures.

² Helen M. Marks, "Student Engagement in Instructional Activity: Patterns in the Elementary, Middle, and High School Years," *American Educational Research Journal* 37, no. 1 (2000): 156; online at http://gtnpd46.ncdpi.wikispaces.net/file/view/Marks.pdf/538414934/Marks.pdf.

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Schools and universities collect evidence and conduct institutional research for the following reasons, among others:

- Accreditation requirements
- Board expectations
- Parent questions
- Alumni messaging
- Prospective parent marketing

No matter what prompts education leaders, implementing new tools and procedures for educational assessment is most meaningful, rewarding, and effective if its ultimate aims are fulfilling mission, strengthening culture, enhancing wellness, and better educating students.

Measurement makes a difference. Educational settings benefit from the commonplace corporate utterance "What gets measured gets done." A 2013 RAND report for the Hewlett Foundation, *New Assessments, Better Instruction?* found that assessments had a big impact on teacher activities in the classroom (including changes in curriculum content and emphasis), time allocation and resources for different pedagogical activities, and teachers' interactions with individual students. This impact is most effective under the following conditions:

- Teachers receive training and support to interpret scores effectively.
- Test scores "matter," but important consequences do not follow from scores alone.
- High-stakes tests are part of an integrated assessment system that includes formative and summative components.
- Assessment is one component of a broader systemic reform effort.¹

¹ Susannah Faxon-Mills et al., *New Assessments, Better Instruction? Designing Assessment Systems to Promote Instructional Improvement* (Santa Monica, CA: RAND Corporation, 2013); online at http://www.rand.org/pubs/research reports/RR354.html.

The late Grant Wiggins, educator and author, made the same argument as absolutely central to his counsel to school leaders:

First and foremost, academic leaders need to ensure that every educator understands that his or her job is to work toward the mission and goals by *identifying and working to close the inevitable gaps* between mission and reality, ... between desired learning results and actual performances by students on measures that matter.²

The use of data to inform improvement has received a great deal of attention of late, and many administrators are seeking to strengthen data use in their school. The High School Survey of Student Engagement (HSSSE) and the newly launched Middle Grades Survey of Student Engagement (MGSSE) are excellent starting points or next steps. The HSSSE (targeting grades nine through 12) and the MGSSE (targeting grades five through nine) are student-focused surveys that investigate the attitudes, perceptions, and beliefs of students about their school work, the school learning environment, and their interactions with the school community. These data sets provide information about student satisfaction, classroom learning environments, attention given to 21st century skills, bullying, student stress, and much, much more.

Student engagement, although worded in a variety of ways, is sometimes explicitly stated or implied by the mission statements of many independent schools. But even when it isn't, there is strong evidence supporting the assertion that engagement leads to greater academic achievement, which is certainly in the mission statement of nearly every school. To cite Murphy and Torre, "Scholars universally demonstrate a 'positive correlation' between engagement and 'achievement related outcomes," and "Lack of engagement adversely affects student achievement." Sixty-three percent of respondents in an

² Grant Wiggins and Jay McTighe, *Schooling by Design: Mission, Action, and Achievement* (Alexandria, VA: Association for Supervision and Curriculum Development [ASCD], 2007), 177.

³ Joseph F. Murphy and Daniela Torre, *Creating Productive Cultures in Schools: For Students, Teachers, and Parents* (Thousand Oaks, CA: Corwin, 2014).

NAIS survey reported that the HSSSE was "extremely" or "very" useful for evaluating their school's educational effectiveness. Another 33 percent said it was "somewhat" useful. As one respondent wrote, "We are really most interested in measuring our students' perception about how engaged they feel in all aspects of our program, and we are very interested in trying to compare these data with schools that are similar to ours. For the most part, HSSSE has helped us to do this."

Since the HSSSE has been used by independent schools for a longer time than the MGSSE — 2016 was the first year the MGSSE was available — in the pages that follow, we'll see more examples of schools putting the HSSSE to valuable effect.

Just because the HSSSE is useful doesn't mean it is being fully utilized. One representative quote from the NAIS survey was straight to the point: "We could do a better job at this." Registering for the HSSSE may be a great step for your school, but selecting the right tools for the job doesn't mean it's getting done. For example, handing someone a tennis racket doesn't make him or her a tennis pro. Using evidence collected by a carefully selected repertoire of available assessments for improving student learning requires a serious institutional commitment and a wide systematic array of initiatives.

Independent schools function in many ways more like colleges than state-accountable, district-supervised public schools. There is much to learn from the work of postsecondary institutions. Colleges and universities have been wrestling with new accreditation and accountability demands and obligations placed on them to collect and use evidence of student learning. They have found the work very challenging.

⁴ National Association of Independent Schools (NAIS), "Feedback on Your HSSSE Participation Survey," September 2015 (survey for internal use).

The authors of a chapter in a recent book on the subject summarize the state of the postsecondary practice, and it will sound very familiar to many in the K-12 world: "The norm for many institutions is to gather data, circulate the resulting reports among a small group of people, and then to just shelve them if nothing horrible jumps out. And sometimes even if it does! Gathering data is far less risky and complicated than acting on the evidence in the data."

What's required is to turn data into action. "The value of assessment can ONLY be measured by the contribution it makes to student success and the impact it has on improved student performance [emphasis added]."⁷

⁶ Jillian Kinzie, Pat Hutchings, and Natasha Jankowski, "Fostering Greater Use of Assessment Results: Principles for Effective Practice," in *Using Evidence of Student Learning to Improve Higher Education*, ed. George D. Kuh et al. (San Francisco: Jossey-Bass, 2015), 58.

⁷ George D. Kuh et al., "Making Assessment Matter," in *Using Evidence of Student Learning to Improve Higher Education*, ed. George D. Kuh et al. (San Francisco: Jossey-Bass, 2015), 230.

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As suggested in the subtitle of the book by Anthony Bryk and his colleagues, *Learning to Improve*, schools need to "get better at getting better." Leaders in both well-performing and above-average schools need to continue pressing educators to improve school performance on the subjects that matter most to them. This includes math, reading, critical thinking, and problem solving, in addition to a range of other areas, such as student wellness, social skills, responsibility, and motivation.

Schools also need to improve learning for *all* students, not just "median" students. Achievement gaps exist in nearly every school setting, and they deserve close attention. Many data-use experts place the greatest attention on equity, explaining that data can be "most powerfully employed for addressing those deeply problematic and long-lingering challenges of differing levels of success for students of different backgrounds."²

Data use, when done well with discipline,

- reveals gaps;
- · identifies improvement opportunities;
- suggests remedies and interventions;
- monitors progress (and the lack thereof); and
- · confirms effectiveness.

But at the same time, it is essential that data alone not drive decisions or answer questions. Instead, data must inform leadership and illuminate issues. Data-driven decision making is a poor way of describing best practice. Instead, thoughtful, judicious, initiative-taking leadership is more, not less, essential in data-immersed environments.

¹ Anthony Bryk et al., *Learning to Improve: How America's Schools Can Get Better at Getting Better* (Cambridge, MA: Harvard Education Press, 2015).

² Amanda Datnow and Vicki Park, Data-Driven Leadership (San Francisco: Jossey-Bass, 2014).

Using data is no longer optional. The only question remaining is *how well* you'll use it at your school. If school leaders are asked about their data strategies, the response is often apologetic, embarrassed, or uncertain.

Like many other school improvement efforts, data-informed decision making begins at the top. The board must ask the head to make it a priority and then hold the head accountable for measurably effective progress. The head must speak to the importance of data use, and he or she must allocate resources of time, money, and training/professional development for it. It is incumbent on the head to become personally involved and to "show the flag" at assessment activities.

Using data for improvement is not the same as testing for accountability. It requires a mindset shift. In *Learning to Improve*, a brilliant book about the challenging work of making schools better, one chapter is titled "We Cannot Improve at Scale What We Cannot Measure." In this chapter, the authors distinguish between the all-too-familiar "measurement for accountability" and, what is much more important, "measurement for improvement." Measurement for improvement entails

- · more frequent measurement;
- determining whether an educational change is working, in real time or close to it:
- being easily embedded in day-to-day work;
- signaling actionable change;
- having educators as the primary users; and
- data-sharing in a low-stakes, low-risk safe environment conducive to change.³

Another mindset shift is to recognize that the real work is not just collecting the evidence but using it to show results. This has been a big

³ Bryk et al., Learning to Improve.

push among accrediting associations and other assessment experts. A report from the Western Association of Schools and Colleges explains that the accreditation process needs to center not only on gathering evidence but on "becoming more systematic and intentional about gathering data about the right *things* — and on *using* the resulting information to continuously improve."⁴

In *Using Evidence of Student Learning to Improve Higher Education*, edited by university assessment thought leader George Kuh and his colleagues, the distinction between doing assessments and using results is summarized: "Assessment's purpose is to answer questions, shape better policies, make better decisions.... 'If an assessment doesn't help improve teaching and learning activities, why bother with it?" ⁵

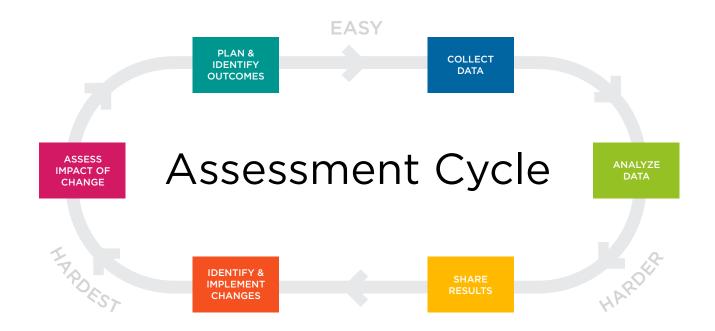
How can we simplify and visualize the core components of a data-informed, continuous improvement process? Many useful resources, including Wiggins and McTighe's *Schooling by Design*;⁶ Boudett, City, and Murnane's *Data Wise*;⁷ and Bryk and colleagues' aforementioned *Learning to Improve*, describe effective systems. Most recently, Kuh and his colleagues at Indiana University published a handy and succinct cyclical graphic, which captures key steps in the process:

⁴ Western Association of Schools and Colleges, "Evidence Guide: A Guide to Using Evidence in the Accreditation Process: A Resource to Support Institutions and Evaluation Teams," Working Draft (January 2002), 5; online at https://www.csusm.edu/wasc/evidence_guide_jan_02.pdf.

⁵ Jillian Kinzie, Pat Hutchings, and Natasha Jankowski, "Fostering Greater Use of Assessment Results: Principles for Effective Practice," in *Using Evidence of Student Learning to Improve Higher Education*, ed. George D. Kuh et al. (San Francisco: Jossey-Bass, 2015), 56.

⁶ Grant Wiggins and Jay McTighe, *Schooling by Design: Mission, Action, and Achievement* (Alexandria, VA: Association for Supervision and Curriculum Development [ASCD], 2007).

⁷ Kathryn Parker Boudett, Elizabeth A. City, and Richard J. Murnane, *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).



Source: Adapted from Jillian Kinzie, Pat Hutchings, and Natasha Jankowski, "Fostering Greater Use of Assessment Results"

The process begins with clarification, commitment, and communication of the institution's intended outcomes. Ask, "What are we holding ourselves accountable for?" Work from mission, prioritize, and hold these outcomes high. This is what counts.

In the assessment cycle graphic, data collection comes second. Go out and get the information, using the best tools at your disposal to collect evidence about your intended outcomes.

One important element is missing in the graphic: forming guiding questions. Let's say that critical thinking is the mission-aligned, high-priority outcome you're focusing on. Before collecting data, ask some questions to guide your work. For example:

- Which groups of students grow the most in critical thinking over four, seven, or 12 years?
- In which grades does the most growth happen?
- Do students who develop these skills the most differ from

those who advance the least in their enjoyment of school, their engagement in class, their completion of homework, or their participation in extracurricular activities?

The process can be made far more powerful when you approach data collection with a purpose, a quandary you want to resolve, a gap you want to fill, or a problem you want to solve.

After you have collected the evidence, the work becomes more challenging. Analysis requires time, patience, discipline, and collaboration. Sharing data, which is the next step, should be done with a plan and careful follow-through to ensure understanding and ownership by key constituencies.

Hardest of all, according to Kuh and colleagues, other experts, and people in the field, is translating the data analysis and communication into meaningful action and then knowing whether the intended effect has been accomplished. This is both challenging and essential. If these last steps remain incomplete or are poorly implemented, many voices in your school will rightly question and challenge the value of the data collection and analysis steps.

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The High School Survey of Student Engagement (HSSSE) was launched in 2003. It grew out of the National Survey of Student Engagement (NSSE), a survey developed by the Center for Postsecondary Research at Indiana University to measure the level of student participation at universities and colleges in Canada and the United States.

The HSSSE (pronounced "hessie") is a comprehensive survey of student engagement and school climate issues. More than 400,000 students in more than 40 states completed the survey between 2006 and 2013. The HSSSE is designed to help schools ascertain students' beliefs about their school experience and to provide assistance to schools in translating data into action.

The HSSSE's primary purposes include the following:

- To help high schools explore, understand, and strengthen student engagement
- To work with high school teachers and administrators on utilizing survey data to improve practices
- To conduct research on student engagement

Until 2013, the HSSSE was a research and professional development project directed and administered by the Center for Evaluation and Education Policy (CEEP) at Indiana University as a fee-for-service to schools, districts, and other groups that wanted to examine high school student engagement. Starting in 2012, however, the use of HSSSE survey items by schools, districts, and researchers is permitted without charge.¹

In 2012, NAIS and the NAIS Commission on Accreditation partnered with CEEP to offer the HSSSE to a group of independent schools in a three-year pilot study, beginning in the spring of 2013. The study had three main purposes:

¹ Although the HSSSE questionnaire is free, NAIS schools pay for the individual reports and the benchmarking reports, plus additional items.

- To help schools assess their effectiveness in providing social/ emotional support for academic success, especially student progress related to 21st century capacities
- To develop a way for schools to comply with learning assessment standards without using standardized achievement tests
- To capture data showing the value-added experience of independent school education

Eighty-six independent schools participated in the pilot, with around 55 to 60 schools administering the HSSSE to their ninth- through 12th-grade students each year during the spring of 2013, 2014, and 2015. After the successful implementation of this pilot, NAIS extended the opportunity to use the HSSSE to all of its member schools.

At the request of NAIS, CEEP launched the Middle Grades Survey of Student Engagement (MGSSE) in spring 2016.

The HSSSE and the MGSSE align student engagement with national research, which conceptualizes student engagement as a complex, multidimensional construct that includes three elements:

- Cognitive aspects (e.g., solving problems, using metacognitive strategies)
- Behaviors (e.g., persistence, effort, attention, taking challenging classes)
- Emotions (e.g., interest, pride in success)²

The HSSSE and the MGSSE measure the following dimensions of student engagement:

² Jennifer A. Fredricks and Wendy McColskey, "The Measurement of Student Engagement: A Comparative Analysis of Various Methods and Student Self-Report Instruments." In *Handbook of Research on Student Engagement*, ed. Sandra L. Christenson, Amy L. Reschly, and Cathy Wylie (New York: Springer-Verlag, 2012), 763–782; online at http://www.lcsc.org/cms/lib6/MN01001004/Centricity/Domain/108/The%20Measurement%20of%20Student%20Engagement-%20A%20 Comparative%20Analysis%20of%20Various%20Methods.pdf.

- Cognitive/intellectual/academic engagement
- Social/behavioral/participatory engagement
- Emotional engagement

Cognitive/intellectual/academic engagement captures students' effort, investment in work, and strategies for learning, including the work students do and the ways students go about their work. This dimension, focusing primarily on engagement during instructional time and with instruction-related activities, can be described as engagement of the mind. Survey questions that are grouped within this dimension describe these elements of student engagement:

- Students' effort, investment, and strategies for learning
- · The work students do and the ways they do it
- Engagement during instructional time

Social/behavioral/participatory engagement emphasizes the ways in which students interact within the school community beyond the classroom, including nonacademic, school-based activities; social and extracurricular activities; and interactions with other students. This dimension, with its focus on student actions, interactions, and participation within the school community, can be described as engagement in the life of the school. Survey questions that are grouped within this dimension of engagement include students' involvement in social, co-curricular, and nonacademic school activities:

- Interactions with other students
- The ways in which students interact within the school community
- · The engagement with the school outside of instructional time

Emotional engagement encompasses students' feelings of connection to (or disconnection from) their school — how students feel about where they are in school, the ways and workings of the school, and the people within the school. This dimension can be described as engagement

of the heart. It focuses largely on students' internal lives and is not frequently expressed explicitly in observable behavior and actions. Survey questions that are grouped within this dimension address these elements:

- Students' feelings (positive or negative) about their current school situation
- Students' attitudes toward the people with whom they interact, school work, and school structures
- Students' affective reactions

Validity and Reliability

School leaders working with the HSSSE or the MGSSE will likely find themselves being asked about the validity or reliability of the surveys. Sharing the results with key constituencies and employing them for continuous improvement and monitoring of interventions and programmatic changes can help with these doubts. Using the HSSSE or the MGSSE effectively will be difficult if there is a lack of confidence in its underlying psychometric properties. Indeed, you should not wait to be asked but take the initiative to put out the word that this is a reliable tool that generates confidence.

The HSSSE and the MGSSE are strongly grounded in the research and literature on student engagement and, in particular, on the research related to the engagement of high school and middle-grade students. Research describes student engagement as a multidimensional construct of behaviors, which include

- persistence;
- effort;
- attention;
- · taking challenging classes;
- emotions (e.g., interest, pride in success); and
- cognitive aspects (e.g., solving problems, using metacognitive strategies).

The HSSSE and the MGSSE measure student engagement in each of the three dimensions (cognitive, behavioral, and emotional) identified in the research and literature.

Both survey instruments were intentionally designed to satisfy the conditions needed for self-reported data to be reliable:

- 1. Information is known to respondents.
- 2. Questions are phrased clearly and unambiguously.
- 3. Questions refer to recent activities.
- 4. Respondents think the questions merit a serious and thoughtful response.
- 5. Answering the questions does not threaten or embarrass students, violate their privacy, or prompt them to respond in socially desirable ways (e.g., concede to peer pressure).

The three survey tools designed by CEEP — the National Survey of Student Engagement for college students (NSSE), HSSSE, and MGSSE — were designed to satisfy these five conditions.

Researchers and educators often discuss survey trustworthiness in terms of the validity and reliability of the instruments. These concepts are multifaceted and have diverse definitions; there are multiple methods for examining reliability and validity. However, as a general concept, reliability refers to the degree to which an instrument produces consistent results across administrations. For example, a measure would not be reliable if one day it measured an object's length at 14 inches and the next day it measured the same object as 13 inches. As a general concept, validity refers to whether the results obtained from using an instrument actually measure what was intended and not something else.

Evidence that supports the validity and reliability of the HSSSE³ includes the following:

- Content validity (face validity). Content validity addresses the question, "Do the survey questions cover all possible facets of the scale or construct?" This form of validity refers to the extent to which a measure represents all facets of a given construct. There are no statistical tests for this type of validity, but rather it relies on experts to determine whether the instrument measures the construct well. To establish content validity, CEEP convened an external Technical Advisory Panel in 2012-2013, which included national academic experts in student engagement, K-12 practitioners, and psychometricians. The Technical Advisory Panel examined the content validity of the HSSSE categories (i.e., dimensions of engagement), subcategories, and items to assess the extent to which the constructs aligned with current research and literature on student engagement. Items were revised, refined, or dropped from the instrument on the basis of recommendations from the Technical Advisory Panel. Therefore, the content validity of the HSSSE is supported by the integral involvement of the Technical Advisory Panel in the development and refinement of the HSSSE.
- Construct validity. Construct validity is the degree to which an instrument measures the characteristics (or constructs) it is supposed to measure. Construct validity addresses the question, "Does the theoretical concept match up with a specific measurement/scale?" The three dimensions of student engagement measured by the HSSSE and the MGSSE (cognitive engagement, emotional engagement, and behavioral/social engagement) are commonly regarded in research and literature as the key dimensions of high school and middle school student

³ Since the MGSSE is newly released, similar reliability and validity evidence is not available yet.

engagement.⁴ Confirmatory factor analyses of HSSSE data support the construct validity of the subscales for the three dimensions of student engagement.

- Response process validity. Response process validity addresses the question, "Do respondents understand the questions to mean what they are intended to mean?" This form of validity refers to the extent to which the respondents understand the construct in the same way it is defined by the researchers. There are no statistical tests for this type of validity, but rather data are gathered via respondent observation, interviews, and feedback. To establish response process validity, CEEP conducted focus groups and cognitive interviews with students at seven high schools, using both paper and online versions of the instrument. Survey items were refined on the basis of respondents' feedback in order to establish response process validity.
- Reliability. CEEP specifically examined internal consistency reliability. Internal consistency reliability addresses the question, "Do the items within a scale correlate well with each other?" Internal consistency is the extent to which a group of items measure the same construct, as evidenced by how well they vary together, or inter-correlate. Internal consistency reliability is measured with Cronbach's alpha. A Cronbach's alpha coefficient greater than or equal to 0.70 is traditionally considered reliable in social science research.⁵ For the HSSSE, the Cronbach's

⁴ Fredricks and McColskey, "Measurement of Student Engagement"; and Jennifer A. Fredricks, 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; online at http://www.isbe.net/learningsupports/pdfs/engagement-concept.pdf.

⁵ Robert M. Thorndike and Tracy M. Thorndike-Christ, *Measurement and Evaluation in Psychology and Education*, 8th ed. (New York: Pearson, 2010).

alpha reliability coefficient was calculated for each of the three dimensions of student engagement (cognitive engagement, emotional engagement, and behavioral/social engagement) using 2013–2015 data that included 64,911 students. The Cronbach's alpha was 0.71 to 0.91 for the subscales of cognitive engagement, 0.73 to 0.89 for the subscales of emotional engagement, and 0.70 for behavioral/social engagement.⁶

More generally, it should be noted and widely communicated that careful research has been conducted and has concluded that there is great value in student voice. Writing in *Kappan*, Harvard Professor Ronald Ferguson summarized research done by the Gates Foundation this way:

[The Measures of Effective Teaching Project's] December 2010 report ranks teachers based on their student survey responses, then compares how much students learn in classes taught by teachers that students rate high compared to those that they rate low. One version of the analysis correlates survey responses with learning gains in other sections taught by the teacher during the same school year. Another examines gains in classrooms taught in the prior year. In each analysis, students of math teachers with Tripod survey rankings in the top quarter learned the equivalent of 4 to 5 months more per year, on average, than students of teachers with survey rankings in the bottom quarter....

Doubts about whether student responses can be reliable, valid, and stable over time at the classroom level are being put to rest. We are learning that well-constructed classroom-level student surveys are a low burden and high-potential mechanism for incorporating students' voices in massive numbers into our efforts to improve teaching and learning.⁷

⁶ Please note that NAIS has not received enough information about the reliability of *individual* items to establish that they can be used with good authority, in and of themselves, to make claims, set goals, or monitor improvement. Hence, it would be unwise to select a single question or item (e.g., Question 4a: "Overall, I feel good about being in this high school") to support an argument that the school is being highly successful (or unsuccessful) or to check year-to-year for progress tracking. Some schools, though, do seek to unpack, explore, and draw greater conclusions from individual items by examining the qualitative evidence from the open-ended section of the survey, grouping it into categories and then associating those categories with responses on that individual item. You can see one such example of this practice in the Greenhill case study in Section VI.

Similarly, researcher John Hattie, author of the widely referenced book *Visible Learning*, wrote in a 2015 monograph *What Works Best in Education*:

There is ... a need to include the student voice about teacher impact in the learning/teaching debates; that is, to hear the students' view of how they are cared about and respected as learners, how captivated they are by the lessons, how they can see errors as opportunities for learning, how they can speak up and share their understanding and how they can provide and seek feedback. ... As the Visible Learning⁸ research has shown, the student voice can be highly reliable, rarely includes personality comments and, appropriately used, can be a major resource for understanding and promoting high impact teaching and learning.⁹

^{8 &}quot;Visible learning" occurs "when teachers see learning through the eyes of students and help them become their own teachers." (John Hattie, *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement* [New York: Routledge, 2009].)

⁹ John Hattie, What Works Best in Education: The Politics of Collaborative Expertise (London: Pearson, 2015), 15.

V. LAUNCHING AND MANAGING THE HSSSE-MGSSE: KEY STEPS TO MAKE IT SUCCESSFUL

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V. LAUNCHING AND MANAGING THE HSSSE-MGSSE: KEY STEPS TO MAKE IT SUCCESSFUL

As you work to implement or strengthen your use of the HSSSE, the MGSSE, or other similar tools, it is important to consider certain issues carefully and make key decisions effectively.

In this section, we'll look at six strategic priorities for launching a successful HSSSE or MGSSE program, seven principles for using assessment results, and six techniques and tactics for effective administration.

Six Strategic Priorities for Successful Programs

1. MISSION ALIGNMENT

The HSSSE or the MGSSE is best introduced, framed, and frequently affirmed as being tightly aligned to the school's vision of educational excellence. Make these connections; don't assume others will see them. For Tyler Thigpen, now a doctoral candidate at Harvard Graduate School of Education and formerly upper school head at Mount Vernon Presbyterian School (Georgia), two of the school's most important education priorities were connecting learning to the outside world and elevating student voice. When Thigpen launched the HSSSE program, he explained to all concerned that it was the best tool to measure these particular qualities.

2. LEADERSHIP INVOLVEMENT

It's best not to delegate assessment initiatives too thoroughly. If the head or division head is not observed by all involved as attending and invested, the program will not be taken seriously. Show that you care! When schools, such as The Lovett School (Georgia), establish HSSSE results as part of the board's institutional "scorecard" or when the head makes HSSSE or MGSSE data part of a faculty presentation at the beginning of the year, it sends a message that the project matters and is worth the time to make it work.

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3. RESOURCE ALLOCATION

Put your money — and other precious resources — where your mouth is. Allocate and assign administrative responsibilities and dedicated meeting time to the HSSSE or MGSSE. Feature news of it prominently, and consider whether your team would benefit from consultation or other advice on best practices. All of these commitments will pay significant dividends compared with letting the tool wither out on a distant, unnourished vine.

4. GOAL/INITIATIVE ALIGNMENT

In nearly every school, data collection seems abstract to many participants. "Why are we doing this again?" and "What are we going to do with this information?" are oft-heard questions. Head them off. Explain from the beginning which specific goals the HSSSE or MGSSE will monitor or which initiatives it will inform. Reducing bullying might be one such goal. At The American School in London, where family transience impacted school community, improving the quality of student life via an advisory program and other initiatives was the goal, and the HSSSE was the method used to identify opportunities for improvement and measure progress.

5. QUESTIONS

Begin at the beginning. Data inform judgment and strengthen understanding, but it is up to the leadership and the faculty to determine about what the data should inform. Before announcing the new tool — or perhaps before selecting it — conduct one or more roundtables in which the only task is to generate questions about student life, classroom experience, social dynamics, and students' emotional well-being. Consolidate and prioritize those

V. LAUNCHING AND MANAGING THE HSSSE-MGSSE: KEY STEPS TO MAKE IT SUCCESSFUL

questions, and then, before administering the HSSSE or MGSSE, study whether and how the survey might provide at least initial evidence for answering those questions. This puts everyone in the frame of mind to make sense of the data on arrival.

6. COMMUNICATIONS AND TRUST-BUILDING

Leadership should proactively communicate what the HSSSE and MGSSE are, why they support the school's mission, and how they will further the school's improvement. In addition, underscore that they will not be used punitively and that they won't factor into faculty evaluation. Trust, as we all know, is the stitching of school culture and educational improvement. The HSSSE and MGSSE must be deployed to elevate — not depress — trusting communities. Consider how early in the process faculty leaders can be involved in choosing and deploying the HSSSE or MGSSE.

Seven Principles for Using Assessment Results

The HSSSE and MGSSE have a "big sibling," a tool widely used at hundreds of colleges and universities, called the National Survey of Student Engagement (NSSE). HSSSE and MGSSE users can learn a lot from NSSE research and practice. Jillian Kinzie, who administers the NSSE from offices at Indiana University, has collaborated with two colleagues to share strategies for "fostering greater use of assessment results." They lay out Seven Principles, most of which are pertinent to independent schools:

- 1 "Gauge the value of assessment work by the extent to which results are used." Ask whether the work is embedded in a cyclical process that culminates in action for improvement and measured progress.
- "Identify the target for use of evidence of student learning Identify institution-wide or program-level goals..." and, if so, which one: departmental, divisional, grade-level, etc.
- "Begin assessment activity with the end use in mind. From the outset of any assessment process, consider the practical questions ... of greatest interest to potential partners ... and how the results could be used."
- "Leverage the accreditation process for meaningful campus action to improve student learning."
- "Connect assessment work to related current national initiatives and projects." Is your school working with others on curricular initiatives such as STEM programming, makerspace development, equity improvement, computer science, independent advanced studies, social/emotional learning, or wellness? Consider how you could collaborate with others in collecting, sharing, and analyzing evidence such as HSSSE or MGSSE data.

- "Link assessment activity to campus functions that require evidence of student learning...." Does your school have board education committees, external evaluations, departmental reviews, or strategic planning goals? Probably. Consider how the HSSSE or MGSSE can be embedded within these projects.
- "Work purposefully toward the final stage of the assessment cycle assessing impact, closing the assessment loop and remember that the assessment of student learning is a *continuous* process.... [T]aking time to assess the impact of evidence-based change is essential in fostering a culture that supports the meaningful use of assessment results."

Administering the HSSSE and MGSSE: Six Techniques and Tactics

Previous users of the HSSSE report that administering the survey has been simple and hassle-free. Nonetheless, here are a few tips:

1. CONSIDER YOUR SCHEDULE OF ADMINISTRATION CAREFULLY.

First, think about how often you wish to use the survey. If you are participating in a particular research program such as the NAIS HSSSE pilot study, this might be decided for you: every year for three years. But if you have discretion, think about timing it to your accreditation cycle (self-study, interim report, next self-study) or to your strategic plan cycle (identifying priorities, monitoring progress), which would be every two to three years.

¹ Jillian Kinzie, Pat Hutchings, and Natasha Jankowski, "Fostering Greater Use of Assessment Results: Principles for Effective Practice," in *Using Evidence of Student Learning to Improve Higher Education* ed. George D. Kuh et al. (San Francisco: Jossey-Bass, 2015), 70–71.

2. NOTE THAT IT MAY NOT BE IDEAL, IN THE LONG RUN, TO ADMINISTER EVERY YEAR TO EVERY STUDENT.

It doesn't cost very much in time and money, but HSSSE and MGSSE data can be labor-intensive to analyze. Also, students may suffer from "survey fatigue" when asked to do a survey again and again, year after year. Seniors may or may not be the best survey respondents. They represent the capstone and completion of your program, yes, but there is a common, and perhaps developmentally necessary, disaffection that often taints the perspective of seniors and might influence overall results. One option to consider is to administer HSSSE every year but just to ninth- and 11th-graders. Another is to administer it every third year to all but seniors.

3. CHECK YOUR BANDWIDTH.

It's worthwhile to do this in advance for this online survey tool, but know that only a few schools have reported any difficulty in this arena.

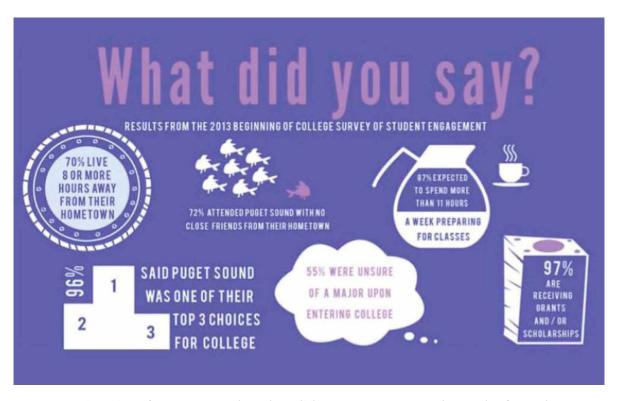
4. SPEAK TO STUDENTS ABOUT THE PURPOSE AND VALUE OF THE HSSSE AND MGSSE.

Have a school leader take a few moments at a school meeting to explain what the survey is, how it will be used, and why students should care. Erin Duffy, head of the upper school at Seacrest Country Day School (Florida), explains, "I really wanted to make kids feel like part of the process. I spoke to them to explain why it's important; I said it's even more important than the SAT! I also

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asked them to promise me that they will be honest so we can better meet their needs."

- Tell and Show. Beyond telling students you value their input, show it to them by pointing to specific examples of how you've recently changed programs and policies based on student input, whether or not that input came from the HSSSE.
- Create Messaging. At the University of Puget Sound, administrators created an infographic to communicate to students how carefully they attended to student input.



Source: University of Puget Sound, "What did you say?" postcard. Results from the 2013 Beginning of College Survey of Student Engagement; in NSSE, Using Data to Catalyze Change on Campus: Lessons from the Field, Volume 3

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5. ACKNOWLEDGE AND SHOW APPRECIATION FOR STUDENT PARTICIPATION.

Doing so won't change any results of the survey already completed, of course, but unless you're only doing it every three or four years, it's never too soon to request student support for a survey. Offer ice-cream sundaes in the cafeteria or a free dress day the following day — something to delight students and show them that you appreciate their assistance and effort.

6. STRIVE FOR — BUT DON'T OBSESS ABOUT — A HIGH PARTICIPATION RATE.

Yes, you want to have a large sample, and, yes, for the open-ended response sections, you certainly want to try to provide every student with the opportunity to contribute. But it's not essential to have *every* student participate. As long as the sample set is reasonably representative of the whole, your report will be solid. Fifteen kids out of 300 out with a stomach bug isn't likely to cause a problem, but if 29 male varsity athletes are on a road trip, their absence will change the demographic makeup of the resulting sample population in ways that could skew results.

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

Receiving your HSSSE or MGSSE report can be either exciting or aggravating. It's up to you to do the planning, adopt the attitude, and take the right steps to make it more like the former than the latter.

1. MAKE AND TAKE THE TIME.

Report interpretation should be a scheduled priority. It is important to anticipate when the report is likely to arrive and to schedule time for the work to analyze it. Currently, reports are arriving in mid-August, but efforts are being made to move it up to June when school life is slightly less busy.

2. WIDEN THE CIRCLE OF INTERPRETERS.

It often makes sense to ask heads or senior administrators to take the first pass at reading and reviewing the report and then, soon thereafter, work to widen the circle. More readers bring more insight and more ownership for action on the findings.

Involve faculty. Invite teachers on an optional basis to join administrators for a review and discussion, and perhaps include lunch or another incentive. Retreats are another option for this work. Form a joint admin/faculty task force, and schedule a one-day annual retreat where you can focus on the work of interpretation. Schools that want teachers to use data for meaningful action will be far more successful when teachers participate in interpretation, rather than just receiving PowerPoint presentations.

Youngstown University (Ohio) hosted 15 NSSE "Lunch and Learn" workshops for faculty. They looked at NSSE themes, shared data, and gathered feedback on how to improve

practices. The teachers were given time to dig into data reports and discuss why they thought certain areas were low performing.

In *Using Evidence of Student Learning*, Timothy Reese Cain and Pat Hutchings offer nine recommendations for involving faculty members, including these five:

- Locate assessment in the commitments that faculty hold.
- Respect faculty curricular authority and ownership.
- Cultivate faculty voice.
- Facilitate both formal development opportunities and informal spaces for faculty to engage with, learn about, and enact assessment.
- Create mechanisms to share internal best practices and success stories.¹
- Involve students. Though less widely practiced, this is an
 exciting avenue some schools could pursue, especially when
 surveying older students. After all, the HSSSE and MGSSE
 are vehicles for employing and honoring student voice,
 and why shouldn't that sentiment be extended to the data
 interpretation? At The American School in London, where
 the upper school head's focus was on social engagement,
 he realized that he could make much more sense of what

¹ Timothy Reese Cain and Pat Hutchings, "Faculty and Students: Assessment at the Intersection of Teaching and Learning," in *Using Evidence of Student Learning to Improve Higher Education*, ed. George D. Kuh et al. (San Francisco: Jossey-Bass, 2015), 104-105.

was important in the data if students joined him in reading and discussing the results. At Greenhill School (Texas), a special research tutorial class was created that enabled an administrator to work with students for two trimesters on analyzing HSSSE data (see the case study below).

Involve other schools. Independent schools should begin
working closely together, especially when it comes to data.
First, identify three to five non-competitor schools like your
own that have also recently administered the HSSSE or
MGSSE. After forming a group and promising confidentiality,
take about an hour to share reports via Google Hangout or
Skype and to discuss results and explore divergences.

This approach is sometimes referred to as creating "communities of practice" or organizing "networked improvement communities." Although underutilized across NAIS schools, it is proving highly effective in other contexts. Depending on the size of the group and the complexity of the project, it is best implemented with a consultant acting as facilitator.

3. INVITE PREDICTIONS BEFORE JUMPING INTO DATA.

A common practice in many guides to data use in schools is to ask your colleagues to predict what the data will reveal on selected items and then compare expectations with reality. Perhaps those areas where the data conform to predictions require little further attention, but areas of surprise might call for greater discussion.

4. REFER TO PSYCHOMETRIC PROPERTIES AND BUILD DATA LITERACY SKILLS.

Jumping into reports and taking the numbers as they come can work just fine some of the time. But recognize that as the results get shared across various constituencies, some will ask and wonder about the margin of error and the statistical reliability of the tool. It's good to be prepared when those questions arise. When you are working with others, make sure that the key properties of the HSSSE and MGSSE are understood. Consider taking a few minutes to step back and explain the key properties. This effort will pay dividends at your school far beyond the surveys themselves. (For more information, see Section IV: About the HSSSE and the MGSSE.)

This is an opportunity worth exploiting to support the strengthening of data literacy among both your colleagues and your students. Data surround us now more than ever; everyone can benefit from opportunities to become savvier. As Datnow and Park write in their Call #4 for data-driven leadership: "Build skills and knowledge for data use. The data-informed leader plays a crucial role in developing and investing in professional capital — people's knowledge, skills at working together, and ability to make wise judgments with respect to data use."²

5. COMPARE WITH NORMS.

One of the most common ways to go about studying your school data is to compare performances with norms via NAIS and the

² Amanda Datnow and Vicki Park, Data-Driven Leadership (San Francisco: Jossey-Bass, 2014).

public school system. You can prioritize among the abundant data items by focusing on areas of greatest and least divergence from these norms and determining whether they represent points of pride and accomplishment to carry forward and communicate or points of concern demanding greater attention.

- Note the limitations. Some members of the HSSSE NAIS user community caution strongly against making any comparison with public norms: public school structures, mandates, constraints, and populations are just "too different" from independent schools for fair or meaningful comparison. When comparing with NAIS norms, remember that they include very large and very small schools, boarding and day schools, religious and nonsectarian schools, and single-sex and coed schools.
- Consider custom reports. In the parallel work of NSSE at
 the college level, many institutions focus on comparison
 with a "basket" of carefully selected similar schools.
 Consider investing in a custom report from CEEP (Center for
 Evaluation and Education Policy at Indiana University), which
 allows you to compare your school with a set of like schools,
 with a minimum of six.

6. STUDY SUBGROUP DATA.

An approach to your analysis that is potentially more fruitful than norm comparison is subgroup comparison. Spend less time comparing your entire student body with that of other schools and school types and more time comparing the experience of different sets of students within your school. In interviews, few NAIS schools report spending much time in this kind of analysis. Not only is it

more strategic to do so, it is essential for any school with a deep concern for and commitment to equitable student learning among their boys and girls, students of color, and socioeconomically diverse student bodies.

- Really dig in to see whether and how students of color view their learning experience differently. For instance, identify key gaps between groups, and use those identified gaps as springboards for closer examination and research. Review them as potential levers for closing any achievement gaps in your school. (For more information, see Section VIII: Using the HSSSE and the MGSSE to Drive Improvement.)
- Compare cohorts. Some schools dial in tightly on their gradelevel cohorts, looking to see how freshmen view schooling compared with seniors or how one graduating class compares with another in their social dynamics.

At Seacrest Country Day School (Florida), for example, school leaders have looked at how students gain in confidence and self-esteem over their four years.

At Pace University (New York), when administrators are studying NSSE data, their attention has been primarily on the "sophomore slump," using evidence to determine where it hits hardest and how they can best address it.

7. STUDY OPEN-ENDED RESPONSES.

Most schools see the open-ended responses as being of limited value compared with the survey data, but there are nuggets to mine. Think about taking time to review these responses as your

team looks for themes and patterns to illuminate the quantitative results. A full-bore qualitative study is also an option, as described in the Greenhill School case study (see below).

8. USE THE DATA AS A SPRINGBOARD.

Treat data as a starting place, not a finish line.

- Send a follow-up survey. Surprised by something you
 observe in your HSSSE or MGSSE results? A follow-up survey
 can explore topics in more detail or pull students in for
 focus group discussions of the issues. A Google search for
 "NSSE cognitive interviews" yields information about how to
 facilitate student focus groups.
- Connect the dots. If you do a parent survey, for instance, compare student and parent perspectives on certain topics to reveal the seriousness of issues or whether parental communications might be lagging on a critical topic. What has been said about NSSE applies to the HSSSE and MGSSE as well: "Corroboration of engagement results with other institutional data increases confidence in decision-making."

If you administer the College and Work Readiness
Assessment (CWRA), think about whether performance
gaps in the CWRA can be connected, at least inferentially,
to HSSSE or MGSSE data. Do students in a CWRA
underperforming cohort report doing less homework,
being involved in more extracurriculars, or having weaker

³ National Survey of Student Engagement, *Using NSSE Data to Assess and Improve Undergraduate Education: Lessons from the Field. Volume 1* (Bloomington, IN: Indiana University Center for Postsecondary Research, 2009), 28.

relationships with teachers than those in a higher performing cohort?

When Juniata College (Michigan) administrators found that the Collegiate Learning Assessment (CLA, the college-level CWRA) reported that their students had lower than expected analytic writing skills, they looked to the NSSE and found that their students wrote fewer long papers than counterparts at peer institutions. They shifted instructional assignments accordingly.⁴

For a very rich example of how HSSSE and CWRA data sets might be compared and connected, see Richard Arum and Josipa Roksa's book *Academically Adrift: Limited Learning on College Campuses*, a study of university students' academic experiences based on a thorough analysis of the NSSE and the CLA.

9. REMEMBER, IT'S ALWAYS ABOUT THE QUALITY OF THE QUESTIONS.

At the end of the day, the quality of your work interpreting your data will track closely to the quality of the questions you ask about student life and learning. Hypotheses are another kind of question too. Consider what hypotheses you can form about student growth and success and how can you use the HSSSE and MGSSE to test those hypotheses. Stanley Ikenberry and George Kuh make the following suggestions:

⁴ National Survey of Student Engagement, *Moving from Data to Action: Lessons from the Field. Volume 2* (Bloomington, IN: Indiana University Center for Postsecondary Research, 2012), 15.

Assessment work preoccupied with collecting data rather than using evidence usually falls short of the mark. It is the articulation of an important question and an explicit understanding of the need for evidence that must drive the assessment. ... [A]ssessment begins with the articulation of an important question, such as the following:

- Does the evidence of student learning outcomes align with and confirm our institution's stated learning goals?
- Are there disparities in academic performance among students from various backgrounds?
- How does student-faculty interaction influence our students' success?⁵

⁵ Stanley O. Ikenberry and George D. Kuh, "From Compliance to Ownership: Why and How Colleges and Universities Assess Student Learning," in *Using Evidence of Student Learning to Improve Higher Education*, ed. George Kuh et al. (San Francisco: Jossey-Bass, 2015), 18.

CASE STUDY: GREENHILL SCHOOL (TEXAS)

Compare the HSSSE to an onion: it reveals more information as you peel back the layers. Users are encouraged to consider what they might discover if they keep peeling the HSSSE onion.

Many users find value in focusing on a few top-level data points, such as overall cognitive engagement or the year-to-year trend on a single item, such as "I am considering transferring to another school." Others create a basket of multiple items and compare them among cohorts, comparing ninth-graders with 12th-graders, for example. Still others dig deep into the subgroup data, comparing boys and girls, students of different ethnicities, and students of different races. Many scan quickly through the open-ended responses to see what jumps out, trying to perceive trends.

Under the direction of Chris Bigenho, director of educational technology, Greenhill School has taken the deepest dive into HSSSE data identified to date and has involved students. The school has done this by conducting a comprehensive and detailed qualitative data analysis of two open-ended response questions.

In terms of the overall numbers, Greenhill School generally does well and is pleased with the results. The school has a long-standing commitment to what it calls "the triangle" of academics, athletics, and the arts. School administrators look to student reports to determine whether students are engaged in and have good opportunities for the rounded and rich experience Greenhill offers, but yet are not overwhelmed by it.

The administration has also been closely monitoring items around feeling safe and freedom of expression on campus, which has been the subject of some stress for the high school students. This was prompted in part by a speaker program on race and culture, which caused some white

CASE STUDY: GREENHILL SCHOOL

and conservative students to feel uncomfortable when articulating conservative or Republican viewpoints.

When Bigenho, who has frequently conducted and published research in the learning sciences, saw a copy of the HSSSE report, it occurred to him that this posed a greater opportunity for the school, both to understand its key challenges and opportunities and to provide students with rich hands-on learning. He told the student body that he was welcoming volunteers for a two-trimester independent study and research practicum, explaining that this would be valuable preparation for those intending to do more research in college and beyond. Two 11th-grade students volunteered to participate in the study.

These students would be working with a great deal of data about their school and their classmates, and the data, although anonymous, were sensitive. Before the students had access to the data, Bigenho had them participate in a free online tutorial. They earned a certificate from the National Institutes of Health Office of Extramural Research on Protecting Human Research Participants, which institutions may use to fulfill requirements for training in the protection of human subjects.

Chris Bigenho and the students conducted a literature review regarding research on student engagement and its significance. They reported on the results during an end-of-year faculty meeting. Their report included reading three pieces: "Students' Perceptions of Membership in Their High Schools," "Student Engagement in High School Classrooms from the Perspective of Flow Theory," and "School Engagement: Potential of the Concept, State of the Evidence." This was serious work.

Their qualitative research action commenced by preparing the data set for analysis with the research software Atlas.ti v.6. The short-answer responses were loaded into Atlas.ti. There were two questions:

CASE STUDY: GREENHILL SCHOOL

- 1. Q14: Why have you considered transferring to another school? (n=138)
- 2. Q31: Would you like to say more about any of your answers to these survey questions or provide any other comment about your experience at this school? (n=150)

As reported in the students' summation paper, the answers were then "coded sentence by sentence with two people in the room at all times coming to a consensus on each code, each code determining the mood, subject, and implications behind the anonymous comments." This laborintensive process took the three-person research team more than two months. The process involved applying principles of grounded theory, as well as the application of existing schema reported in the literature on student engagement.

Over time, multiple themes emerged. The students elected to focus on four major themes that they felt would be of interest. They presented these themes to the faculty and encouraged them to give the themes attention in the future. One area of particular interest was the question of the school's triangle of academics, athletics, and the arts, which many participants wrote about in both free-response questions. The researchers cited students expressing the desire to focus more on areas of their own particular interest or have a better balance or a less overwhelming load. One student's conclusion on this topic was that "it seems the students would rather have a scalene triangle than an equilateral one."

Another area the researchers dove deeply into was the issue of diversity, acceptance, and inclusion. Although the survey disappointingly doesn't elicit many perceptions about the climate of ethnic and racial inclusion in a school, one item in the selected-response section asked, "How

CASE STUDY: GREENHILL SCHOOL

much does your school emphasize the building of positive relationships with students of different backgrounds?" Note that this item only reveals students' views on the school's actions and emphasis, not how students treat each other or the safety of the school climate and positive relationships existing throughout the school.

Both the administrators and the researchers at Greenhill took satisfaction in the school's overall rating, which was significantly higher than the NAIS mean. Had they stopped there, as too many schools often do, they would have missed the rest of the story. However, Bigenho requested the full data set from the HSSSE administering office at Indiana University. This made it possible to see the quantitative responses matched to the open-ended comments. When the researchers coded students who expressed opinions about diversity in their open-ended responses, they were then able to create two groups of students: those who elected to write about diversity and those who did not. They removed the subset from the full group of participants and re-ran the statistical analysis on both groups. They also paired t-tests and found significant differences on specific questions linked to feelings on diversity. They discovered, in their words, "Maybe we're not doing so great," and that "feelings about diversity were impacting how students viewed the school in both a positive and negative light." For example, students who commented on diversity topics also responded to question 4a, "Overall, I feel good about being in this high school," nearly a full standard deviation lower than the full data set.

By gaining access to the full data set and taking the time to code the free-response questions, the research team was able to better understand the context and story behind many of the numbers reported to the school through the executive summary. This is the hard work that can lead to a clearer understanding of what the data represent and what they mean for the school.

CASE STUDY: GREENHILL SCHOOL

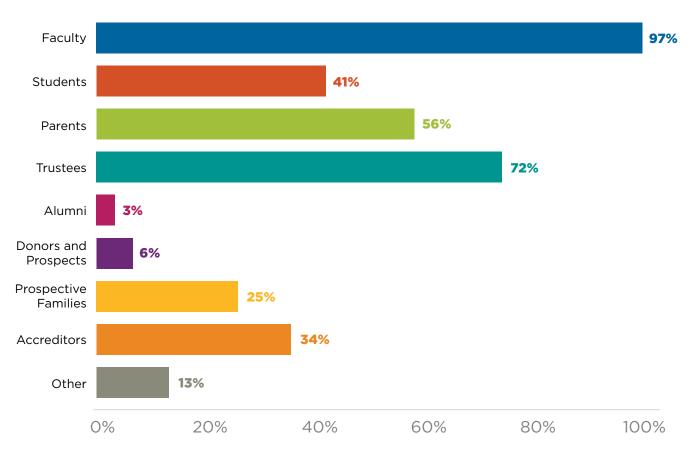
In their final presentation to the faculty, the researchers refused to make the mistake of "solution-itis"; one of their very few recommendations — beyond asking for greater attention to these issues — was for additional research to be conducted. But the administration is not sitting still; Upper School Head Laura Ross has multiple initiatives and conversations under way to address and respond to the issues uncovered by the research. The school is now positioned to continue this research for at least two more cycles as administrators explore the impacts of some of the changes and initiatives being implemented.

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

As part of a small survey of NAIS HSSSE users, respondents were asked to report with whom they shared HSSSE results. Not surprisingly, faculty topped the list. Trustees came in second.

With what audiences do you (selectively) share HSSSE results? Select all that apply.



Source: NAIS, "Feedback on Your HSSSE Participation Survey"

It is interesting to see that nearly half of the participating schools communicated HSSSE results to their students, and it is surprising that so few schools shared data with prospective families and accreditors. In the case of the latter, it might have been a matter of timing; many schools who have been using the HSSSE only a year or two probably haven't had a self-study or accreditation visit in that time.

Here are some thoughts on best practices in sharing HSSSE and MGSSE data.

1. GO BEYOND PUBLIC PRESENTATIONS.

The most common approach, as shown in the survey and in many conversations, is for the head or upper school head to present slides featuring a select set of data points at a faculty meeting (since the MGSSE was just released in 2016, there are no examples of sharing its data in public presentations). For example, Michelle Lyon at Parish Episcopal School (Texas) brought to her faculty a 34-slide presentation in which she reviewed about 25 key HSSSE questions. For each question, she provided two bar graphs for her audience to evaluate, one comparing three years of the school's data for that question and one comparing the school's most recent year data with NAIS and public school norms. She organized her selected items into three categories: academics, school life, and rapport.

As much as this approach is common and as valuable as it can be for ensuring a wide awareness of the HSSSE (or MGSSE) and your school's results, don't overlook the static nature of such a presentation. It can be limiting in the ability to generate true shared ownership for the tool and for its meaningful implementation into consequential assessment. As noted in the discussion in Section VI, it should be every school leader's aim to go above and beyond just showing data to colleagues; instead, escort them into a deeper dive of querying, unpacking, comparing, and applying these data.

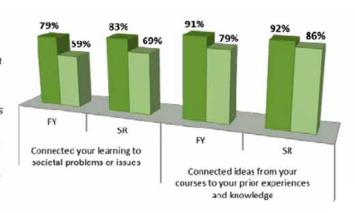
2. FOCUS AND DISTILL YOUR COMMUNICATIONS.

Many school leaders emphasized that the HSSSE's greatest challenge is its bulk and breadth. There's so much material that it quickly overwhelms. Schools using the MGSSE will probably share the same opinion. Communicate your committee's key findings about the data in small, digestible bites, and be wary of inundating constituents.

- Some schools create very small baskets of just one to seven questions of greatest importance and keep people's focus there. Albuquerque Academy (New Mexico) focuses on whether students have considered transferring to another school; at Parish Episcopal School (Texas), it is, "I do projects in which I interact with people outside school."
- Consider using infographics for powerful, visually illustrated communications, as has been done at Mills College to convey NSSE data to faculty, students, admissions visitors, and alumnae.



Mills students in their first and senior years are significantly more engaged in connecting their learning to societal problems or issues, including diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments, and connecting ideas from their courses to their prior experiences and knowledge.>>



Source: Mills College

3. CONVEY POSITIVE RESULTS.

Many schools take care to use the "feedback sandwich" approach in their communications, beginning with a celebration of their school's successes and triumphs and putting the areas for improvement in a subordinate position. This happens, for example, when heads are new to a school. When launching a HSSSE or MGSSE program, heads work to help administrators and faculty members, and perhaps even trustees, feel a degree of comfort and affirmation from the tool in hopes of generating greater confidence when using it as an improvement device.

4. CREATE DASHBOARDS.

For your board of trustees and your leadership team, a dashboard (sometimes called a scorecard) captures and communicates your school's five to 15 key quantifiable success measures for ready viewing and better planning and monitoring. The metaphorical names for these tools are apt. Ideally, they convey the most important data succinctly and at a glance, like a car's dashboard or an athletic scoreboard. And just as a dashboard that only has a speedometer (and no temperature or gas indicator) will potentially lead you astray, suggesting you can drive as fast and as long as you want without slowing or stopping, a school dashboard that highlights only academic achievement indicators (SAT scores, AP performance, elite college admission) could similarly steer you wrong.

Dashboards are becoming increasingly common in colleges and universities, and many of them include their student engagement scores. Many examples exist. One excellent comprehensive scorecard is the University of Cincinnati "President's Report Card."

UC 21 President's Report Card to the Board of Trustees

Goal 6: Create Opportunity

ltem	2003	2004	2005	2006	2007	Change since Most Recent Measure	Change Since Baseline Year
Diversity of Students - Total University Female Student Headcount	17,747	18,235	19,105	19,363	19,745	2.0%	11.3%
Diversity of Students - Total University % Female Students	52.5%	53.1%	54.2%	54.5%	54.3%	-0.2%	1.8%
Diversity of Students - Total University African American Student Headcount	3,787	3,951	4,023	3,858	3,677	-4.7%	-2.9%
Diversity of Students - Total University % African American Students	11.2%	11.5%	11.4%	10.9%	10.1%	-0.8%	-1.1%
Diversity of Students - Total University Minority Student Headcount	5,302	5,562	5,630	5,468	5,396	-1.3%	1.8%
Diversity of Students - Total University % Minority Students	15.7%	16.2%	16.0%	15.4%	14.8%	-0.6%	-0.9%
Ennellment Faculty Stu	ident	T2*	anaial				

Enrollment Diversity Student Diversity Financials

SIGNIFICANT PROGRESS © EMERGING PROGRESS NEEDED

Source: University of Cincinnati, "President's Report Card to the Board of Trustees," 2007; online at http://www.uc.edu/president25/reportcard/sept07/goal6metricsc.htm

Another example comes from the University of Massachusetts Lowell (UMass Lowell) 2020 Report Card 2015.

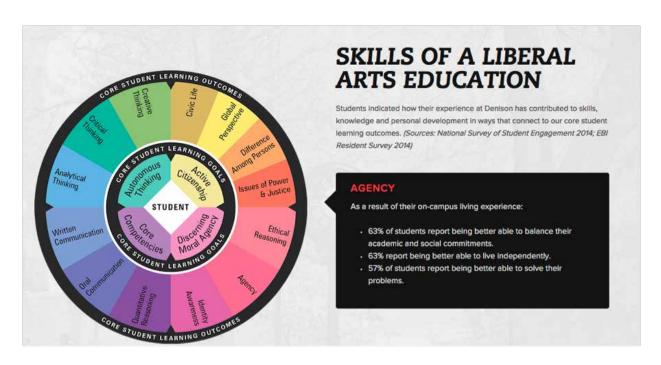
	National Survey of	Stude	nt Engagem	ent Results	: Overall Stu	dent Satisf	action
	20	800	2011	2012	2013	2014	2020 GOAL
UMass Lowell Freshmen	8	0%	86%	82%	81%	85%	86%
New England Publics Freshmen	8.	2%	85%	84%	84%	86%	
UMass Lowell Seniors	7	9%	85%	84%	81%	83%	86%
New England Publics Seniors	8	6%	83%	84%	84%	86%	
	National Survey of	Studer	nt Engageme	ent Results:	High-Impa	ct Practices	*
	•	Studer	nt Engagemo	ent Results:	High-Impa	ct Practices	*
	* For Freshmen, these				2013	2014	2020 GOAL
	•	U	Mass Lowell	Freshmen	2013 65%	2014 63%	
	* For Freshmen, these high-impact practices include leaming community, service learning and	U	Mass Lowell	Freshmen Freshmen	2013 65% 56%	2014 63% 54%	2020 GOAL
	* For Freshmen, these high-impact practices include leaming community, service learning and research with faculty;	U	Mass Lowell Ingland Publics Carnegie C	Freshmen Freshmen lass Peers	2013 65% 56% 57%	2014 63% 54% 57%	2020 GOAL 70%
	* For Freshmen, these high-impact practices include learning community, service learning and research with faculty; for Seniors, these include	U New Er	Mass Lowell Ingland Publics Carnegie C UMass Lowe	Freshmen Freshmen lass Peers ell Seniors	2013 65% 56% 57% 83%	2014 63% 54% 57% 87%	2020 GOAL
	* For Freshmen, these high-impact practices include leaming community, service learning and research with faculty;	U New Er	Mass Lowell Ingland Publics Carnegie C	Freshmen Freshmen llass Peers ell Seniors cs Seniors	2013 65% 56% 57%	2014 63% 54% 57%	2020 GOAL 70%

Source: University of Massachusetts Lowell Report Card Indicators, UMass Lowell 2020 Report Card 2015; in NSSE, *Using Data to Catalyze Change on Campus: Lessons from the Field, Volume 3.*

For more information, see the case study about dashboards at The Lovett School (Georgia) and Seacrest Country Day School (Florida).

5. USE HSSSE AND MGSSE DATA IN MARKETING.

As seen in NAIS's survey of HSSSE users, only about a quarter of the responding schools use HSSSE results in their marketing and enrollment work ("Prospective Families"). There are good reasons for that. The survey results do not provide the firmest of foundations, and they can change from year to year. Furthermore, whether or not the norms for comparison are truly fair "comps" is questionable. But it bears noting that many colleges and universities do post their NSSE data on their websites and use them in admissions. Wofford College created a four-page brochure, "Measuring Student Engagement: Learn What Your Students Will Actually Get," for prospective parents. Another excellent example comes from Denison University, which prominently placed a colorful, interactive wheel on its website for visitors to learn more about NSSE results for various key items, such as global perspective and student agency.



Source: Denison University, "Skills of a Liberal Arts Education"; in NSSE, *Using Data to Catalyze Change on Campus: Lessons from the Field, Volume 3.*

NSSE has published a handy guide on best practices for posting NSSE data to an institution's website, with supporting examples from NSSE institutions. For instance, NSSE recommends "highlight[ing] strengths and areas for improvement to demonstrate candor."

¹ National Survey of Student Engagement, "Guidelines for Display of NSSE Results on Institution Web Sites"; online at http://nsse.indiana.edu/pdf/Guidelines%20for%20Displaying%20NSSE%20Data%202014.pdf.

CASE STUDY: THE LOVETT SCHOOL (GEORGIA) AND SEACREST COUNTRY DAY SCHOOL (FLORIDA)

Two southeastern K-12 schools are blazing the trail for the use of HSSSE data. Lovett, a large school in Georgia, and Seacrest Country Day, a smaller school in Florida, provide great examples of how to successfully use data on institutional dashboards with boards of trustees.

Both schools use HSSSE results for more than just their dashboard, of course. At Lovett, Upper School Head Dan Alig and Assistant Headmaster Marsha Little report that the HSSSE has been highly valuable for them in a multitude of ways. When they noted that their students were reporting lower ratings on the time they spent independently reading for pleasure, for example, the school responded by restructuring summer reading assignments and looking for different ways to encourage independent reading throughout the school year.

Lovett leaders have also worked to "triangulate data" by comparing student responses on the HSSSE with other student surveys, including the SAIS Value Narrative Survey² and the Freedom from Chemical Dependency³ survey. When doing so, they look at how the data from each can be better understood with reference to the other. In accreditation, HSSSE data have informed Lovett's self-study considerably. For that self-study, Little reports, school leaders established several goals that can be informed by HSSSE results. They use particular items from the HSSSE, such as "How much has your experience at this school contributed to developing creative ideas

^{2 &}quot;SAIS Value Narrative Surveys," Southern Association of Independent Schools; online at http://www.sais.org/?page=297.

^{3 &}quot;Surveys and Assessments," FCD Prevention Works; online at http://fcd.org/what-we-do/surveys-and-assessments/.

CASE STUDY: THE LOVETT SCHOOL AND SEACREST COUNTRY DAY SCHOOL

and solutions?" and "How much has your experience at this school contributed to understanding yourself?" as examples of ways to track and measure their success.

At Seacrest, the HSSSE has become part of the formal annual work of standardized measurement. School leaders explain, "Part of Seacrest's mission from its very beginning has been the empowerment of children to take charge of their education and that engagement with learning is the best path to success. The HSSSE is the best available measure of how we are fulfilling our mission in this very important domain."

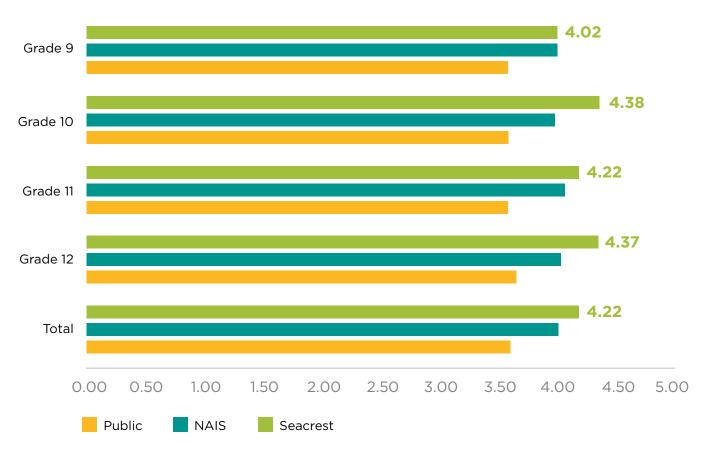
Seacrest Upper School Head Erin Duffy reports that she relies heavily on HSSSE data above all other assessments. After receiving the report, Duffy explains: "First I go over it myself thoroughly, and then I bring the dean and the department chairs into the process, giving them specific questions to think about and particular items to respond to."

Duffy reports paying close attention to cohort comparisons and drawing new understandings of how students change and view the school differently at different grade levels. She gets satisfaction from the fact that students from ninth through 12th grade increasingly report feeling comfortable with themselves, suggesting that the school must be doing something right! On the other hand, seniors do become more critical about fairness in school procedures, which Duffy chalks up to the inevitable developmental disillusionment that happens among 12th-graders in most schools.

⁴ Seacrest Country Day School, "Standardized Testing at Seacrest: A Strategic Approach," Seacrest website accessed August 18, 2016 at http://www.seacrest.org/uploaded/Academics/2014-2015/ Seacrest_approach_to_testing.pdf.

CASE STUDY: THE LOVETT SCHOOL AND SEACREST COUNTRY DAY SCHOOL

Positive Relationships and Partnerships with Adults in the School



Source: Seacrest Dashboard

It is in their dashboards that these schools are doing the most interesting work with the HSSSE. Lovett's Little recalls that the school's "academic scorecard" emerged from conversations at a board committee about five years ago; the committee became more thoughtful in evaluating the school's success and trend lines. For example, when looking at AP scores and participation rates, trustees began asking questions about access to AP classes. In part as a result of these conversations, according to Little, policies are changing, and more opportunities are being provided to students. Lovett's scorecard, which is pretty much "just a giant and fancy spreadsheet," has been backloaded with 15 years or more of historical data, including SSAT, ERB, PSAT, SAT, AP, NMSQT, ACT, and CWRA scores.

CASE STUDY: THE LOVETT SCHOOL AND SEACREST COUNTRY DAY SCHOOL

However, after the first few years of using the new academic scorecard, several leaders at Lovett raised a flag of concern. "This is great, but it's not the heart of our school or our mission. How can we track more fully what is in the mission and not reduce ourselves and all that we do to standardized testing scores?"

Accordingly, the committee added new sections to the scorecard. "It's not been entirely easy," Little said. "How do you fit character into a spreadsheet cell? It's certainly still an experiment, a work in progress for us." They've added cells for the percentage of seniors completing a senior project and those earning a diploma distinction, both of which require much more than academic competency. They've also added a set of carefully selected HSSSE numbers. Cognitive, social, and emotional engagement at each grade level and as compared with the mean each receive attention, as do HSSSE scores aligned to Lovett's commitment to 21st century skills. This includes how students believe their school has contributed to the following:

- Writing and speaking skills
- Critical thinking
- Collaboration
- Creative ideas

The expanded scorecard is still in its early phases, but Little believes it is generating good discussion at the board level. In addition, there is a better appreciation for the breadth and the significance of the school's mission to develop both intellect and character.

At Seacrest, Erin Duffy tells a similar story:

I'd been telling the board, which has been increasingly concerned with quantifiable metrics in recent years, that we can't use traditional measures of narrowly defined academic achievement to measure the success of our independent school and its unique mission for intellectual engagement,

CASE STUDY: THE LOVETT SCHOOL AND SEACREST COUNTRY DAY SCHOOL

ownership of the educational experience, and character. Finally, the board got tired of hearing me say this again and again, and they charged me to go do it, to go build that better and more comprehensive dashboard.

The dashboard Duffy developed — and continues to develop further each year — still includes SAT scores but also uses the HSSSE for data on things the school believes most aligned to mission, such as the following:

- Percentage of students participating in clubs, organizations, and athletics
- Percentage of students who report that teachers emphasize ideas in depth
- Percentage of students reporting that they regularly discuss questions in class with no clear answers

"It has been so educational for the board," Duffy says. "Conversations now reflect a broader understanding of the school's purposes, and priorities are set with the right balance of attention to student achievement, student learning experiences, and the whole child."

VIII. USING THE HSSSE AND THE MGSSE TO DRIVE IMPROVEMENT

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

VIII. USING THE HSSSE AND THE MGSSE TO DRIVE IMPROVEMENT

Do you use supply-side or demand-side assessment? There are two ways to think about using the HSSSE or the MGSSE in school improvement.

In one approach, *supply-side assessment*, users study the supplied HSSSE or MGSSE results and determine areas in which the school is seen to be somehow underperforming. They then set these supplied areas as targets for improving student learning and quality of life. Changes, sometimes called "interventions," are implemented, and HSSSE or MGSSE data are consulted every year or two to check for progress on the target. When the University of Puget Sound (Washington) studied its NSSE data and discovered lower than desired results for student perceptions of experiential learning opportunities, a task force was established. The university deployed new programs and new approaches to communicating opportunities and, later, noted progress. This may be the most common and simplest way to go about the work of using measurement tools for improvement.

In a second approach, demand-side assessment, the HSSSE, the MGSSE, and other measurement tools are used for analyzing and solution-seeking for overarching institutional goals and objectives. In this case, schools begin with identified problems. Maybe diversity directors are inquiring about achievement gaps; maybe board members are concerned about attrition in the high school. In these cases, administrators use the appropriate data from academic achievement or enrollment to unpack whether there is a problem and then pinpoint it as specifically as possible.

For example, imagine that a particularly problematic academic achievement gap (measured by GPA) is identified among Hispanic boys in grades 10 and 11, and a particularly problematic attrition rate is discerned for girls on financial aid in grades six and seven. It is at this juncture, where there's a demand to discover more about the problem and its resolution, when the HSSSE or the MGSSE should be consulted. Compare HSSSE stats for Hispanic boys in grades 10 and 11 with those for all boys in these grades, and MGSSE stats for girls who

receive financial aid in grades six and seven with the stats for all girls in those grades. Then identify key gaps. Perhaps for the boys there's a gap in relationships with teachers; for girls, perhaps the gap is around feeling safe and free from bullying. As you follow the data, surprises may emerge. Dig into the data more closely. Conduct focus groups with students to get more information for corroboration. The HSSSE and the MGSSE have informed you on potential strategies to address the larger problem, and these surveys can be used for monitoring whether those strategies are proving effective. But the HSSSE and the MGSSE by themselves aren't the only measurements of success for your initiative. That would only be found in the greater goals themselves — a narrowed achievement gap or a reduced attrition rate.

In this second approach, educators are more closely following the advice of Kuh and his colleagues in the argument for "consequential" assessment:

Organize assessment work to respond to high priority questions. Too often the tendency is to release reports highlighting a particular set of data — the results of this survey or that focus group. A more consequential approach is to weave together evidence from different sources that speak to the same guiding questions.... In other words, emphasize the demand side of assessment — do not just supply evidence and hope that it will trickle down to good effect.1

Five Strategies for Effective Use of the HSSSE-MGSSE

1. ESTABLISH ROUTINES, CYCLES, ANNUAL PROCESSES.

Effective use of the HSSSE or MGSSE will be sharply limited if it is done as a one-off, out of context, or just-because. It is far more effective to insert it into an ongoing, structured, and systematized

¹ George D. Kuh et al., "Making Assessment Matter," in *Using Evidence of Student Learning to Improve Higher Education*, ed. George D. Kuh et al. (San Francisco: Jossey-Bass, 2015), 231.

school process. Using data intentionally as part of a curriculum review committee, strategic planning cycle, or other long-standing or newly developed activity is crucial to addressing important educational goals and outcomes. In the *Data Wise* books, from Harvard's Graduate School of Education, the authors developed an eight-step cyclical process for "using assessment results to improve teaching and learning, with the most important first step being 'prepare." Here, teams of educators "organize for ongoing collaborative work" into committees with critical resources provided.²

2. USE THE HSSSE AND MGSSE FOR ACCREDITATION.

The accreditation cycle offers regular systems of review, structure, self-analysis, goal-setting, and monitoring. The HSSSE and MGSSE could be valuably exploited here.

The NAIS Commission on Accreditation has established what it calls Criterion 13. "The standards require a school to provide evidence of a thoughtful process, respectful of its mission, for the informed decision-making that draws on data (both internal and external) about student learning." HSSSE and MGSSE data are excellent ways to broaden the means by which data are collected and used for student learning.

At The Lovett School, Assistant Headmaster Marsha Little says that the HSSSE was instrumental to the school's self-study process:

² Kathryn Parker Boudett, 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).

³ National Association of Independent Schools (NAIS), "Criteria for Effective Independent School Accreditation Practices"; online at http://www.nais.org/Articles/Pages/Criteria-for-Effective-Independent-School-Accreditation.aspx.

We used the data for our "where are we now" section of the accreditation. It was useful to show here's how we're doing. And then for each goal we have for the school in student character, we carefully went from the goal to HSSSE, looking carefully to map the items most closely aligned, and use these very specific items as benchmarking for our school improvement plan.

3. INVOLVE YOUR CONSTITUENCIES.

We've already seen how important it is to broaden participation in data analysis, but it is also critical to bring everyone into the work of setting goals and determining strategies. At The American School in London Upper School, Jack Phillips tackles the areas of social engagement that the survey has indicated deserve attention. He says that he will be including students in every step of planning and implementing new techniques. A year from now, after concerted and collaborative effort, he looks forward to getting the subsequent HSSSE data, sharing them at a school assembly, and celebrating success with a surprise student party.

At Marshall School (Minnesota), when new Head Kevin Breen took the reins, he used HSSSE to set goals for improvement. He assured colleagues that the survey was widely understood and appreciated and that it would be the benchmark for progress. But then he stepped back and said to the departments that it was their task, not his, to develop and implement at least two strategies for each targeted school-wide engagement goal.

4. KEEP EQUITY CONCERNS AT THE FOREFRONT.

Schools still looking for the right handle to use with the HSSSE and MGSSE should consider equity. Most schools in NAIS (or outside of it) still have important work to do to ensure a truly equitable learning environment for all students. The HSSSE and MGSSE can be very useful in advancing this issue. One of the seven key "calls" to education leaders in the Datnow-Park book, *Data-Driven Leadership*, is "#6: Keep Equity Concerns at the Forefront."

The data-informed leader needs to keep equity concerns at the forefront of data use efforts to ensure equitable learning opportunities for all students. ... The data-informed leader must be ever attentive in order to ensure that all students are provided with opportunities to achieve at high levels in rigorous and engaging instruction.⁴

For example, when the University of North Carolina Wilmington dug into the subgroup data of its NSSE results, the data showed that students of color in certain departments were less likely to consult professors and advisers about career planning. The university moved to recruit more career advisers of color and implemented a new mentoring program for students of color in those departments, thereby closing this gap.⁵

⁴ Amanda Datnow and Vicki Park, *Data-Driven Leadership* (San Francisco: Jossey-Bass, 2014).

⁵ National Survey of Student Engagement, *Using NSSE Data to Assess and Improve Undergraduate Education: Lessons from the Field. Volume 1* (Bloomington, IN: Indiana University Center for Postsecondary Research, 2009), 20.

5. MONITOR IMPROVEMENT INITIATIVES.

After you have developed and implemented initiatives, it is essential to monitor goals using an array of data sources. Be sure to check future HSSSE or MGSSE surveys to gauge growth and improvement. In the interim, consider how you can use "pulse" surveys, observational checklists, performance rubrics, and other easily applied tools to track whether the implementation efforts are being faithfully and effectively accomplished and whether the needle is moving the way you prefer.

CASE STUDY: MARSHALL SCHOOL (MINNESOTA)

Kevin Breen recalls his delight on arriving at Marshall School as its new head in 2013. The school, which has a lot to love, also has its challenges, one of which was distinguishing itself from its public and religious competitors as a high-quality independent school.

For this purpose, Breen says, the HSSSE has been extraordinarily valuable. "I didn't want to arrive and immediately impose my own particular view of what an independent school ought to be; I didn't want to come off sounding like the school had to change to become more like the schools I was coming from."

Instead, Breen turned people's attention to the HSSSE's NAIS norms, which became a neutral and universal arbiter or standard for independent school excellence, particularly in regard to creating a student-driven culture.

What's great about HSSSE is how clearly it conveys the value of these engagement attributes; that these are things we all want in a school — it has that face validity. It became for me personally as head, and for all of us in the school, a guide as well as a measure, and a common language and common set of benchmarks for us. It wasn't me versus anyone else; it was all of us together for the HSSSE standards and the independent school norms.

In his first year as head, Breen carefully introduced the HSSSE to his faculty and his community. He cited then NAIS President John Chubb when explaining "meaningful engagement" as the single distinguishing feature of independent school excellence. Breen said:

I have enrolled us in this low-cost, high-return study. For just a few hundred dollars, we can join a cohort of independent schools in a longitudinal study that will measure our students' engagement and benchmark us against our peers and against national norms. As we enter

VIII. USING THE HSSSE AND THE MGSSE TO DRIVE IMPROVEMENT

CASE STUDY: MARSHALL SCHOOL

into our self-study, it is vital that we know how well we are engaging students here at Marshall.

Upon receiving his report, Breen studied the HSSSE data, grouping the school's results into three categories:

- Things we do very well on
- Things we need improvement in
- Things we do better than other schools do, but which we need to do even better

As a still-new head, he recognized the importance of celebrating the school's strengths first, displaying his appreciation of them and putting a light on bright spots for positive reinforcement. For instance, he showed how students valued the school's English teachers for the way they facilitated active, inclusive class discussion.

He articulated this in a vivid PowerPoint presentation to his faculty during the school's opening days. After underscoring the evidence for student engagement as a vehicle for learning, he pointed out particular items in the HSSSE report that he wanted faculty to focus on, including "How much does your school emphasize analyzing ideas in depth for classes?" and "How much has your experience at this school contributed to thinking critically (reasoning, asking 'why?')?"

Moving from information to action, Breen asked department chairs to work with their colleagues to accomplish these tasks:

- Select a few ideas identified in the presentation as being best opportunities for improvement.
- Set a goal to come up to NAIS norms in two years.
- Determine one or two interventions or changes in teaching methods and curriculum — designed to advance toward this goal.

As head of school, Breen could take a slightly more hands-off approach to management. He could trust teachers to review their own practice and

VIII. USING THE HSSSE AND THE MGSSE TO DRIVE IMPROVEMENT

CASE STUDY: MARSHALL SCHOOL

to develop their own improvements, knowing that they were all on the same page in terms of their goals and how progress would be measured.

Having this clarity and commitment helped him strengthen the school's culture of experimentation and risk-taking.

When one teacher tried to flip her class, in order to have more engaging class activities, it wasn't an immediate success. In fact, it sort of flopped at first. But because she was determined to reach that engagement goal, she didn't give up right away. Instead, she kept at it until it did work; and because parents understood the broader goal, they too were more patient.

All along, Breen's mantra has been "Let's do what we do well even better." And for many teachers, "even better" has meant more frequently and with more confidence. Breen continued, "The HSSSE definitely helps many with teacher self-confidence. Previously, teachers were assigning a monolithic position to all parents, concluding that they will all complain if we spend time on projects; they want us to prep for standardized tests."

"The HSSSE data provides teachers with an empirical defense for the projects that they want to teach," Breen said. "When the head names engagement as a top priority, the teachers know they have institutional support. In that way, the HSSSE data gives teachers permission to do what works."

Now, two years later, the school is making great strides and has become a more data-savvy environment. Breen explains:

In our self-study, identifying strengths, challenges, goals, we're using HSSSE for many of our goals; using HSSSE data and benchmarks for framing and measuring progress. Throughout Marshall, it has become more of an ongoing conversation, talking about engagement, and using HSSSE data to set goals for our improvement efforts.

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.

		3	Your School	NAIS			HSSSE Public		
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)	Grade	Mean 4	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

- 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.
- 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 12thgraders 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	

- § 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.
- 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 Cohen¹ 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/scantron_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

Fredricks, Jennifer A., and Wendy McColskey. "The Measurement of Student Engagement: A Comparative Analysis of Various Methods and Student Self-Report Instruments." In *Handbook of Research on Student Engagement*, edited by Sandra L. Christenson, Amy L. Reschly, and Cathy Wylie, 763–782. New York: Springer-Verlag, 2012. http://www.lcsc.org/cms/lib6/mn01001004/centricity/domain/108/the%20measurement%20 of%20student%20engagement-%20a%20comparative%20analysis%20 of%20various%20methods.pdf

Fredricks, Jennifer A., Wendy McColskey, Jane Meli, Joy Mordica, Bianca Montrosse, and Kathleen Mooney. *Measuring Student Engagement in Upper Elementary through High School: A Description of 21 Instruments*. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southeast, 2011. http://ies.ed.gov/ncee/edlabs/regions/southeast/pdf/rel_2011098.pdf

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. <a href="http://nsse.indiana.edu/http://nsse.i

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

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