Driving Engagement:
Case Studies on Using Engagement Surveys to Improve the Student Experience

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)

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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

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:

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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 labor-intensive 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

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.

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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.

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 Survey[1] and the Freedom from Chemical Dependency[2] 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

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1 "SAIS Value Narrative Surveys," Southern Association of Independent Schools; online at http://www.sais.org/?page=297.

2 "Surveys and Assessments," FCD Prevention Works; online at http://fcd.org/what-we-do/surveys-and-assessments/.

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."[3]

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.

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3 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.

Positive Relationships and Partnerships with Adults in the School
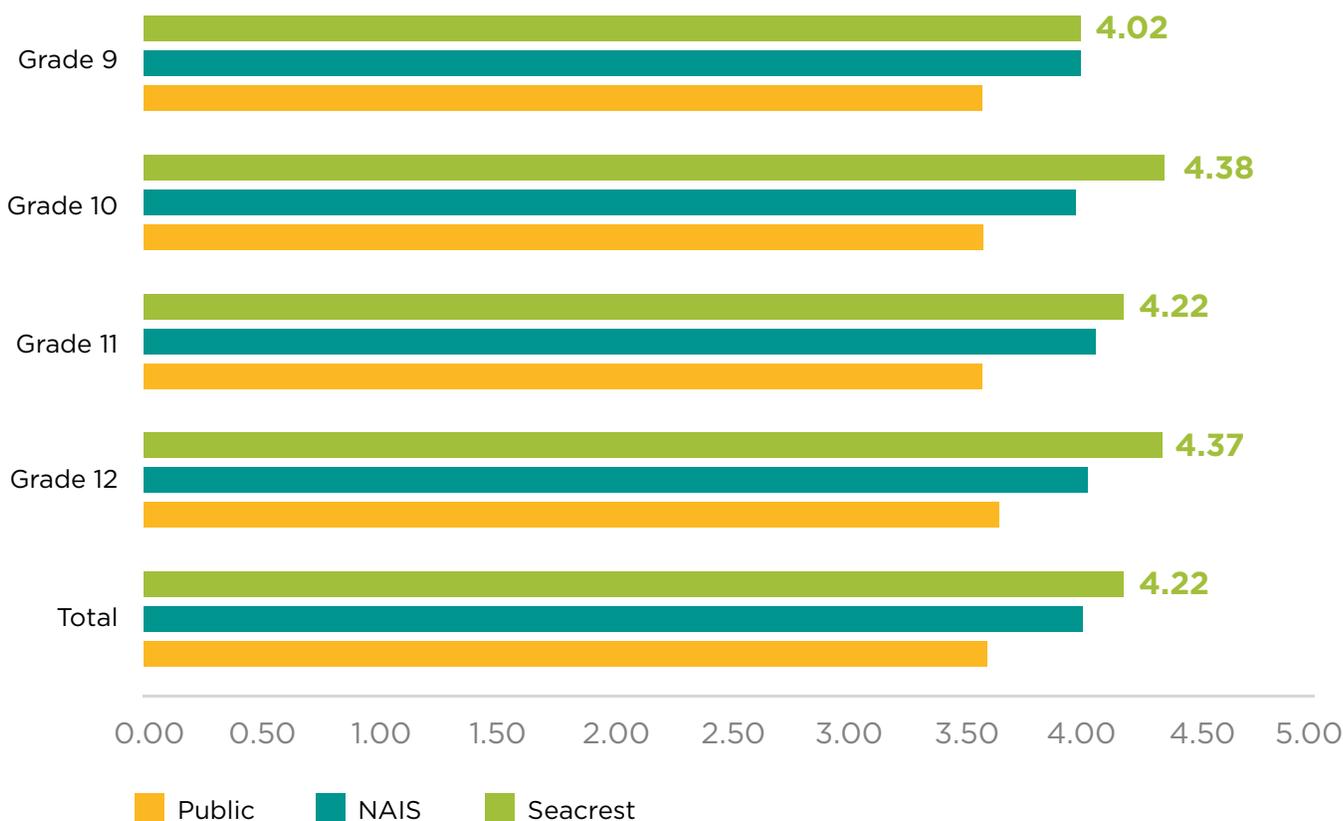
Source: Seacrest Dashboard

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.

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,

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."

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

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

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.