

From the Mouths of Babes:
Using Student Voice To Improve Instruction

By

Ron Koehler

In 2005, Bill Gates changed the lexicon of education reform with his oft-repeated assertion that “the new three R’s in education are rigor, relevance and relationships.”

It was second nature for Gates, whose billions were made through the development and sale of proprietary software, to impose his vision on the masses. Unfortunately, the consumers of this prescription for higher achievement did not agree.

Students, like the open-source insurgents who threaten Microsoft, believe the model should be reversed. It’s the relationships between students, between students and teachers, and the relevance of their work that inspires them to greater academic attainment, similar to programmers achieving ever more facile software through collaboration.

All across the nation, educators are challenged with the daunting task of eliminating the achievement gaps between disparate groups of students while at the same time increasing the achievement of all. While there are few examples of statistically significant leaps in test scores across large numbers of students, most would agree there is no substitute for the magic that occurs between a skilled teacher and a motivated student.

Engagement as an Achievement Strategy

Measuring student engagement through research and using results as leverage points in changing instructional practices are strategies used by school leaders to improve achievement for the more than 100,000 students served by the 20 public school districts in the greater Grand Rapids, MI, area. Their work was spearheaded by Kent ISD, a regional education service agency, in response to Michigan's 2006 adoption of requirements for all students to master Algebra II, four years of English, three years of science, including chemistry and/or physics, to graduate from high school.

For more than two years, local superintendents studied instructional strategies employed worldwide to help students achieve higher standards. Through this work, they were introduced to iNet, the International Network for Educational Transformation. Most striking about the work of iNet was the focus on students' engagement and involvement strategies employed by its members, which at the time were largely schools in the United Kingdom, Australia and New Zealand.

Their first student engagement research among Kent ISD school districts, reflecting the responses of more than 17,000 high school students, found 60 percent of the class of 2011 had little appreciation for their mandated courses, nor did they understand how the courses would benefit them in college or careers. These were the first students required to meet the new graduation standards, and their responses indicated clearly they recognized, and perhaps resented, their inability to choose a greater number of electives. And, despite being on a track to take the more rigorous Michigan Merit Curriculum requirements since their last year of middle

school, their survey responses demonstrated little had been done to explain why they were taking more rigorous classes or how they would be better prepared for college and careers as a result.

The initial research was conducted under the auspices of Kent ISD, which provides a wide array of instructional, information technology, professional development and back-office services to the 20 public districts as well as 17 public school academies in the region. A grant from the Mott Foundation to study the reasons students drop out of school, and possible preventive measures, was used to finance the research conducted by *K12 Insight*, a national education research firm based in Herndon, VA.

While the superintendents' study identified individualized education, student voice and making content more relevant for students as strategies, the Mott grant was applied to measure engagement as there was widespread fear of an increased dropout rate resulting from higher standards.

Measuring Student Attitudes

Work began on the Kent research in 2009. The initial study was modeled after the Indiana University High School Survey of Student Engagement (HSSSE), which was first made available to schools on a regular basis in 2006.

The pioneering HSSSE study has been made available to schools across the country and by 2010 was measuring the engagement levels of more than 40,000 students each year. Chief among the findings of the HSSSE is the level of boredom among students – about two thirds report being bored daily – with the relevance of content and instruction delivery methods being key contributors to the lack of engagement. Just 26 percent of respondents express a level of personal engagement with the teacher lecture delivery model, while 44 percent rate lecture as

“not at all engaging.” Most engaging are courses that focus on debate and discussion and project-based learning.

Said one HSSSE respondent when asked about the relevance of classes: “I don’t find the work interesting, don’t enjoy being talked at, and hate that everyone teaches to standardized tests.”

The initial Kent survey focused on student attitudes toward individual core content areas, toward school in general, and explored additional themes such as security, participation in extracurricular activities, relationships with adults and other students, and students’ general sense of wellbeing.

The 2010 Kent survey reached 17,355 high school students in 20 public school districts, approximately 60 percent of the total high school population among the districts served by Kent ISD. These districts are largely located within Kent County, which has a population of more than 600,000, an urban center in Grand Rapids, and a good representation of edge-cities, affluent suburbs and rural communities. Located relatively equidistant between Detroit and Chicago, some 35 miles from the eastern shores of Lake Michigan, the region is often used as a testing ground for new consumer goods, as its demographics reflect the nation as a whole.

The good news found in the first Kent student engagement study were the levels of satisfaction with school – 85 percent reported being satisfied or extremely satisfied – and the relatively high levels of parental support. Encouraging too was the high percentage of students, 74 and 77 percent, respectively, who said they had a positive relationship with their teachers and with one or more adults in their schools. On the flip side were the responses to student interest in core content areas. Just 28 percent expressed interest in English, required in all four years under

the MMC; 32 percent in world languages, a two-year requirement; 34 percent in math, a four-year requirement; and 40 and 44 percent in social studies and science, both three year requirements.

An Engagement Matrix

The 2012 Kent survey was quite different. Working with K12 *Insight*, a new engagement matrix was developed that more closely models the Gallup Student Poll conducted annually since 2009. While these tools are somewhat similar in their construct, the K12 *Insight* student engagement tool has two distinct advantages: The matrix is designed to clearly identify high leverage areas where staff can adjust instructional strategies to increase engagement, and the K12 *Insight* tool affords districts the opportunity to adjust the survey or add questions that meet specific needs.

Here's how lead researcher Stephan Knobloch describes engagement and the development of the K12 *Insight* engagement tool:

Engagement refers to student involvement and interest in subject matter, schoolwork and other school-related activities. Engaged students are involved in learning activities and have a sense of ownership for their learning. Engaged students have a sense of connectedness to intellectual pursuits and tend to have a more positive attitude toward their education. Engaged students are more likely to take initiative in school work and activities with enthusiasm, optimism, curiosity and interest. Engagement can be categorized into three types: emotional, behavioral and cognitive.

In 2011, Kent Intermediate School District (Kent ISD) collaborated with K12 Insight, a research and communication firm in Herndon, Va., to conduct a correlation study of

student engagement. A survey instrument was developed to measure student engagement and factors that influence engagement. The survey included a set of 8 engagement items, 16 items that can influence engagement derived from research literature, and a number of general satisfaction and demographic items.

Survey Topics

- *General feelings a student has about school*
- *Relationships with school staff members and peers*
- *Interest in school work, subject matter and school activities*
- *Perception of support and encouragement*

Purpose of Study

- *To measure each student's engagement level*
- *To identify areas of strength and opportunities for improvement*
- *To understand the relationship between engagement and specific items*
- *To share with district and school leadership a simple overview of results to take next steps*

Survey item response options were based on a 5-point Likert-type agreement scale – Strongly Disagree (1) to Strongly Agree (5).

Sample Engagement Items:

1. *I am proud to go to this school.*
2. *I am interested in what I am learning.*

3. *My teachers believe I can do well in school.*

Sample Items Related to Engagement

1. *My teachers talk about interesting subjects in my classes.*
2. *I look forward to seeing what we will do in class every day.*
3. *My teachers care about how I am doing.*

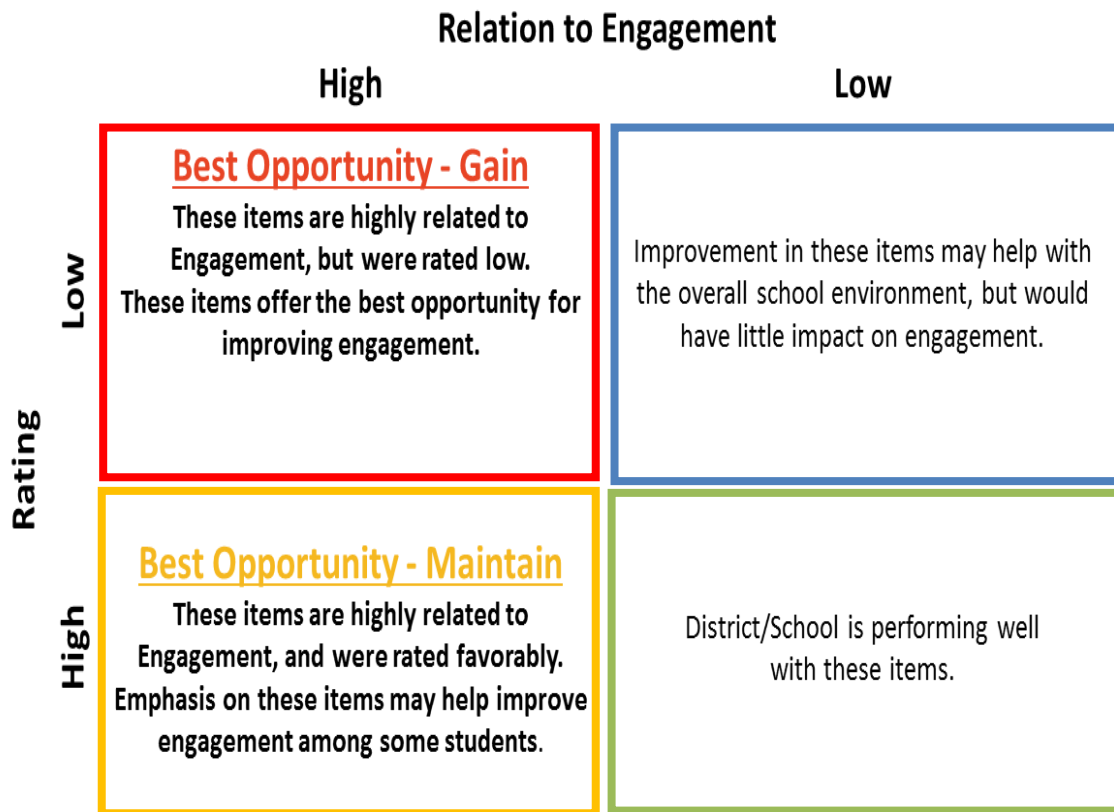
Most important, however, is the engagement matrix developed by Knobloch and K12 *Insight* allowing survey administrators and staff to identify the areas where engagement can be improved.

A Researcher's Rationale

Here are Knobloch's responses to a series of questions posed about the engagement matrix for the purposes of better informing *Perspectives* readers about the work.

- **How did you create the student engagement matrix?**

The engagement matrix is a simple table that organizes the correlation of factors that can influence student engagement into four quadrants. The table is a quick and easy tool to help teachers and administrators identify those factors that, if addressed, will likely improve student engagement. Additionally, the table organizes items that may be less influential.



- **What are the most important components?**
 - The most important components of the matrix are highlighted in red and yellow based on the data analysis using the median engagement rating and the median correlation of each item related to engagement.

- **What can you learn about student behavior from this measure?**
 - The information contained in the engagement matrix is based on student perceptions of parent, teacher and other student behaviors. The data in the student engagement matrix provides teachers and school leaders with information to consider when making decisions on curriculum instruction

and assessments. Actions and next steps after analysis and discussion can lead to changes in adult and student behavior.

- **How can you use this measure as a tool to create a better learning environment for students?**
 - The information derived from the study can lead to a better learning environment for students if teachers, curriculum designers, school leaders and test designers commit to heighten student engagement.
 - Identifying one or two areas to focus on which have strong positive correlations to engagement can lead to improved student engagement. This is likely to have a positive effect in the classroom and most importantly in student learning.

- **Can this measure help with the major issues of the day – closing the achievement gap and creating a more valid evaluation tool for educator effectiveness?**
 - Student engagement may be a means to look at how instructional practice and adult behaviors influence learning.
 - A teacher's or employee's level of engagement can be correlated to how effectively he or she performs. This is but one measure. To have a more complete picture of effectiveness, definitions of performance must be in place and appropriate measures created and designed to measure the specific performance. While engagement may assist in understanding effectiveness, it is not a measure of effectiveness.

Relevance: A Key Factor

The 2012 survey results were revealing in several ways. Participating Kent districts found that while some had taken significant steps toward creating greater engagement, others had not, or were forced to make staff and service reductions that blunted efforts to better engage students. Thus, while 81 percent of the 11,493 respondents reported being engaged/highly engaged, and just 12 percent of students reported being dissatisfied or extremely dissatisfied with their high school experience, 48 percent of students questioned the relevance of their course content. 25 percent of students said just half of their classes were relevant to their current or future needs and 21 percent said few of the courses they took would be of future benefit.

One stark contrast stood out among the individual building results. In 2011, acting on the research done through student voice and secondary redesign models by its superintendents' association, Kent ISD opened Innovation High, which deployed the New Tech Network project-based learning model to increase student engagement. Innovation High was designed as a laboratory school to provide the region's building administrators and their teachers a new instructional methodology and learning environment to study and adapt in their schools.

Across the region, responses from all students found just 20 percent attending traditional comprehensive high schools were "highly engaged" in their education. At Innovation High, where students work on real-life projects provided and or/presented with the involvement of the business community, 41 percent of students were "highly engaged." At Innovation High, 94 percent of students are satisfied or extremely satisfied in the school, and their responses to engagement in individual content areas are higher as well. Innovation High core content areas are integrated with other disciplines, so students may take bio-lit, a combination of biology and

literature, for example. In all core areas where content is integrated, interest levels are in the 70 percent range.

In math, however, because their home districts have different requirements for 8th graders – some must complete algebra I by the end of 8th grade, while others defer algebra I until the 9th grade – some Innovation High students come into the school needing algebra, and others geometry as their first high school math class. That makes it difficult for staff to integrate math into other subjects, because of the small size of the school -- approximately 100 students per grade level -- limits the number of classes that can be offered. Student engagement in math at Innovation High is definitely higher than at traditional schools, at 52 percent, but students also find math the least engaging of all core content areas.

Innovation High results are instructive because its students typically represent the region as a whole. Each district is given a number of seats at IHigh, and the selection process varies among the 20 districts served. Some districts present Innovation High as an option at 9th grade orientation to allow students and their families a choice. In others, counselors recommend IHigh to students they believe would do better in a project-based educational environment. The gap between the number of students recommended by member districts and full enrollment is filled by advertising to charter and home school families.

At present, Innovation High's population of special education students is 8 percent, the percentage of free and reduced lunch is 54 percent, and 33 percent of its students are from diverse ethnic backgrounds. Comparable numbers for all of Kent ISD are 12 percent special education, 48 percent free- and reduced lunch and 37 percent from diverse ethnicities.

Student Voice and Evaluation

During these four years of student engagement study, it is clear Kent teachers, administrators and staff better understand how greater engagement can increase student performance, lower absenteeism rates and improve overall classroom decorum. Educators also recognize and employ strategies to increase engagement.

District administrators are now exploring the prospect of extending engagement research into the evaluation process. Michigan teacher evaluation laws require annual evaluations of all staff and will soon mandate 50 percent of each evaluation be based on student standardized test performance. Understanding that neither building principals nor teachers can control all the conditions that can cause fluctuations in test scores – changes in assessments, minimum scores required for acceptable performance levels -- high school principals are now calling for teacher and student engagement surveys to be included as a component of the evaluation process.

Their rationale is that building administrators may not be able to control test scores, but they can control the learning environment they create within their buildings. Likewise, teachers can create a captivating and supportive learning environment even if student scores fluctuate with changes in tests, cut scores, or curriculum.

Kent ISD districts have learned, and benefited, from student engagement research. They're committed to continuing their efforts to better understand how to engage students in their education, and are working to create the relationships necessary to ensure all students are comfortable in their learning environment.

Building principals are using the engagement matrix to examine instructional practice and help teachers improve performance with new strategies to inform students of the scope and

value of the content they're delivering. Teachers are also re-evaluating the "stand-and-deliver" instructional styles of the past and are putting new energy into video lectures that can be accessed at any time, allowing classroom time to be more of a hands-on lab experience.

Kent ISD will continue to push the envelope. Our instructional leaders have found the responses of nearly 30,000 students in two engagement research projects extraordinarily valuable to stimulate dialogue among high school teachers about teaching and learning. It has also given building administrators new ammunition in their efforts to encourage teachers to move from their "sage on the stage" instructional style to that of a facilitator, mentor and learning coach.

Endnotes

Information about the Indiana University High School Survey of Student Engagement is available at <http://www.indiana.edu/~ceep/hssse/>

Information about the Gallup Student Poll is available at <http://www.gallupstudentpoll.com/home.aspx>

K12 *Insight* Researcher Stephan Knobloch Ed.D can be reached by phone at 703-542-9640 and by email at sknobloch@k12insight.com

Author

Ron Koehler, Assistant Superintendent for Organizational and Community Initiatives and Legislative Affairs at Kent ISD. He can be reached by phone at 616-365-2292 and by email at ronkoehler@kentisd.org