

Highly Effective Teaching Practices

*Exploring How HISD Teachers are Accelerating Student
Progress and Increasing Results & Expectations*

Research Report
Presented: August 2009



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HIGHLY EFFECTIVE TEACHING PRACTICES

Exploring How HISD Teachers are Accelerating Student Progress and Increasing Results & Expectations

Executive Summary

Over the past few years, the Houston Independent School District (HISD) has achieved record-breaking results in improving students' academic performance. At the heart of our success are the thousands of teachers who are the biggest influencers on the quality of learning for every child. The importance of having a highly effective teacher in every classroom cannot be underscored, and it is a high priority for the district.

That is why in the 2008–2009 school year, HISD identified a group of more than 60 core teachers in grades 3–8 in math, science, language, reading, and social studies who facilitated the highest levels of student academic growth to engage in a study to learn about their strategies for success. These individuals had the highest average value-added Cumulative Gain Index for two consecutive years based on 2006–2007 and 2007–2008 teacher-level value-added results according to SAS EVAAS® data.

The purpose of this Highly Effective Teacher (HET) Study, supported by the Bill & Melinda Gates Foundation and conducted by researchers from Battelle for Kids, was to:

- Recognize teaching excellence
- Uncover instructional practices that facilitate high levels of student academic growth
- Explore ways to support existing professional development pathways
- Create new pathways to foster and replicate high-leverage practices across the district

Using Appreciative Inquiry, a qualitative methodology, guided questions were used to elicit information from these teachers about what they do in their classrooms to support students' learning. This study uncovered four recurring themes across each of the subject area groups of highly effective teachers, including:

- Instruction that supports and engages ALL students.
- A child-centered focus that fosters relationships and is responsive—teaching to each student's needs.
- A consistent and predictable classroom environment that is positive, safe, organized and conducive to high quality learning for ALL students.
- Professional self-efficacy and continuous improvement through collaboration, personalized professional development and supportive leadership.

Each of these themes is discussed in detail in the full research report.

Project Overview

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These teachers participated in a qualitative research study over a period of two days to collectively explore the factors that may be contributing to their instructional effectiveness. The two sessions served as professional development opportunities for these teachers. They also allowed researchers to gather rich narrative information on teacher perceptions of factors contributing to their instructional effectiveness. Analysis of these reflections enabled researchers to identify four themes of the professional practice of highly effective teachers, including:

1. Instruction that supports and engages ALL students.
2. A child-centered focus that fosters relationships and is responsive—teaching to each student's needs.
3. A consistent and predictable classroom environment that is positive, safe, organized and conducive to high quality learning for ALL students.
4. Professional self-efficacy and continuous improvement through collaboration, personalized professional development and supportive leadership.

The HET Study is unique in its seamless integration of stakeholders and project objectives. Its objectives included contributing to the educational knowledge base, as well as directly informing practice. Rigorous quantitative measures were used to identify, recognize, and reward the instructional excellence of the HISD teachers, and systematic qualitative methods were employed to collect data on factors that contribute to student academic growth.

Appreciative Inquiry, a qualitative methodology, was selected for its capacity to: 1) encourage and nurture enthusiasm among participants, 2) focus inquiry on the strengths of highly successful teachers rather than the deficits, and 3) allow multiple voices representing different stakeholders to be involved in sharing stories, collecting data and interpreting data. Teachers' reflections and stories are the core of this study. District personnel and researchers listened to and recorded the teachers' stories. HISD administrators, content specialists and professional development services supported researchers in the collection and analysis of the qualitative data. An additional advantage of this broad participation was that emerging ideas could inform future professional development and research.

Research Design

Sample Selection and Composition

The study’s identification of the sample of highly effective teachers is unique in that the teachers were identified on the basis of value-added measures of student academic growth. Most of the available literature on highly effective teachers relies on anecdotal reports, student achievement data, or perception data. The selection process began by identifying all of the teachers in grades 3–8 in each of the five core subjects who were in the top 10 percent of student gains for two consecutive years, 2006–2007 and 2007–2008, based on SAS EVAAS® Value-Added Teacher Level Cumulative Gain Index.

An important objective of the project was to recognize and reward teacher excellence; therefore, all teachers were sent a congratulatory letter by district administration recognizing them for their exemplary work.

Of the approximately 190 teachers who were in the top 10 percent for two consecutive years, 110 were invited to participate in the two sessions. Teachers were excluded from this study if they:

- Were no longer employed by HISD as a classroom teacher
- Had a Value-Added Cumulative Gain Index in another subject that was in the bottom quartile (Q4) of performance across the district
- Had a Cumulative Gain Index of less than negative one (-1) in any other subject,
- Were in the bottom eight among third grade Language teachers based on a rank-order of the 2007–2008 Cumulative Gain Index¹
- Did not have their principal’s support to participate in the study, or declined participation

A “highly effective teacher” refers to a core content area teacher in grades 3–8 whose students have demonstrated high academic growth (typically three or more standards errors above expected gains) for a period of two consecutive years.

Sixty-four teachers participated in the study. Thirty-three highly effective teachers were elementary teachers, and 31 were middle school teachers. The teachers’ classroom contexts were diverse. For example, the elementary teachers taught in both self-contained and departmentalized formats. Ten elementary teachers were bilingual teachers. Four teachers taught in multi-grade settings. Fifteen taught in schools identified as exemplary, 24 taught in schools earning a recognized rating, 23 taught at schools rated academically acceptable, and four teachers taught at schools working toward removal from the academically unacceptable list.² These highly effective teachers taught English Language Learners (ELL), special education, general education and Vanguard students.

Following is a more detailed breakdown of the teachers that participated in this study:

33 Elementary School Teachers <ul style="list-style-type: none">• 12 third grade teachers• 8 fourth grade teachers• 11 fifth grade teachers• 2 multi-grade teachers• 10 of the 32 teachers are bilingual teachers	31 Middle School Teachers <ul style="list-style-type: none">• 14 sixth grade teachers• 11 seventh grade teachers• 4 eighth grade teachers• 2 multi-grade teachers
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¹ This criterion was applied due to the high rate of 3rd grade language teachers in the pool of teachers in the top 10 percent for two consecutive years.

² Based on the 2008 Texas Accountability Ratings.

Session Formats

Sixty-four of the 110 invited teachers participated in two interactive group sessions to uncover the factors that may account for high student gains and to deepen the understanding of how to develop, reward, and retain exceptional educators. The sessions took place in March and May 2009. Each session was three days long but individual teachers only participated for one day in each of these sessions. Teachers were grouped by content area as described below.

Each day's activities were similar regardless of content area. Teachers were grouped as follows:

- Science and social studies teachers attended the first day of both the March and May sessions;
- Math teachers attended the second day of both sessions; and
- English Language Arts and reading teachers attended the third day of both sessions.

Teachers engaged in a series of activities including peer interviews, group discussions and activities, and focused-writing. These sessions served as a professional development opportunity for the teachers as well as an opportunity to generate the necessary insight to fulfill the study's objectives. During the March sessions teachers interviewed each other about their successes and strengths and broadly explored factors they thought contributed to their students' growth. The data were analyzed to identify themes and patterns to influence the content of the May sessions. The five broad themes from the analysis of data from the March sessions were:

1. High expectations for student growth
2. Instructional practices that meet the needs of all students
3. A classroom environment that promotes success
4. Child-centered focus
5. Professional self-efficacy

During the May sessions, participating highly effective teachers were asked to provide feedback about whether they agreed with the initial interpretations of the research team. They were then asked to engage more specifically with the five broad themes to further uncover and explore the dynamics, influence and importance of each of the theme areas. In addition, the teachers were asked to provide written responses around two themes of their choice. In particular, they were asked to write about how each of the themes impacts the work they do in their classrooms. Teachers' voices are often overlooked or discounted in the professional discourses of school improvement. This study provided an opportunity for their voices to be heard and their professional strengths and expertise leveraged. This research project is based on the assumption that highly effective teachers know and can communicate what they do that makes a difference in student growth.

District staff played an integral role in achieving the study objectives in several ways. First, they assisted in supporting, documenting and providing feedback on the study process itself. Second, they participated in the research process by working with Battelle for Kids' personnel to analyze the data and identify themes and patterns. Finally, HISD used the results of the study to construct professional development products or opportunities that may raise the overall quality of instruction across the district. This collaboration is ongoing.

Appreciative Inquiry

The Appreciative Inquiry (AI) methodology guided the qualitative research design. Appreciative Inquiry is the purposeful study of behaviors that work well. Appreciative Inquiry provides access to nuanced qualitative data. It also harnesses and/or creates enthusiasm within an organization by building on, or more effectively utilizing, its strengths and resources to create change. If the enthusiasm, action steps and understandings generated by AI are nurtured and encouraged to develop, organizational transformation can result. Through AI, strengths, expertise and resources receive careful study in order to better understand them and then to expand and extend them.

This research study reinforces the following four core components of ASPIRE:

- Developing Human Capital
- Informing Practice
- Improving Teaching and Learning
- Recognizing Excellence

Data Analysis

The data were analyzed using an inductive approach that searches for themes within and across data sets. Data included field notes from the session facilitators, the interview sheets and recorded notes taken by the teachers as they interviewed each other about their teaching successes and the teachers' written narratives. The identification of themes and their analysis were grounded in the data rather than developed from a-priori codes. Nevertheless, it was expected that the data would speak to the following questions:

- What do highly-effective teachers identify as contributing factors to extraordinary effects on student growth across student sub-groups?
- What commonalities exist across the practices of highly effective teachers?
- Can high-leverage behaviors be identified and understood in such a way that they are transferable and coachable?

The analytical questions that emerged from review of Session One (March) data and that were fed back into the research design and interview protocol questions for Session Two (May) were:

- How can understanding the abstract attitudes, beliefs and dispositions to which highly effective teachers attribute their success be further developed?
- Are attitudes, beliefs and dispositions, such as *passion*, transferable and coachable?

Findings

The data were collected in two sets of sessions, in early March and May 2009. The initial analysis of the March data determined the format and the focus of the second set of sessions. BFK researchers analyzed the data from the first sessions (in March) to identify emergent themes for continued exploration during the second sessions (in May). This section will first highlight some preliminary findings from the first set of sessions. Next, the four themes that emerged from an analysis of the complete data set are discussed.

Professional Preparation and Practices

There were two sets of understandings that emerged from the first set of sessions. First, there were some apparent patterns in the backgrounds and practices that were self reported by the participating teachers, including:

- No visible pattern existed in the experience levels of the teachers. Years of classroom teaching experience ranged from 3–24 years.
- While no pattern existed in years of teaching experience overall, teachers with fewer than 10 years of experience in the subject area in which they were identified for participation made up 65 percent of the sample.
- Only a third of teachers possessed a Master's degree.
- Thirty-six percent of teachers did not have education degrees.
- Nearly all teachers reported that they collaborate to plan instruction.
- Nearly all teachers reported that they used student performance data to plan instruction.

The Importance of Passion, Beliefs and Dispositions

The second set of preliminary findings from the March sessions was that the teachers overwhelmingly pointed to a set of their values, beliefs and dispositions as explanatory factors in their students' progress. In particular, teachers pointed to passion as an important ingredient in their success. Furthermore, when asked to identify the most inspiring aspects of the day's activities, teachers' responses nearly equally included concrete, practical and measurable examples, such as specific instructional strategies, with those that are much more difficult to measure and understand, such as valuing the opportunity to simply connect with other teachers and share inspirational stories. Passion was often identified as the single most important factor in a teacher's success. Having high expectations and believing that all children can succeed also were integral components.

The findings presented a challenge. Passion and other abstract concepts such as beliefs and dispositions are very difficult to quantify and measure. They can neither be categorized as *inputs* nor are they easily reduced to a set of *classroom processes*. Despite the difficulty in measurement, these factors were clearly identified as important reasons for the successes of the highly effective teachers. Thus, the challenge was to manage the tension between attitudes, beliefs and dispositions with the HET Study's objective of uncovering a more complete, nuanced understanding of best instructional practices that are actionable, coachable and, to the best extent possible, measurable so that real-time impact can be made on improving teaching and learning across the district. Thus, during the May sessions teachers were encouraged to carefully consider the importance of "passion" and whether it could be understood as a tangible dynamic that could be transferable and to consider how these abstract factors influence, and are influenced by, more concrete professional practices.

Four Principal Findings

This section presents the four main themes, or domains, that emerged from all data to explain student gains in the classrooms of the highly effective teachers:

1. Instruction that supports and engages ALL students
2. A child-centered focus that fosters relationships and is responsive—teaching to each student's needs
3. A consistent and predictable classroom environment that is positive, safe, organized and conducive to high quality learning for ALL students
4. Professional self-efficacy and continuous improvement through collaboration, personalized professional development and supportive leadership

"I individualize expectations for my students. At the beginning of the year we evaluate where they are as readers and writers, then I ask them what do they want to accomplish from this year and we set a goal."

These four themes are discrete, yet form a compelling insight. The first three focus on students. Inherent in these is the reality that students are not steady states of matter. Students change from minute to minute as they struggle with complex content, work on challenging tasks, and are asked to demonstrate what they know and can do. Highly effective teachers are able to adjust instruction to meet the individual needs of students as those students change and as the environment of the classroom changes.

Inevitably, these teachers adjust instruction, pace, sequence and mode of engagement as a function of the needs of students throughout the class period. The fourth theme, then, is critical in the success of these teachers in meeting individual student needs. These teachers see themselves as powerful in influencing how students learn. They know they make a difference and they find satisfaction in that.

If one digs into the details of the challenges or points of tensions that inevitably arise for these highly effective teachers, it becomes clear just how complex it is to create an effective classroom environment. Here are a few examples: 1) Teachers adjust instructional goals to make them a better fit for individual learners, 2) Teachers balance the demand of being the authority figure and task-master with the need to care for and develop connections with their students, and 3) Teachers adjust and change established routines to accommodate and take advantage of novel emerging circumstances, etc. By managing the inevitable tension across the four domains, highly effective teachers are able to create conditions where these factors support and reinforce each other rather than get in each other's way. For example, highly effective teachers realize that a warm classroom environment where students feel safe to ask questions, take risks and build on successes and failures does not conflict with the mandate for a rigorous curriculum and high level results.

1. Instruction That Supports and Engages ALL Students

Factors related to instruction and a teacher's firm grasp of the content area are, not surprisingly, a major component of supporting and engaging all students. What appears to be different in the discussions of these teachers is that a balance is sought between the needs of the student and the by-the-book standards-based instruction. These teachers allow themselves to adjust their teaching if students are not learning specific content standards.

They trust themselves and know that they will recycle around and ultimately every student will master the appropriate content. Reconciling this balance necessarily entails differentiating instruction and frequent collection and review of student performance data. The following discussion outlines supporting components of instruction that meets the needs of *all* students.

Student Performance Data Guides Instruction

Teachers use various forms of student performance data to guide instruction. However, it is important to note that teachers define student performance data quite broadly to include benchmark assessments, the Texas Assessment of Knowledge and Skills (TAKS)-related data and assessments, student work samples, teacher-created assessments, teacher observation and note-taking during learning, etc. Just as important, valuable information about student learning can be ascertained by listening to pairs of students as they solve a math problem together, students' reading their writing aloud, small groups jointly constructing a product, and by engaging students in conversations about their learning. Because this kind of listening and data gathering is important to highly effective teachers, they tend to spend most of their time moving around the classroom.

Data-driven instruction is naturally differentiated instruction because the teacher consistently knows where individual students are struggling or where they need to be challenged. In addition, consistent integration of student performance data in the instructional feedback loop influences the nature of classroom instruction. Cooperative learning, projects, peer work, student notebooks and classroom discussion provide teachers with valuable information about a learner's progress. Students are often involved in goal-setting and progress-monitoring.

The teachers' descriptions of their assessment practices and their intricate link to classroom instructional activities raises interesting questions about the extent to which the nature of the instruction of highly effective teachers fundamentally changes the traditional, more passive role of the student to a role characterized by much greater involvement on the part of students in the classroom.

The Learning Process is Not a Secret

Clarity and consistency are identified as extremely important components of a highly-effective teacher's classroom with respect to many classroom features. What drives instruction? Content standards through the district's Horizontal Alignment Planning Guides (HAPGs) drive instruction. Consequently, instructional goals are clearly identified by the teachers, and in turn, are communicated clearly to students. Students know what is expected of them and they know what is required to be successful. This focus of clear and consistent processes is, of course, part of the dynamic management that great teachers accomplish to meet their students' ever-changing needs while still supporting student growth.

The teachers stressed the importance of modeling learning behaviors and thinking processes, clearly identifying learning targets and expectations, providing rubrics and examples of exemplary work and engaging students in "meta" conversations about their own learning. Teachers facilitate conversations that ask students to "think about their learning."

Teachers also pointed to their willingness to share stories about their own learning with students and to constantly model an image of teacher-as-learner to students. Students are taught how to set goals and how to monitor their progress. In addition, students have opportunities to teach each other and participate in the assessment process of their own learning. Teachers overwhelmingly emphasized the importance of clearly communicating expectations for student work. Teachers consistently and repeatedly model these expectations. They provide rubrics and explicitly discuss varied components of academic behaviors—including aspects such as neatness, timeliness and quality. Samples of “excellent” work are made available to students so that they can clearly envision the established targets for successful performance.

Learning is not a mysterious process in the classrooms of highly effective teachers. Rather, it is a set of transparent processes and students have an insider-view of the learning process. As one teacher reported, “I let the kids watch me grade, help out in the lesson, return work promptly and take to heart that the material in the lessons is important.” Classroom processes are transparent and explicitly discussed and explored as an integral part of instruction that meets the needs of all students. Highly effective teachers cultivate self-efficacy in their students. The following is an example of one teacher’s efforts to help students learn and to build learner self-efficacy.

“I love it when I see strong arguments on the method to solve complicated word problems and students come to me for assistance, and one of the students will say, ‘ah, [teacher] won’t help us,’ so they go to other students for clarification or assistance. [This is because] I try to teach them to network and learn from each other and not depend on me so much. I may guide them on which students to ask for assistance. After they get help from a peer, I ask them to come back and explain what they just learned. If it is correct, I congratulate them and have them continue. If it is incorrect, I call on all those students involved and guide them to the correct method.”

The teacher guides the students in a process that pushes them to find the information themselves, to work together, and to immediately put their emergent understandings in their own words. However, the teacher monitors the entire process, ensuring that answers are correct and filling in gaps using various techniques as necessary.

Instilling a sense of pride in a job well done is another part of developing a learner’s self-efficacy. “I work with my students to become proud of their abilities and to believe that their work is a reflection of who they are.” Students are provided the appropriate tools to meet their teacher’s high expectation: “I return papers that do not meet my expectations. But, I do this with a positive approach and feedback, and I work with students to produce what they are capable of.”

Growth is the Focus

Teachers most readily identified holding high expectations for students as a critical factor in fostering high levels of student progress. In fact, a clear understanding of the nature of these teacher expectations emerged from the study. Teachers do not simply hold high expectations for students without a set of intentional processes and procedures that support students to achieve those expectations.

“We keep a portfolio of major assignments. Rather than preach, ‘you must get 100’, I like the students to do better on THIS assignment than on the LAST assignment. I constantly preach that they are learning—not learned...That I am looking for PROGRESS, not perfection.”

In other words, holding high expectations for students does not simply refer to teachers possessing a set of beliefs and hopes of a student being successful.

Highly effective teachers structure learning so that these expectations are understood and they provide the necessary tools for students to achieve them.

High expectations are rooted in specific objectives, and the orientation is academic growth of students rather than the more static notion of achievement, or reaching a benchmark. Importantly, high expectations are set on an individual basis and are continually pushed forward. As one teacher put it, “If a student has mastered an objective, it’s my job to continue to build on it, adding more to it and push that student to be their absolute best.”

Goal-setting and progress-monitoring sustain an emphasis on academic growth. According to one teacher, “Students are accountable for monitoring academic growth through a breakdown of objectives, a growth-tracking chart and self-reflection journal entries. I have a ‘whole-class’ growth tracking card displayed in the classroom, and this visual creates a common purpose toward a common goal.”

Another teacher equated goal-setting with rigor. She recommends that teachers “develop goals using past test scores and grades. Conference with students and let them help you develop goals.” Goals are powerful motivators for learners. They provide a tangible target, and progress can be monitored. Learners who do not see evidence of their own growth frequently become frustrated.

“Weaknesses are Welcome”

Errors and risk-taking in the classroom are important to highly effective teachers. They stressed the importance of encouraging kids to take risks with their learning, such as making a contribution to class discussion even when they are less than confident about their answers, volunteering to solve a problem, admitting when something is difficult and asking for help when it is needed. Teachers model that risk-taking and report that demonstrating making mistakes along the way is a valued part of the learning process. Several teachers reported deliberately making mistakes to demonstrate that everyone makes mistakes and that the entire classroom community is responsible for helping each other learn.

The teachers expect their students to question them. As they explain to students, “We don’t know everything. You might know a better way.” One teacher explained the importance of encouraging students to openly express when they have difficulty understanding a particular concept: “I need to know when my students are lost and when they don’t understand a concept. My students feel comfortable letting me know. They have had the experience of talking in front of the class and now have confidence to ask a question.”

“Four things come to mind when it comes to a having a child-centered focus:

- 1. Give the students a sense of ownership, allowing them to discover and experiment with objectives on their own, which in turn enables students to play an individual role of importance in the classroom and school.*
- 2. Figure out ‘where they are,’ and identify each student according to learning ability, behavior and personality.*
- 3. Decide where I want each individual student to be. In other words, what goals have I set for the students in my class? and,*
- 4. How do I, as an educator, get them to accomplish these goals?”*

2. A Child-Centered Focus That Fosters Relationships and is Responsive—Teaching to Each Student’s Needs

Individual students are firmly at the center of a highly effective teacher’s professional practice. Instruction is balanced according to the content standards being addressed and individual learner needs. A network of positively-oriented support structures and processes are in place to facilitate every student’s learning. A psychologically safe classroom environment is developed to support the growth of the child and to encourage academic risk-taking.

Student ownership in managing the classroom, as well as the learning within it, is keenly cultivated. One teacher succinctly stated: “It’s not about us. It’s about the child.” Another added: “It is so easy to teach based on what works for me. Every day I remind myself and my team that it is not about me or us. It doesn’t matter what works for us if it is not working for our students...We must be willing to come out of our comfort zone.”

Relationship-Building and Respect

Developing individual relationships with students is a crucial component of effective teaching. Teachers identified the following strategies for fostering strong connections with students and creating a climate conducive to learning, risk-taking and academic growth:

- Embrace and acknowledge the individual and individuality.
- Demonstrate how much you care and convince students that you are invested in their success.
- Simply talk to students. Listen to what they have to say. Get to know them. This *demonstrates* that you care.
- Be yourself. Be genuine. Students can see when you are not.
- Share your experiences and yourself with students. Let them see you as a human being. This is important for building a relationship with students.

“The first thing students learn from you is if you trust them. If you are respectful and courteous, they will be the same. Once students know that they are going to be treated with respect and that you expect the same from them, they will be open to listening to you and learning from you.”

Relationship-building is not a separate function from instruction. Rather, it is intricately connected to the effectiveness of instruction. “Being child-centered, building relationships with my students and being human not only feels good, but it also has actually improved my classroom management and increased student learning.”

Respect was emphasized as an important precursor to community, but a varied definition of respect seemed to be underlying the teachers’ descriptions. The teachers neither describe respect as a unidirectional phenomenon, nor an automatic disposition that students accord to the teacher. Instead, teachers described a climate of respect that flows in both directions between students and teachers and that also exists among peers. Teachers are active agents in securing students’ respect. Respect is not automatically accorded to the teacher by mere virtue of position.

Teachers were able to identify one essential way of earning respect—repeated, consistent demonstration of *caring*. “Until they know, and really *believe* that I care, I can’t reach them.” Highly effective teachers must balance the tension between maintaining their roles as authority figures with the need to *earn* respect by demonstrating care for and confidence in the learners.

Instruction is Facilitated by a Positive Behavioral Support Model to Foster Individual Student Growth

One pillar of classroom instruction of highly effective teachers is the existence of a system of positive supports to maximize student growth. A framework of positively-oriented beliefs, processes and procedures exists that integrates academic, social and behavioral initiatives. Students are expected to be successful, and they are provided the tools and resources needed to be successful. Teachers model the behaviors they expect from students, and they take care to display themselves as learners to their students. Strengths and successes are starting points, rather than deficiencies and gaps.

An emphasis on proactive, intentional, positive supports was found in each of the four categories of findings. For example, routines are in place so learners know how the class begins, what to do in the face of difficulty, how to ask for help, how to begin and end group work, how to check their progress, how the teacher transitions from one activity to the next, etc. Teachers continually monitor and recognize student progress, and they make instructional adjustments when needed.

Successes are built upon, and students are constantly encouraged. “Students must believe that you believe in them. It comes from you first.” One teacher describes his yearly opening statement to students, “I tell them that they are in my classroom because ‘they are simply the best’ and ‘every year I receive the smartest kids of the school.’ I tell them that I will demonstrate throughout the school year that it is true.” Others identified myriad ways they recognize both excellence and progress on a daily basis. According to another teacher, “I am truly excited about every child’s ability to add value to my classroom. Each student is given a gift and it’s my job to find out what it is.”

A reliance on positive supports does not only refer to a teacher’s positive attitude or the habit of encouraging learners. What is most important is that teachers provide their students with the tools and resources they need to be successful, and the individual learner is the starting point. This attitude is expressed by one teacher, “Use of encouraging language is key. It’s not what you say; it’s how you say it. My language to kids is specific and strategic so that I can get them thinking and processing on a higher level.” Other teachers described ways of tracking student progress, for example, through individual student notebooks that both teachers and students access. Or, by keeping notes on individualized index cards that target specific needs and that allow teachers to offer feedback that is timely and strategic during conferences with students.

Highly effective teachers know that they cannot “make” a child learn. Instead, they motivate students to learn by providing a system of positively-oriented supports, individualized as needed, that enable children to know what is expected and why, to have the tools they need to do it, and to develop the skills and strategies they need to be successful.

Safety is Important

Safety was a common feature named by highly effective teachers and their definition was broad. Safety was broken down into at least three sub-categories:

- Emotional safety
- Physical safety
- Intellectual safety

Learners must feel safe in each of these sub-categories in order to take risks, learn and to assume the levels of responsibility that characterize the role of students in the classrooms of highly-effective teachers.

The teachers' discussions of safety, community and their reported reliance on positive supports are consistent with research on classroom management. This research criticizes the reactive tendencies of most classroom management initiatives or interventions. For example, reactive teachers respond to misbehavior rather than establishing the necessary conditions and supports that encourage desired behaviors and attitudes. A highly effective teacher, in contrast, believes that a sense of safety is a precursor to learning and it requires intentional methods to establish it. According to one teacher, "It is important to make the classroom community safe and inviting. It does not become safe on its own."

Student Ownership in the Classroom

In the classrooms of highly-effective teachers, students are encouraged to take active roles as learners and members of a classroom community. Student ownership and student voice are cultivated as effective ways to reach, teach and motivate learners. Peer teaching is a common strategy in the classroom. Students who have mastered content have the opportunity to apply their learning in a different way and to contribute positively to the classroom community.

Peer work that runs the gamut from collaboration to evaluation provides the teacher with time to pull out students who need additional assistance. Students have responsibilities in managing the classroom, such as distributing materials or collecting attendance. Students assuming "jobs" in the classroom help sustain the community-like feel and it frees up teacher time to dedicate to instructional activities. This strategy looks different in third grade than in eighth grade, but the concept is the same. Highly effective teachers involve students in the "work" of the classroom, and this enables the teachers to maximize instructional time.

Many teachers involve students in goal-setting, monitoring and reflecting on their own progress. Students contribute to developing rubrics to evaluate their learning. Student contributions to discussion are taken up in creative ways to continue the learning. Feedback from students on classroom learning is collected by many of the highly effective teachers in formal ways, such as mid-year survey, or informally through discussions that take place during instruction. Student voices are incorporated into the instructional design and delivery.

Meaningful involvement of students in classroom roles and responsibilities, as well as in their own learning process, is an effective strategy and motivates students. With assistance from teachers, student progress is visible as students assume active roles in the classroom and in their own learning.

"Start Where the Students Are and Take Them Where the Standards Say They Need to Be"

Highly effective teachers begin by assessing where students are currently as opposed to where they should be and then individualize their instruction to maximize academic progress. The role of positive, intentional supports for effecting student progress is important. The data suggest that what sets highly effective teachers apart from their colleagues is that they possess the ability to take a conventional positive classroom environment and generalize it into a broader, more comprehensive and systematic network of supports and processes that contribute to social, behavioral and academic success. This observation from the data warrants further exploration.

Highly effective teachers balance curricular demands (e.g., content standards) and individual learner needs by building student capacity carefully and intentionally, developing strengths, attending to context and individual student needs, and providing students with the tools necessary for success. For example, one teacher recounted that during her first week at a new school, she gave students an assignment she had given at her previous school. She was shocked when only two of her students completed the assignment.

“At first I was really offended and I took it personally. Why didn’t they do what I asked? I took it as a challenge to my authority. But I had to be bigger than that. I asked the students why they didn’t do it, and they told me they don’t have magazines and newspapers in their homes. I realized that I had to take care to assign things that I knew they could successfully complete. Now I ask them to go outside in their backyard or their neighborhood. I ask them to do things that I know they can do. I never assume, and I never give them something that I am not sure they can do.”

“My motto is to work with students’ strengths, not their weaknesses, and I teach that to my students.”

Teachers described that one of their most effective tools for gaining insight into where students are is to simply ask, “Why?” Asking children to explain their thinking provides a window into where that child is and it provides the teacher with a way to capitalize on what the child *does* know instead of focusing on correcting the error.

Planning instruction at the level of the individual child enables highly effective teachers to facilitate growth of students at all achievement levels. Some teachers reported that pushing their Vanguard students on to greater levels of progress was the most challenging aspect of their teaching. “They get bored so easily,” reported one teacher, “and I can lose them fast if I’m not careful.” Other teachers, however, reported greater difficulty facilitating growth among their struggling students. “I sometimes overwhelm my struggling students, and I am always aware of that. I try to find some way for each to be successful, and then I build from there.” What is important to note is that despite any difference in context or which student sub-group the teachers identified as the one their instruction most readily fits, these teachers resoundingly share the ability to differentiate instruction and to connect with individual students in a manner that is guided by the individual student’s strengths and challenges.

Strategies that the highly-effective teachers used to meet the needs of the inevitably diverse set of learner needs in their classrooms included: using visuals, providing samples and rubrics to guide student work; peer tutoring; differentiated group work so that the teacher can maximize instructional time with students requiring extra assistance; constant mindfulness of the need to build and nurture students’ confidence and desire to learn; students’ setting and monitoring individual goals; helping students learn how to self-assess their work; and inviting individual innovations and then sharing those innovations with the rest of the class.

These strategies have helped each of the highly-effective teachers achieve remarkable successes in their classrooms. Each teacher was able to share many stories of students who had broken through some sort of barrier or challenge to grow on different levels. One eighth grade teacher reported that in one class, more than a third of the students were Resource students. His students also included many English as a Second Language (ESL) students who passed Texas Assessment of Knowledge and Skills (TAKS) at the end of the year despite never having taken a TAKS exam before. The average increase in TAKS math scores across his students was nearly 80 scale points. Some students increased by more than 300 points. According to the teacher, “No matter what level of student I teach I will try my best to push the child to his/her potential. I don’t want to hear they can’t do it. I know they can. Every child can and will learn in my class.”

His story is not an isolated example. A fourth grade teacher described her recent classroom as including 11 students who had failed TAKS in third grade. One of the students was an eleven-year old inclusion student on an Individualized Education Plan (IEP). She had been warned that "he couldn't grasp a thing in math." She spent extra time getting to know the 11-year-old's personal story, and she concluded that he was very capable of learning when he was encouraged and his self-esteem was cultivated. To help him and the other ten students who had failed the previous year, she invented a multisensory approach to teaching math. "I used different methods and allowed students to use the one that met their needs. I learned that using one way is not the safest way. At the end of the year my 11-year-old got commended performance, my other 10 got commended performance too. When they found out their results, their eyes got so big that I can still remember the big smiles on their faces."

Possessing a child-centered orientation is an attitude, a disposition and a set of beliefs about the centrality of the student in the teaching-learning exchange. However, highly effective teachers are able to translate this attitude into a set of strategies and techniques that differentiate instruction and support student growth. Simply put, "A child-centered focus means that everything you do in your classroom is done with the intentions of helping your students grow." "I define success for myself by asking the question: Am I helping this child get better?"

3. A Consistent and Predictable Classroom Environment That is Positive, Safe, Organized and Conducive to High Quality Learning for ALL Students

Many teachers devoted considerable attention to describing how they construct a classroom environment that supports learning. There was a very strong orientation among the teachers toward cultivating a network of positive supports for both maintaining a "community," as the classroom was often termed, and supporting academic growth. Highly effective teachers dedicate a significant amount of time, energy and thought establishing classroom rules, procedures and routines that support the learning of all students. The importance of building relationships was emphasized, and a sense of connectivity among classroom members was commonly expressed.

Clarity, Consistency and Routines

Clarity, consistency and established routines generated a significant amount of discussion when teachers worked through the importance of the classroom environment as a factor in their students' impressive levels of growth. What is striking is the pervasiveness of these findings across almost everything that highly effective teachers talk about. Learners cannot be successful if they do not know what is expected of them at any given point in the school day.

Expectations must be clearly presented in order for learners to be successful. "Classroom management begins with fair, clearly explained expectations. For me, classroom management is like everything else in teaching, clear expectations are the key. Kids don't like to disappoint us!" Expectations and routines are modeled and instructed directly. Clear and consistent rules, processes and expectations support teaching and learning.

"I believe the start of a classroom environment that is conducive to student learning is clear teacher expectations for the students. Setting rules and boundaries is the most important part of the first day. Establish your policies and procedures and explain them to students. Let them help you define the rules. Why is this important? Children need to understand why we have rules. If they come up with these reasons themselves, then they will understand better. Once you have established rules and expectations then learning can follow. When children know what is expected, they can feel more relaxed and confident."

The factors—clarity, consistency and routines—that contribute to a positive classroom environment are similar to factors that support high-quality instruction. Specifically, each factor is distinct and identified as important for developing and nurturing a positive, effective classroom environment. In the stories of these teachers, however, each is inextricably linked to the others. Rules, expectations and processes must be clearly and explicitly discussed and made visible. They must be consistently applied. Classroom routines help to reinforce the clarity and the importance of particular rules and expectations. When a teacher's expectations are clearly communicated and applied consistently, relationships, the classroom community and learning thrive. Clarity, consistency and routines support the highly effective teacher's objective of creating a welcoming, warm, student-centered environment in which students can assume meaningful roles in its conduct.

4. Professional Self-Efficacy and Continuous Improvement Through Collaboration, Personalized Professional Development and Supportive Leadership

The fourth theme that teachers identified as important in their ability to facilitate high levels of student growth is professional self-efficacy. The first three themes that emerged from the teachers' discussions and writing focused largely on classroom processes. This theme, however, connects more broadly to forces, varied stakeholders and colleagues beyond the level of the individual classroom. For example, according to the teachers in this study, high quality professional development contributes to a teacher's effectiveness. In addition, highly effective teachers reported high degrees of professional self-efficacy. A teacher's "passion," a theme that emerged from the start of the data collection during the March sessions, is explored in this category because teachers linked their passion to their own professional growth.

Highly effective teachers exhibited a strong degree of professional efficacy and leadership. Explicit recommendations were made about how to develop, grow and nurture teachers' professional identities and practices. Their recommendations are in the accompanying appendix on page 22.

Nearly all teachers identified pivotal professional development experiences. Those teachers, however, who could not, had plenty of advice about how to improve professional development. Highly effective teachers believe that the professional development is more effective when it is:

- Challenging
- Takes place amongst participants who share a common context or a common interest
- Differentiated according to need and based on specific strengths or gaps
- Directly connected to classroom practice, and more specifically, to student outcomes
- Followed by support for implementation
- Structured in such a way as to allow teachers to see their progress as the skills are developed
- Not limited to "one-shot" training sessions or sessions in which the primary mode of transmission of information is from the presenter, rather, through study groups, action research, peer observations, lesson study and close examination of student work
- Integrates questions of content and pedagogy
- Consistent with collectively agreed upon campus-wide focus for improvement

The teachers were very clear that while professional development should be based on individual need and be informed by supervisor or mentor input, the drive to develop professionally must lie within the individual teacher. However, because passion is linked to confidence and the ability to see one's progress, an individual teacher's sense of passion and desire to continue professional development *can* be cultivated, renewed and/or coached.

Highly effective teachers also explicitly articulated the importance of continued professional growth. An increased sense of confidence, with respect to knowledge of the content area or the teaching craft, sustains a highly effective teacher. Feedback on a job well done, whether it is from the principal, parent or child sustains highly effective teachers, because such feedback is either evidence of growth or an opportunity for growth to continue. While many highly effective teachers are able to “go it alone” without substantive levels of administrative or collegial support, they nevertheless emphasize the importance of support, acknowledgment of contributions and appreciation for sustaining the professional identity and practice of the teacher.

Just as teachers tried to convey to their students an image of learning as always in process, they also possess this attitude with respect to their own professional development. One highly effective teacher reported: “I see myself as an ongoing learner striving to become an effective ongoing teacher. I am always looking for ways to further my content knowledge and teaching practices for I consider my profession as a ‘practice.’ I cannot be content with my level of expertise and remain stagnant.”

Passion Links to Professional Efficacy

Highly effective teachers identified *passion* as an important variable in their success. Passion can refer to possessing a passion for teaching, watching their students grow and make progress or teaching their subject area. Highly effective teachers often highlighted passion, dedication or a sense of mission and urgency as an integral component of their professional identities and practices. They relished the stories and experiences shared in the paired interviews, group discussions and written narratives. We encouraged teachers to explore the transferability of passion, and their conversations were peppered with words like “infectious” and “contagious.” In addition, they were able to identify ways that passion could be transferred, created or sustained. What factors influence a teacher’s passion?

- Confidence in one’s craft and level of content knowledge
- Ability to grow professionally and increase one’s level of content knowledge and craft
- Opportunity to monitor one’s own performance improvement
- Receipt of targeted feedback on performance so that growth continues
- Recognition for performance improvement and accomplishments

Sharing and listening to each other’s stories of passionate practice is an important piece in professional growth. Opportunities for this to take place must be provided. Passion influences and is influenced by professional growth.

Discussion

The HET Study's findings reconfirmed conventional wisdom that school cultures are ill-prepared to recognize and support continued teaching excellence. Some of the participating highly effective teachers were on faculty at highly collaborative schools where their efforts are not only noticed, but applauded. But many other teachers were "outliers" at their schools and were thankful for the opportunity to network with other like-minded teachers during the study.

Several teachers reported that their principal did not acknowledge their invitation to participate in the project, nor the congratulatory letter they received from the district's chief academic officer even though copies of all correspondence were sent to principals. One teacher even reported that the principal handed him a copy of the letter, whispered "good job," and gestured "shhh." The implication being, "Do not share this with anyone." The single most common response to the March sessions during the closing remarks was, "Thank you for saying 'thank you' to us."

Many readers of this report, likely to be educators or other stakeholders with a special interest in educational practices, may conclude that the findings are not surprising. The descriptions of the teachers' professional practices will resonate with the reader either as a result of direct experience or an in-depth knowledge of the field. This resonance may contribute to a general sense that the teachers' observations are not unexpected. However, it might be insightful to directly explore whether or not the findings are truly predictable or unsurprising.

It is true that many practices identified as important by the highly effective teachers appear on lists of "best practices" or standards of effective teaching practice. However, what distinguishes the HET Study is the sample—teachers identified based on a rigorous quantitative value-added metric at the teacher level. The "best practices" were neither practices gathered from anecdotal evidence, nor reported by teachers identified by perception data or less rigorous quantitative selection criteria. The HET results, from both Houston and a similar study conducted in Ohio, need to be shared broadly because the findings support other research that will strengthen the field as a whole.

There are several other issues to explore further. First, if the practices identified by HISD highly effective teachers are unsurprising, then the profession must ask itself, why is this the case? If these practices are known to be effective, why are they not visible in more classrooms? What gets in the way? Or are these practices utilized by most teachers, but in much less successful ways? If the latter is correct, it would suggest that a more nuanced understanding of the described professional practices or more support for teachers are needed for the practices to become more commonplace. The answers to these questions are not clear.

Second, teachers learn from other teachers. They value learning from their own experiences, as well as the experiences of their colleagues. In a recent study, Battelle for Kids administered a survey to more than 7,000 teachers. Results showed that teachers overwhelmingly value their own experience as a "professional development tool" over any other form. This is significant to anyone involved in professional development.

The HET Study has collected stories directly from the teachers. Its design is a credible way, from a teacher perspective, to collect, share and create professional development on classroom practices. A foundation for professional development to support what teachers value has been put into place by the HET Study. The momentum should continue through the sponsoring of additional opportunities for the highly effective teachers to contribute to the professional growth of their HISD colleagues.

In fact, the possible professional development products from the data collected during March and May are much broader than this report might suggest. Additional resources to support their development will be helpful and will prove productive.

Third, it is significant that teachers overwhelmingly connected their success to *passion* and a variety of other factors that are difficult to measure, such as attitudes, beliefs and dispositions toward teaching and children. Discussions on teacher passion are commonplace in the literature. What is not common, however, is a focused look at how passion actually manifests itself in the classroom. What is the impact of passion? How is it actionable? How can it be transferred?

The HET Study incorporated a focused view on how teaching and learning practices and passion, as well as other factors that are difficult to measure, are connected. In the contemporary context of data-driven decision making, it is important that conversations on teaching and learning do not become primarily technical. Teachers' commitment to the many intangibles of teaching was clear in this study. Specifically, that teachers value passion and other factors that are difficult to measure holds numerous implications for how professional development should be created, at the very least in terms of how it is marketed and framed.

Fourth, teachers relied on a positively-oriented systematic network of supports for the academic and social community in their classrooms. An even better understanding of what this support system looks like and how it varies across grade levels and content areas is needed. This particular area may warrant further study because it is especially ripe for the development of many professional development products and experiences.

Fifth, "mistakes are welcome here" is not as commonplace as it may seem. The literature from educational history and curriculum theory points to many examples when the prevailing conventional wisdom was the opposite. Elaborate steps were put into place to avoid mistakes or to punish errors of students. Learners who make mistakes do not typically recognize that their errors and mistakes are, indeed, "learning points."

Sixth, the ways teachers describe their classrooms suggest an emerging role for students in the classroom, a role that is characterized by far greater agency than may have existed in the past. This dynamic warrants further consideration. A more active role for students with greater authority and opportunities for interaction in the classroom needs more focused exploration. This is especially true in large, urban districts where cultural diversity is the norm. What is the role of cultural understandings and misunderstandings or cultural congruence or incongruence in classrooms where learners assume an active, engaged role in the process?

Finally, the data suggest that many schools are ill-prepared to take advantage of the expertise of their highly effective teachers. Not all teachers are comfortable discussing their practice at their schools. Not all principals recognize the talents and efforts of their staff. The Appreciative Inquiry process will provide information to help learn more about this dynamic and contribute to positive change.

Suggested Paths Forward

The HET Study's Planned Outcomes

The HET Study recognizes teacher impact on student growth and supports existing professional development structures while seeking to create new pathways for professional growth and community. Its findings will be widely disseminated in multiple formats. Some of the study's most innovative features are reflected in its planned outcomes. The HET Study:

- Is an opportunity to inform instructional practice in real time. Findings will be widely shared through products developed to foster and replicate practices associated with high-level student growth. They will be made available through ASPIRE•Learn on the ASPIRE portal. Video vignettes also will be available with supporting protocols and resources for use by HISD principals to extend these best practices.
- Can create new pathways of professional development so that the expertise, enthusiasm and energy of teachers are nurtured and spread. As such, the HET Study provides ancillary support for the ASPIRE performance-management system.
- Will result in various written products, including practitioner-friendly materials and academic pieces that contribute to educators' understanding of instructional practices that support and engage learners.

Additional Outcomes or Future Pathways Suggested by the Findings

Following is a brief outline of suggested paths that could be initiated from the HET Study.

I. From the value-added teacher-level reports:

- Investigate the professional contexts of the teachers. What patterns might exist at the school level? For example, do highly effective teachers tend to come from schools with a positive school-wide culture? Are there pockets of "effective practice" supported by opportunities for professional support?

II. From the larger sample of 190 teachers identified as highly qualified:

- 21 of the 58 (36 percent) teachers who attended the March sessions did not have an education degree.
- There was no connection between years of experience and being identified as a highly effective teacher at a broad level. However, in respect to the specific content area for which the teacher was selected, 65 percent of the teachers had been teaching in this content area for fewer than 10 years.

Do these findings hold true with the larger sample?

III. Year Two of the HET Study:

- Develop Year Two of the HET Study in close consultation with the Career Pathways options being developed by HISD to explore ways that the HET Study, the highly effective teachers it has identified, Battelle for Kids and HISD can inform the Career Pathways development in real time.
- Differentiate the behaviors and attitudes of highly effective and other teachers with a goal of refining professional development to move more teachers into the ranks of highly effective.

- Continue the Appreciative Inquiry process as the HET Study’s methodological approach and work toward identifying and establishing new pathways for its use across the district. For example, train HISD personnel across the district to use AI in Professional Learning Communities at the school level. Develop capacity for using AI across HISD regions.
- Invite the highly effective teachers to collaborate on the development of online professional development.
- Continue learning from and contributing to the knowledge and skills of highly effective teachers. This means that we need to facilitate “nested” events that combine the opportunity for highly effective teachers to continue learning about their craft, but also allow researchers to continue learning about their professional practices. We need to better understand how highly effective teachers learn.

Conclusion

The Highly Effective Teacher Study is a collaborative project between the Houston Independent School District and Battelle for Kids. It was funded by the Bill & Melinda Gates Foundation. The HET Study has provided a way to recognize teacher excellence and develop a more explicit understanding of the instructional practices that facilitate high levels of student academic growth. The knowledge and understanding generated will directly contribute to concrete ways to foster and replicate high-leverage practices across the district. The rich set of findings from these teachers and the partnership created between HISD and Battelle for Kids will contribute to future research efforts.

The data indicate that the organizing principles of highly effective instruction transcend subject area. There was little difference in the content and nature of the responses across teachers in the five content areas—math, science, social studies, language and reading.

Effective teachers are able to balance competing values and tensions that inevitably fall within the four factors that the teachers attributed to their success in facilitating growth in their students’ learning. For example, they are able to balance the demands to cover the content standards with meeting the needs of the individual student. They can balance the tension between leading the instruction as the teacher and connecting with students on a personal, caring level. The nature, dynamics and interactions of this balancing act warrant further consideration.

APPENDIX A

Leadership and Professional Development: Recommended Strategies at Your Fingertips

An important objective of the study was to contribute information that could be directly fed back into daily practices. This chart contains leadership implications for growing, rewarding and retaining highly effective teachers.

<p><i>What can principals do to develop and support highly effective teachers?</i></p>	<ul style="list-style-type: none"> • Be visible and communicate regularly with teachers. • Know the educational philosophies and individual strengths of teachers. • Support a culture of collaboration, not competition, by providing time for teachers to collaborate on a regular basis and working with teachers to develop clear processes, protocols, goals and ways to evaluate progress. • Provide specific feedback on teacher performance. Targeted feedback recognizes the professionalism of the teacher and demonstrates awareness of individual strengths and needs. The availability of performance data can support a principal's efforts. View the process as partnering with the teacher to strengthen practice rather than a summative evaluation. Teachers need feedback and to see progress. • Visit classrooms to learn about teachers and students rather than only to evaluate. • Recognize teachers' contributions, expertise, actions that have yielded a positive gain. Use informal and formal data as the basis.
<p><i>How can principals structure professional development to develop and support highly effective teachers?</i></p>	<ul style="list-style-type: none"> • Offer differentiated professional development based on a survey of teachers' needs and interests, as well as feedback from observations and conversations or input from mentors. • Recognize the expertise of staff. Invite in-house experts to share with their colleagues. • Provide time and opportunities for teachers to observe and learn from each other. • Organize school (or district or region-wide) "learning fairs" where teachers can share ideas and expertise—like a "science fair" for educators.
<p><i>What can teachers do to foster professional growth?</i></p>	<ul style="list-style-type: none"> • Be flexible. • Find a variety of mentors. • Share ideas, enthusiasms and concerns. • Ask for help when needed. • Observe other teachers in a targeted fashion, for example: how the teacher begins the day, facilitates group work, asks questions, facilitates a conference with parents, etc. • Embody the lessons teachers strive to pass on to students about the necessity of taking risks and asking for help and that mistakes are learning points. • Trust that confidence is developed through trial and error.