



An Inside Look at Highly Effective Educators in Tennessee:

Exploring the Practices that Lead to Student Academic Growth



Commissioned by the Tennessee Department of Education
as part of First to the Top

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Executive Summary

As one facet of its First to the Top educational-improvement strategy, the Tennessee Department of Education commissioned Battelle for Kids, a not-for-profit organization, to study the practice of highly effective teachers (HETs) from K–12 public school districts across the state. The primary purposes of this study are to learn who these teachers are and what they do that makes them so effective at accelerating student progress. The findings are being used to develop resources to help improve the effectiveness of Tennessee’s entire teaching core.

In this ongoing study that began in Ohio and Texas in 2007 and then expanded to include Tennessee in 2010, Battelle for Kids has discovered four significant findings:

1. A high level of consistency exists in how HETs think about and talk about their practice. Regardless of the subject-area or grade-level they teach, HETs’ work can be characterized by their capacity to integrate action across five sets of values and intents related to their practice through:
 1. **Child-centered focus;**
 2. **A classroom environment that promotes success;**
 3. **Self-efficacy and continuous improvement;**
 4. **High expectations for all students; and**
 5. **Instruction that meets the needs of all students.**
2. Effective teaching is a highly complex activity that can be examined and understood through Dr. Robert Quinn’s Competing Values Framework (CVF). From this perspective, effective practice is not just a set of discrete skills, but rather an emergent activity characterized by the continuous integration of disparate skills, values and intents.
3. The CVF provides a new and useful language for talking about and improving teaching practice. Without a framework of this type, teachers find it difficult to put their practice into words. This framework is useful precisely because it creates distinctions that allow teachers to tease apart many of the core issues of their discipline.
4. Effective teaching can be learned through the lens of the CVF. Great teachers are not born; they develop through attention, focused conversation and intentional experimentation and practice.

Introduction

Why are some teachers more effective than others? Are their instructional practices different? Do they plan differently, or assess students more frequently or more capably? Do they work harder or longer hours than their peers? Do they have innate talents that allow them to connect with students in deeper, more meaningful ways? Are the capacities these educators possess teachable to others?

Bill Gates, the founder of Microsoft® and one of the primary drivers of the Bill & Melinda Gates Foundation, recently wrote an op-ed for *The Washington Post* in which he summed up the necessity of asking these kinds of questions:

“We know that of all the variables under a school's control, the single most decisive factor in student achievement is excellent teaching. It is astonishing what great teachers can do for their students. Yet compared with the countries that outperform us in education, we do very little to measure, develop and reward excellent teaching. We have been expecting teachers to be effective without giving them feedback and training. To flip the curve, we have to identify great teachers, find out what makes them so effective and transfer those skills to others so more students can enjoy top teachers and high achievement.”¹

Tennessee’s Highly Effective Educator Study has been designed to do just that—identify the characteristics, attitudes and behaviors that lead these teachers’ students’ high academic progress and develop resources to support the improved effectiveness of all Tennessee K–12 public school educators. In this paper, we provide an overview of our research, findings and the theoretical perspective that has emerged from this work. We also share our future plans to continue this research and discuss how it will be used to improve the practice of educators across the state.

The Research

The First to the Top Highly Effective Educator Study is an extension of research that began in Ohio during the 2007–2008 school years, expanded to the Houston Independent School District (Texas) during the 2008–2009 school years and further expanded to Tennessee during the 2010–2011 school years.

The question at the core of this study has always been: ***What is a great teacher?*** Our efforts to answer this question are guided by a mixed methodology research design.

1. Quantitative classroom-level value-added data is used to identify highly effective teachers;
2. Identified teachers write about their practice and participate in one-day, same-subject focus groups;
3. Grounded theory methods are used to uncover themes from the writing and focus group conversations; and
4. Findings are shared back with study participants following each round of focus groups to assure the conclusions are warranted.

¹ Gates, B. (2011, February 28). How teacher development could revolutionize our schools. Retrieved from *The Washington Post* website: <http://www.washingtonpost.com/wpdyn/content/article/2011/02/27/AR2011022702876.html?nav=hcmoduletmv>

This research is unique in at least two respects. First, this study focuses on a small, non-representative sample of teachers—those who produce SAS® EVAAS® value-added gains with their students that are more than two standard errors above expected results. Most research, and especially statistical research, is aimed at answering the question: *What is typical of or normal relative to some population?* This study purposefully focuses on teachers who are outside the norm.

Second, this research utilizes a strengths-based approach to define and leverage effective teaching. The approach is modeled after Appreciative Inquiry, which is a research methodology developed by Dr. David Cooperrider and his colleagues. This kind of inquiry is specifically targeted at uncovering not what is missing or lacking with teachers, but what is best about the practice of particular teachers. The findings from this work are a compilation of what the best teachers believe accounts for their best work.

As this Highly Effective Educator Study moved forward over the first two years (2007–2009), there were several iterations of organizing data into themes. In each of these iterations, the emerging themes had to take into account both what had been learned from the most recent group of teachers and also what had been learned from prior groups. By the end of the second year of the study (six large focus group meetings with math teachers, six large focus group meetings with reading teachers, two large focus group meetings with science teachers and two large focus group meetings with social studies teachers), findings coalesced into five overarching themes:

- 1. High expectations for student growth;**
- 2. Instruction that works for all students;**
- 3. A classroom environment that is structured to promote success;**
- 4. Child-centered focus; and**
- 5. Professional self-efficacy and continuous improvement.**

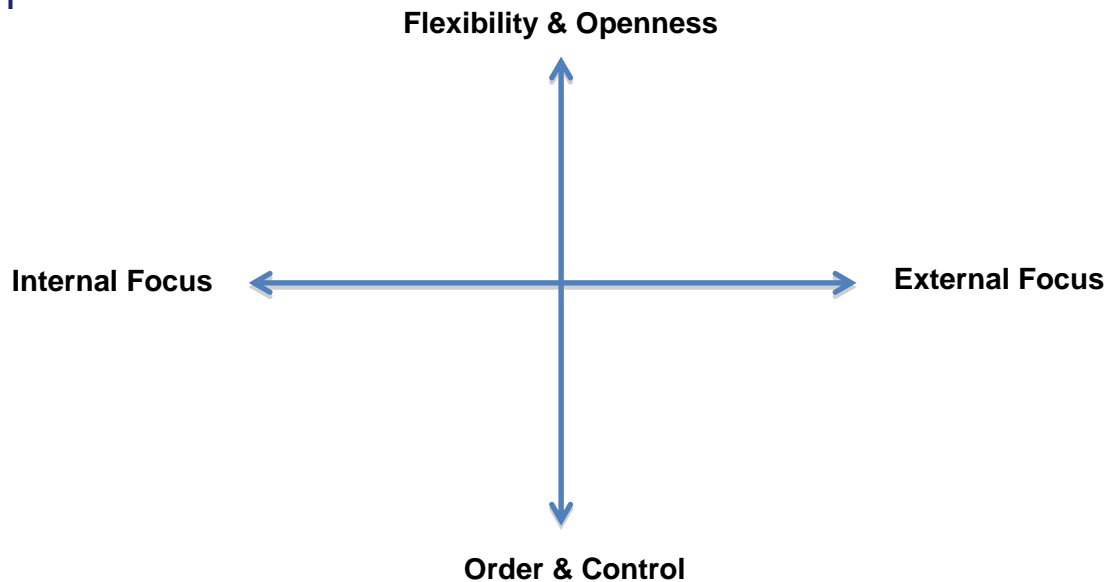
The end of the second year marked a turning point in the research. The five themes worked well to capture the range of collected data, but they didn't capture the spirit of how teachers enact these themes. HETs tend to talk about their classrooms in integrated ways. From the very beginning of this study, we were challenged to not only uncover common elements across HETs' classrooms, but also to find authentic ways to connect the divergent ideas being uncovered. The solution to this challenge came from what might seem an unlikely place—the literature on organizational effectiveness.

In the early 1980s, Dr. Robert Quinn and John Rohrbaugh conducted a meta-analysis of the literature on organizational effectiveness. From this analysis and subsequent research, they developed a framework to connect the diverse set of factors that were associated with organizational effectiveness.² The Competing Values Framework (CVF) “maps” and “integrates” the most significant factors associated with organizational effectiveness. The strength of the model is that it captures many of the inherent complexities associated with organizational effectiveness in a simple, visual way. The surprise for us was that the factors represented in this framework were virtually identical to the themes that were uncovered in our research. When great teachers talk and write about what it is that makes them effective, they end up talking about the same factors that organizational researchers identified with respect to highly effective organizations.

² Quinn, R., & Rohrbaugh, J. (1983). A spatial model of effectiveness criteria: Towards a competing values approach to organizational analysis. *Management Science*, 29(3), 363–377.

The CVF is built around two core tensions that characterize life in any kind of organization (see Figure 1). The vertical dimension describes a fundamental tension associated with organizational structure. Some organizational structures promote order, control and systemization while others promote flexibility, openness and self-organization. The question here is how leaders structure their organizations to strike a balance between conditions that produce order and control, on the one hand, and flexibility and openness, on the other.

Figure 1

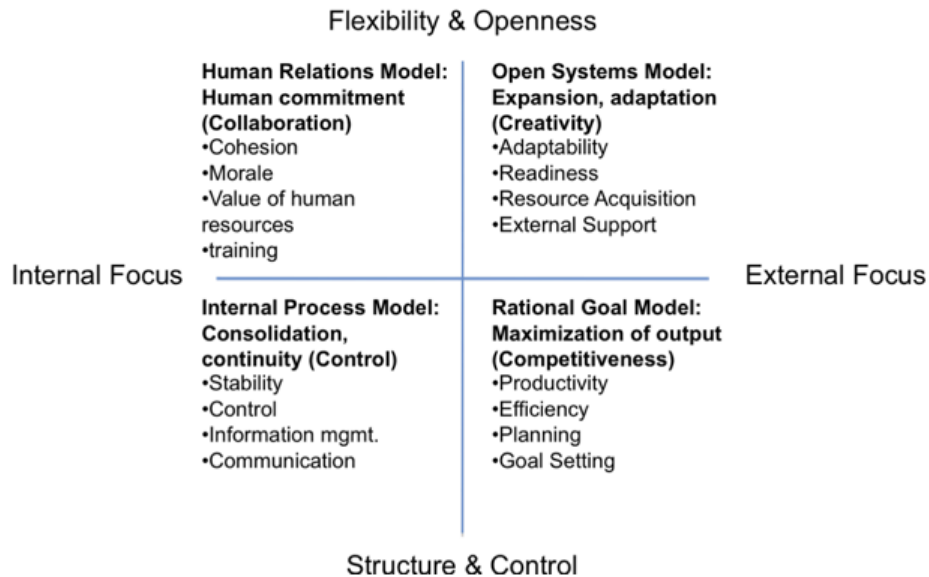


The horizontal dimension describes the tension associated with focus or attention. At one end of the relationship is a focus on internal operations and the well-being of people within the organization, and on the other end is a focus on the alignment of the organization with the environment and the sustainability of the organization as a whole. The question here is how to strike a balance between the people and the issues inside the organization and issues and challenges that arise as the organization engages its outside stakeholders.

What is critical to understand about effective organizations is that their leaders do not see these tensions as either/or dilemmas. For them, it is not a matter of creating organizational structures that reflect flexibility or stability, but, rather, to provide structure that appropriately balances these two diverse needs. Similarly, it's not a matter of whether organizational leaders choose to pay attention to internal or external organizational components, but how information and action from each of these sources is connected and appropriately integrated.

This kind of “management of tensions” parallels how HETs talk about their practice. HETs constantly work to create classrooms that are well managed and business-like, on the one hand, but also lively and energetic, on the other (the vertical tension). They also work to create and maintain an optimal classroom environment while at the same time adjusting and altering the classroom to integrate the mandates, trends and changes in knowledge that arise outside the classroom (the horizontal tension). So, like great leaders, HETs are adept at managing classrooms that are rife with “competing values.” When these two sets of tensions are laid one atop the other, a two by two “spatial map” with four quadrants of “competing values” is created (see Figure 2).

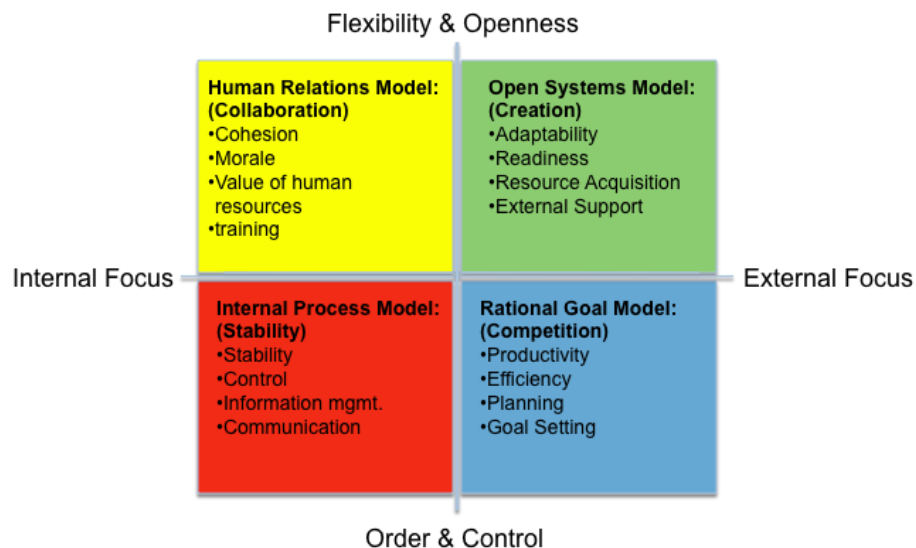
Figure 2



Each of these quadrants represents a cohesive set of values that differs from the others in terms of both structure and focus. For example, the Internal Process Model (lower left quadrant) is associated with stable structures and a focus on internal operations, while the Open Systems Model (top right quadrant) is associated with flexible or emergent structures and a focus on the needs of the larger external system. Each of these constellations of values is essential, but each differs in terms of both the means and the ends they pursue.

In later versions of the CVF, each of the quadrants was color-coded to provide simple referents for relatively complex sets of values. In practice, the four colors in the model provide a language that makes it easy to remember and talk about the values and dispositions associated with each quadrant. Instead of talking about the values associated with the Rational Goal Quadrant, practitioners can simply talk about “blue” values and dispositions. This revised framework is depicted in Figure 3.³

Figure 3

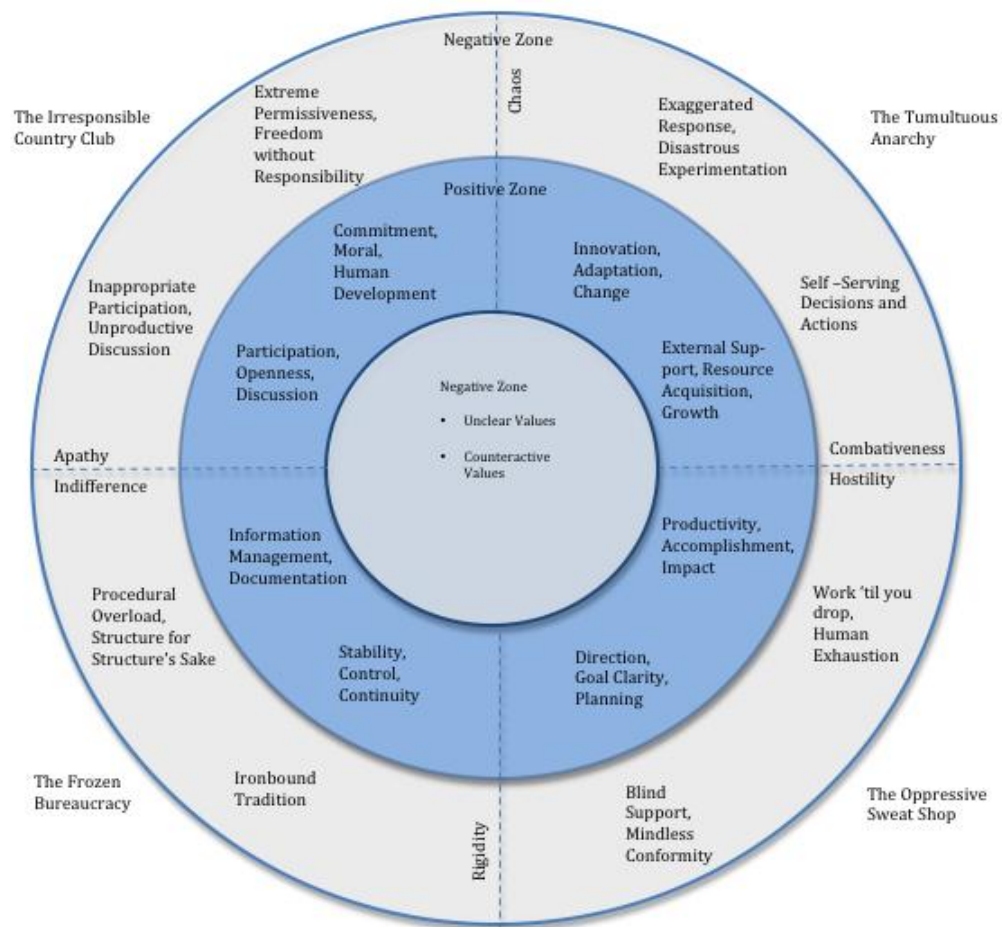


³ Thakor, A. V. (2011). *The four colors of business growth*. Waltham, MA: Academic Press.

Another important aspect of this model is that it provides a powerful lens for understanding both organizational success as well as organizational pathologies. Each of the sets of values represented in the model is positive and productive when those values are integrated with or viewed in the context of the other three sets of values. But when any single set of values begins to dominate organizational life, performance deteriorates. For example, productivity, efficiency and environmental competitiveness (blue quadrant) are all positive values when viewed in the context of the other three sets of values. But, when productivity, efficiency and environmental competitiveness are pursued to the exclusion of the other sets of values, the organization tends to become an “oppressive sweatshop.” When this happens, high levels of stress, over-exertion, unproductive conflict and blind support characterize the organization.

Similarly, collaboration, cohesion and morale (yellow quadrant) are all positive values when they are tempered by the values in the other three quadrants. When these same values are pursued to the exclusion of the others sets of values, the organization tends to become an “irresponsible country club.” When this happens, the organization is characterized by unproductive participation, excessive conversation and decisions are based on emotions rather than rational analysis. These sets of values and their associated dark side are reflected in the diagram below (see Figure 4).⁴ The inner blue ring represents the positive dimension of these values; the outer gray ring represents what can happen when particular values are pursued to the exclusion of the balancing values in the other quadrants.

Figure 4



⁴ Quinn, R. (1991). *Beyond rational management: Mastering the paradoxes and competing demands of high performance*. San Francisco, CA: Jossey-Bass.

The enduring value of this model is that it makes these complex issues visible and therefore amenable to oversight and thoughtful action.

What the Competing Values Framework Brings to this Study

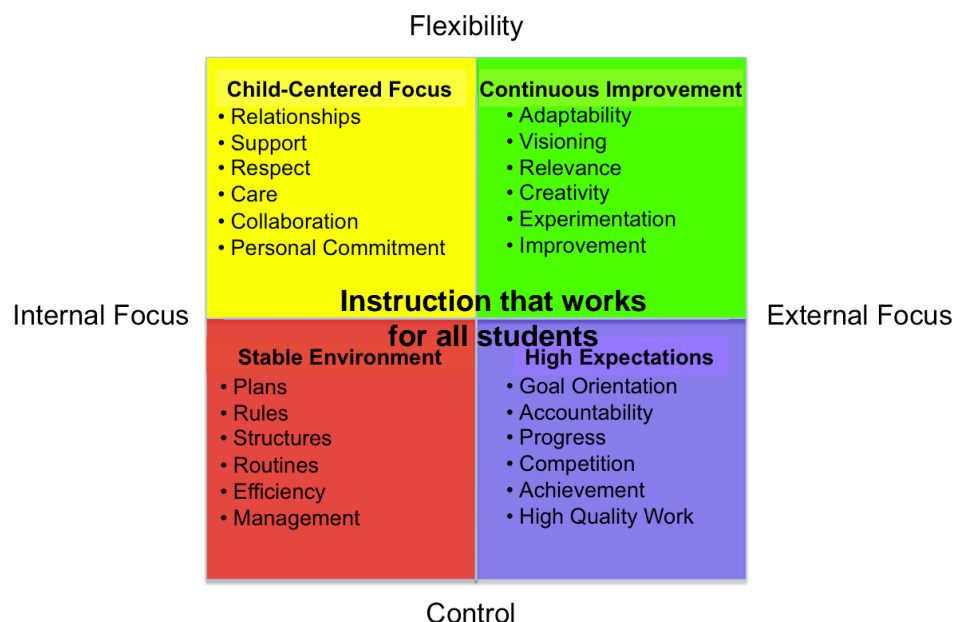
So what does all of this have to do with studying and learning from HETs? There was not only a striking similarity between the values contained in the CVF and the values that were expressed by teachers in this study, but also a fit between the deeper implications of the model and the ways in which teachers talked about and enacted their core values in their classrooms.

For example, highly effective teachers not only talked about the importance of classroom relationships and trust (yellow quadrant) and of pushing student achievement to the limits (blue quadrant), they also talked about the necessary relationship between these two sets of values. For these teachers, time spent developing powerful relationships with students was an essential precursor to higher levels of productivity and achievement rather than a side trip that takes precious time away from productive pursuits. The often repeated maxim, “*Students don’t care how much you know until they know how much you care,*” reflects the essential connection between of human relationships (yellow quadrant) and human achievement (blue quadrant).

We witnessed similar conversations about the relationship between order (red quadrant) and creativity (green quadrant). Many of these teachers talked about structure and routine as antecedents and supports for creativity rather than impediments to creativity. Creativity without order is chaos; order without creative emergence is boredom. When order and creativity are integrated, classrooms begin to take off and students begin to excel.

The way in which the CVF relates these divergent themes makes it an appropriate theoretical construct for this study. HETs are not just teachers who display particular values and associated skills, but instead are teachers who are also able to integrate those values and skills. Below (Figure 5), we have modified the CVF to include descriptors that are more appropriate for the classroom context. Beyond that, the framework and its underlying meaning structure are unchanged.

Figure 5



There is one more important note in our adaptation of the CVF. Our fifth theme, “Instruction that works for all students,” is in and of itself an integrative theme. It is a way of talking about what happens when the values in all four quadrants are aligned and integrated. Every student, every day feels valued and challenged in a supportive context that engages them around new learning. So in our adaptation of this model, this theme cuts across the four quadrants and reflects our teachers’ ultimate statement of classroom effectiveness—instruction that works for every student, every day.

Integration and Highly Effective Teaching

Perhaps the most important nugget to take away from this research is something that almost all teachers take for granted—good teaching is complicated. It is about balancing and integrating divergent notions of what is good and right. When the five themes that emerged from this research are viewed through the lens of the CVF, the complexities associated with effective teaching are highlighted rather than pushed to background and ultimately ignored. The CVF is a useful lens precisely because of its capacity to integrate these divergent ideas.

To illustrate the way in which HETs integrate their practice, two short pieces of writing from two different Tennessee teachers are displayed below. These two excerpts are color-coded to illustrate how their practice is reflective of this kind of integration. In this coding exercise:

- **Blue** represents values associated with high expectations and achievement;
- **Red** represents values associated with management and stability;
- **Yellow** represents values associated with child-centered instruction; and
- **Green** represents values associated with continuous improvement.

One Tennessee HET Talked About Her Classroom in this Way:

Learning is maximized when the lessons I design are purposeful, interactive and engaging. This requires me to monitor student learning and use data in my class to drive the teaching towards successful students. If I am doing my best, I have used a proactive style of teaching by self-correcting on a daily basis, checked for understanding and made appropriate changes throughout the learning process. My teaching is not dependent on yearly test results but the effectiveness of instructional strategies and student needs. The principal value of teaching is to enrich and expand upon a successful learning environment and to be motivated to implement the most effective teaching strategies. To enhance students I look for ways to push and encourage them to new levels of learning. I can't wait until the end-of-the year test's results to see what they are missing; I have to start in August to see. I have one year to move them forward through powerful structures that help them organize subject matter, time, space and materials to make learning happen.

Another Tennessee HET Wrote About Her Classroom in this Way:

Relationships are my number one priority in the classroom. At the beginning of the year, I focus on getting to know the students and fostering a positive, cohesive classroom environment. We talk about what they like and don't like. They fill out interest surveys so I can get to know them better. I ask parents and caretakers to write me a letter about their child. We celebrate birthdays. Our classroom is a joyful place. I use the interest surveys throughout the year to help me think of examples, ways to differentiate activities and ideas for centers. It is not hard for me to think up creative activities. Students talk easily and love to share what they know. They ask questions. They are willing to take risks in their learning. I make it a collaborative classroom so everyone's ideas are valued and respected, not just mine. This gives my students confidence and helps to make them receptive to learning. I'm receptive to them, which helps build trust along the way.

Near the beginning of the year, I sit down with each student individually to talk about their goals for the year. Together, we set one short-term goal and one-long term goal and we talk about ways to achieve the goals. We both sign the contract and shake hands. I started this because it sounded like a good idea, but I noticed my follow-through was weak the first couple of years, so I started to be more purposeful about follow through on goal-setting. We now have a mid-semester and end of semester check-in conferences to discuss student progress and adjust our goals and strategies. As a class we set one large goal at a time. We set a goal to answer 50,000 math problems on an Internet-based math program. Students were driven and were so excited to reach the goal a few months later. We followed our progress. Now our new goal is 85,000 math problems. I want to integrate some more processes for goal-setting and progress-monitoring next year, maybe have students keep a portfolio of their work and progress. I've always been able to develop good relationships with my students. I took pride in my ability to get to know students and to empathize with their struggles. My question to myself was "Are students happy?" Now my question is "Are students learning?" It's not enough to love my students. I had to raise the bar and have higher expectations for them. I am still working on becoming more purposeful. Some of my projects might have been fun, but they might not have had clear objectives—or some of the objectives might have gotten lost on some of the students in the mix. I've raised expectations; now I need to develop some more supports and processes to support them. I am accountable to students, and my relationships drive this commitment. Students will do anything for you when they trust you and know that you care about them.

These pieces of writing are useful because they demonstrate how good teachers naturally integrate their practice. We have begun to call this kind of integration "Powerful Practice" as a way of differentiating it from practice that tends to be more fragmented and perfunctory. One decision, one move or one effort to improve is assessed simultaneously through multiple lenses so that the move produces more than the expected value. This kind of practice ultimately results in a classroom that is at once, more caring, productive, stable and creative. When the teacher in the second piece writes: "My question to myself was, "Are students happy? Now my question is, "Are students learning?," she is writing about her transformation to more a more "powerful" integrated practice.

As we began to look around for other examples of this kind of integration, it was suddenly obvious in many places. For example, we were able to map the elements of some of the best-known teacher evaluation frameworks (e.g., Pathwise⁵, TAP⁶ and Teaching as Leadership⁷ frameworks) onto the CVF. This mapping was not intended to devalue these frameworks, but to demonstrate the inclusiveness of the CVF. By and large, all of the elements of these systems mapped readily onto the CVF. Furthermore, when we examined Tennessee's new teacher evaluation framework and the TEAM rubric⁸ (adapted from the TAP⁶ rubric) at its core we made an interesting discovery. When the TEAM rubric was examined at the "At Expectations" level, each of the 23 elements could be mapped onto the different quadrants of the CVF (see Figure 6).

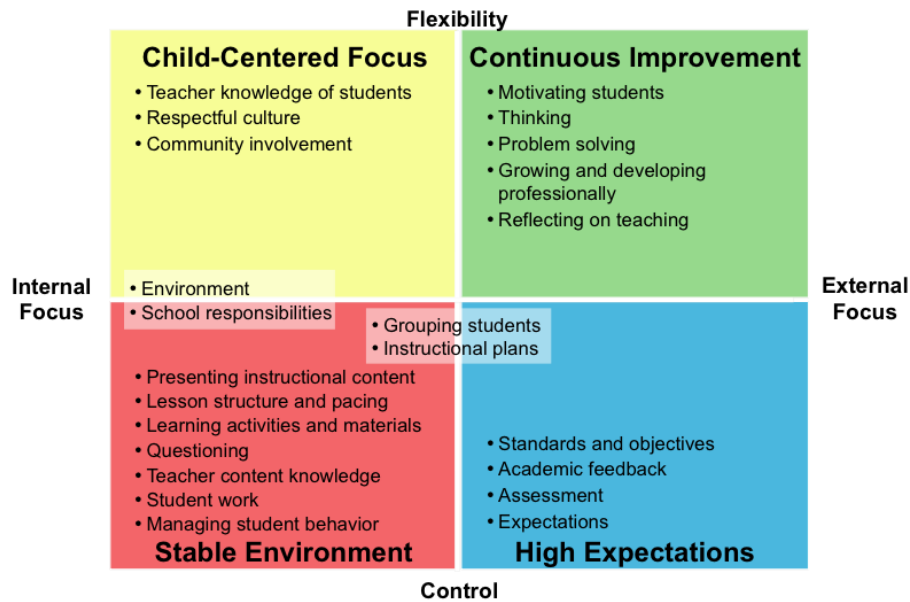
⁵ Danielson, C. (1996). *Enhancing professional practice: A framework for teaching*. Alexandria, VA: Association for Supervision and Curriculum Development

⁶ TAPTM: The System for Teacher and Student Advancement. (2011, November 20). TAP teaching skills, knowledge and responsibilities performance standards [Web page]. Retrieved from <http://www.tapsystem.org/action/actiontaf?page=ifa>

⁷ Farr, S., & Teach for America. (2010). *Teaching as leadership: The highly effective teacher's guide to closing the achievement gap*. San Francisco, CA: Jossey-Bass.

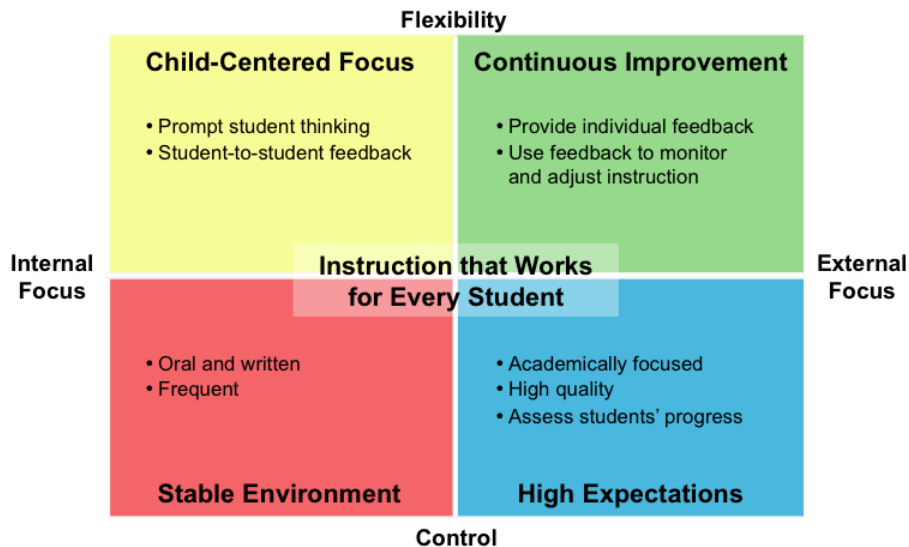
⁸ Tennessee Department of Education. (2011, November 20). Teacher and principal evaluation [Web page]. Retrieved from <http://www.tn.gov/firsttothetop/programs-committee.html>

Figure 6



When we examined particular elements of the rubric at the “Significantly Above Expectations” level, integration across the four quadrants was readily observable. In Figure 7, “Academic Feedback,” one of the 23 elements of the TEAM rubric, was mapped using the descriptors from the “Significantly Above Expectations” level.

Figure 7



Notice how the descriptors for the highest level of performance on this element demonstrate the kind of integration that is characteristic of HETs. The other elements of the TEAM rubric also show a similar kind of integration when their descriptors are mapped at the “Significantly Above Expectations” level. Not all elements map across the entire framework, but in many cases they do. The integrative perspective that arose out of this work actually shows up in many other places when viewed through the lens of the CVP. These findings will drive our future work to strengthen the Tennessee teaching core.

Connections to Teacher Development

Because of the relational nature of the CVF, it can be viewed as a developmental map. People may have strong or weak affiliation to particular values in the model, but these affiliations can change over time given the kinds of experiences that teachers have in their classrooms and lives. As HETs talked about what really mattered in their practice, we heard many stories that were developmental in nature. For example, many teachers who talked about integrating values across categories also reported that they weren't able to do these things early in their career. The capacity to enact and integrate these disparate sets of values is not innate; it is developed over time. This is an important aspect of this research. If particular values and associated skills can be learned and integrated over time, and if these values describe important aspects of what it means to be an effective teacher, then it is possible for all teachers to develop and become more effective. With this model in mind, it becomes possible to chart particular developmental paths into the future.

In addition, the model provides a new and useful metaphor for discussing and ultimately understanding what it means to be an effective teacher. If the CVF appropriately frames the core issues associated with leading a complex organization and this framework is equally useful in describing an HET's classroom, then HETs can be viewed as leaders of complex organizations. This elevates the practice of teaching to the same level of difficulty as leading any kind of complex organization. CEOs in Fortune 500 companies may be able to learn as much about great leadership from teachers as teachers can learn from studying what great business leaders do.

Developing the Tennessee Teaching Force

Highly effective teachers in Tennessee and elsewhere attest to both the necessity and their capacity to improve. Most of what it means to be a highly effective teacher is learned over time rather than being innate in the individual. The advantage that some people have coming into the profession is that they have had prior experiences that have helped them develop the values and the associated skills that are also useful in leading a classroom. The CVF provides a unique starting place for all teachers to get better because it embodies a set of big ideas, all of which are critical to effective teaching. Essentially, this work suggests four things that can be leveraged for the development of the Tennessee teacher core:

1. Each of the quadrants in the framework represents a set of values and associated skills that are critical in producing high-level academic gains with students, regardless of grade-level or subject-area. One way to improve one's teaching is to begin to value and develop skills in areas that are currently underdeveloped in one's practice. For example, some teachers may not develop deep relationships with students. This research, however, suggests this is one of the critical elements of effective teaching. Furthermore, developing deep relationships with students is a necessary precursor for high levels of student growth, not an unrelated enterprise.
2. These values and their associated skills do not exist as discrete or unrelated "practices" or "behaviors." Instead they exist as an interrelated constellation of tendencies or habits of mind that take on additional value when integrated with other critical habits of mind. HETs are not only masters of enacting these four, distinct organizational tendencies, but also in finding ways to connect and integrate these tendencies. It is this capacity to integrate that produces the synergies that are necessary for a classroom to move to a higher level of functioning. For these teachers, the whole they create is absolutely greater than the sum of the parts.

3. The CVF provides a new and uniquely useful language for talking about the practice of teaching. Teachers can use this language to begin identifying their natural proclivities and strengths as well as their inherent blind spots and challenges. Moreover, this language allows teachers to connect and integrate tendencies that are separated and often dissociated. Teaching effectiveness is inherent in the integration of these four sets of values. For example, teachers typically have a difficult time talking about their practice in conceptual terms. With the CVF, teachers are provided a set of distinctions that allow them to talk in more coherent ways about what they do. When teachers in our focus groups learned the language of the CVF and the colors that signify the values in each quadrant, they immediately began to use the colors in describing their practice. They talked about “going yellow” in particular circumstances or “emphasizing blue” in other circumstances.
4. This capacity to enact and integrate these values and their associated skills is something learned over time as teachers systematically experiment and create who they are in the classroom. The key to this kind of development is attention. People can develop new sets of practices if they can name them, practice them and systematically integrate them into their identities as teachers. For example, three HETs from the same school led their entire teaching staff through a CVF survey. A very interesting finding emerged: The average “strength quadrant” of the entire building was red. The faculty explored contextual reasons for this result as well as ways they might use their strengths in the red area to branch off and develop other processes needed for highly effective teaching. The teachers reported the process to be “eye-opening” and a very effective way to uncover and explore the balances and imbalances existing across the school. On the one hand, what might appear to be a strength—the existence of building-wide consensus on rules, norms and processes—has the potential to hinder learning if those structures become so rigid that they get in the way of establishing relationships, pushing student achievement levels or encouraging students to use knowledge in creative out-of-the-box ways.

In addition, the desirability of everyone on the staff having the same strength is questionable. This suggests the need for more conversations about balance across values within the building as well as how everyone might work together to use the processes contained within the red quadrant to develop other equally important areas.

Where We are Headed with this Work

The 2011–2012 HET research will be moving in a new direction; it is now time to begin using what has been learned to improve the effectiveness of teaching across the state. This year’s work will involve:

1. Identifying and working with Professional Learning Communities (PLCs) of teachers headed up by one or more of the HETs with whom we have already been working;
2. Exposing teachers in the PLC to three online courses developed out of this study;
3. Helping teachers in each PLC locate their areas of strength or comfort relative to the CVF;
4. Partnering with teachers to identify projects designed to stretch them from their identified area of comfort to a quadrant in which they feel less comfortable; and
5. Studying what happens as the teachers in these PLCs work to create the kinds of integrations that are characteristic of HETs.

Most of these efforts will be concentrated in the second half of the school year. And by the end of the 2011–2012 school years, we will know whether this framework provides a viable means to improve the practice of all teachers.

In Summary: Key Findings

Effective teaching is one of the most complex activities in which an adult can engage, but more teachers must become effective for Tennessee's First to the Top strategy to be successful. The primary conclusion of this study is effective teaching is a complex context specific activity that requires both formal knowledge as well as a kind of knowledge-in-action that guides what teachers do minute by minute. The good news is these capacities can be learned. The four sets of values that comprise the CVF can be used to understand what good teaching is and to chart a course for what must be done to become a better teacher. In the following years, the process of becoming a better teacher will be studied and documented to more clearly paint a picture of what it means to grow and become a highly effective teacher. **Below is a list of three concrete steps that can be taken to improve the quality of teaching and learning across the state.**

- 1. Enlist the aid of HETs in developing the teacher force. HETs want to improve their practice and support the improvement of other teachers' practice. The key is to develop structures that support and reward this kind of activity.**
- 2. Provide the appropriate resources to help PLCs engage in improvement. One of the important outcomes of this research will be materials and processes to support the professional learning of teachers across the state.**
- 3. Study what happens when people actively engage in development. As HETs engage their colleagues in the exploration of highly effective teaching, there is a critical need to study sites where improvement is happening. The more we know of what works, the faster the transformation of the teaching core.**

This study has also uncovered that HETs have a great deal in common with effective leaders of different kinds of organizations across the country. By recognizing the similarities between teaching excellence and leadership excellence, the state of Tennessee is beginning to chart a course toward more effective teaching and learning for all. Given these research findings, it is not too much to hope that "an effective teacher will be in every classroom."⁹

⁹ Haycock, K., & Hanushek, E. A. An effective teacher in every classroom. *Education Next*, 10(3). Retrieved from <http://educationnext.org/an-effective-teacher-in-every-classroom/>



Battelle for Kids is a national, not-for-profit organization that provides strategic counsel and innovative solutions for today's educational-improvement challenges.

As part of First to the Top, Battelle for Kids partnered with the Tennessee Department of Education to research the practices of highly effective teachers and principals in K–12 public school districts in Tennessee. Based on these findings, we have created professional development resources to share best practices and help educators across the state begin thinking and talking about improving their effectiveness.

For more information and to access these resources, visit the Tennessee Student Progress Portal at www.BattelleforKids.org/Tennessee.