Key Tables and Concepts: Five Levers to Improve Learning by Frontier & Rickabaugh 2014

Anticipated Results of Three Magnitudes of Change			
Characteristics of Three Magnitudes of Change	**Examples**	**Associated Planning Questions**	**Results In….**
Status Quo Management • Maintain existing expectations for performance. • Maintain existing roles, structures. • Maintain existing purpose, products, tasks. • Emphasis on updating annual products and tasks .	• "Rolling over" processes and procedures from the previous year. • Keeping track of and tabulating grades in same manner as in the past. • Completing teacher evaluation processes and forms in same manner as in the past.	• What rules, processes, and procedures need to be followed? • What dates and deadlines must be met? • What information needs to be communicated so this runs smoothly again?	Identical results, or, if status quo falls behind societal changes, results will decline.
Transactional Change Burns (1978), Bass (1985) • Exchange of skills or services valued by one group for rewards valued by another group. • Group focus • Contingent rewards • Monitor and corrective action	• Implementing a schedule change. • Implementing a new way of tabulating and reporting grades. • Implementing ratings from a new teacher evaluation framework.	• What new rules, processes and procedures need to be followed? • What new dates and deadlines must be met? • What rewards and punishments will affirm or extinguish behavior?	Systems where the paperwork changes, but skills and learning remain the same. OR Systems where the organizational structure changes, but student experience remains largely the same.
Transformational Change Burns (1978), Bass (1985) • Interaction among leaders and followers to increase capacity to meet the needs of others. • Individual focused…to the benefit of the group • Tend to motivation • Intellectual stimulation • Autonomy supportive	• Utilizing class-time differently to focus on rigor and student engagement. • Teaching students strategies to set attainable goals based on formative assessments. • Developing and utilizing a shared language of effective instruction for teachers to utilize during self-reflection of video analysis of their own teaching.	• How do we determine if students are engaged or merely compliant? • What do students believe to be true about the relationship between their effort and results? • What is the balance between formative and summative practices that support teacher growth and ensure accountability?	Changes in thoughts and behaviors among teachers and students, resulting in improved learning.
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Overview of the Five Levers		
Lever	**Examples**	**Associated Planning Questions**
structure Logistical components of districts, schools, and classrooms such as schedules, staffing, and administrative processes.	• School size • Class size • Annual calendar • Daily schedule	• Where should we deliver teaching? • How long should it be delivered? • What logistical issues need to be addressed?
sample Grouping of students in any classroom or program at any given time.	• Heterogeneous vs. homogeneous grouping of students • Gender separate classes • Access to accelerated programs	• Who should have access? • Where should specialized services be delivered? • Who should be grouped with whom?
standard Expectations for quality and articulated pathways for growth as related to student learning.	• State academic standards • School-level criteria for student performance • Classroom and teacher expectations for quality work	• What should be taught? • How good is good enough?
strategy The practices teachers use to help students deepen their understanding of content and improve student's ability to use important skills.	• Instructional strategies for whole class instruction • Instructional strategies for individualized instruction • Efforts to empower students as agents in curriculum, instruction, and assessment	• How will we teach? • How will we know they've learned? • How will we build on student strengths? • How will we provide appropriate challenge for learners? • How will we provide appropriate support for learners?
self Beliefs that teachers and students have about their capacity to be effective.	• Teacher efficacy • Autonomy support • Student confidence • Learned helplessness • Stereo-type threat • Growth mind-set	• What do teachers believe to be true about students? • What do students believe to be true about teachers? • What do teachers believe about their capacity to meet student learning needs? • What do students believe about their capacity to learn?
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Examples of planning questions that indicate efforts to maintain the status quo

<table>
<tr><td colspan="5">**Status quo**
Planning questions that maintain the status quo focus exclusively on implementation of processes that perpetuate existing practices.</td></tr>
<tr><td>Structure</td><td>Sample</td><td>Standard</td><td>Strategy</td><td>Self</td></tr>
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<td>

When should the process occur?
Who should do the process?
What tools/resources are necessary for the process?
Where will the process occur?
How will we know the process has been completed?

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When will we place students?
Who will communicate results of placement decisions?
What criteria will be used to decide placement?
Where will students be placed?
How will placements be communicated?

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When in the sequence of learning should the standards be applied?
Who will communicate the standards?
Who is responsible for teaching which standards?
What criteria / processes will be used to measure compliance / proficiency?
How can we demonstrate we're currently teaching these already?

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When and how will we evaluate the teaching strategies that are used?
What process is used to decide / teach strategies?
Where will training occur?
Who will provide the training?
How will we know teachers have been trained?

</td>
<td>

When do we orient students to existing rules and expectations?
Who is responsible for helping kids navigate the school structure?
What process will be used to inform students of their progress and status?
When will summative results about student achievement be communicated?
How will students be held accountable?

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<tr><td colspan="5">For example, suppose a school plans to maintain the status quo of their current system of grading and reporting. Planning and efforts related to report cards would be around logistical components of when grades are due, to whom they are submitted, how they will be submitted, who will distribute them, etc.</td></tr>
<tr><td colspan="5">*Five Levers to Improve Learning, Tony Frontier & Jim Rickabaugh 2014 ASCD*</td></tr>
</table>

Examples of planning questions that indicate efforts to make transactional change

Transactional Change

Planning questions that seek changes in current practices, but do not change underlying assumptions about teaching and learning; typically require different logistical approaches, but do not require new or different ways of thinking about leveraging student learning.

Structure	Sample	Standard	Strategy	Self
• When will we deploy the new structure? • Who will be involved in the decision making process? The implementation process? • What resources / training is / are required? • Where will the structure be deployed? • How will we communicate the change? • How will we know the implementation was successful?	• When will we deploy new groupings and/or criterion for grouping? • Who will be placed where? • Who will determine placements? • What are the revised criterion for placements? • Where will students go/report? • How will we communicate the change in groupings or placements?	• When should students be held accountable for which standards? • Who is responsible for teaching the revised standards? • What are the new standards? • Where should the standards be taught? • How should curriculum be modified to ensure standards are addressed?	• When will we teach the strategies we want teachers to use? • Who decides the strategies to be used? • What process is used to decide / teach strategies. • Who will provide the training? • How will we know teachers have been trained?	• When will students engage in activities that help adults understand who they are as a learner? • What instruments, strategies processes are used to develop a learner profile? • Who will administer assessments / tools to create a learner profile? • Where in the grade progression will learner profiles be developed? • How will it be used?

For example, a school is moving from an antiquated paper-pencil report card to an on-line report card system. The shift in practice has nothing to do with the content of the report card, the shift in practice requires a different process for how grades are entered and how they can be accessed. This could also include a change in cut-scores – such as a shift from a 90% to a 93% for an "A" or a change in descriptors from an "A" through "F" system to an "Advanced" through "Minimal" system would also be a technical change. Conversations and planning would be associated with the new ways of calculating grades and the new methods used to enter and upload grades on the new, electronic system.

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Examples of planning questions that indicate efforts to engage in transformational change.

Transformational Change

Planning questions that challenge the underlying assumptions about the relationship among school structure, student & adult beliefs about learning that yields a more effective learning experience for students.

Structure	Sample	Standards	Strategy	Self
• When will we be in a position to ensure changes in structure will result in a different and more effective learning experience for students? • How does the current structure impede student learning? • Who will notice the change has occurred in a manner that increases student capacity to learn? • Whose learning will benefit from the change? Be inhibited by the change? In what ways? • What elements of structure need to be changed to allow strategies to have the intended impact on student learning and / or student experience? • Where will there be an impact on student capacity to learn ? • How does changing the structure influence the student's experience in ways that are likely to generate more learning? • How does the current structure prevent implementation of intended strategies? • How will we know the impact of the change on student learning? Student conceptions of self?	• When will we be in a position to ensure changes in the sample will result in different and more effective learning experience for students? • Whose learning needs are served by the existing sampling? Whose needs are not served? • What are the intended and unintended consequences of current sampling procedures? Proposed procedures? • Where are students served in a manner that best aligns their learning needs with where they spend the majority of their school time? • How does changing the sample yield access to more effective opportunities for learning?	• When should particular standards be emphasized to inform teacher's effort for instruction, effort, and feedback to students? • When should students prioritize effort toward which standards? • What standards are more important than others? • Where can prioritized standards be implemented and integrated across the curriculum? • How will the standards be implemented in a manner that allows students to describe their current performance, the desired performance, and effort to put forth to close the gap between the two?	• What strategies can educators use to best leverage student learning? • What strategies can students utilize to best leverage their own learning? • What strategies should be utilized if the teacher sees the classroom through the eyes of his or her students? • What strategies should be utilized if each student sees him or herself as his or her own best teacher?	• When will students engage in activities that help them understand themselves as a learner? • Who will engage students in processes that develop their effective strategies that result in greater learner capacity? • What feedback loops and support systems will assist students and teachers in supporting one another's learning? • How will students be engaged with adults in developing their learning path? • How will the feedback loops and support systems develop authentic engagement, accountability and ownership for the student? • How do we ensure students believe in their capacity to learn?

For example, a school is trying to re-conceptualize grading from a token-economy of completing tasks and accumulating points to a standards-based system where students are empowered to monitor their progress and adjust their efforts to achieve specific learning goals. Here the shift is not about a report card or reporting tools but about teachers utilizing assessment differently and students seeing themselves differently as a result of a reconceptualization of the inter-relationship among standards, strategy, and self. Conversations and planning for transformational change require discussions around the fundamental, often unspoken, assumptions related to why we give grades in the first place.

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Leveraging Structure	
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To avoid **leverage errors** associated with structure: **Do less of….**	To access **leverage advantages** associated with structure: **Do more of…**
Assuming that a change in structure will result in a change in students' learning experiences.	Acknowledging that changes in structure merely create a set of potentials or opportunities to more effectively deploy practices designed to leverage standards, strategy, and conceptualizations of self.
Articulating changes in structure as *the* goal.	Clarifying that changes in structure are a means to an end of more effectively serving students' learning needs.
Waiting to change standards, strategy, or conceptualizations of self until after changes in structure have occurred.	Deploy strategies to actively leverage standards, strategies, and conceptualizations of self as a matter of best practice that can occur in any classroom, any day, at any time.
Assuming that a transactional change in policy or practice will result in a transformational change in teaching and/or learning.	Acknowledge the time and complexity of implementing transformational change.
Focus on the grand, district level initiatives as the important agent in change.	Focus on district or building-level initiatives that acknowledge and support each teacher's classroom practice as the important agent of change.

Leveraging Sample	
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To avoid **leverage errors** associated with sample: **Do less of…**	To access **leverage advantages** associated with sample: **Do more of…**
Assuming that because kids are grouped differently, their instructional needs are being met more effectively.	Building capacity to differentiate instructional strategies for all students.
Investing time and energy pursuing perfect student placement systems.	Investing time and energy in ensuring that regardless of placement, each student experiences an appropriate balance of challenge and support.
Assuming that kids aren't aware of, and don't internalize, the stigma of being placed in a group that is perceived to be "lower and slower."	Considering and responding to the impact of grouping practices on each student's perception of him or herself as a learner including how race, poverty, ethnicity, and gender can be internalized by students as a liability.
Providing limited access to learning experiences that target student's individual needs (e.g. a two week gifted and talented pull out session, a weekly math support session) and ignoring those needs when students aren't in those clustered groups.	Ensuring that through differentiated curriculum and instruction, students have access to an appropriate balance of challenge and support in the classrooms where they spend the majority of their time.
Using rigid, fixed grouping practices that create tracks or clusters of low and high achieving students.	Use flexible grouping and skill-based unit-level pre-assessments to differentiate units of instruction based on specific learning needs.

Leveraging Standards	
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To avoid **leverage errors** associated with **standards**: **Do less of…**	To access **leverage advantages** associated with **standards**: **Do more of…**
Transactional alignment of new standards to status quo curriculum, instruction, and assessment.	Analyzing standards to consider the implications for changes in curriculum, instruction, assessment.
Describing "what we cover" and "what we teach" in each classroom.	Analyzing how standards are assessed and in a valid way and taught in a responsive way in each classroom; what is taught is less important than what has been learned.
Taking comfort knowing that teachers are aware of, and utilize, standards in their lesson planning.	Ensuring that students are aware of, and utilize, standards to guide their efforts and assess their own work for attributes of quality.
Assuming that changing curriculum documents results in a change in student learning experience.	Developing assessment and rubrics that are aligned to the content and ways of understanding articulated in the standards.
Assuming that the same articulated standards or grading scales result in similar expectations for quality work in each classroom.	Groups of teachers collaboratively analyzing and assessing common samples of student work to ensure a clear vision, and a clear pathway, to quality work across grades and buildings.
See teachers as the sole users of standards.	Develop systems that support teachers and students capacity to use standards to guide feedback and effort.
Treat all standards as being of equal importance.	Prioritize standards to inform important decisions about resources to be allocated toward curriculum, instruction, and assessment.

Leveraging Strategies	
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To avoid **leverage errors** associated with **strategies**: **Do less of…**	To access **leverage advantages** associated with **strategies**: **Do more of…**
Assuming that because kids were told something, they understand.	Utilize strategies that allow students to construct meaning around important content and build fluency around important skills.
Treating students as though they are blank slates.	Utilize strategies that honor the fact that new knowledge is constructed on existing knowledge.
Assuming that all kids are as interested in, and as motivated to learn, the content and skills that are taught.	Strive to see learning from the perspective of each student; what is likely to be engaging? What is likely to be relevant?
Using rubrics exclusively as a tool to justify grades.	Use rubrics as an instructional tool to help students learn how to describe, understand, and assess quality work.
Rigid application of models or checklists that ignore the complexities of both the art and science of teaching or are used exclusively for administrators to evaluate teachers.	Strive for superintendents, principals, and teachers to understand the complexity and opportunity presented by comprehensive instructional frameworks as a starting point for addressing each student's learning needs; not merely as tools for evaluation.
Assume that all instructional strategies are equally effective in improving student learning.	Acknowledge that different instructional strategies can substantially increase student achievement when deployed effectively and in the right context.
Utilize the same few instructional strategies	Utilize a repertoire of instructional strategies that are specifically aligned to the intended outcomes for student learning.
Utilizing collaborative time with teams of teachers to talk about structure and sample.	Utilize collaborative time to talk about intentional use of standards and to share, or reflect on, the use of instructional strategies.

Leveraging Self	
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To avoid **leverage errors** associated with **self**: **Do less of…**	To access **leverage advantages** associated with **self**: **Do more of…**
Assuming that because kids were compliant that they are engaged in learning.	Focusing on developing malleable traits that will lead students to commit to learn for their own uses and purposes.
Treating students as though they are solely receptacles for our knowledge and wisdom.	Utilizing students as resources to support their learning, drawing on past experiences, imagination, curiosity and knowledge to build and expand learning capacity and success.
Assuming that all students learn in the same way and at the same rate as age cohorts and classmates.	Designing learning paths with students that accommodate the ways in which they can learn best and at a pace that is responsive to their needs.
Implying that intelligence is a fixed characteristic.	Affirming and teaching that intelligence is malleable; hard work and the right strategy improves everyone's understanding and skills.
Providing praise that affirms fixed abilities ("You must be really smart").	Providing praise that affirms effort and strategy ("What an insightful answer! How did you come up with that?")
Relying on grades as a sole means of communicating learning progress.	Developing clear learning goals and a variety of means to demonstrate and communicate that learning has occurred.
Assuming that the current level of student achievement is a reflection of their potential to learn.	Committing to the potential of, and finding ways for, every student to build the skills and develop the strategies necessary to lift their performance and find learning success.
Assuming that learning is something that will happen in a linear manner, to all students, as an entire group.	Understanding that while learning may occur in a group or social context, all learning ultimately is a personal experience. Unless students make a personal connection with what they are trying learn, learning does not occur.

Three Critical Questions for Prioritizing Efforts to Improve Student Learning:

1. What is the student outcome we are trying to influence?

2. What levers will have *the most direct impact* on influencing that outcome?

3. Does the change require leveraging a transactional change in process or a transformational change in thought and practice?

For Reflection

**Three Critical Questions for Prioritizing Efforts to Improve Student Learning:**

1. What is the student outcome we are trying to influence?

2. What levers will have *the most direct impact* on influencing that outcome?

3. Does the change require leveraging a transactional change in process or a transformational change in thought and practice?

   Action: What steps are required to move forward with this initiative in a manner that is most likely to address student learning needs as described above? Administrators? Staff? Students?

**Metaphors to Guide Thought and Action**

- Don't remodel the kitchen and then be surprised when the food doesn't taste any better (alignment of effort to action; structural change requires a lot of effort, but may result in an identical experience).
- Don't merely cut, stack and move wood when you're trying to build a fire. (re-arranging structure and sample in a physical interaction vs. changing the "spark" that occurs at the point-of-contact between teachers and learners when strategies are effectively used to connect students understandings of themselves, and themselves as learners, through the standards).
- Lead like a penguin; the components that matter most sit beneath the water line and create the foundation for what is visible (structure and sample rest on a foundation of standards, strategies, and self.)
- You are not merely teaching kids how to ride a bike, you are teaching them how to use the gears and read the terrain so they can go wherever they choose in an efficient manner (standards as the terrain, the bike as the structure and sample; the bicycle is only useful if the rider understands herself as a rider to know how to use strategies to efficiently exert effort; a rider who fails to climb a hill may have the capacity to do so, but started in the wrong gear).

Avoiding Leverage Errors by Thinking Like a Penguin: Prioritizing Beneath the Water Line
(Frontier & Rickabaugh 2014)
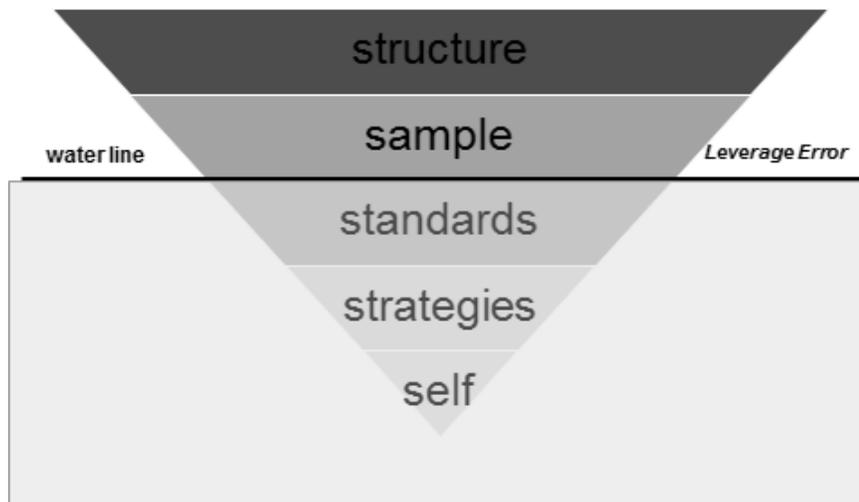
Leverage Error

The leverage error most often associated with *structure* and *sample* is the assumption that prioritizing around changes in those areas will result in an improved learning experience for students. The leverage error most often associated with *standards, strategies, and conceptualization of self* is the assumption that a transactional change in those areas will result in a transformation in teacher capacity and a transformation in student learning.
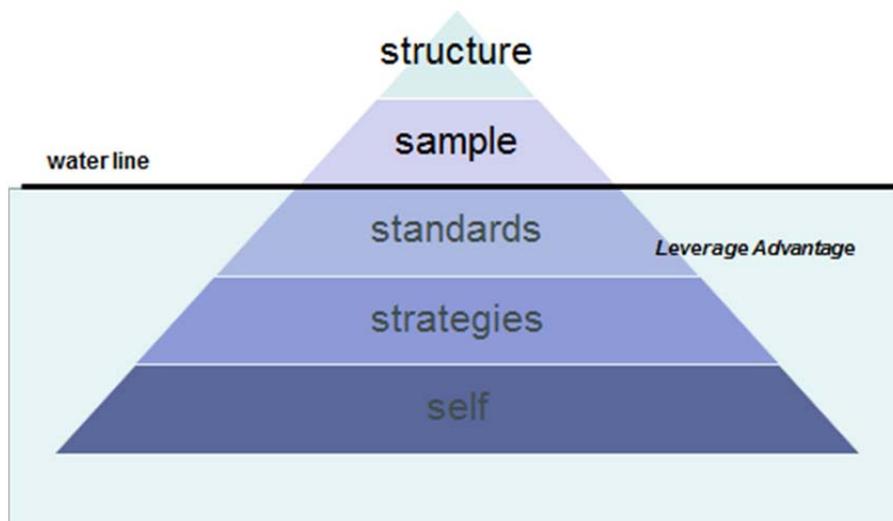
Leverage Advantage

The leverage advantage of *structure* and *sample* can only be accessed by acknowledging that those levers are merely associated with conditions for learning; they rest on a less visible, but critically important foundation. The leverage advantage of structure and sample is engaged most effectively in a context that prioritizes to ensure *strategies are more effectively utilized to connect students - and their conceptions of themselves as learners - to standards*. While these components are less visible, they are the basis for stability and sustainability of a system designed to improve learning.

Self-Reflection: Using the Five Levers to Prioritize for Powerful Results		
Area of Leverage	**Areas of Strength**	**Areas of Need**
Structure		
Sample		
Standards		
Strategy		
Self		

Key Understandings:

- *Prioritizing around structure and sample can effectively change a school, but student learning experiences may remain unchanged.*
- *Prioritizing to use more effective instructional strategies to connect kids to standards is high leverage, but be aware of the critical distinction among status quo, transactional, and transformational change.*

Prioritizing Efforts to Improve Student Learning

Prioritizing around structure and sample can effectively change a *school*, but *student* learning experiences may remain unchanged.

Prioritizing to use more effective instructional strategies to connect kids to standards is high leverage, but be aware of the critical distinction among status quo, *transactional,* and *transformational* change.

structure
What? Where?

sample
Which students?

standards
Level of expectation?

strategy
Effective practices?

self
Can I be effective?

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Tony Frontier, PhD, is an award winning educator, author, and consultant who works with schools to improve curriculum, instruction, and assessment. A former teacher, associate principal, and curriculum director, he is the co-author of *Effective Supervision: Supporting the Art and Science of Teaching* (ASCD 2011) with Robert Marzano and David Livingston, co-author of *Five Levers to Improve Learning: Prioritizing for Powerful Results in Your School* (ASCD 2014) with James Rickabaugh and *Creating Passionate Learners* (Corwin 2015) with Kim Brown and Don Viegut. As a researcher and consultant, Tony works with school districts around the country to develop engaging curriculum, utilize effective instructional strategies, design systems of teacher supervision that support reflective practice, and use data to improve student learning. He is an Assistant Professor of Doctoral Leadership Studies at Cardinal Stritch University in Milwaukee where he teaches courses in applied learning theory, organizational development and statistics, a Senior Consultant for Capacity Unlimited, and an ASCD Faculty Member. He can be contacted at tonyfrontier@gmail.com

Areas of Expertise and Topics for Professional Development

Professional development sessions with educators should model the engaging instructional strategies and active meaning-making processes that benefit learners in classrooms. Whether giving a key-note address or a series of workshops across multiple days, participants should feel affirmed about components of existing practice, challenged to consider new perspectives and approaches, and supported to develop new skills and implement new strategies.

- Curriculum development utilizing the *Understanding by Design framework.*

- Comprehensive frameworks for effective instruction including Marzano's *Art & Science of Teaching*, the *Danielson Framework*, and the *Stronge Framework.*

- Developing valid, reliable formative and summative assessments that are aligned to standards *and* inform teaching and learning.

- Building teachers' repertoire of instructional strategies with an emphasis on student engagement and autonomy support.

- Prioritizing leadership and strategic planning to impact student learning using the *Five Lever Framework*.

- Supervisory systems that support teachers' reflective practice and reflective growth toward expertise; not merely ratings and evaluation.

- Understanding and measuring student engagement to inform school improvement.

- Quantitative data analysis, research, and program evaluation.