

Powerful Teaching and Learning: Hawaii Classroom Observation Study (2008 – 2010)

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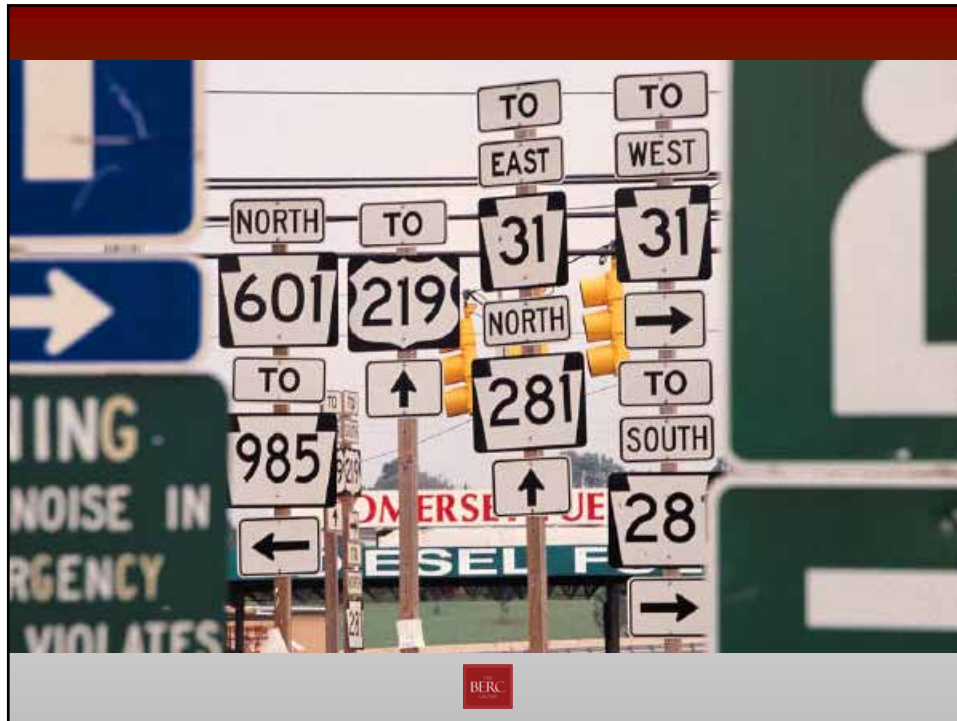


BAKER ■ EVALUATION ■ RESEARCH ■ CONSULTING

Agenda

- Brief history – Why we are where we are?
- Powerful Teaching and Learning
- STAR Framework for *Powerful Teaching and Learning*TM
- Research Findings



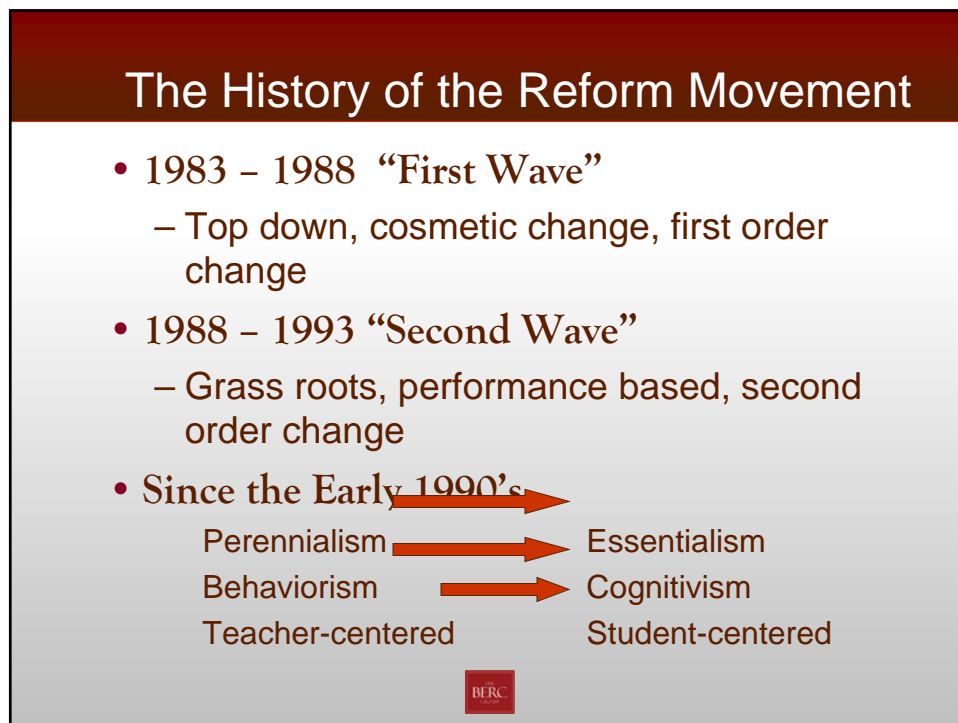
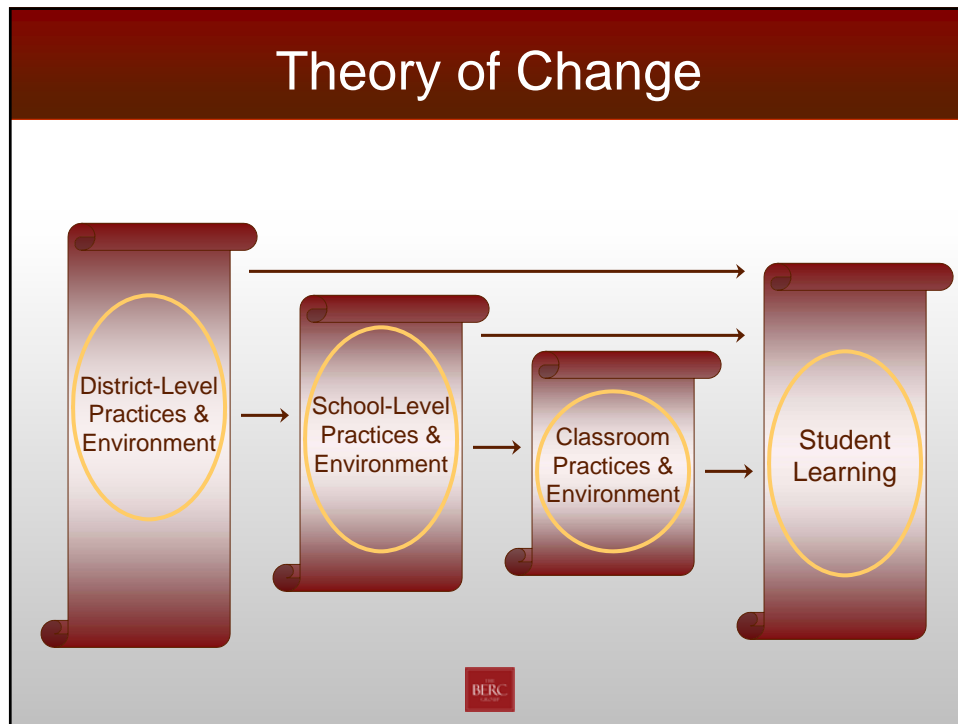


Getting to Common Practice

- Students do not benefit from educational best practices that they do not experience.

- Dean Fixsen





Instructional Changes Resulting from State Education Reform Acts 1988 - 1993

Pre-reform		Post-reform
Teacher-centered	➡	Student-centered
Norm referenced	➡	Criterion referenced
Bell curve	➡	J curve
Teacher information	➡	Student performance
Student compliance	➡	Active inquiry
Adopted curriculum	➡	Adapted curriculum

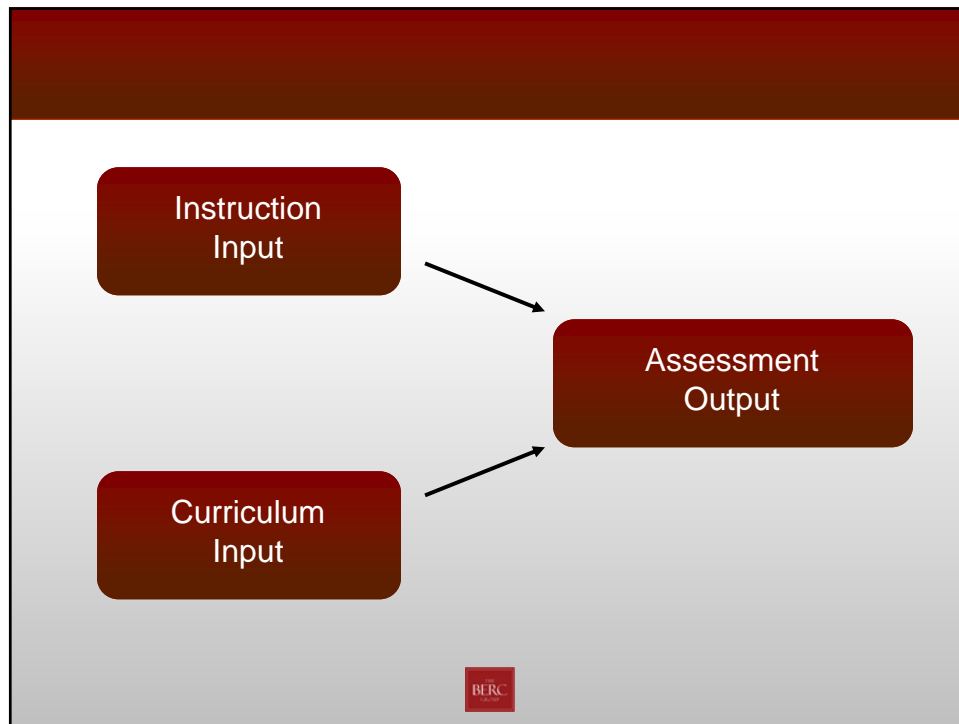


Education Reform Alignment

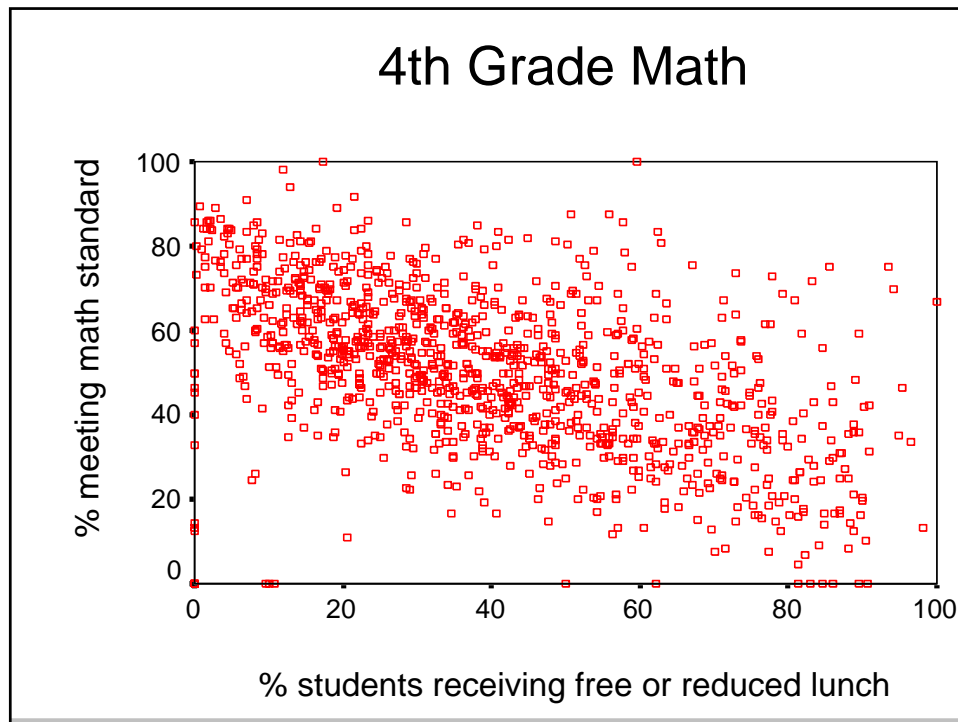
- Clear efforts around what to teach
 - Curriculum Alignment
- Clear efforts around what to test
 - Assessment Alignment
- Few efforts around how to teach
 - Instructional Alignment

Powerful Teaching and Learning





- ## Powerful Teaching and Learning
- From research
 - To survey
 - To observation
 - To Framework
- A small red square logo with the letters "BERC" is located at the bottom center of the slide.



Development of the STAR Protocol

- Started with teacher surveys measuring how people learn and drawing from our original study back in 1987 related to first and second order change
- Survey findings yielded a single factor: *Constructivist Teaching Factor*
- Developed TAOP centering on 15 items produces from exploratory factor analysis and finalized through confirmatory factor analysis (plus 12 other items added in for various reasons)
- Overall score correlated with student achievement (WASL)



Powerful Teaching and Learning

- PTL was highly correlated with standardized test scores. That is, test scores were higher regardless of poverty
- Students of poverty benefited most from PTL
- Students of poverty received PTL less often than their more affluent counterparts

Abbott & Fouts, WSRC 2003

www.spu.edu/wsrc (technical reports)



Development of the STAR Protocol

- BERC was using TAOP. After several hundred observations, met to discuss main influences of overall scoring (1, 2, 3, 4)
- Settled back to the original 15 times:
 - 3 – skills
 - 3 – knowledge
 - 3 – thinking
 - 3 – application
 - 3 – relationships
- Realized these matched the four State Goals from 1993



Development of the STAR Protocol

- Reorganized into Skills and/or Knowledge, Thinking, Application, Relationships (Newmann and Wehlage)
- Validity studies:
 - Construct
 - Content
 - Concurrent
 - Face
- Have now conducted more than 15,000 classroom observations in Washington State



STAR Classroom Observation Protocol

For specific bullets and/or formatting we considered:

- TAOP
- TOP
- SIOP
- RTOP
- MTOP



STAR Framework

- STAR Framework for Powerful Teaching and Learning
- STAR Classroom Observation Protocol
- STAR Professional Development Process



The STAR Instructional Framework

- 5 Essential Components
 - Skills/knowledge
 - Thinking
 - Application
 - Relationships
- 15 Indicators
- Multiple (95) Strategies



Pause & Reflect

What are some of your thoughts and/or questions right now?



STAR – Essential Components

Skills or knowledge developed at a *rigorous* conceptual level

Thinking that leads to personal *reflection* and higher level questions

Application of learning in a real or *relevant* context designed to make meaningful connections

Relationships with/among students is critical for student learning and differentiated instruction



STAR ★ PROTOCOL
SKILLS/KNOWLEDGE • THINKING • APPLICATION • RELATIONSHIPS

PHASE ONE
PERSONAL REFLECTION

The STAR Framework for Powerful Teaching and Learning™


S **ILLS/KNOWLEDGE**
 Skills and/or knowledge are manifested as the teacher provides opportunities for students to develop rigorous conceptual understanding, not just recall.

T **HINKING**
 Thinking is evident as the teacher provides opportunities for students to respond to open-ended questions, to explain their thinking processes, and to reflect to create personal meaning.

A **PPPLICATION**
 Application of skills, knowledge, and thinking is evident as the teacher provides opportunities for students to make meaningful personal connections and to extend their learning within and beyond the classroom.

R **ELATIONSHIPS**
 Relationships are positive as the teacher creates optimal conditions for learning, maintains high expectations, and provides social support and differentiation of instruction based on student needs.

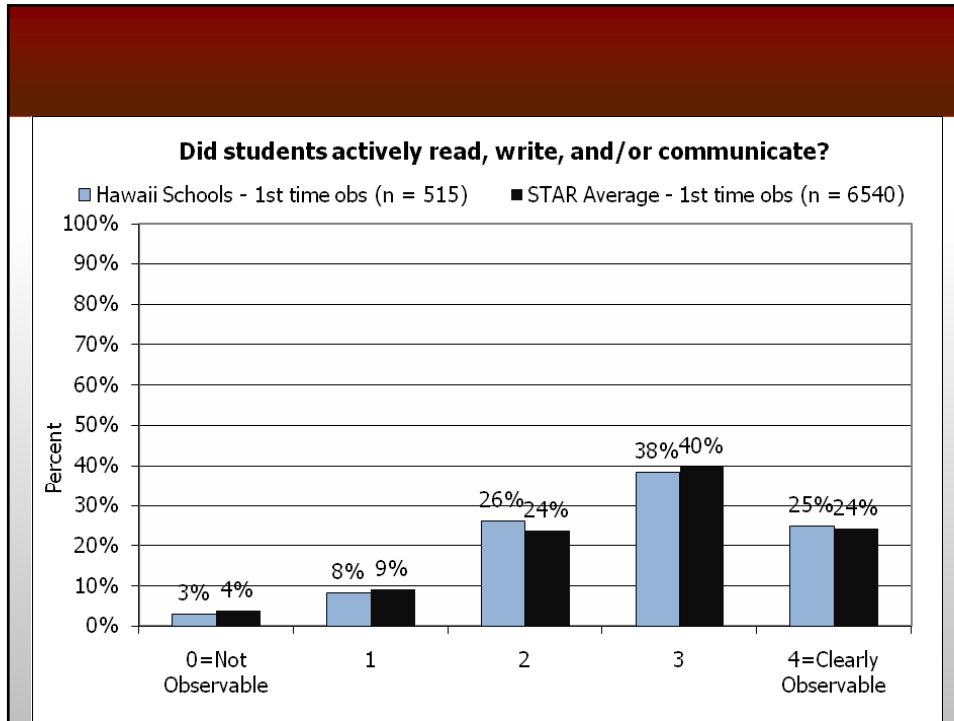
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SKILLS
Did students actively read, write, and/or communicate?

TEACHER	<p>1. Teacher provides an opportunity for students to develop and/or demonstrate skills through elaborate reading, writing, speaking, modeling, diagramming, displaying, solving and/or demonstrating</p> <ul style="list-style-type: none"> • Reading/notes/journals/research papers • Response logs/lab reports/data tables/graphic displays • Dialogue/debate/skits/presentations • Develop experiments 	<p>Not Observable Clearly Observable</p> <p style="text-align: center;">————— —————</p>
STUDENTS	<p>2. Students' skills are used to demonstrate conceptual understanding</p> <ul style="list-style-type: none"> • Organize/sequence/compare information • Consider alternatives • Interpret and/or evaluate • Predict/hypothesize • Compare/contrast • Analyze cause and effect • Develop models/simulations/original creation • Communicate conceptual understanding 	<p>Not Observable Clearly Observable</p> <p style="text-align: center;">————— —————</p>
ME	<p>3. Students demonstrate appropriate methods and/or use appropriate tools within the subject area to acquire and/or represent information</p> <ul style="list-style-type: none"> • Read and/or analyze text or other data • Produce a piece of creative or expository writing • Participate in a discussion/debate/oral presentation • Use and/or develop graphic organizer • Conduct interviews or focus groups around a topic • Construct a written or visual explanation to a phenomenon • Use manipulatives/models/primary sources • Identify information sources to be used in a project • Develop a visual for other student representation of information 	<p>Not Observable Clearly Observable</p> <p style="text-align: center;">————— —————</p>
<p>What am I currently thinking about SKILLS? How does this apply to ME?</p>		

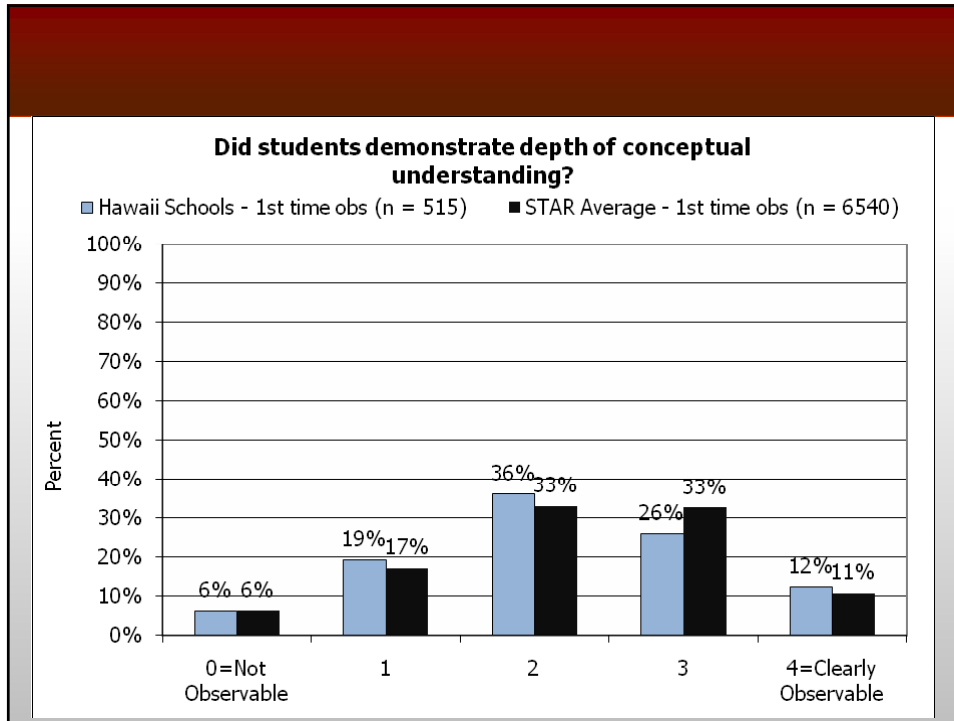
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KNOWLEDGE

Did students demonstrate depth of conceptual understanding?

	Description		
TEACHER	4. Teacher assures the focus of the lesson is clear to all students <ul style="list-style-type: none"> Assure students are aware of lesson objectives and assess that students know how to meet the objectives Organize lesson around guiding/essential questions and/or enduring understandings Align lesson with state goals and learning targets 	<input type="checkbox"/> Not Observable	<input type="checkbox"/> Clearly Observable
STUDENTS	5. Students construct knowledge and/or manipulate information and ideas to build on prior learning to discover new meaning, and/or to develop conceptual understanding, not just recall <ul style="list-style-type: none"> Generate their own ideas, questions, or hypotheses Synthesize information Analyze/critically examine information Discuss a public issue Use evidence/data to support an opinion Use visually representation Arrive at a conclusion or interpretation 	<input type="checkbox"/> Not Observable	<input type="checkbox"/> Clearly Observable
ME	6. Students engage in significant communication, which could include speaking/writing, that builds and/or demonstrates conceptual knowledge and understanding <ul style="list-style-type: none"> Make distinctions Apply/analyze/debate ideas Form generalizations Raise questions Examine evidence/complete questions Participate in a literature circle Conduct a simulation Demonstrate the use of vocabulary and fundamental concepts of a subject area 	<input type="checkbox"/> Not Observable	<input type="checkbox"/> Clearly Observable
What am I currently thinking about KNOWLEDGE? How does this apply to MET?			

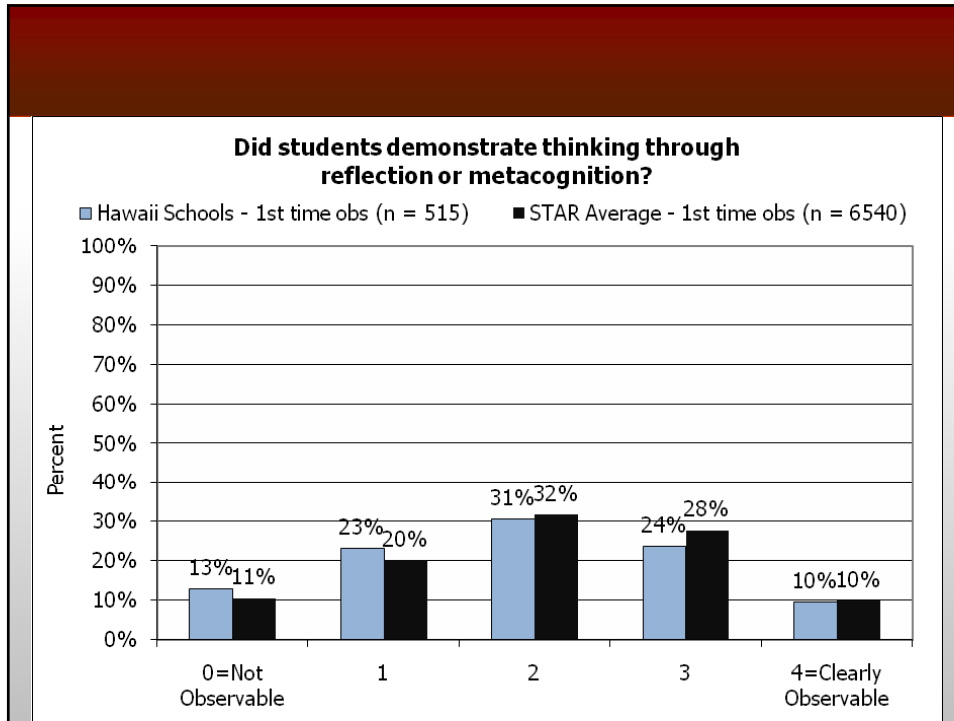


THINKING

Do students demonstrate thinking through reflection and/or metacognition?

TEACHER	<p>7. Teacher uses a variety of questioning strategies to encourage students' development of critical thinking, problem solving, and/or communication skills.</p> <ul style="list-style-type: none"> • Ask students their opinions • Gives sufficient wait time • Asks open-ended questions • Focuses on higher-order thinking questions • Probes student responses beyond a correct answer • Elicits responses from multiple students to a question • Solicits contributions from all students 	<p>Not Observable Clearly Observable</p> <input type="range"/>
STUDENTS	<p>8. Students develop and/or demonstrate effective thinking processes either verbally or in writing.</p> <ul style="list-style-type: none"> • Participate in a discussion around an issue • Articulate thinking strategies • Practice thinking in the context of required content • Explain problem-solving processes • Critique lab procedures • Provide verbal and/or written feedback to peers • Develop and/or demonstrate real-world connections • Provide their own opinions on a topic or issue 	<p>Not Observable Clearly Observable</p> <input type="range"/>
ME	<p>9. Students demonstrate verbally or in writing that they are intentionally reflecting on their own learning.</p> <ul style="list-style-type: none"> • Demonstrate metacognition • Make a text-to-text and/or text-to-self connection • Examine own biases on an issue • Monitor thinking and adjust strategies • Reflect quietly to gain personal meaning (journals, exit slips, etc.) • Students rethink/revise work based on data, self-evaluation, and/or constructive feedback from peers/teachers <p>What am I currently thinking about THINKING? How does this apply to ME?</p>	<p>Not Observable Clearly Observable</p> <input type="range"/>

HHSU



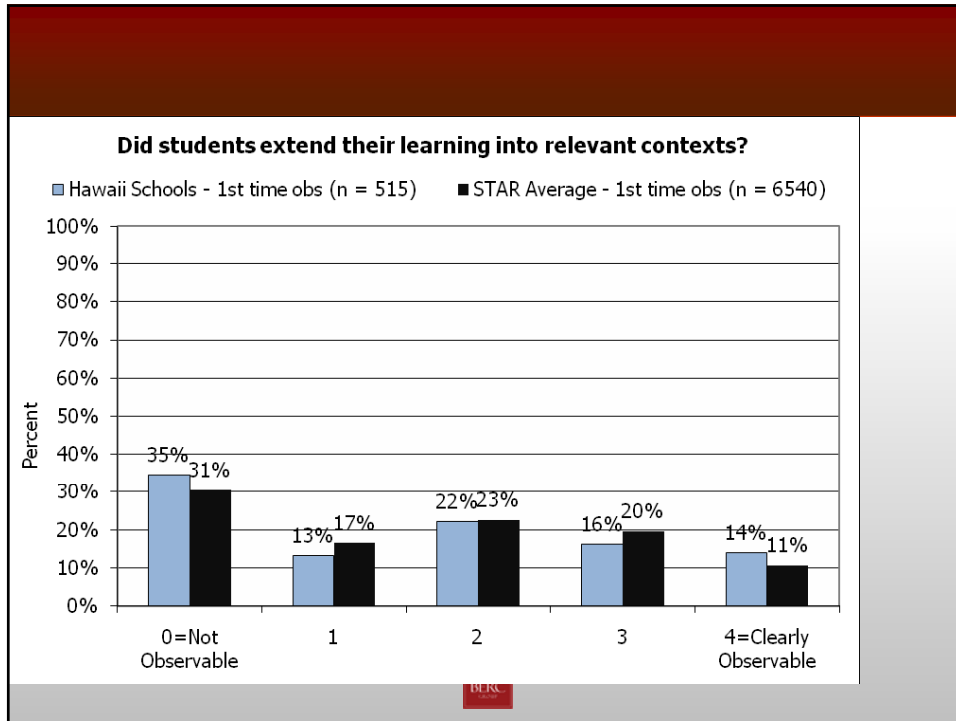
APPLICATION

Did students extend their learning into relevant contexts?

TEACHER	<p>10. Teacher relates lesson content to other subject areas, personal experiences, and contexts</p> <ul style="list-style-type: none"> Relates lesson content to prior learning Integrates multiple subject areas Relates information to a real world problem Makes meaningful personal and/or cultural connections Shares a personal story related to lesson content Demonstrates connection to a personal experience 	<input type="checkbox"/> Not Observable <input type="checkbox"/> Clearly Observable
STUDENTS	<p>11. Students demonstrate a meaningful personal connection by extending learning activities in the classroom and/or beyond the classroom</p> <ul style="list-style-type: none"> Makes meaningful personal connections Share a personal story Address a real world/contempory problem Design lab procedures for an experiment Carry out independent research Participate in a relevant simulation Articulate the purpose of a particular project Present work and/or finished projects to an audience 	<input type="checkbox"/> Not Observable <input type="checkbox"/> Clearly Observable
ME	<p>12. Students produce a product and/or performance for an audience beyond the classroom</p> <ul style="list-style-type: none"> Post student work to a website or other public forum Write a letter to a newspaper editor Partner with community members/businesses Develop and/or conduct a community survey Classroom with pen pals Produce an informative or persuasive piece of work (essay, speech, play, brochure, etc.) Participate in a service-based learning project, job-shadow, internship, and/or mentorship 	<input type="checkbox"/> Not Observable <input type="checkbox"/> Clearly Observable

What am I currently thinking about APPLICATION? How does this apply to ME?

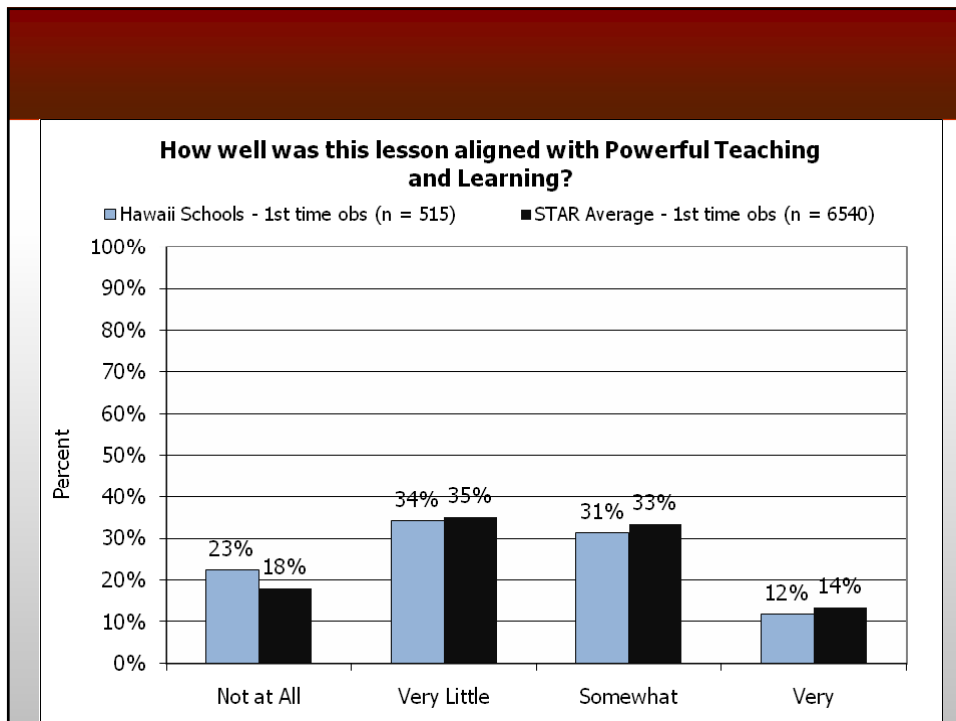
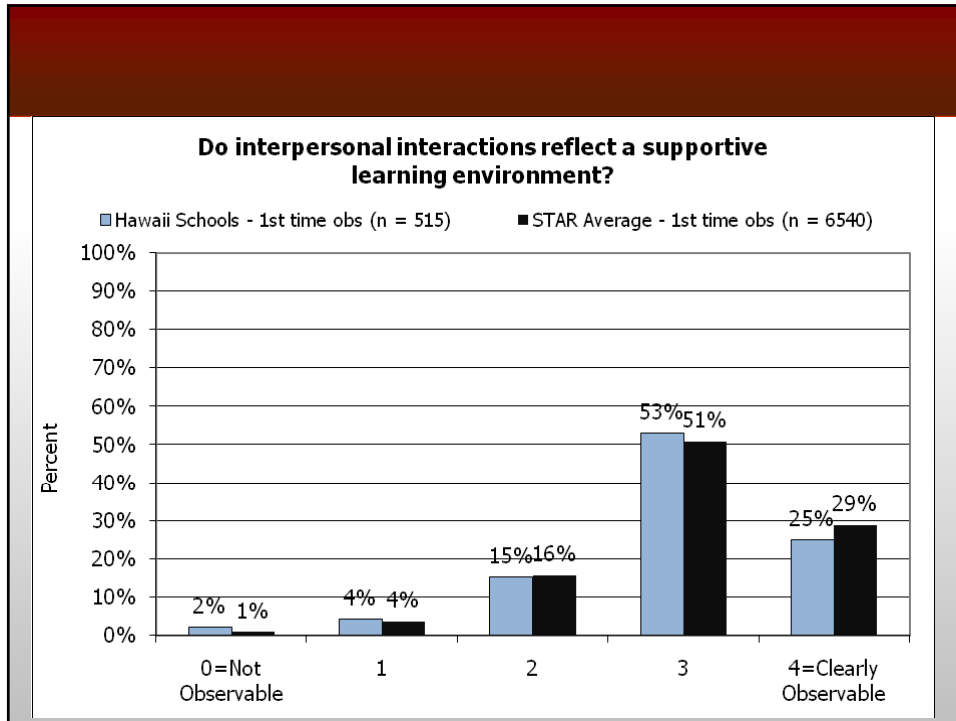
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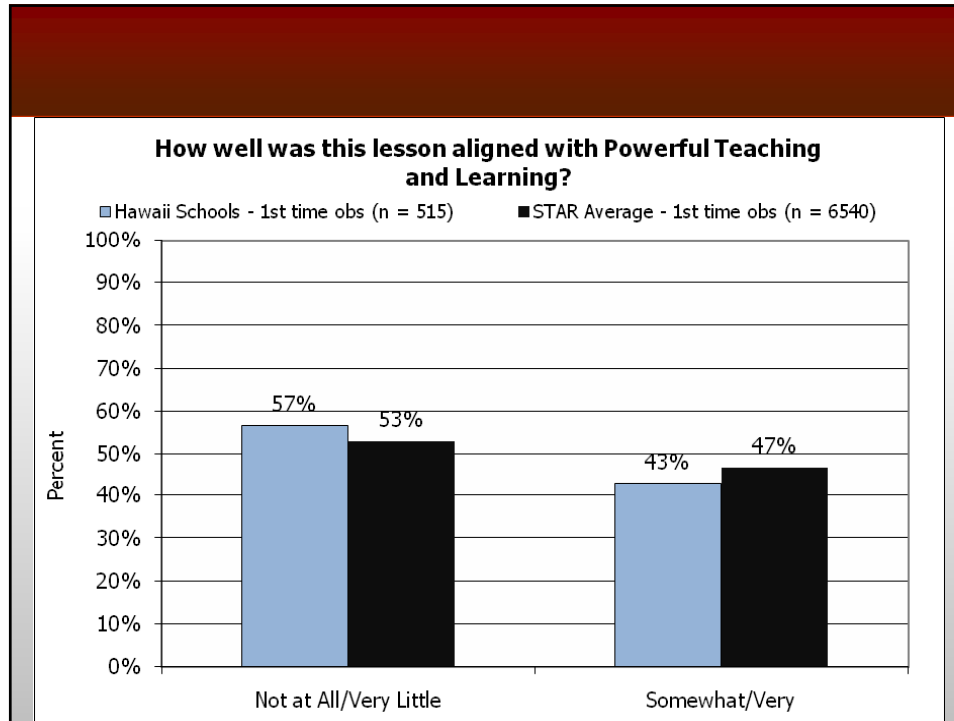


RELATIONSHIPS

Do interpersonal interactions reflect a supportive learning environment?

TEACHER	<p>13. Teacher assures the classroom is a positive, inspirational, safe, and challenging academic environment</p> <ul style="list-style-type: none"> • Interacts positively with students • Solicits and encourages students' ideas • Models and expects responsible behavior • Provides challenging assignments • Assesses routines and rituals are in place that allow students to work and move comfortably in the room • Encourages students to share their ideas, thoughts, and/or feelings • Creates a welcoming environment where students feel safe, secure, and respected, and there is an atmosphere of respect, civility, warmth, and humor 	<p>Not Observable Clearly Observable</p> <p style="text-align: center;"> ----- </p>
STUDENTS	<p>14. Students work collaboratively to share knowledge, complete projects, and/or critique their work</p> <ul style="list-style-type: none"> • Receive social support for learning through periodic grouping with peers (response partners, triads, small groups, etc.) • Make comments and respond to peers in a positive and constructive manner • Participate in writing groups/peer editing groups/reading groups/research groups/lab groups/problem solving groups 	<p>Not Observable Clearly Observable</p> <p style="text-align: center;"> ----- </p>
ME	<p>15. Students experience instructional approaches that are adopted to meet the needs of diverse learners (differentiated learning)</p> <ul style="list-style-type: none"> • Participate in enrichment and/or remediation activities • Experience multiple ways to practice a concept and/or new learning • Make their own choices about ways to approach learning tasks • Progress through the lesson based on their needs rather than just progression 	
<p>What am I currently thinking about RELATIONSHIPS? How does this apply to ME?</p>		

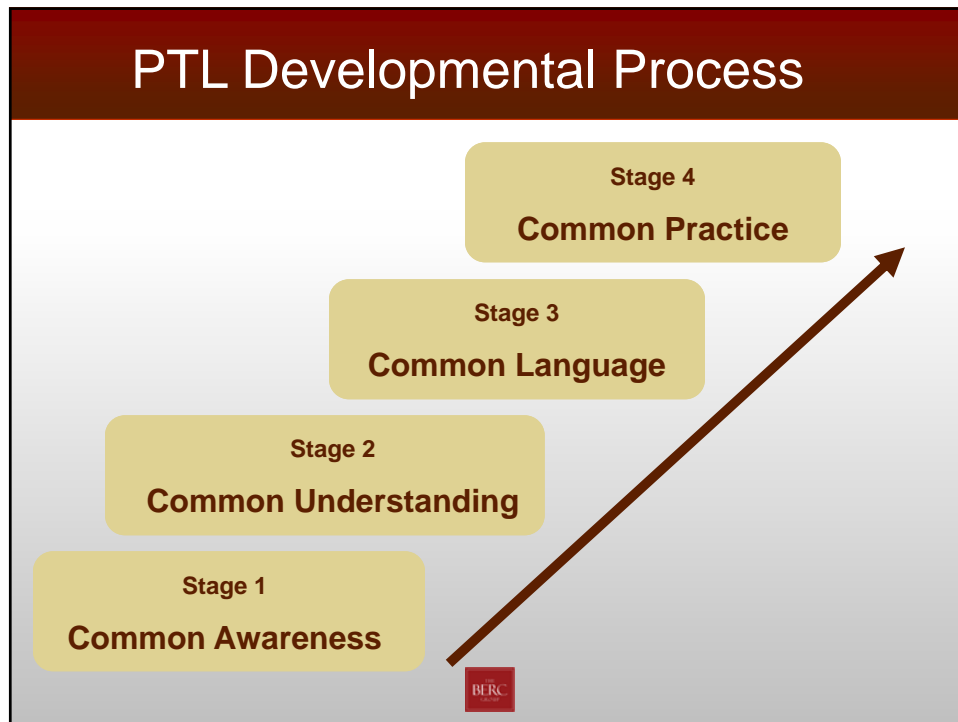




Conclusions/Implications

- The nature of teaching and learning in Hawaii is about the same as other schools in the study
- Less than half of all classrooms are aligned with standards-based reform goals
- More than half of the classrooms observed reflected lessons typical to pre-reform efforts that would result in students meeting the 50th percentile on a norm-referenced system
- We are no longer working in a norm-referenced system
- There is a large mis-match related to reform purpose and classroom practice





Powerful Teaching and Learning

Common Awareness

- That we are going to focus on teaching and learning

Common Understanding

- Why we need to focus on teaching and learning

Common Language

- We use the STAR Framework to talk & plan

Common Practice

- There are common teaching and learning strategies throughout the school

BERC

Common

- **AWARENESS** - Teachers are aware of a clear focus on improving the quality of teaching and learning. In an interview asking them about school improvement initiatives, teachers would identify improving teaching and learning as a central theme of their work.
- **UNDERSTANDING** - Teachers understand the importance of why they are refining and aligning teaching and learning across the school. Teachers will also be able to identify how the various means of professional development support the goal of quality teaching and learning.
- **LANGUAGE** - Teachers are able to dialogue about teaching and learning using a consistent and understood vernacular. Teachers will be able to plan lessons in common and regularly reflect on lessons already taught.
- **PRACTICE** - Classrooms exemplify effective teaching and learning. Teachers will routinely collaborate and visit each other's classrooms to ensure lesson pedagogy is effective and consistent across the campus.

