

Research-Based Practices Symposium
Science Facilitated Discussion Session
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Overall Key Points and Questions

Once a program was implemented, how did you know what was effective?

Districts employ the measures below to determine what programs are effective in increasing student achievement:

- Benchmarking, disaggregating student achievement data, examining sub-groups, examining teacher efficacy
- Formative teacher evaluation → instructional effectiveness (examining causal connections)
- Administrator tools/training in evaluation
 - What does excellence look like?
- Connected to research on student learning
- Building systemic approach to establishing evaluative practices
- Peer-to-peer teaching and learning continuum
- Formative and summative teaching evaluation
- Deepening use of journals/notebooks, focus on student reflection, processing time after hands on work
 - Instructional coaches examining work, one-on-one study of student work
 - Conversation amongst teaching collaborative to determine “just in time” instruction

Other Measures

- Decrease in tardies, discipline referrals, absences
- Curriculum is a conversation between admin and teachers, teachers and students
- Asking the students, engaging students in a curriculum dialogue
- Systemic measure in place, capacity matrix (Leander)- science, secondary
- Bringing in issues, seeking guidance form peers

Models of collecting data on these cultural markers of engagement/achievement

Participants discussed how to measure what we are wanting to measure:

- Formative assessment probes (Paige Keeley’s work)
- Not collecting data on formative assessment, using checklist tool, formative assessment as a diagnostic tool, rather than a summative marker of achievement
- Transfer of knowledge/skills across disciplines
- Psychometric analysis of benchmarking, are we measuring what we intend?

Correlation between benchmarks and TAKS

Participants discussed the correlation between benchmarks and TAKS and what this can and cannot reveal:

- Faithful review of benchmarks reveals gaps in instruction, deficiencies in curriculum/lesson design
- Guidance/support to develop statistical measurements/ correlations
- Benchmarks focused on high stakes questions, indicators lower than actual TAKS, examining benchmarks – TAKS correlation
- Predicting “bottoming out” on curriculum taught immediately prior to TAKS test; later those skills come back up (can’t stop teaching just because of TAKS)
- Instructional coaches in conversation with teachers, visiting classrooms/doing walk-throughs; reporting back to campus leadership team; then connecting to district-level leadership, non-hierarchical culture of collaboration
- Students taking ownership of their data, goal setting

Group action items across districts...

The group determined the below items as ways to improve the use of research in their decision making process:

- Working to develop capacity in evaluating non-standardized measures of achievement/engagement
- Get ahead of the new TEKS!
- Walk through tools/rubrics *science specific*
- Tools/mechanics for student feedback
- Institute for learning out of University of Pittsburgh collaboration w/Austin ISD
- Public domain resource for evaluation of student work
- National School Reform faculty, critical friends training
- Need assessment tools specific to science, shifting mental models
- Concern-Based Adoption Model (self-management-student) [CBAN]
- Handbook of field experiences aligned to TEKS
- Benchmarks developed toward end-of-course exams (not just TAKS)

Cross-district and area-specific

- Professional development collaborative
- Teacher evaluation that enables/encourages increased capacity in instructional efficacy
- Models of collecting evidence of cultural markers of engagement and achievement?

High Priority Items

- [E3] Guidance/support to develop statistical measurements of correlations between evaluative tools; quality of benchmarks
- Tools/rubrics that are specific to walk-throughs in science classrooms
- Tools/mechanisms for gathering and incorporating student feedback
- Foster non-hierarchical cultures of collaboration from district level leadership- to students