Measures of Effective Teaching (MET) Project and a District's Approach to Teacher Effectiveness work

National Comprehensive Center for Teacher Quality

December 13, 2010

AGENDA

- **Measures of Effective Teaching (MET) Project**
  - **Goals**
  - **Sample & Measures**
  - **Initial Findings**

- Denver Public School's approach to Teacher Effectiveness
  - Educator Evaluation System in DPS

Why Does Teacher Effectiveness Matter?

"For 40 years, we've known there's large **differences in student achievement gains** in different teachers' classrooms and yet almost everywhere **teacher evaluation is a perfunctory** and meaningless exercise," Kane said. "If we know teaching matters and, given the evidence, if the quality of instruction varies so much, why do we provide such little feedback to teachers to help them improve?"

Thomas J. Kane, Deputy Director of Research and Data for the Education Program at the Bill & Melinda Gates Foundation – Dec. 2010

Goals of the MET Project

- Improve the quality of information about teacher practice
  - So that educators and policymakers can identify and support good teaching
  - So that teachers know what is effective teaching and how they can improve their practice

Goals of the MET Project, cont'd.

- Conduct rigorous research using multiple measures, including value-added data
- Collaborate with real teachers in real classrooms
- Develop fair, reliable, and multi-dimensional measures of effective teaching

The Measures of Effective Teaching Project

Participating Teachers

Charlotte-Mecklenberg	465
Dallas	315
Denver	130
Hillsborough County	741
Memphis	444
New York City	728
Pittsburgh	196
TOTAL	3,019

- Two school years: 2009-10 and 2010-11
- >100,000 students
- Grades 4-8: ELA and Math
- High School: ELA I, Algebra I and Biology

Table Talk

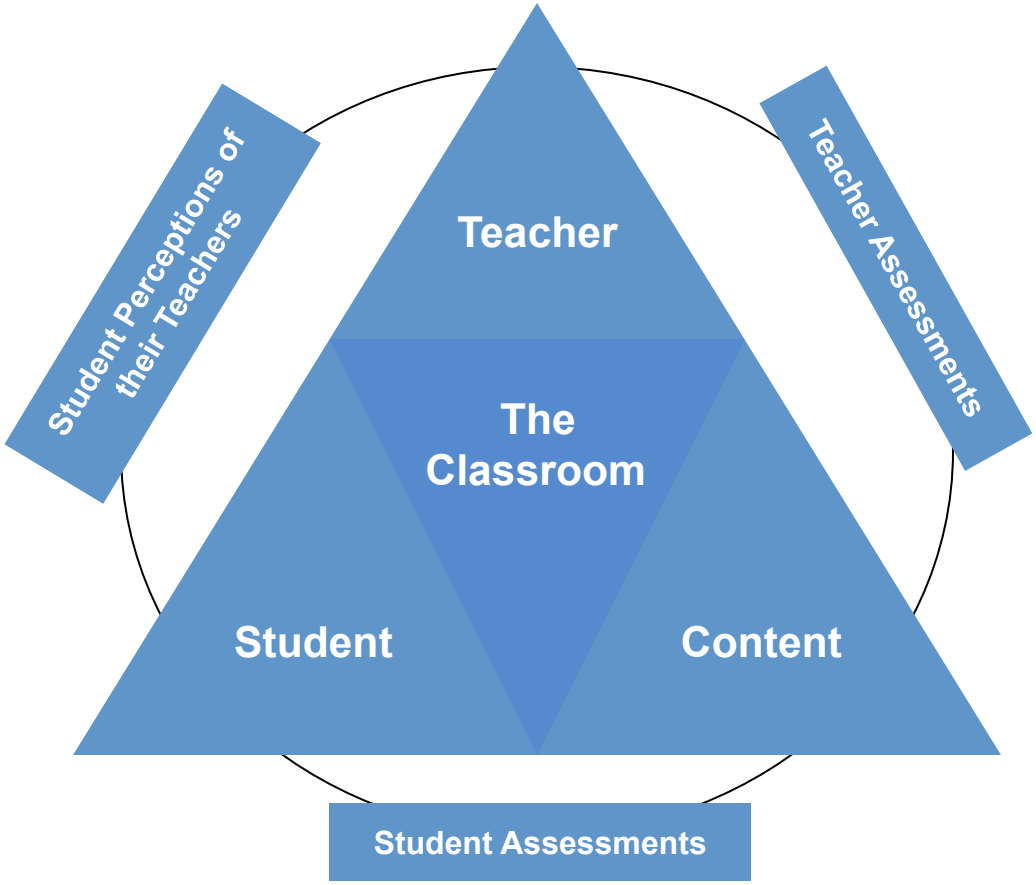
- What do you see as the problem today in teacher evaluation?

MET

- Problems of many current teacher evaluation systems
  - Often do not provide teachers with meaningful feedback on how to improve
  - Do not provide supervisors with objective data to assess teachers' strengths and weaknesses
  - Rarely take into account the full range of what teachers do

- As a result
  - Many teachers leave the teaching profession for other occupations
  - Students are short-changed
  - Administrators decision-making processes about recruitment and professional development are limited

Multiple Measures of Teaching Effectiveness



Measures

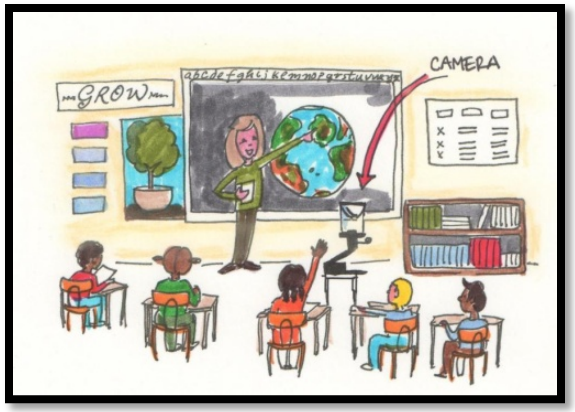
Observable "On-Stage" Metrics

1. Video Capture
   - General Protocol
     - Danielson Framework for Teaching
     - Classroom Assessment Scoring System (CLASS)
     - National Board for Professional Teaching Standards (NBPTS)
   - Content Specific Protocol
     - Mathematical Quality of Instruction (MQI)
     - Protocol for Language Arts Teaching Observations (PLATO)
     - Quality Science Teaching (QST)

Unobservable "Off Stage" Metrics

2. Teacher Reflections (Teacher Video Commentary)
3. Student Perception Survey
4. Teacher Knowledge Assessment
5. Educator Working Conditions Survey
6. Supplemental Student Assessments (part of Value Added Measure)

Video Capture and Reflection



- Video Capture
  - 4 Captures per content area per year
  - Collected via 360° panoramic camera
  - Researchers from ETS view video and use one of 6 observational protocols to score lessons

- Video Reflection
  - Teacher watches video online and responds to questions about the lesson (e.g., confirms lesson objectives, describes prior/next lessons, etc.)
  - Teacher uploads / posts documents relative to lesson (e.g., worksheets, planning guide, etc.)

Front View

Side View

Student Perception Survey

- Online (20 min.)
- Tools
  - Items selected from the Tripod Survey (Ron Ferguson, Harvard University)
  - Assesses the extent to which students feel the classroom environment is engaging, demanding, supportive of learning

Educator Working Conditions Survey

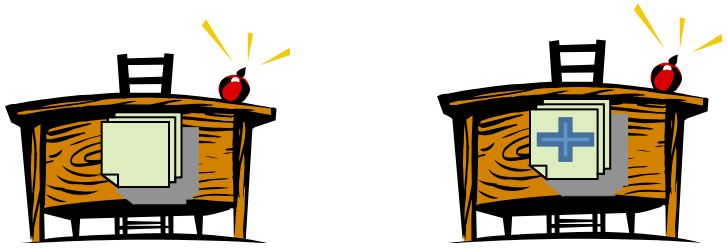
- Online (30 min.)
- Tool
  - Developed by the New Teacher Center
  - Assesses school environment, instructional support, whether teachers are encouraged to try new approaches, and receive appropriate professional development

Teacher Knowledge Assessment

- Online, (1 hr. per content area)
- Tool
  - Developed by ETS and University of Michigan's Learning Mathematics for Teaching Project
  - Assesses teachers' ability to
    - identify errors in student learning,
    - use this knowledge to develop a strategy to correct errors and strengthen student understanding
    - use strategies appropriate for English Language Learners (ELLs)

Supplemental Student Assessment

- Paper/ Pencil (1 hr. per content area)
  - Multiple-Choice and Constructed Response Sections
  - Focuses on higher-order conceptual understanding
- Tool
  - ES Reading – Stanford Achievement Test (SAT) 9
  - ES Math – Balanced Assessment Mathematics (BAM)
  - HS – ACT Quality Core (specific for content area)



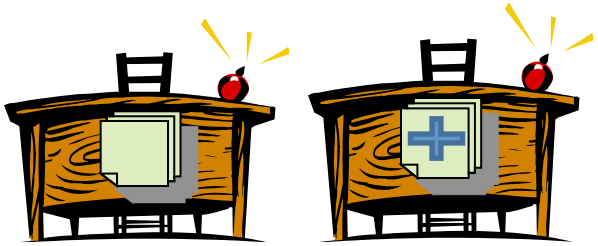
Highlights from Year 1

- 13,000 video captured lessons from over 3,000 teachers
- 80,000 student perception surveys
- 90,000 supplemental student assessments
- 2,000 teacher working condition surveys

Progress to Date

- Assembled data in 5 of 6 districts. No results from Memphis yet.
- Grades 4-8, Math and ELA. No high school results yet.
- Video scoring in early stages.
- Reporting timeline snapshot:
  - Early findings **December 10, 2010**
  - First year findings May 2011
  - Weighting Measures September 2011
  - Second year findings February 2012

MET Project Analysis: Year One

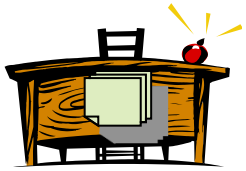


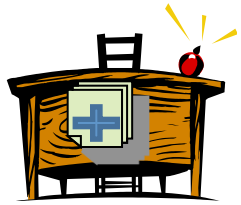
- We observed classrooms using digital video
- We asked students about their perceptions of their teacher and classroom
- We collected student outcomes and calculated value-added for each teacher on state tests and supplemental assessments

Can evidence from one class (or year) predict performance in another?

VA on State Assessments

VA on
Supplemental Tests





Four Key Preliminary Findings

Finding #1:

- **Value-added is predictive, even though value-added scores for a teacher may vary from year to year.**
  - In every grade and subject we studied, a teacher's past success in raising student achievement on state tests (that is, his or her value-added) is one of the strongest predictors of his or her ability to do so again.

Four Key Preliminary Findings

Finding #2:

- **The teachers who are successful in generating value-added gains on state tests *also* tend to help students understand math concepts or demonstrate reading comprehension through writing.**
  - We see evidence that teachers with high value-added on state tests also seem to help students perform better on supplemental tests that measure conceptual understanding.

Four Key Preliminary Findings

Finding #3:

- **Student perceptions can help identify effective teachers and point to specific aspects of teacher practice needing improvement.**
  - The average student knows effective teaching when he or she experiences it.

Four Key Preliminary Findings

Finding #4:

- **Valid teacher feedback need not be limited to test scores alone.**
  - By combining different sources of data, it is possible to provide diagnostic, targeted feedback to teachers who are eager to improve.

What Do the Findings Mean?

- Preliminary findings are imperfect, but we are confident in the directional value they provide.
- They indicate that **states and districts should stay the course** in efforts to design and implement teacher evaluation systems based on multiple measures. Specifically:
  - Work with teachers to develop accurate lists of the students in their care, so that **value-added data are as accurate as possible**
  - Use confidential surveys to **collect student feedback** on specific aspects of a teacher's practice, including those in non-tested grades and subjects
  - **Re-train those who do classroom observations** to provide more meaningful feedback

What's Next?

- **Spring 2011:** Additional year one findings, including analysis of observed classroom lessons
- **Summer 2011:** Composite measure of teacher effectiveness
- **Winter 2011-2012:** Final findings and "validation engine"

For more information

www.metproject.org

Questions about MET?

AGENDA

- Measures of Effective Teaching (MET) Project
  - Goals
  - Sample & Measures
  - Initial Findings

- **Denver Public School's approach to Teacher Effectiveness**
  - **Educator Evaluation System in DPS**

Redesign of the current system to address significant gaps

From	To	Impact
• Evaluations based on principal judgment alone with little inter-rater reliability and inconsistent implementation	• Multiple sources for measurement, evaluation, and development – including peers - with student achievement at the core and steps in place to ensure consistency with improved training on implementation	38% → 90+% *Teachers agreeing "the evaluation process allows accurate assessment of performance"*
• Multiple parts – but the summative results are a Binary "Satisfactory"/ "Unsatisfactory" system	• Differentiated ratings reflecting multiple dimensions – with proper evaluator training to adequately implement	29% → 90+% *Teachers who said the evaluation process helped them improve*
• Feedback and development opportunities not adequately linked to identified areas for improvement	• Regular feedback from multiple sources and development needs linked to plans to address them for all teachers; additional tailored support for new teachers	40% → 90+% *Teachers with development needs identified via evaluation*

Current

Future

Data based on The Widget Effect - TNTP

Teacher Effectiveness in DPS

- DPS invited to participate in the *Measures of Effective Teaching Project* (Fall 2009)
  - Educator Effectiveness Initiative was getting started in DPS
  - Opportunity to incorporate research findings that included DPS teachers
  - Part of a network of districts across the USA engaged in similar reform

Elements of Effective Teaching

STEP 1: *What's Effective Teaching?*

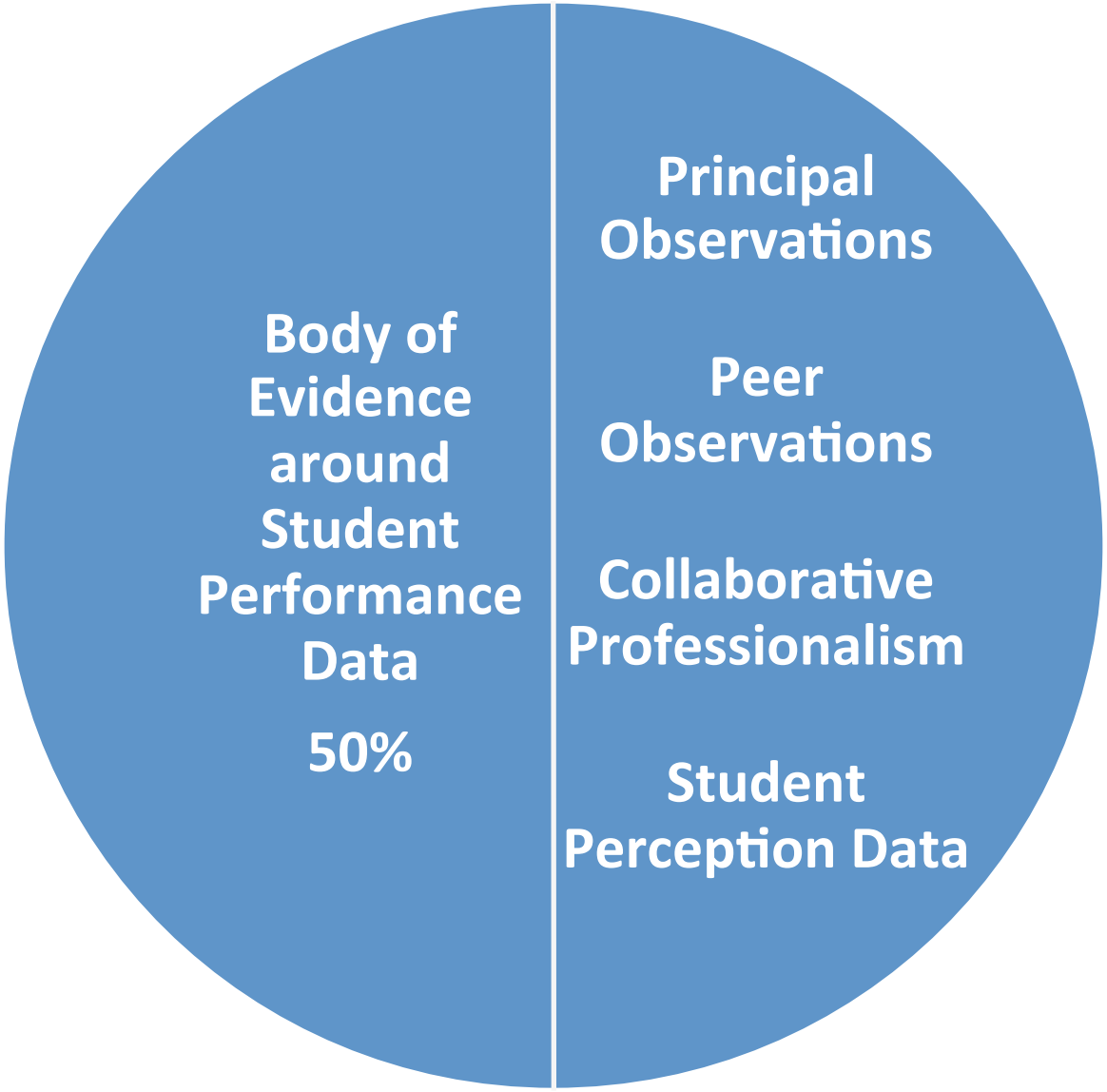
- Think about your most positive experience as a student. What was it about that teacher's practice that made him/her effective?
  - Individually
    - Jot down a list of the things that stand out for you
    - What did that effective teacher do?
  - Triads (share and compare)
  - Debrief

Elements of Effective Teaching

Step Two: *Organizing qualities of effective teaching*

- Look back over your lists with your triad and label your descriptors using the following domain categories where you believe they fit.
  - Learning Environment = LE
  - Instruction = I
  - Professionalism = P
  - Planning & Preparation = PP
- Debrief

Components of LEAP (Leading Effective Academic Practice)



Summary of Observation Tool Design

- Empowers teachers to **diagnose practice** and identify strengths and development areas
- Meaningfully **differentiated performance** of teachers
  - Four rating categories, with seven distinct scores
- Onstage and Offstage **Domains**
  - 8 **Expectations** and 18 **Indicators**
  - Comprehensive but manageable
  - Teacher and Student behaviors
- Focus on **English Language Learners**, urban lens
- Used for **Professional Development and Evaluation**

DOMAINS

INDICATORS

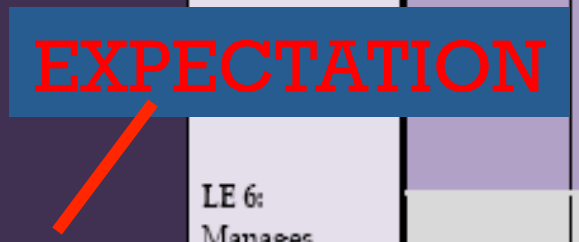
EXPECTATIONS

DOMAIN	EXPECTATION	INDICATOR	
LEARNING ENVIRONMENT	POSITIVE CLASSROOM CULTURE AND CLIMATE	LE 1	Demonstrates **care, interest in, and respect for students** and their communities and cultures
		LE 2	Fosters a **supportive and respectful learning environment** among students
		LE 3	**Motivates students to learn**, take academic risks, and demonstrate classroom
	EFFECTIVE CLASSROOM MANAGEMENT	LE 4	Implements **high, clear exp behavior** and appropriately misbehavior
		LE 5	Classroom **resources and space** reflect and ir learning
			, transitions, and
INSTRUCTION	STANDARDS-BASED GOALS	I 1	Clearly communicates **learning objective(s)** for the lesson, connecting to **larger rationale(s)**
		I 2	Provides **descriptive feedback** to students on achievement and next steps
	HIGH-IMPACT INSTRUCTIONAL MOVES	I 3	Supports student success with **rigorous tasks**
		I 4	Uses **questioning** effectively
		I 5	**Checks for understanding** in varied ways throughout lesson
		I 6	Uses **technology and digital resources** appropriately to enhance student learning
	DIFFERENTIATION	I 7	Is proactive in **planning for and addressing all students' needs**
	MASTERFUL CONTENT KNOWLEDGE	I 8	Demonstrates **deep knowledge of content area** and relevant standards
	ACADEMIC LANGUAGE DEVELOPMENT	I 9	Ensures **content is accessible for ELLs**
		I 10	Promotes students' active and appropriate **use of academic language**
	21ST CENTURY SKILLS	I 11	Provides opportunities for **creativity/ innovation, critical thinking** and **problem solving**
		I 12	Fosters **communication and collaboration** among students

DRAFT

Dom	Expectation	Indicator	Observable Evidence	Ineffective (1–2)	Approaching (3–4)	Effective (5–6)	Distinguished (7)
LEARNING ENVIRONMENT	EFFECTIVE CLASSROOM MANAGEMENT	LE 6: Manages student groups, transitions, and resources effectively	Teacher Behaviors	• Rituals and routines are used inconsistently, not at all, or are inefficient, so transitions and handling of resources result in loss of learning time. • Rituals and routines, if in place, are not clear to students. • No clear schedule for the day or lesson is evident.	• Rituals and routines often make transitions and handling of resources efficient but sometimes result in loss of learning time. • Rituals and routines are somewhat clear to students; teacher needs to remind students of these routines. • A clear schedule for the day is evident, but it may not be clear or updated.	• Rituals and routines make transitions and handling of resources highly efficient and do not result in loss of learning time. • Rituals and routines are a way of life in the classroom and are embedded into learning. • A clear schedule for the day or lesson is displayed for students.	*In addition to 'Effective':* • Students may regular handle resources and duties (e.g., organizin and maintaining class library or equipment, manipulatives, tools), which does not result in loss of learning tim • Teacher has to do minimal management or reminders to handl groups, transitions, and resources becaus students have internalized related routines and rituals.
			Student Behaviors	• Students are not familiar with classroom routines and rituals (e.g. what to do when they enter classroom, need to use the restroom, find a resource, sharpen pencils, etc.) • Students are not familiar with lesson processes (e.g. how lessons begin or end, or how to move from whole group to independent or group work), as evidenced by broad confusion, transitions that last more than 1 minute, and many students engaging in off-task behaviors.	• Students are familiar with classroom routines and rituals (e.g. what to do when they enter classroom, need to use the restroom, find a resource, sharpen pencils, etc.) • Students are familiar with lesson processes (e.g. how lessons begin and end and how to move from whole group to independent or group work), but they may not adhere to these transitions, as evidenced by some confusion, transitions that about 1 minute, and/or some students engaging in off-task behaviors.	• Students are familiar with classroom routines and rituals (e.g. what to do when they enter classroom, need to use the restroom, find a resource, sharpen pencils, etc.) • Students organize and maintain classroom library, math manipulatives, digital tools and resources, and other classroom materials. • Students move seamlessly through lesson processes (see examples in Approaching), as evidenced by minimal confusion, transitions that last less than 1 minute, and few (0–10%) students engaging in off-task behavior.	*In addition to "Effective":* • Students can self-manage lesson process based on routines or protocols established b teacher. • Students remind each other of routines and rituals to manage groups, transitions, an resources.

Dom	Expectation	Indicator	Observable Evidence	Ineffective (1–2)	Approaching (3–4)	Effective (5–6)	Distinguished (7)
LEARNING ENVIRONMENT	EFFECTIVE CLASSROOM MANAGEMENT	LE 6: Manages student groups, transitions, and resources effectively	Teacher Behaviors	• Rituals and routines are used inconsistently, not at all, or are inefficient, so transitions and handling of resources result in loss of learning time. • Rituals and routines, if in place, are not clear to students. • No clear schedule for the day or lesson is evident.	• Rituals and routines often make transitions and handling of resources efficient but sometimes result in loss of learning time. • Rituals and routines are somewhat clear to students; teacher needs to remind students of these routines. • A clear schedule for the day is evident, but it may not be clear or updated.	• Rituals and routines make transitions and handling of resources highly efficient and do not result in loss of learning time. • Rituals and routines are a way of life in the classroom and are embedded into learning. • A clear schedule for the day or lesson is displayed for students.	*In addition to 'Effective':* • Students may regular handle resources and duties (e.g., organizin and maintaining class library or equipment, manipulatives, tools), which does not result in loss of learning tim • Teacher has to do minimal management or reminders to handl groups, transitions, and resources becaus students have internalized related routines and rituals.
			Student Behaviors	• Students are not familiar with classroom routines and rituals (e.g. what to do when they enter classroom, need to use the restroom, find a resource, sharpen pencils, etc.) • Students are not familiar with lesson processes (e.g. how lessons begin or end, or how to move from whole group to independent or group work), as evidenced by broad confusion, transitions that last more than 1 minute, and many students engaging in off-task behaviors.	• Students are familiar with classroom routines and rituals (e.g. what to do when they enter classroom, need to use the restroom, find a resource, sharpen pencils, etc.) • Students are familiar with lesson processes (e.g. how lessons begin and end and how to move from whole group to independent or group work), but they may not adhere to these transitions, as evidenced by some confusion, transitions that about 1 minute, and/or some students engaging in off-task behaviors.	• Students are familiar with classroom routines and rituals (e.g. what to do when they enter classroom, need to use the restroom, find a resource, sharpen pencils, etc.) • Students organize and maintain classroom library, math manipulatives, digital tools and resources, and other classroom materials. • Students move seamlessly through lesson processes (see examples in Approaching), as evidenced by minimal confusion, transitions that last less than 1 minute, and few (0–10%) students engaging in off-task behavior.	*In addition to "Effective":* • Students can self-manage lesson process based on routines or protocols established b teacher. • Students remind each other of routines and rituals to manage groups, transitions, an resources.



Dom	Expectation	Indicator	Observable Evidence	Ineffective (1–2)	Approaching (3–4)	Effective (5–6)	Distinguished (7)
LEARNING ENVIRONMENT	EFFECTIVE CLASSROOM MANAGEMENT	LE 6: Manages student groups, transitions, and resources effectively	Teacher Behaviors	• Rituals and routines are used inconsistently, not at all, or are inefficient, so transitions and handling of resources result in loss of learning time. • Rituals and routines, if in place, are not clear to students. • No clear schedule for the day or lesson is evident.	• Rituals and routines often make transitions and handling of resources efficient but sometimes result in loss of learning time. • Rituals and routines are somewhat clear to students; teacher needs to remind students of these routines. • A clear schedule for the day is evident, but it may not be clear or updated.	• Rituals and routines make transitions and handling of resources highly efficient and do not result in loss of learning time. • Rituals and routines are a way of life in the classroom and are embedded into learning. • A clear schedule for the day or lesson is displayed for students.	*In addition to 'Effective':* • Students may regular handle resources and duties (e.g., organizin and maintaining class library or equipment, manipulatives, tools), which does not result in loss of learning tim • Teacher has to do minimal management or reminders to handl groups, transitions, and resources becaus students have internalized related routines and rituals.
			Student Behaviors	• Students are not familiar with classroom routines and rituals (e.g. what to do when they enter classroom, need to use the restroom, find a resource, sharpen pencils, etc.) • Students are not familiar with lesson processes (e.g. how lessons begin or end, or how to move from whole group to independent or group work), as evidenced by broad confusion, transitions that last more than 1 minute, and many students engaging in off-task behaviors.	• Students are familiar with classroom routines and rituals (e.g. what to do when they enter classroom, need to use the restroom, find a resource, sharpen pencils, etc.) • Students are familiar with lesson processes (e.g. how lessons begin and end and how to move from whole group to independent or group work), but they may not adhere to these transitions, as evidenced by some confusion, transitions that about 1 minute, and/or some students engaging in off-task behaviors.	• Students are familiar with classroom routines and rituals (e.g. what to do when they enter classroom, need to use the restroom, find a resource, sharpen pencils, etc.) • Students organize and maintain classroom library, math manipulatives, digital tools and resources, and other classroom materials. • Students move seamlessly through lesson processes (see examples in Approaching), as evidenced by minimal confusion, transitions that last less than 1 minute, and few (0–10%) students engaging in off-task behavior.	*In addition to "Effective":* • Students can self-manage lesson process based on routines or protocols established b teacher. • Students remind each other of routines and rituals to manage groups, transitions, an resources.

INDICATOR

Dom	Expectation	Indicator	Observable Evidence	Ineffective (1–2)	Approaching (3–4)	Effective (5–6)	Distinguished (7)
LEARNING ENVIRONMENT	EFFECTIVE CLASSROOM MANAGEMENT	LE 6: Manages student groups, transitions, and resources effectively	Teacher Behaviors	• Rituals and routines are used inconsistently, not at all, or are inefficient, so transitions and handling of resources result in loss of learning time. • Rituals and routines, if [illegible]lace, are not clear to [illegible]udents. • N[illegible]clear schedule for th[illegible]day or lesson is ev[illegible]ent.	• Rituals and routines often make transitions and handling of resources efficient but sometimes result in loss of learning time. • Rituals and routines are somewhat clear to students; teacher needs to remind students of these routines. • A clear schedule for the day is evident, but it may not be clear or	• Rituals and routines make transitions and handling of resources highly efficient and do not result in loss of learning time. • Rituals and routines are a way of life in the classroom and are embedded into learning. • A clear schedule for the day or lesson is displayed for students.	*In addition to 'Effective':* • Students may regular[illegible] handle resources and[illegible] duties (e.g., organizin[illegible] and maintaining class[illegible] library or equipment,[illegible] manipulatives, tools),[illegible] which does not result[illegible] in loss of learning tim[illegible] • Teacher has to do minimal management[illegible] or reminders to handl[illegible] groups, transitions,[illegible] and resources becaus[illegible]
			Student Behaviors	• St[illegible]dents a[illegible] wi[illegible] class[illegible] an[illegible] do[illegible]when t[illegible] cla[illegible]room[illegible] th[illegible]restroo[illegible] re[illegible]urce, sharpen pe[illegible]ils, etc.) • St[illegible]dents are not familiar wi[illegible] lesson processes (e.[illegible] how lessons begin or[illegible]nd, or how to move fr[illegible] whole group to independent or group work), as evidenced by broad confusion, transitions that last more than 1 minute, and many students engaging in off-task behaviors.	resource, sharpen pencils, etc.) • Students are familiar with lesson processes (e.g. how lessons begin and end and how to move from whole group to independent or group work), but they may not adhere to these transitions, as evidenced by some confusion, transitions that about 1 minute, and/or some students engaging in off-task behaviors.	resource, sharpen pencils, etc.) • Students organize and maintain classroom library, math manipulatives, digital tools and resources, and other classroom materials. • Students move seamlessly through lesson processes (see examples in Approaching), as evidenced by minimal confusion, transitions that last less than 1 minute, and few (0–10%) students engaging in off-task behavior.	• Students remind each other of routines and rituals to manage groups, transitions, an[illegible] resources.

OBSERVABLE EVIDENCE @ 4 LEVELS FOR T; 0-4 LEVELS FOR Ss

Dom	Expectation	Indicator	Observable Evidence	Ineffective (1–2)	Approaching (3–4)	Effective (5–6)	Distinguished (7)
LEARNING ENVIRONMENT	EFFECTIVE CLASSROOM MANAGEMENT	LE 6: Manages student groups, transitions, and resources effectively	Teacher Behaviors	• Rituals and routines are used inconsistently, not at all, or are inefficient, as transitions and handling of resources	• Rituals and routines often make transitions and handling of resources efficient but sometimes result in loss of learning time.	• Rituals and routines make transitions and handling of resources highly efficient and do not result in loss of learning time.	*In addition to 'Effective':* • Students may regularly handle resources and duties (e.g., organizing and maintaining classroom library or equipment, manipulatives, tools), in ways that do not result in loss of learning time. Student has to do little management because students have internalized related routines and rituals.
				the day or lesson is evident.	the day is evident, but it may not be clear or updated.	the day or lesson is displayed for students.	groups, transitions, and resources because
			Student Behaviors	• Students are not familiar with classroom routines and rituals (e.g. what to do when they enter classroom, need to use the restroom, find a resource, sharpen pencils, etc.) • Students are not familiar with lesson processes (e.g. how lessons begin or end, or how to move from whole group to independent or group work), as evidenced by broad confusion, transitions that last more than 1 minute, and many students engaging in off-task behaviors.	• Students are familiar with classroom routines and rituals (e.g. what to do when they enter classroom, need to use the restroom, find a resource, sharpen pencils, etc.) • Students are familiar with lesson processes (e.g. how lessons begin and end and how to move from whole group to independent or group work), but they may not adhere to these transitions, as evidenced by some confusion, transitions that about 1 minute, and/or some students engaging in off-task behaviors.	• Students are familiar with classroom routines and rituals (e.g. what to do when they enter classroom, need to use the restroom, find a resource, sharpen pencils, etc.) • Students organize and maintain classroom library, math manipulatives, digital tools and resources, and other classroom materials. • Students move seamlessly through lesson processes (see examples in Approaching), as evidenced by minimal confusion, transitions that last less than 1 minute, and few (0–10%) students engaging in off-task behavior.	*In addition to "Effective":* • Students can self-manage lesson process based on routines or protocols established b teacher. • Students remind each other of routines and rituals to manage groups, transitions, an resources.

4 LEVELS OF EFFECTIVENESS, BUT 7 RATING CATEGORIES

Achieve.

2010

- Develop DPS definition of teacher effectiveness
- Engage principals and teachers in system design
- Build organizational capacity through principal professional development and Teacher Leader Academies
- Refine evaluation system design based on preliminary MET research findings

2011

January

Pilot and refine evaluation components and process at 16 schools

2012

August – June

- Roll out the new system to 80% of teachers groups at 80% of DPS schools
- Pilot new principal performance assessment system to align to teacher system
- Refine evaluation system design based on final MET research findings

Teacher groups not included in Phase 1 2011-12 roll-out will be included in 2012-13 roll-out.

Next Steps and Challenges

Next Steps

- Pilot new tool in 16 schools (Spring 2011)
- Develop Off-stage Elements
- Educator Evaluation System Roll Out (Fall 2011)
- Video Usage Study (Fall 2011)

Challenges

- Build confidence of observers & prepare the observed
- New system to balance accountability AND support/feedback for educators
- Incorporation of MET findings and feedback from the field

www.metproject.org

Theress Pidick

Director, MET Project (Denver Public Schools)

Theress_pidick@dpsk12.org

720-423-3895