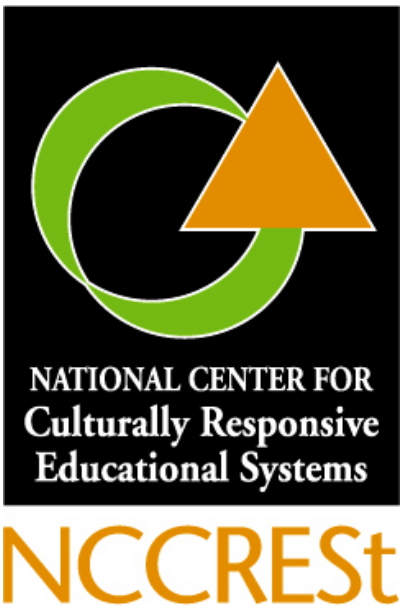
Module

4

MODULE 4: COLLECTION AND USE OF EVIDENCE

Academy 1: Mining Meaningful Data



Facilitator's Manual

NATIONAL CENTER FOR CULTURALLY RESPONSIVE
EDUCATIONAL SYSTEMS

Facilitator's Manual

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Academy 1: Mining Meaningful Data

We strive to produce the most reliable and current academies possible. Therefore, our academies are updated regularly based on facilitator and participant feedback, on subject-matter expert input, and on up-to-date research. You will find the version of this academy on the Table of Contents page. Please check our web site regularly -- www.NCCRESt.org – to find new versions and addenda to this academy.

Module 4: Collection and Use of Evidence

Academy 1: Mining Meaningful Data – version 1 (2005)

Academy Abstract:

This Academy helps participants develop their skills to analyze data over time to adjust and improve their strategies for instructional improvement. The activities in this module begin with personal reflection by participants on values and beliefs about the identification, collection and use of data for school improvement. It continues with a brief overview of the new accountability systems, moves to current methods being used by school systems and how this affects all students, and ends with an activity that requires participants to continue their reflection on tracking data that they can use to prepare for subsequent activities. Participants use data from their own district or another district in their state to begin to examine the link between data and practice changes.

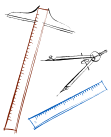
Academy Outcomes:

As a result of the activities and information shared at this Leadership Academy, module participants will:

- Clarify their reasons or rationale for using data to change practice.
- Identify and align meaningful data to renew their school improvement efforts to be more culturally responsive.
- Determine what data should be used to guide practice.
- Use a district-wide improvement survey and other forms of displaying outcomes to analyze data.

Academy Agenda:

Review the agenda, noting the structure of the academy (lecture, activities, question-answer period, break time, assessment), and process for answering participant questions.



Academy Materials

You should have these materials prior to conducting the Academy:

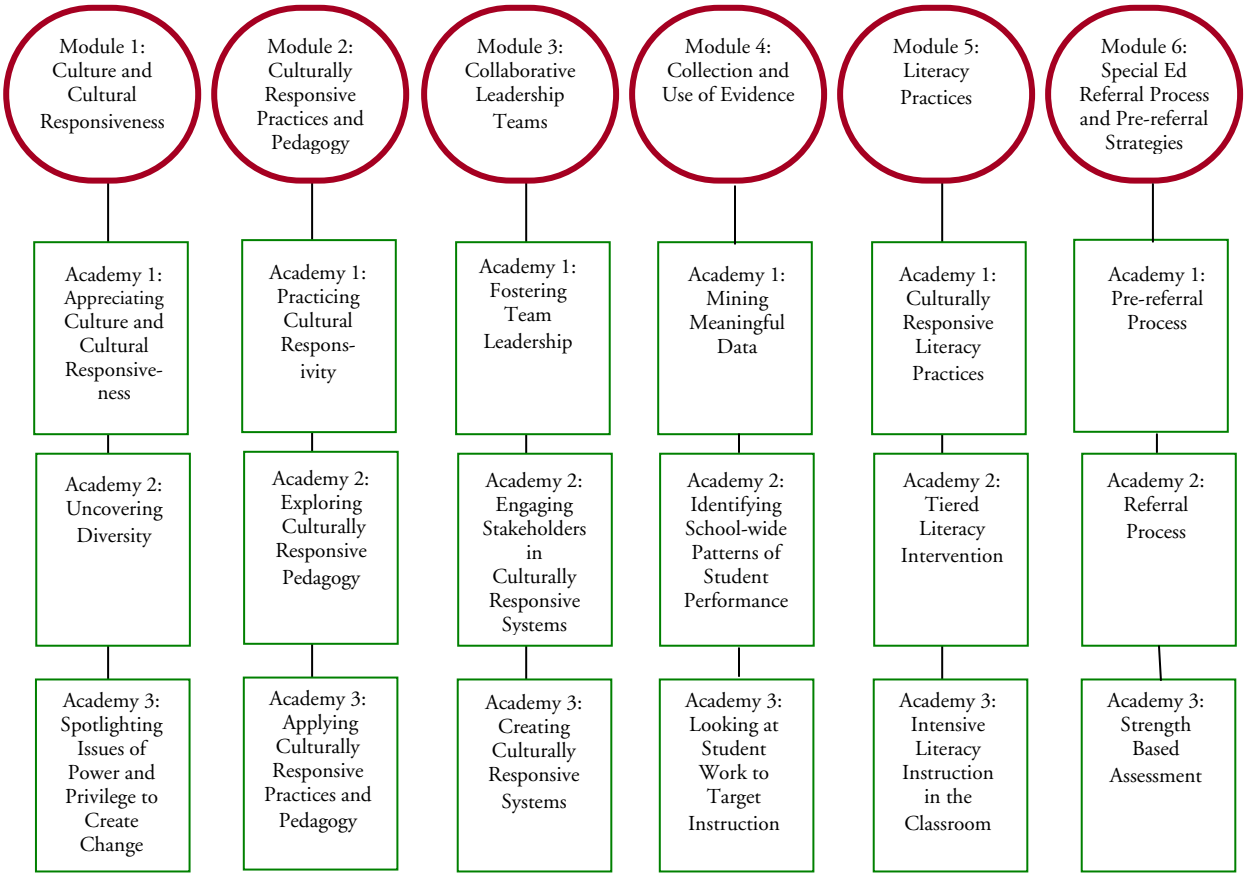
- FACILITATOR'S MANUAL
- ACADEMY POWERPOINTS and access to a PowerPoint presentation system
- FACILITATOR LESSON PLANS: Lesson plans are provided as Appendix A.
- PARTICIPANT HANDOUTS. Handouts are provided as Appendix B and contain the Leadership Academy overview and agenda, paper for note-taking, activity handouts, self-assessment and academy evaluations, and resources. (Handouts can be copied double sided and in black and white).
- NAME TAGS (Make sure you have broad tipped felt pens for name tags so that people write their names in large print that can be read from a distance).
- CHART PAPER
- MARKERS
- TAPE

Appendices

Lesson plans and participant handouts can be found in Appendices A and B respectively at the end of each academy.

NCCRESt Academies

The goal of all academies is to create a network of skilled and knowledgeable teacher leaders, administrators, community members, and family members who will serve as effective transformational agents of change for culturally responsive practices and systems. Academy participants are generally teams of educational professionals from schools and districts, selected to advance knowledge and practice related to culturally responsive systems and practices. Academies are organized into modules that share an overarching theme. The modules include:



Academies are designed to (1) engage adult learners in advancing their knowledge and skills about culturally responsive practices within organizations; (2) build communities of practice in which inquiry and public discourse are cornerstones of continuous improvement in culturally responsive systems; and (3) embody approaches to learning that affirm the sociocultural histories and experiences that all members of the academies bring to shared learning. Finally, the Leadership Academies create forums for open discussion to help school and community members think more broadly and systemically about culturally responsive schools and classrooms.

Facilitator Note

Each Facilitator Manual provides detailed information about every aspect of an academy from the academy outcomes through the academy content and, finally, evaluations. In most cases, you will follow the same process when presenting every academy: (1) Introduction to NCCRESt Academies; (2) Academy Overview; (3) Academy Session; (4) Self-evaluation; and (5) Academy Evaluation.

Please make sure that you prepare for each academy by reviewing all the materials: Facilitator Manual, lecturette presentation, lesson plans, activity handouts, and participant materials.

If you have questions or comments about this or any other academy, please contact NCCRESt. We welcome your questions, suggestions, and feedback.

Tips for Facilitating Leadership Academies

Before delving into the flow of the academies, please read through the following tips that can help you and your participants get comfortable and maintain focus on learning and growing. Notice that each tip is accompanied by an icon. . These icons signal specific types of facilitator behavior and you will notice them appearing throughout the academy as symbols for actions, explanations, and notations. We hope that you enjoy facilitating these learning opportunities as much as we have.

TIPS FOR GETTING STARTED: Introduce the academy facilitators, and provide an overview of NCCRESt and sponsors of the academy. Talk a bit about what a Leadership Academy is, its structure, how it is designed, and present the academy topic and outcomes. Explain the roles the facilitators will play and have participants introduce themselves and briefly tell what they'd like to learn or take away with them at the end of the academy, focusing on what would be useful to them in their practice. This should take no longer than 15 minutes. You are provided with a PowerPoint to lead this introduction.

TIPS FOR MOVING THINGS ALONG: Included in the academy is a time schedule for activities – stick to it! Each activity has a built in timer, simply click to the next slide when you finish reading the instructions, the timer will keep you on schedule so you won't have to watch the clock. Try to begin and end on time, and instead of scheduling multiple breaks, invite people to get up to stretch, get a drink or use the bathroom as needed.

During discussions, try not to let one person dominate the conversation or go off on tangents that are narrowly focused on their own experiences. To "cut people off" politely, ask others what they think or ask a questions to get the discussion moving in a different direction.

TIPS FOR MANAGING ACTIVITIES: Before beginning an activity, briefly review the activity with the group and discuss its purpose. Read through the tasks and look over supporting materials. Ask if there are any questions. If necessary, have each group select a person who will take notes and report to the larger group the outcomes of their discussion or work.

While the participants are working in their small groups, circulate from group to group to make sure they are on task and to answer any questions. Be available if a group gets stuck, but don't interfere in the group process unless they need assistance.

TIPS FOR LECTURETTES: Practice timing yourself so you don't run over the allotted period. Copies of the PowerPoint slides and facilitator notes are provided in this manual. Each slide is accompanied by a lecturette icon (as seen on the right), a pause for questions and answers is identified by a question icon (seen below in the "tips for participant questions" section), and a stop sign icon indicates a participant activity.

Tips for participant questions: Paper is included in the participant materials for note-taking. Urge participants to jot down notes and save their questions for the Q and A periods so the academy does not run over the allotted time.

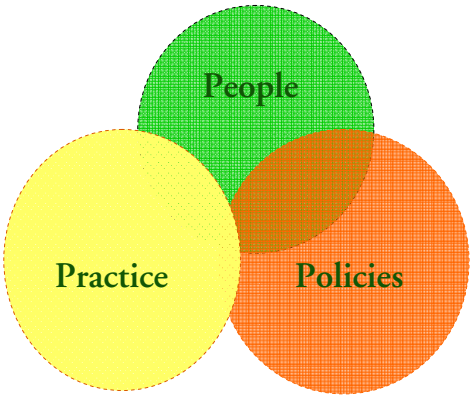
TIPS FOR LEAVE-TAKING: To wrap things up, ask people to take a minute to think about what they learned during the academy. Ask the participants to complete the self-assessment and share their thoughts and any last words. Use the overhead or chart paper to record what they say as a way to highlight new learning and congratulate the group on their hard work. Ask participants to complete the Academy Evaluation before they leave as a way to improve future academies.

Professional Learning Principles

NCCRESt has a set of Professional Learning Principles for work with educators who work in practice, policy, and research settings. These principles emerged from a variety of research traditions, particularly those focused on sociocultural perspectives. As a lens for understanding human learning, sociocultural perspectives help us understand the relationship between individual psychological characteristics, identification with and mastery of specific cultural and linguistic heritages, and the contexts in which learning occurs. This perspective offers us a way of understanding the interaction between the tasks or activities that focus learning and the various ways that the tasks may be understood and valued by learners. Finally, the kinds of intellectual and affective tools that learners bring to tasks, or the kinds of tools they may need to develop, are also influenced by the nature of tasks and the learners' own cultural and psychological characteristics. This framework is particularly useful as the United States navigates the increasing cultural and linguistic diversity of our school-age population. Our principles have been influenced by research from the Center for Research on Education, Diversity, and Excellence (CREDE) as well as the National Staff Development Council.

PRINCIPLE 1: Professional Learning is focused on improving learning within a diverse, multicultural community. The diverse, multicultural context that characterizes most contemporary communities must be grounded in the outcomes, content, and activities of any professional learning activity.

PRINCIPLE 2: Professional Learning engages educators in joint, productive activity through discourse, inquiry, and public practice. Effective professional learning is reached by continuous, collaborative interaction with colleagues through discussion, knowledge development and understanding, and directed inquiry around practice.



PRINCIPLE 3: Professional Learning is a facet of daily practice, not a compartmentalized activity. Since professional learning is embedded within practice, it becomes part of daily discourse, shared discussions about student learning and student products, as well as more formalized mentoring and coaching, meetings, study groups, and examination of evidence from inquiry cycles.

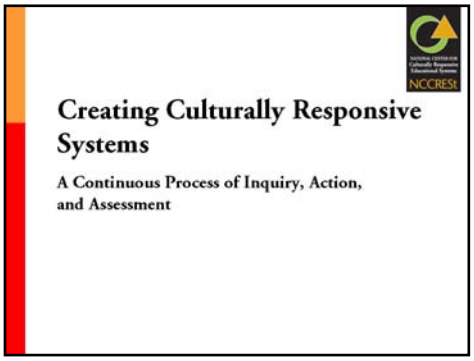
PRINCIPLE 4: Professional Learning results in improved learning for students who have been marginalized from the academic and social curricula of the US public school system. Professional learning scaffolds teacher learning so that the influence of individual cultural identity and values on individual and systems practices are understood, mediated by expanding professional knowledge of the sociocultural dimensions of learning, and its impact assessed through student involvement and performance in academic and social curricula.

PRINCIPLE 5: Professional Learning influences decisions about what is taught and why. Since professional learning is generative, educators' knowledge will expand and become more complex as it develops. It is expected that professional learning will result in examination and improvements to the content and process of instruction for culturally and linguistically diverse learners.

PRINCIPLE 6: Professional Learning is focused on the diffusion of professional knowledge to build sustainable educational communities focused on improving learning outcomes for students and their families who are culturally and linguistically diverse. As educators gain knowledge, they also have the responsibility for sharing and mentoring others both in the practice of professional learning and in the expanded knowledge that comes from such activity.

Academy 1:
Mining Meaningful Data

Slide 1



Creating Culturally Responsive Systems: A Continuous Process of Inquiry, Action, and Assessment:

In this academy we will examine aspects of using data to improve student performance. By the end, you should be able to clarify your reasons for using data and identify and align data to improve practice.

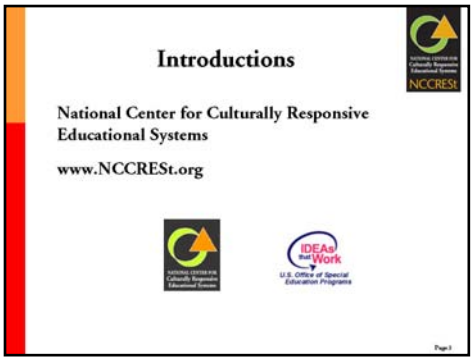
Facilitator Note: Allow 10 minutes for the introduction to the academy (Slides 1 - 7).

Slide 2

Introduction – Facilitators and Sponsors:

Introduction: Introduce the academy facilitators (your position and background, and co-facilitators, if any) and the school or district that is sponsoring the academy.

Slide 3



Introduction - NCCRESt:

The National Center for Culturally Responsive Educational Systems (NCCRESt) is funded by the Office of Special Education Programs at the U.S. Department of Education. The mission of NCCRESt is to close the achievement gap between students from culturally and linguistically diverse backgrounds and their peers, and to reduce inappropriate referrals to special education.

As a result of the work of NCCRESt, we expect to see an increase in the use of prevention and early intervention strategies, a decrease in inappropriate referrals to special education, and an increase in the number of schools using effective literacy and behavioral interventions for students who are culturally and linguistically diverse.

As part of our work, we link existing general education reform networks with special education networks. We also synthesize existing research into products that are made accessible in both print and electronic versions. These publications support the efforts of professionals, families, researchers, advocacy organizations and others involved in the work to create culturally responsive, inclusive school communities.

Slide 4

Introduction – Leadership Academies:

Leadership Academies: NCCRESt helps educators develop leadership skills for culturally responsive practice through leadership academies.

The academies are designed to be used by local researchers and professional developers who are invested in collaborating with schools. The goal of this collaboration is to build more culturally responsive schools that successfully educate students from diverse cultural and linguistic backgrounds. The approach includes careful consideration of the content for professional development, adult learning principles, and selection of teams from schools and districts that can support their colleagues' learning and practice. In this way, professional development can build on converged needs and extend the creativity and skill of practitioners.

NCCRESt specifically works with school districts and state education agencies to build information systems that help leadership teams focus on goals for instructional, curricular, and cultural improvement. NCCRESt also works toward empowering action research agendas among school professionals.

Slide 5

Introduction – Participants:

Have participants introduce themselves and briefly tell what they'd like to learn or take away with them at the end of the Academy, focusing on what would be useful to them in their practice.

Slide 6

Agenda:

15 min: Introductions, Greetings, and Warm up

40 min: Activity 1: Mining Report Card Data

20 min: Lecturette 1: Mining System-wide Data

30 min: Activity 2: Multiples of Instructional Data

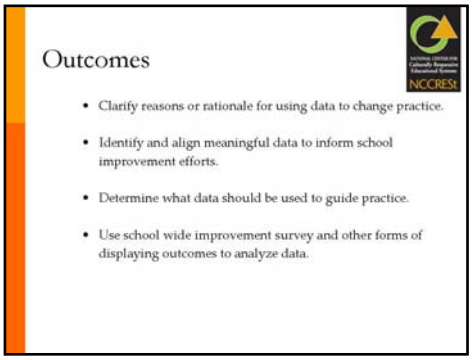
10 min: Break

15 min: Lecturette 2: Mining Classroom Data

20 min: Activity 3: Using Data to Support School Improvement

30 min: Leave-taking and Feedback

Slide 7



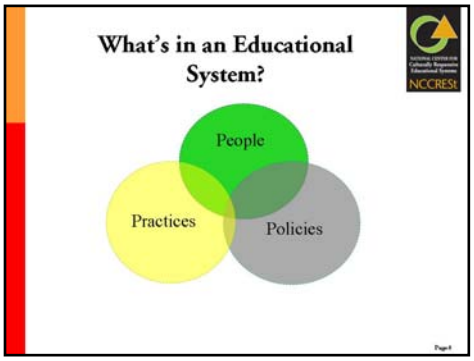
Outcomes:

As a result of this academy, participants learn skills and acquire information to support them in their professions. These outcomes provide a glimpse of the academy topics. You may wish to run through these outcomes quickly, or give the participants a brief preview of the lessons as you talk about each outcome. These are the four outcomes for this academy:

As a result of the activities and information shared at this Leadership Academy, module participants will:

- Clarify their reasons or rationale for using data to change practice.
- Identify and align meaningful data to inform their school improvement efforts.
- Determine what data should be used to guide practice.
- Use a district-wide improvement survey and other forms of displaying outcomes to analyze data.

Slide 8



What's in an Educational System?

Before you can act systemically, you need to know what aspects of a system you need to involve. NCCRESt has developed a conceptual framework for understanding culturally responsive educational systems that identifies three key elements that comprise an educational system: the people, the practices, and the policies. People are key since educational systems are created to educate people, infants, children, adolescents, and adults. Educational systems employ people. Teachers and other school practitioners work together to create effective learning communities for the students they serve. School leaders and other administrators help to keep the system flowing so that students enter, progress and graduate, and teachers and other personnel are recruited, hired, coached, evaluated and retired in a constantly flowing process.

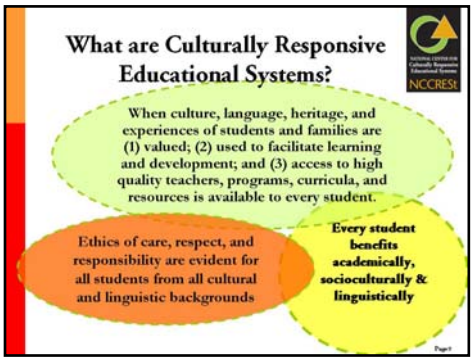
Policies help to guide the people side of the work. They are created to maintain the learning process and reduce the amount of effort expended on activities other than learning, like getting supplies to the classroom, deciding which students are assigned to which teachers, and making sure that there are enough books, desks, classrooms and buildings to house all the students. Policies help parents and students know what to expect, what is expected from them and how the school calendar will flow from the time that school opens until the end of the school year.

Practices are what people do. They include simple things like how students are greeted at the beginning of the year to how reading is taught in the classroom to how assessment occurs. While policies regulate the spheres in which people operate, much of daily practice is up to the people who do the work: students and school practitioners alike. Practices also include how teachers interact with one another, their supervisors, and the building leadership. The practices of administrators at central administration affect the lives of school personnel and the choices they make to involve themselves in decision-making.

When we talk about making a system culturally responsive, we mean that people, policies, and practices need to be assessed in terms of the degree to which they permit or impede culturally responsive action.

Facilitator Note: Allow 10 minutes for this lesson on educational systems (Slides 8 - 9).

Slide 9



What are Culturally Responsive Educational Systems?

Culturally responsive educational systems are grounded in the belief that we live in a society where specific groups of people are afforded privileges that are not accessible to other groups. By privileging some over others, a class structure is created in which the advantaged have more access to high quality education and later, more job opportunities in high status careers. This leads to socio-economic stratification and the development of majority/minority polarity. We can turn the tide on this institutionalized situation by building systems that are responsive to cultural difference and seek to include rather than exclude difference.

Students who come from culturally and linguistically diverse backgrounds can excel in academic endeavors if their culture, language, heritage, and experiences are valued and used to facilitate their learning and development. These systems are concerned with instilling caring ethics in the professionals that serve diverse students, support the use of curricula with ethnic and cultural diversity content, encourage the use of communication strategies that build on students' cultures, and nurture the creation of school cultures that are concerned with deliberate and participatory discourse practices. Moreover, culturally responsive educational systems create spaces for teacher reflection, inquiry, and mutual support around issues of cultural differences.

Slide 10

Now's a good time to ask questions or clarify something you heard…

Participants may have jotted notes on the information you presented. Take a moment to ask if they have questions or need clarification on anything they've heard to this point. Don't get caught up in a debate over the information – make sure you stay on task and on the material presented since you have only a short time to facilitate the academy. Limit this period to 5 - 7 minutes.

Why Data Mining?

Notice the number of times that data and evidence appear in NCCRESt's principles. Saying that teachers, families and administrators need data to make decisions is one thing, understanding and using data well is another. In fact, few teachers and administrators have been educated in programs that have focused on making meaning from data and then using those analyses to guide school improvement and classroom instruction. This module is designed to help building leadership teams learn the skills required to mine data and use it to make decisions. As principals and teacher leaders become confident in their ability to query their data, they will become strong role models and coaches for the entire faculty.

In this module we take a serious look at understanding and using data and other evidence of student performance to improve student learning. We begin by looking at school level data to identify patterns in school performance. We then examine data to understand school structures and then look at issues of pedagogy and practice. Participants will consider a variety of measures of academic performance by asking tough questions about data such as: What do students need to know? How will we know if students have learned it? Who is successful? Who is not? What will we do if students have not learned what they need to know? Working steadily and continuously as a team, school faculty and administrators can become successful with all, not just some, of their students.

Activity 1: Mining Report Card Data - Background

This activity gives participants an opportunity to evaluate school report cards in terms of the quality and relevance of the data provided.

Activity Sections

- Part 1: Examining District Data
- Part 2: Comparing District Data
- Part 3: Debrief

Complete Activity Takes 30 Minutes

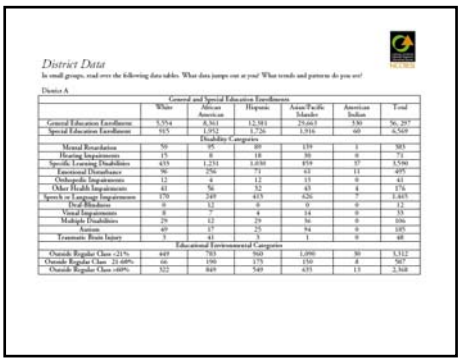
Activity 1, Part 1: Examining District Data

Facilitator Materials

None

Participant Materials

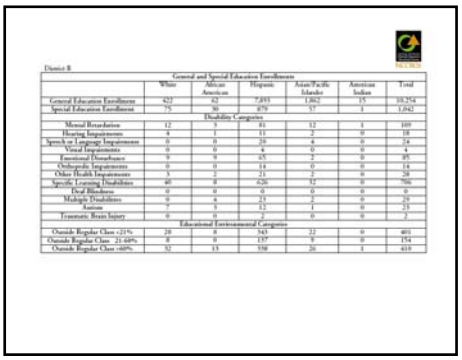
District Data, *Annual Yearly Progress*, chart paper


District Data

In small groups, read over the following data tables. What data jumps out at you? What trends and patterns do you see?

District A

	General and Special Education Enrollments					
	White	African American	Hispanic	Asian/Pacific Islander	American Indian	Total
General Education Enrollment	5,554	8,361	12,381	23,667	330	50, 293
Special Education Enrollment	915	1,952	2,726	1,916	60	6,569
	Disability Categories					
Mental Retardation	50	95	89	159	1	385
Hearing Impairments	15	6	18	30	0	71
Specific Learning Disabilities	635	1,233	1,030	859	57	3,590
Emotional Disturbance	50	256	71	83	11	495
Orthopedic Impairments	12	6	12	13	0	43
Other Health Impairments	43	56	32	43	4	176
Speech or Language Impairments	170	249	415	626	7	1,465
Deaf Blindness	0	12	0	0	0	12
Visual Impairments	0	7	4	14	0	33
Multiple Disabilities	29	12	29	36	0	106
Autism	69	13	23	94	0	195
Traumatic Brain Injury	3	43	3	1	0	48
	Educational Environmental Categories					
Outside Regular Class <21%	645	783	760	1,090	30	3,312
Outside Regular Class 21-60%	66	190	175	150	8	587
Outside Regular Class >60%	322	869	540	635	13	2,368


District B

	General and Special Education Enrollments					
	White	African American	Hispanic	Asian/Pacific Islander	American Indian	Total
General Education Enrollment	622	62	7,493	1,862	15	10,254
Special Education Enrollment	75	30	879	57	1	1,042
	Disability Categories					
Mental Retardation	12	3	81	12	1	109
Hearing Impairments	4	1	11	2	0	18
Speech or Language Impairments	0	0	20	4	0	24
Visual Impairments	0	0	4	0	0	4
Emotional Disturbance	9	9	65	2	0	85
Orthopedic Impairments	0	0	14	0	0	14
Other Health Impairments	3	2	21	2	0	28
Specific Learning Disabilities	40	8	620	32	0	700
Deaf Blindness	0	0	0	0	0	0
Multiple Disabilities	0	4	15	2	0	20
Autism	7	3	23	1	0	23
Traumatic Brain Injury	0	0	2	0	0	2
	Educational Environmental Categories					
Outside Regular Class <21%	28	8	343	22	0	401
Outside Regular Class 21-60%	8	0	137	9	0	154
Outside Regular Class >60%	32	13	338	26	1	410

Activity Time Limit

10 minutes

Facilitator Note

Breaking into groups can be a time consuming event. Be prepared for how you will handle this so your time isn't wasted on this part of the activity. Will the name tags have codes on them to facilitate this process? Will they be grouped by proximity?

In this activity, participants are to examine district data. Invite participants to change the numbers into percentages or ratios if they would rather view the data in these forms.

Activity

Break into small groups of 5-7 participants. Allow participants time to browse through the data tables and get a sense of what they contain. In small groups, ask participants to use the data tables to respond to this challenge: **What trends or patterns do you notice in the data?**

Groups should write their findings on chart paper and hang them on the walls when they complete the activity.


Adequate Yearly Progress

The following chart displays information on the Adequate Yearly Progress (AYP) of three school districts. The ranges of American Indian, African American, Hispanic, White, English Language Learner, and Special Education are highlighted. A "no" in a column means that the group made AYP in reading for the 2004-2005 school year. A "no" in a column means that the group did not make AYP.

What do you notice about the information? Which groups tend to make AYP more frequently than others? What do you believe this is happening? What implications does this information have for the classroom?

District	American Indian	African American	Hispanic	White	Asian American	English Language Learner	Special Education
A	Yes	No	No	Yes	Yes	No	No
B	No	No	Yes	Yes	Yes	Yes	No
C	Yes	Yes	No	Yes	Yes	No	No
D	No	No	No	Yes	No	No	No
E	Yes	Yes	No	No	Yes	No	No
F	No	No	No	Yes	Yes	No	No

Activity 1, Part 2: Comparing District Data

Facilitator Materials

None

Participant Materials

None

Activity Purpose

Participants broaden their understanding of assessment and data in this activity.

Activity Time Limit

10 minutes

Facilitator Note

Getting participants up and out of their seats may be challenging. Few people want to be the first one to start the activity, especially so early in the Academy when few may know each other. A possible remedy for this situation many be to ask participants to pair up for this activity.

Activity

Invite participants to look at the results of the other groups' results to Activity 1. These should already be posted on chart paper around the room. Ask them to compare and contrast the answers to their own group's conclusions.

Activity 1, Part 3: Debrief

Facilitator Materials

None

Participant Materials

None

Activity Purpose

This debrief allows the group to reflect on the questions and further analyze the report card.

Activity Time Limit

10 minutes

Facilitator Note

Ask participants if they noticed a disproportionate number of students from particular ethnic groups represented in any one category. For example, ask participants what they thought about the number of African American student identified as having mental retardation as compared to the number of white students with the same label.

Activity

Return to a whole group. Ask participants to volunteer questions that groups came up with for the activity and the parts of the data. What else would the public like to know that isn't on the data tables?

Lecturette 1: Mining System-Wide Data

This lecturette outlines issues that influence data collection and use. The lecturette will build on Activity 1. It provides the basis for Activity 2.

Facilitator Materials

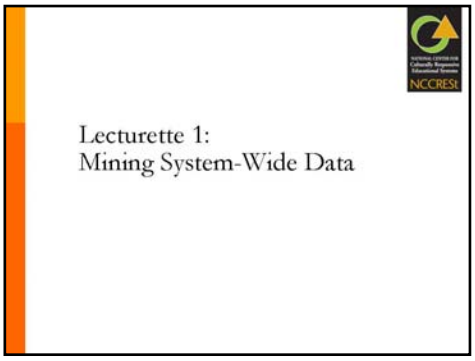
Lecturette 1 PowerPoint

Outcomes Met in Lecturette

- Clarify their reasons or rationale for using data to change practice.

Complete Lecturette Takes 20 Minutes

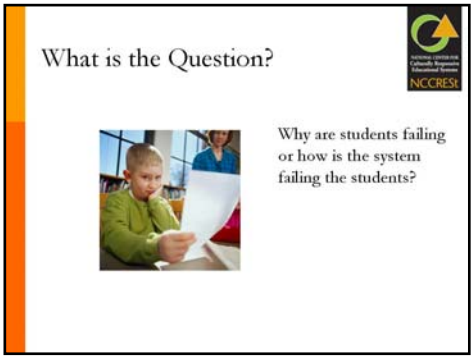
Slide 1



Lecturette 1: Mining System-wide Data:

This lecturette explores the relationship between student learning and accountability. It also presents questions that ensure the data collected is meaningful. It introduces the Systemic Change Framework and how data affects interaction among its levels.

Slide 2



What is the question?

Many times the question asked of system-wide (district, school and classroom) student data is: Why are students failing in our district, school or classrooms? This question assumes that students lack something to achieve better results. Sometimes the question is rephrased to ask: How are our schools or classrooms failing students? However, this question often leads us to assume that principals or teachers are lacking something to achieve better results.

Facilitator Instructions:

Recalling the previous activity about school report cards, discuss the following question and the assumptions with the participants: Why are students failing, or how is the system failing the students? Spend about 5 minutes on this topic.

Discussion starters:

Grading Practices – Is it "fair" to grade all students with the same measurement? For example: Should students with disabilities be required to pass a standardized test in order to graduate from high school?

Access to Resources – Do students have access to what they need to succeed? For example: Are there enough computers available for a class of beginning computer programmers?

Timing – When is the exam given? For example: Is the required high school exam on civics given

before all 9th graders have taken Civics 101?

Relevance – Do students care about the subject? For example: Does the state require that all high school biology classes include labs on pest control because the farmers in the state are losing a lot of crops to insects?

Slide 3

Opportunities to Improve Chances for Learning:

Curriculum: Curriculum must meet all students' learning abilities. This includes students with special needs through students who require advanced material.

Instruction: Excellent instruction ensures that students reach their highest potential. This instruction is tailored to each individual and challenges students' abilities without pushing them beyond their capabilities.

Mentoring: Students are given chances to mentor each other. Providing opportunities for additional learning, this allows students another way to learn material.

High Quality Teachers: One of the best ways to accomplish chances for student learning is to hire high quality teachers. These teachers are capable of using excellent curriculum, instruction and mentoring. They are well qualified in their field and experience.

Safe Schools: Students are more likely to succeed if they feel safe in school. They can focus on school work instead of self preservation.

Technology: Having access to technology improves chances for learning. Using computers and the Internet are standard in teaching and learning.

Physical Facilities: School should be a comfortable place to learn. Students should have adequate space, materials and temperature for optimal learning.

Culturally responsive environments: Classrooms must be safe and respectful places for students to learn.

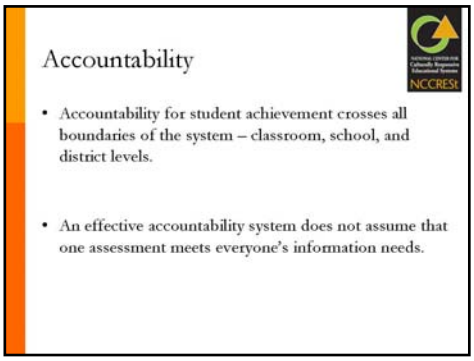
Learning Styles: Schools should address all learning styles in the curriculum in order to reach all students.

Facilitator Instructions:

Discuss ways that these opportunities can improve student learning. Specifically, what kinds of opportunities can be given? Spend about 5 minutes on this topic.

Discussion starters: After school tutoring, Saturday School, etc.

Slide 4



Accountability:

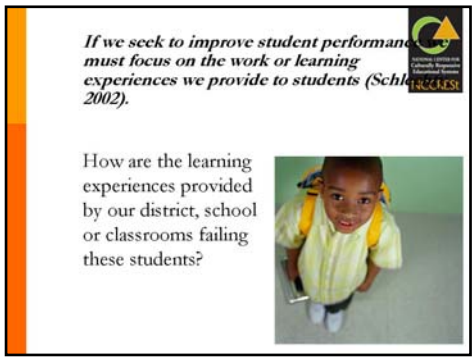
Accountability in education today crosses all boundaries of the system. State, district, school, and classroom data are all necessary to inform an effective accountability system.

An effective accountability system does not assume that one assessment can meet everyone's information needs. It is imperative that educators keep in mind the diverse information needs of each systemic level and select and use the appropriate assessments or measures to meet their needs. Data used to inform the superintendent or school board is not necessarily the most effective data to inform the classroom teacher or student. (Stiggins, 2002)

Facilitator Instructions:

Discuss why accountability crosses all boundaries of the system. Invite participants to share their thoughts.

Slide 5



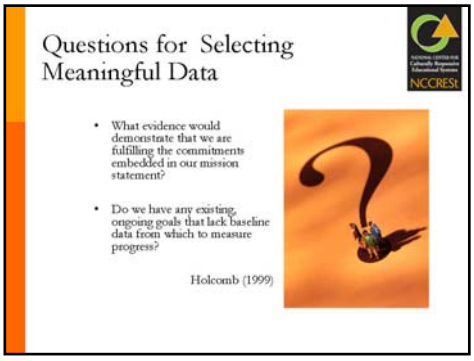
Reframing Questions:

If we are seeking to improve student performance, then we need to focus on the work or learning experiences we provide to students (Schlechty, 2002). Thus, we would reframe the question from: Why are students failing or how is the system failing the student? To: How are the learning experiences provided by our district, school or classroom failing these students? This allows us to target the quality of work and support at all levels that encourage and support improved student learning.

Facilitator Instructions:

What does this reframing do? Why is it important? Lead a short discussion about this topic.

Slide 6



Questions to Think About:

Holcomb provides these questions for schools to identify data and address their improvement goals. To improve all aspects of school functions – from student learning to administrative functioning. [Citation: Holcomb (Holcomb, 1999)]

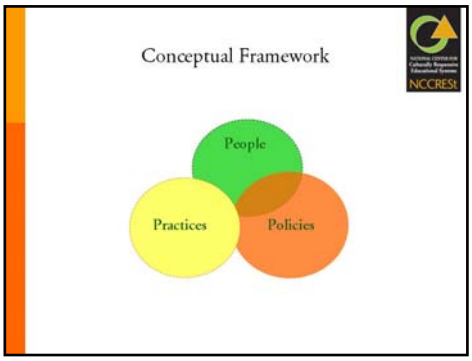
Facilitator Instructions:

Refer to the school's or district's mission statement.

Lead a short discussion about these questions on slides 6 and 7. Ask the group to identify data (sources of evidence) they would collect as a result of the questions (use hypothetical situations to get the conversation going). Would they use a state achievement test? A parent survey?

Use chart paper to collect their data suggestions. Spend at least 5 minutes on this discussion. It leads into the next slide.

Slide 7



Conceptual Framework:

Before you can act systemically, you need to know what aspects of a system you need to involve. NCCRESt has developed a conceptual framework for understanding culturally responsive educational systems that identifies the three key elements that comprise and educational system: the people, the policies, and the practices. People are key since educational systems are crated to education people, infants, children, adolescents, and adults. Educational systems employ people. Teachers and other school practitioners work together to create effective learning communities for the students they serve. School leaders and other administrators help to keep the system flowing so that students enter, progress and graduate, and teachers and other personnel are recruited, hired, coached, evaluated and retired in a constantly flowing process.

Policies help to guide the people side of the work. They are created to maintain the learning process and reduce the amount of effort expended on activities other than learning, like getting supplies to the classroom, deciding which students are assigned to which teachers, and making sure that there are enough books, desks, classrooms, and buildings to house all the students. Policies help parents and students knew what to expect, what is expected from them, and how the school calendar will flow from the time that school opens until the end of the school year.

Practices are what people do. They include simple things like how students are greeted at the beginning of the year to how reading is taught in the classroom to how assessment occurs. While policies regulate the spheres in which people operate, much of daily practice is up to the people who do the work: students and school practitioners alike. Practices also include how teachers interact with one another, their supervisors, and the building leadership. The practices of administrators at central administration affect the lives of school personnel and the choices they make to involve themselves in decision-making.

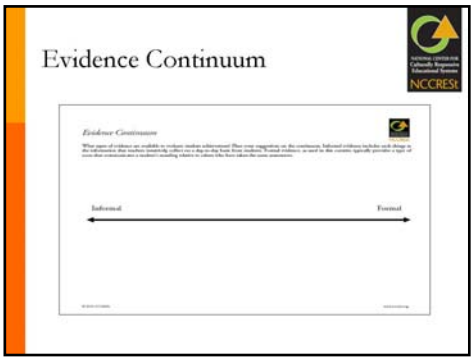
When we talk about making a system culturally responsive, we mean that people, policies, and practices need to be assessed in terms of the degree to which they permit or impede culturally responsive action.

Data are produced at the boundary of interaction between people, policies, and practices. Therefore, changes in the classroom are felt at different areas of the system.

Facilitator Instructions:

Referring back to the sources of evidence they suggested on the previous slides, discuss where they fall on the CF – in people, policies, or practices. This shows that accountability crosses all boundaries of the system, and everyone is responsible for student achievement.

Slide 8



Evidence Continuum:

Have participants identify data and place on a continuum – from informal to formal evidence…. (Activity 2)

Facilitator Instructions:

Explain Activity 2 here.

Activity 2: Multiples of Instructional Data - Background

This activity provides an opportunity for participants to identify various data available to teachers for supporting change in their schools.

Outcomes Met In Activity

- Clarify their reasons and rationale for using data to change practice

Activity Sections

- Part 1: Evaluation Evidence
- Part 2: A Continuum of Evidence
- Part 3: Evidence Inventory
- Part 4: Rationale for Using Data

Complete Activity Takes 30 Minutes

Activity 2, Part 1: Evaluation Evidence

Facilitator Materials

None

Participant Materials

Sticky Notes

Activity Purpose

This activity activates prior knowledge and assists in assessing sophistication of participants.

Activity Time Limit

5 minutes

Facilitator Note

You may need to offer prompts to get the process started: spelling test scores, independent student book selections, etc.

Activity

In pairs, ask participants to reflect and respond to this question: ***What types of evidence are available to evaluate student achievement?*** Have pairs write each type of evidence they generate on separate sticky notes.

Activity 2, Part 2: A Continuum of Evidence

Facilitator Materials

None

Participant Materials

Evidence Continuum

Activity Purpose

This activity allows participants to identify their personal values and beliefs about the use of data to inform instructional improvement. It is important to note that we must be clear about the driving forces for data identification, collection and use before a commitment to use data can be made.

Activity Time Limit

15 minutes

Facilitator Note

The facilitator should define and provide examples of evidence that range from subjective, informal assessments such as teacher observations to wholly objective, formal assessment tools that are standardized and scored outside of the classroom.

Informal assessments include information that teachers intuitively collect on a day-to-day basis from students. Observant and reflective teachers can walk through a classroom and make mental notes of the kinds of challenges and accomplished performances that students are encountering. They come back to these mental notes to help a student practice a particular skill, expand their vocabulary, extend their problem solving or engage in alternative learning activities. All these adjustments in teaching are made through the teachers' knowledge of the content and their performance expectations. In addition, teachers may have and use informal assessments that they have found useful, including interview protocols for reading comprehension or mathematical thinking. These kinds of assessments tend to include criterion referenced indicators of success.

Formal assessment tools, as used in this context, typically provide a type of score that communicates a students' standing relative to others who have taken the same assessment. These assessments present teachers with measurements that may be used to compare students to one another, themselves, or even to a standard. Skillful teachers utilize evidence from their assessments to build curriculum and to assess their own instructional strategies. When teachers use the formal assessments in conjunction with their own informal assessments, they provide their students with a rich environment that not only meets curriculum standards for the school, but also personalizes the instruction for each student in the classroom. The formal assessments tend to include norm-referenced assessments, include paper and pencil activities, standardized test, and evidence of satisfactory completion of state or national standards.

Activity

1. Still in pairs, refer participants back to the sticky notes they previously completed. Challenge them to place the sticky notes along the continuum based on whether the evidence is a fully informal or formal assessment. (5 minutes)

2. Have teams pair up and share their *Evidence Continuums*. Urge them to rethink their evidence placements as they talk with each other. (10 minutes)

Activity 2, Part 3: Evidence Inventory

Facilitator Materials

None

Participant Materials

Student Performance Evidence Inventory

Activity Purpose

To engage the group in building shared vocabulary about data and to distinguish between kinds and purposes of data.

Activity Time Limit

5 minutes

Facilitator Note

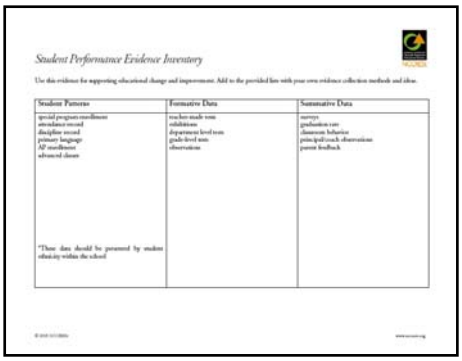
Examples of Formative Evidence: teacher-made tests, publishers' tests, state-level tests, report cards, exhibitions, portfolios, performance tasks, district-level tests, department level tests, grade-level tests, surveys, observations, graduation rate, classroom work, homework, video tapes, and projects.

Examples of Contextual Evidence: language proficiency, gender, special program enrollment, attendance record, mobility rate, socio-economic status, family configuration, family support, parent language proficiency, community services, student-age, pre-school experience, discipline record, and primary language.

Examples of Summative Data: surveys, graduation rate, classroom behavior, principal/coach observations, and parent feedback.

Activity

Ask participants to complete the *Student Performance Evidence Inventory*. Use the *Data Inventory* to brainstorm with the group for additional data that may be used to evaluate effective school setting issues. Identify which group the data falls into: contextual, formative or summative.


Student Performance Evidence Inventory

Student Patterns	Formative Data	Summative Data
special program enrollment attendance record discipline record primary language AP enrollment advanced classes	teacher-made tests exhibitions department level tests grade-level tests observations	surveys graduation rate classroom behavior principal/coach observations parent feedback
*These data should be presented by student ethnicity within the school		

You should describe the three types of evidence used to hone instruction: contextual, formative, and summative. Each of these categories of evidence helps teachers (1) understand and know their students (contextual), (2) assess students progress (formative), and (3) judge outcomes (summative). All three are important since teachers need to plan their instructional strategies. Contextual data includes statistical information about the characteristics of students and their families. This data may be gender, age, primary language, etc. Formative data includes projects and assessments done within the classroom and by students. They may or may not be officially graded. Some formative data

may be subjective, such as teacher observations, and some may be objective, such as standardized tests. The third type, summative data, is similar to student learning. However, summative data is collected by the teacher to evaluate if instruction is effective. Examples might include classroom behavior, principal/coach observations, and parent feedback.

Activity 2, Part 4: Rationale for Using Data

Facilitator Materials

None

Participant Materials

None

Activity Purpose

This activity allows participants to reflect on why data is important.

Activity Time Limit

5 minutes

Facilitator Note

None

Activity

Ask participants to brainstorm some reasons why they may use data in their everyday situations. What are their reasons and rationale for using data to change practice?

Lecturette 2: Mining Classroom Data

This lecturette outlines change issues that teachers face in the school. It provides the basis for Activity 3.

Facilitator Materials

Lecturette 2 PowerPoint

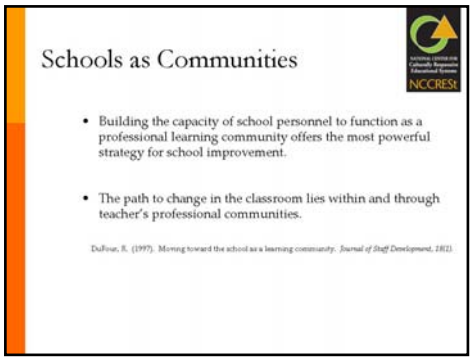
Complete Lecturette Takes 15 Minutes

Slide 1

Lecturette 2: Mining Classroom Data:

This lecturette explores the relationship between professional learning communities and student learning. It looks at various kinds of evidence. Finally, it examines the importance of daily data collection to improve teaching and learning.

Slide 2



Schools as Communities:

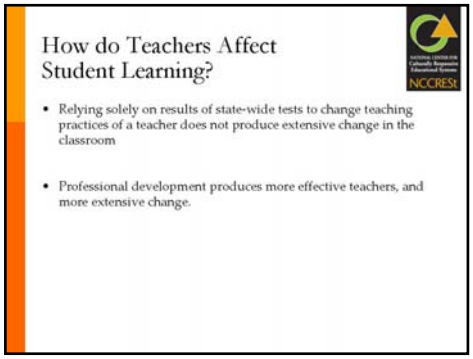
DuFour, R. (1997). Moving toward the school as a learning community.

Journal of Staff Development, 18(1).

Facilitator Instructions:

A professional learning community is a group of administrators and school staff who are united in their commitment to student learning. They collaborate, learning and working together toward a shared vision. Professional learning communities utilize school data to improve teaching and learning throughout the school. Lead a short discussion on this concept. How does building a professional school community lead to change in the classroom?

Slide 3



How do Teachers Affect Student Learning?

Relying solely on results of state-wide test to change teaching practices of a teacher does not produce extensive change. Teaching practices must change to improve student learning. Professional development for teachers supports change in the classroom because it develops teachers' skills and knowledge.

Facilitator Instructions:

Discuss how teacher professional development affects student learning.

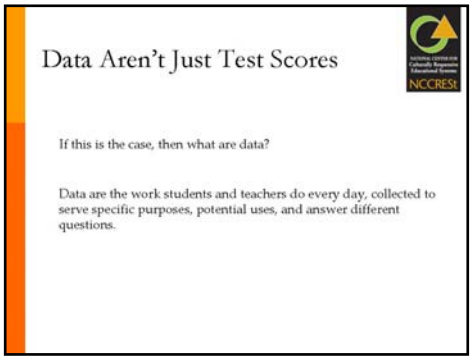
Slide 4

Ongoing Professional Development

Teachers and other school practitioners need to engage in ongoing professional development that helps them examine the results of their practices. By examining results in small groups of colleagues, teachers can begin to question the kinds of choices they make in their classrooms. Teachers can ask questions about which students are able to access and engage learning activities and materials. Which students do well working in groups? What kinds of teacher scaffolding do students with different learning resources need?

This kind of professional development that generates the content of professional development from the work that teachers do and brings teachers together to learn from one another is critical to helping teachers learn to work with culturally and linguistically diverse students. Strong leadership within the building for coaching, mentoring and inquiry teams is needed to make a successful shift from expert models of professional development to job embedded, critical analysis of current practice.

Slide 5



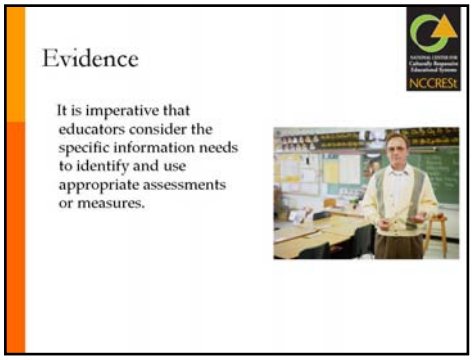
Data aren't just test scores:

Data aren't just test scores. If this is the case, then what are data? Data are collected to serve specific purposes and potential uses and answer different questions.

Facilitator Instructions:

Refer back to the last activity in which the participants listed many types of evidence they could collect to evaluate effective instruction. Lead a short discussion on reasons data may be collected on a day to day basis. (5 minutes)

Slide 6



Evidence:

When identifying the assessment, one needs to ensure that students are succeeding in school and going beyond standardized tests and report cards.

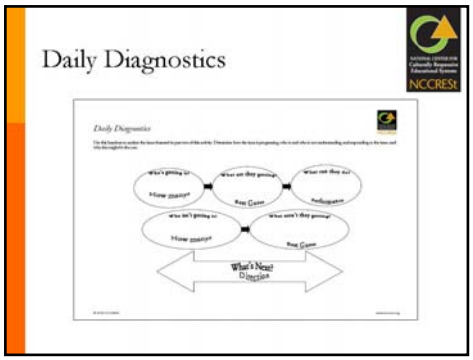
In other words, the data that inform the teacher of a student's progress in math compared to other students at same grade level is not necessarily the most effective data to inform the classroom teacher of individual student's progress through the year.

Also, one assessment may not be enough to evaluate a single student's progress in a specific subject. Use multiple measures when appropriate.

Facilitator Instructions:

Provide an example of a specific occasion in which a teacher would want different data for similar information or topics. For example, a student's reading ability may be measured by standardized test scores, individual reading selection and one-on-one assessment.

Slide 7



Daily Data Collection:

Teachers must monitor their teaching each day to ensure their students are progressing. The goal is to make sure all of the students are "getting it." Are the students understanding the curriculum? If so, what are they understanding? What can they do? If not, who isn't understanding it? Why not? At the end of the day, teachers should look at what they've accomplished that day and ask themselves: "What's next?"

How do the teachers know who's getting it and who isn't? They must use data collection throughout the day. Data collection is not an afterthought – collected periodically throughout the year. Instead, it is integrated in daily activities. Teachers must plan the data collection methods to be used when they plan their daily curriculum. Collecting data throughout the day provides opportunities for improved student learning and instruction.

Slide 8

School Improvement Data Matrix:

Use the handout to have each pair identify one school improvement issue they would like to resolve in their school…. (Activity 3)

Facilitator Instructions:

Explain Activity 3 here.

Activity 3: Using Data to Support School Improvement – Background

Culturally responsive instruction comes from accurate and timely information about individual students: their capacities, experiences and knowledge base that can be activated in order for them to engage as fully as possible in new learning situations. In the old paradigm, teachers taught the curriculum without the advantage of understanding individual student needs, thus leaving out or gliding over individual differences. In the new accountability paradigm, assessment is about continuously improving the teachers' performance and, ultimately, improving kids' access and mastery of content and learning skills.

Outcomes Met In Activity

- Identify and align meaningful data to renew school improvement efforts to be more culturally responsive.
- Determine what data should be used to guide practice.
- Use a school-wide improvement survey and other forms of displaying outcomes to analyze data.

Activity Sections

- Part 1: Potential School Improvements
- Part 2: Data Matrix
- Part 3: Daily Diagnostics

Complete Activity Takes 20 Minutes

Activity 3, Part 1: Potential School Improvements

Facilitator Materials

Chart paper, an overhead, or presentation slide

Participant Materials

None

Activity Purpose

To prepare the participant for Part 2 of this activity.

Activity Time Limit

5 minutes

Facilitator Note

Participants will probably respond with more school improvements than classroom improvements. This tends to happen in group settings because human nature is to keep our private challenges to ourselves. Try to obtain classroom improvements such as higher literacy scores on standardized assessments without pointing out specific participant members. Some improvements you may solicit are: more parent involvement, less student bullying, better classroom management, new books for the library/classrooms, smaller class size, and higher literacy skills.

Activity

Ask the whole group to discuss this question*: **What are some school or classroom improvements you would like to make or see happen?*** List the response on chart paper, an overhead, or presentation slide.

Activity 3, Part 2: Data Matrix

Facilitator Materials

None

Participant Materials

School Improvement Data Matrix

Activity Purpose

This activity is meant to show participants the value of data in making decisions and changes in their school and classrooms.

Activity Time Limit

10 minutes

Facilitator Note

None

Activity

Organize participants to pairs. Using the School Improvement Data Matrix, each pair identifies one improvement issue they would like to resolve in their school or classroom. Urge the pairs to use the pool of issues from Part 1. The pairs should write a description of the issue, indicators that show the issue is being met, and data that will help evaluate the effectiveness of the school improvement effort (refer them to the Data Inventory handout for assistance).

School Improvement Data Matrix

Classroom Improvement Issues	Indicators of Success	Data Sources

Activity 3, Part 3: Daily Diagnostics

Facilitator Materials

None

Participant Materials

Daily Diagnostics

Activity Purpose

This activity is meant to allow participants the opportunity to visually pull together data and information about a specific issue.

Activity Time Limit

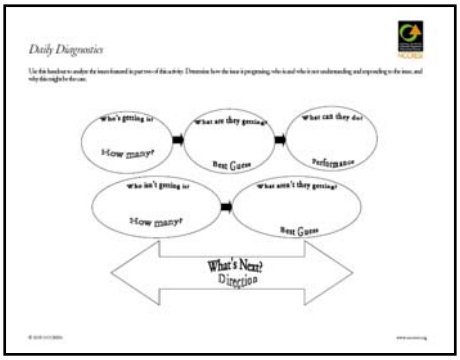
5 minutes for explanation

Facilitator Note

This is a take-away handout. It was thoroughly explained in the lecturette.

Activity

Explain that the *Daily Diagnostics* handout provides teachers with immediate feedback on an issue identified in Part 2, or any curriculum or instruction procedure. Use this handout to analyze how the matter is progressing, who is getting it, who isn't and why?



Leave Taking

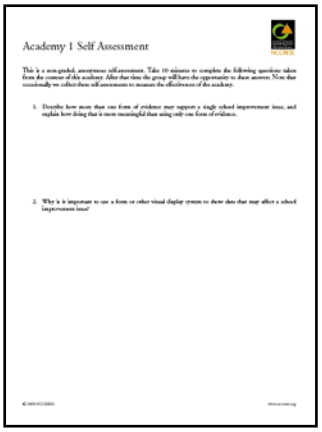
Leave Taking, Part 1: Self Assessment

Facilitator Materials

None

Participant Materials

Self Assessment


Academy 1 Self Assessment

Activity Purpose

The self assessment provides the participant with an objective means of evaluating the knowledge and skills gained in this academy.

Activity Time Limit

10 minutes

Facilitator Note

None

Activity

Have participants complete the *Self Assessment*. Remind groups that their assessments will be collected for module assessment purposes and they do not need to put their names on the assessments.

Leave Taking, Part 2: Debrief

Facilitator Materials

Chart paper, overhead, or presentation slide

Participant Materials

Self Assessment

Activity Purpose

This activity gives participants a chance to compare their evaluation answers.

Facilitator Note

None

Activity Time Limit

10 minutes

Activity

Return to whole group and ask participants to share their responses. Use an overhead or chart paper to record what they say as a way to highlight new learning, and congratulate the group on their hard work.

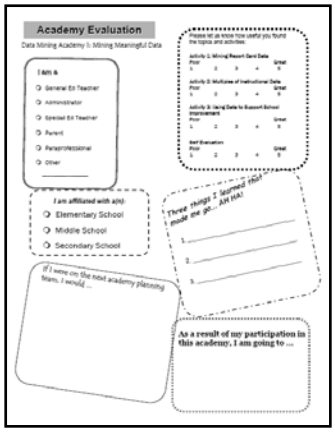
Leave Taking, Part 3: Academy Evaluation

Participant Materials

Academy Evaluation

Activity Purpose

This activity provides feedback for developers from module participants.



Activity Time Limit

10 minutes

Facilitator Note

Collect the *Academy Evaluations* and return them to the National Center for Culturally Responsive Educational Systems.

Activity

Have participants complete the *Academy Evaluation*. This evaluation gives the module developers a chance to see how the academy is being received and allows them to improve it as needed.

Resources

Ancess, J. (2000). The reciprocal influence of teacher learning, teaching practice, school restructuring, and student learning outcomes. *Teachers College Record, 102*(3), 590-619
This article discusses the reciprocal and dynamic relationship of teacher learning, teaching practice, school restricting, and student outcomes in three high performing public secondary schools for at-risk students. Student outcomes include improvement in student graduation rates, course pass rates, college admission rates, and academic course- taking rates. The article describes each school's context and the inquiry process that stimulated teacher learning; triggered changes in teaching practice, school organization, and student outcomes; expanded teacher learning; and extended improved outcomes to a wider population of students. It describes how the interaction of these variables produced practitioner knowledge that teachers used to benefit of student outcomes. It discusses how in each of the three schools teachers' learning was initially driven by their aspirations for specific student effects, which led them to develop and implement practices that drew on their school's culture, and their knowledge of their students, successful practice, and their content area. In each case teachers made changes in their teaching practice and in school and curricular organization. This article also identifies a set of contextual conditions that support this change process. Lastly, the article presents implications for researchers, reformers, and practitioners who aim to improve student outcomes by changing teacher practice and school organization. The article is based on findings from a five-year multiple-case study of how three high schools connect disenfranchised students to their future.

Brimijoin, K., Marquissee, E., & Tomlinson, C.A (2003). Using data to differentiate instruction. *Educational Leadership, 60*(5), 70-73
Part of a special issue on using data to improve student achievement. An overview of how one teacher uses assessment data to differentiate instruction is presented. The teacher uses multiple methods of data collection and believes her role as data collector is to determine students' prior understanding and achievement, track their responses to moderate challenges, and measure their outcomes against expected performance goals. She uses a wide array of pre-assessments when teaching new content and uses assessment to modify instruction so that each student is appropriately challenged. To prepare for state standards testing, she asks students to select topics that need more work and sets up centers to serve students' needs. In addition, this teacher uses assessment to target learner needs.

Brown, K. & Capp, E., Robert (2003). *Better data for better learning. Leadership, 33*(2), 18-19
A standards-based assessment program at Rocklin Unified School District in Rocklin, California, uses technology to link assessments directly to standards, producing timely reports that teachers and administrators can use to monitor student progress and hone the curriculum. The four steps involved in this program include distributing assessments to students, scanning their answers into the classroom computer, using Web technology to collate the data, and using the data to quickly identify potential areas of concern.

Cabrera, A.F., Colbeck, C.L., & Terenzini, P.T. (2001). Developing performance for assessing classroom teaching practices and student learning. *Research in Higher Education, 43*(3), 327-354
Several states are requiring instructions to document changes in student outcomes. Regional and specialized accrediting agencies are also changing their review criteria from measuring inputs to assessing indicators of student learning. This article describes the results of an evaluation project that sought to develop performance indicators of learning gains for undergraduate engineering students. Specially, the study investigated the relationship between classroom practices and students' gains in professional

competencies. More than 1,250 students from 7 universities participated. Findings show that the instructional practices of Instructor Interaction and Feedback Collaborative Learning, and Clarify and Organization are significantly and positively associated with gains in students' self-reported gains in problem-solving skills, group skills, and understanding of engineering as an occupation. The indicators meet several conditions recommended by the assessment literature. They are (1) meaningful to the user, (2) reliable and valid, and (3) index observable behaviors rather then subjective impressions.

California Department of Education. http://www.cde.ca.gov/index.asp

Mason, Sarah (2002). *Turning Data into Knowledge: Lessons from Six Milwaukee Public Schools*. Wisconsin Center for Education Research, April 2002.

McTighe, J. & Thomas, R..S (2003). Backward design for forward action. *Educational Leadership, 60*(5), 52-55.
Part of a special issue on using data to improve student achievement. Schools can integrate improvement initiatives at the school and district levels by using a three-stage backward design process that looks back to key concepts and essential questions that underlie content standards. School improvement planning should begin with a consideration of desired learning results, making students' understanding of key concepts and searching for answers to provocative questions the primary goals of teaching and learning. The second stage of backward design involves school teams in analyzing multiple sources of data, rather than a single test, to assess whether students have achieved the desired learning. The final stage requires teachers to plan learning experiences that help students understand key concepts and requires school improvement teams to generate action plans to obtain the desired student achievement results.

NEA Foundation for the Improvement of Education Spring 2003 No. 5

Popham, J.W. (2003). The seductive allure of data: Using data to improve student achievement. *Educational Leadership, 60*(5), 48-51
This article examines how teachers can use classroom data to improve teaching and learning, focusing on how to determine if data is reliable and useful. Topics include designing instructionally useful educational test and analyzing data from standardized achievement tests.

Schmoker, M. (2003). First things first: Demystifying data analysis. *Educational Leadership, 60*(5), 22-24
If teachers are to determine which data can be used to improve teaching and learning, then they need to overcome experts' tendencies to complicate to use and analysis of student achievement data. Teachers can set the stage for targeted and collaborative efforts that can pay immediate dividends in terms of achievement gains if they know how many students are succeeding in the subjects they teach and the areas of strength or weakness within those subjects. However, the extended, district-level analyses and correlation studies that some districts conduct can result in over analysis and overload. This overload problem could be resolved by developing a simple temple for a focused improvement plan with annual goals for improving students' state assessment scores.

Taylor, B.M., Peterson, D.S., Pearson, P.D., & Rodriguez, M.C. (2002). Looking inside classrooms: Reflecting on the 'how' as well as the 'what' in effective. *Reading Teacher, 56*(3), 270-280
This article discusses a subset of findings from year 1 of a larger national study on school reform in reading (Taylor, Pearson, Peterson, & Rodriguez,2001) funded by the Center for the Improvement of Early Reading Achievement (CIERA). The purpose of the larger study was to evaluate the impact of all aspects of school reform on student performance. The purposes of the present, more focused analysis are to (a) describe the teacher practices we observed in the classrooms, particularly those that are derived from the

research of the last four decades; (b) examine the relationship between teachers' practices and students' growth in reading achievement; and (c) provide vignettes that vividly describe what those practices look like in action.

Taylor, L.K. & Shawn, J.(2003). The long and winding road to accountability. *Leadership, 32*(3), 32-33. The writers describe the Monrovia Unified School District's accountability system. This system involves data analysis and target-setting, monitoring progress, reports on progress, oral reports to the board of education, liaison support, and teacher evaluation. The accountability system has had an effort on instructional leaders and staff and has fostered an awareness of specific student needs, encouraged professional conversations about student work and instructional successes, and focused efforts across activities. Moreover, it has benefited students, as illustrated by improvements in student work, student engagement, and instruction.

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Glossary

Collaborative Leadership Team
A Collaborative Leadership Team is a school-based group of individuals who work to provide a strong organizational process for school renewal and improvement.

Conceptual Framework
Before you can act systemically, you need to know what aspects of a system you need to involve. NCCRESt has developed a conceptual framework for understanding culturally responsive educational systems that identifies the three key elements that comprise and educational system: the people, the policies, and the practices.

Cultural Responsivity
Cultural responsivity is a developmental process. It is the ability to learn from and relate respectfully with people of your own culture as well as those from other cultures. It includes adjusting your own and your organization's behaviors based on what you learn. Cultural responsivity involves exploring and honoring your own culture, while at the same time learning about and honoring other people's cultures.

National Center for Culturally Responsive Educational Systems
The goal of all academies is to create a network of skilled and knowledgeable teacher leaders, administrators, community members, and family members who will serve as effective transformational agents of change for culturally responsive practices and systems. Academy participants are generally teams of educational professionals from schools and districts, selected to advance knowledge and practice related to culturally responsive systems and practices.

Professional Learning Community
A professional learning community refer is a group of administrators and school staff who are united in their commitment to student learning. They collaborate, learning and working together toward a shared vision. Professional learning communities utilize school data to improve teaching and learning throughout the school.