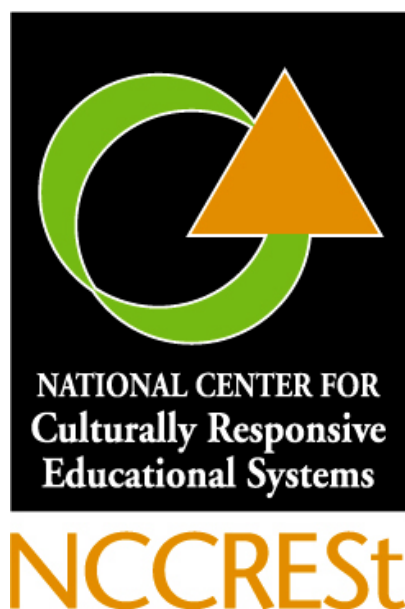


MODULE 4: COLLECTION AND USE OF EVIDENCE

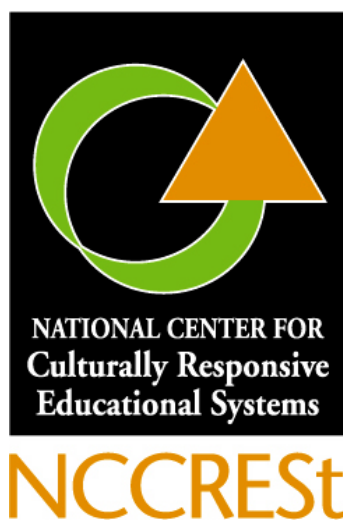
Academy 2: Identifying School-Wide Patterns of Student Performance



Facilitator's Manual

NATIONAL CENTER FOR CULTURALLY RESPONSIVE
EDUCATIONAL SYSTEMS

Facilitator's Manual



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Academy 2: Identifying School-Wide Patterns of Student Performance

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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 2: Identifying School-Wide Patterns of Student Performance – version 1 (2005)

Academy Abstract:

This Academy helps participants develop their skills to analyze and use data over time to adjust and improve their strategies for instructional improvement.

Academy Outcomes:

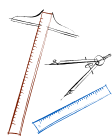
As a result of the activities and information shared at this Leadership Academy, module participants will:

- Identify a set of questions that will continually guide their efforts for culturally responsive practices.
- Match the kinds of data that can be collected with those questions.
- Establish an ongoing process for measuring change effects.
- Understand the impact of progress in the building from a complex framework of change mechanisms.

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 OVERVIEW.....	10 MINUTES
ACTIVITY 1: FISHBONE ACTIVITY.....	35 MINUTES
LECTURETTE 1: RICHNESS AND COMPLEXITY OF STUDENT DATA	30 MINUTES
ACTIVITY 2: UNDERSTANDING THE CHALLENGES: ASSESSING YOUR SCHOOL'S STUDENT ACHIEVEMENT	20 MINUTES
BREAK.....	10 MINUTES
LECTURETTE 2: USING STUDENT DATA: UNDERSTANDING THE CHALLENGES	20 MINUTES
ACTIVITY 3: TRACKING CHANGE	15 MINUTES
LEAVE-TAKING AND FEEDBACK	30 MINUTES



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

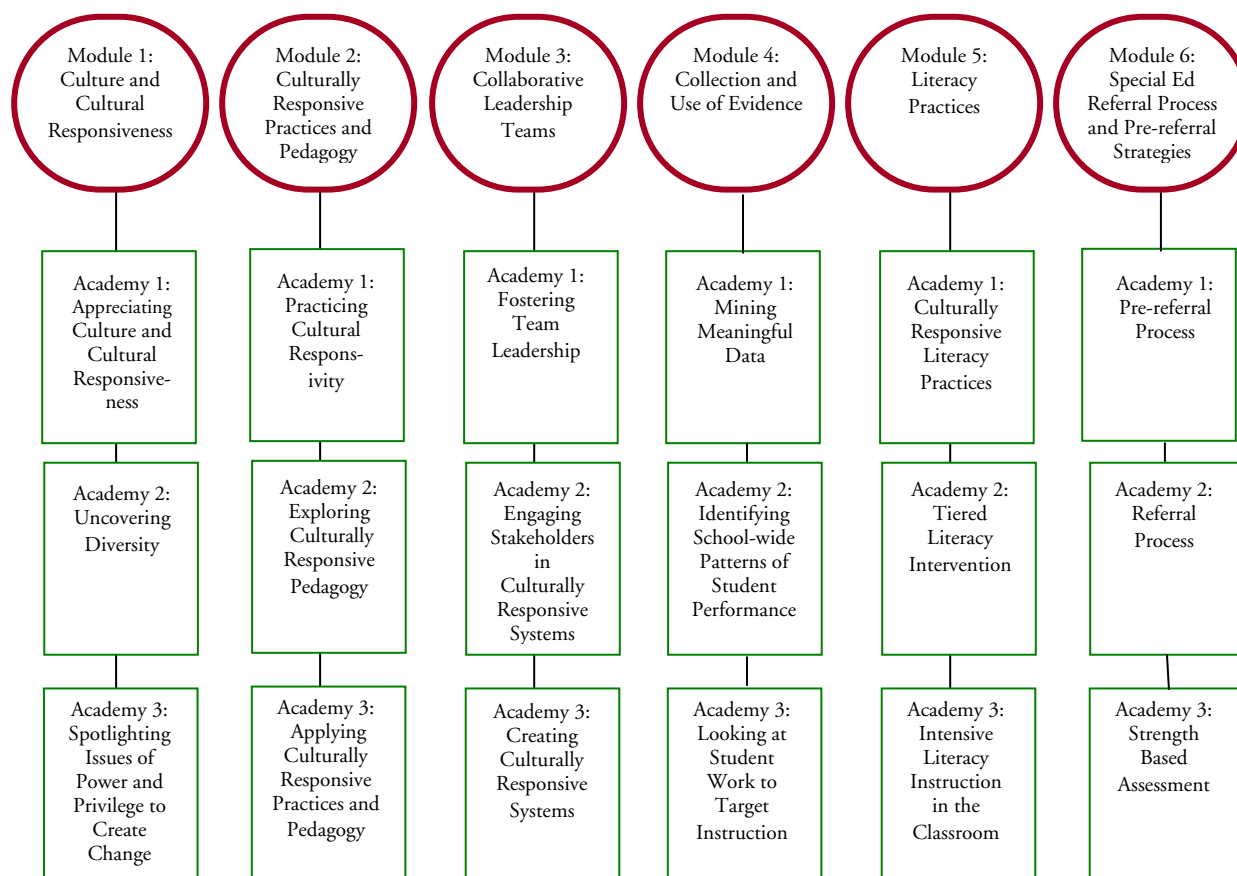
Appendices

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.





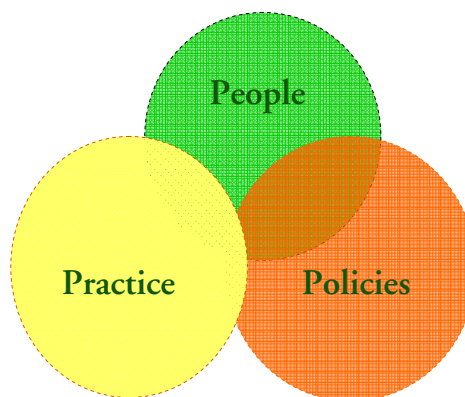
Professional Learning Principles

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.

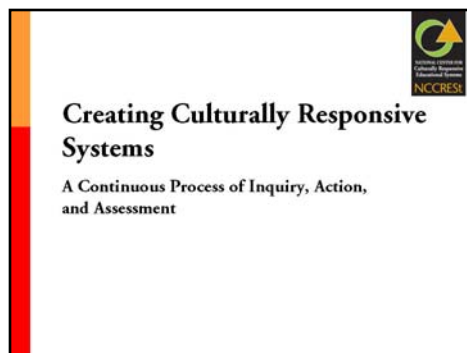
PRINCIPLE 6: Professional Learning is focused on the diffusion of professional knowledge to build sustainable educational communities focused on improving learning outcomes for students and their families who are culturally and linguistically diverse. As educators gain knowledge, they also have the responsibility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

Academy 2:

Identifying School-Wide Patterns of Student Performance



Slide 1



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

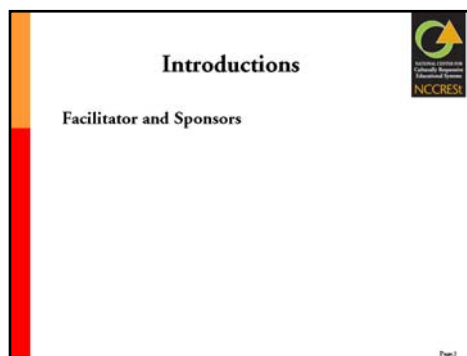
In this academy we will examine the use of school-wide patterns of data. By the end, you will be able to identify and discuss issues around data and evidence, understand the challenges which accompany the use of data, and recognize areas in which change is necessary.



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



Slide 2

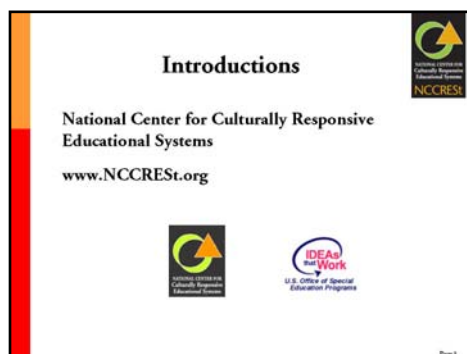


Introduction – Facilitators and Sponsors:

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:

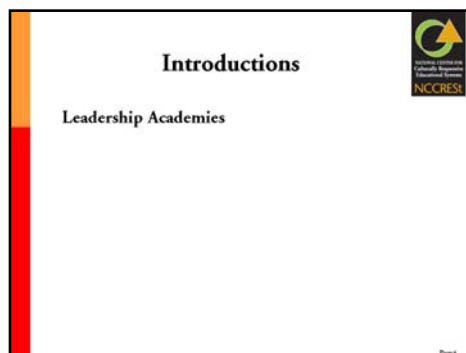
The National Center for Culturally Responsive Educational Systems (NCCRESt) is funded by the Office of Special Education Programs at the U.S. Department of Education. The mission of NCCRESt is to close the achievement gap between students from culturally and linguistically diverse backgrounds and their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

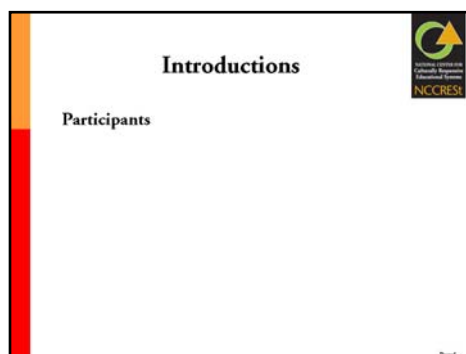
The academies are designed to be used by local researchers and professional developers who are invested in collaborating with schools. The goal of this collaboration is to build more culturally responsive schools that successfully educate

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

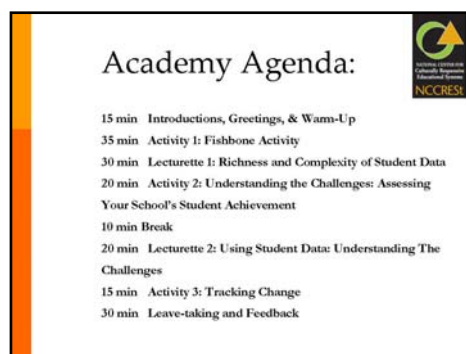


Introduction – Participants:

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: Introduction, Greetings and Warm-Up

35 min: Activity 1: Fishbone Activity

30 min: Lecturette 1: Richness and Complexity of Student Data

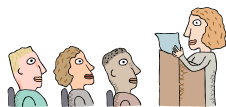
20 min: Activity 2: Understanding the Challenges: Assessing Your School's Student Achievement

10 min: Break

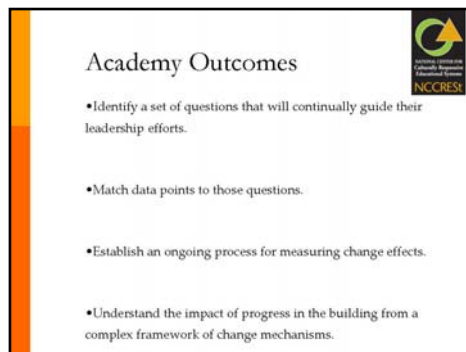
20 min: Lecturette 2: Using Student Data: Understanding the Challenges

15 min: Activity 3: Tracking Change

30 min: Leave-taking and Feedback



Slide 7



Academy Outcomes

- Identify a set of questions that will continually guide their leadership efforts.
- Match data points to those questions.
- Establish an ongoing process for measuring change effects.
- Understand the impact of progress in the building from a complex framework of change mechanisms.

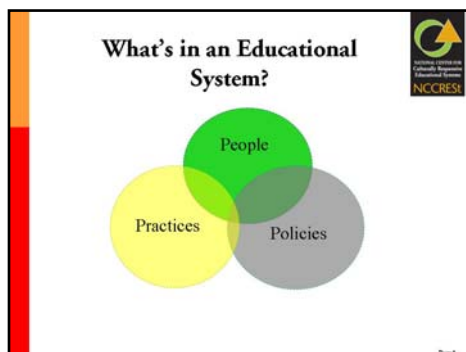
Outcomes:

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:

- Identify a set of questions that will continually guide their leadership efforts.
- Match data points to those questions.
- Establish an ongoing process for measuring change effects.
- Understand the impact of progress in the building from a complex framework of change mechanisms.



Slide 8



What's in an Educational System?

People
Practices
Policies

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?

When culture, language, heritage, and experiences of students and families are (1) valued; (2) used to facilitate learning and development; and (3) access to high quality teachers, programs, curricula, and resources is available to every student.

Ethics of care, respect, and responsibility are evident for all students from all cultural and linguistic backgrounds

Every student benefits academically, socioculturally & linguistically

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...

?

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. Make sure you stay on task and on the material presented since you have only a short time to facilitate the academy. Limit this to 5 - 7 minutes.

Activity 1: Fishbone Activity - Background

In this activity, participants will identify and discuss issues surrounding the evidence.

Activity Sections

- Part 1: District Data
- Part 2: Fishbones
- Part 3: Debrief

Complete Activity Takes 35 Minutes

Activity 1, Part 1: District Data

Facilitator Materials

None

Participant Materials

District Data

Activity Purpose

This activity provides a forum to discuss current issues for schools and districts.

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?

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

District A

	General and Special Education Enrollment					Total
	White	African American	Hispanic	Asian/Pacific Islander	American Indian	
General Education Enrollment	5,354	4,521	12,381	29,221	130	50,607
Special Education Enrollment	215	1,252	1,726	1,316	68	5,577
Disabilities Categories						
Mental Retardation	50	10	10	110	1	181
Learning Disabilities	13	0	10	10	0	33
Specific Learning Disabilities	433	1,211	1,030	419	11	3,094
Emotional Disturbances	86	206	11	13	0	496
Orthopedic Impairments	11	0	11	11	0	43
Other Health Impairments	44	86	12	43	1	176
Speech or Language Impairments	179	249	413	426	0	1,467
Autism	0	11	0	0	0	11
Visual Impairments	0	11	0	14	0	25
Hearing Impairments	27	11	19	26	0	83
Deaf/Blindness	0	11	11	14	0	36
Multiple Disabilities	49	11	11	14	0	85
Truncate: Brain Injury	1	11	0	1	0	13
Educational Environmental Categories						
On-track Regular Class <15%	444	52	507	1,090	50	3,113
On-track Regular Class 15-40%	0	0	0	0	0	0
On-track Regular Class 40-60%	32	11	130	26	1	180

District B

	General and Special Education Enrollment					Total
	White	African American	Hispanic	Asian/Pacific Islander	American Indian	
General Education Enrollment	422	62	2,013	1,262	13	10,714
Special Education Enrollment	75	30	276	17	1	1,124
Disabilities Categories						
Mental Retardation	12	0	0	12	1	25
Learning Disabilities	4	1	11	2	0	18
Specific Learning Disabilities	0	0	0	0	0	0
Emotional Disturbances	0	0	0	0	0	0
Orthopedic Impairments	0	0	14	0	0	14
Other Health Impairments	1	0	14	1	0	16
Speech or Language Impairments	40	0	426	32	0	508
Autism	0	0	0	0	0	0
Visual Impairments	0	0	13	2	0	15
Hearing Impairments	0	0	11	0	0	11
Deaf/Blindness	0	0	11	0	0	11
Multiple Disabilities	0	0	11	0	0	11
Truncate: Brain Injury	0	0	0	0	0	0
Educational Environmental Categories						
On-track Regular Class <15%	20	0	243	11	0	484
On-track Regular Class 15-40%	0	0	110	0	0	110
On-track Regular Class 40-60%	32	11	130	26	1	410

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

Organize participants into small groups (3-5). Have groups look at the District Data handout and discuss the various pieces of data which they find to be of interest.

Activity 1, Part 2: Fishbones

Facilitator Materials

None

Participant Materials

Fishbone Activity

Activity Purpose

Participants define those issues that undergird the use of data at the district level.

Activity Time Limit

15 minutes

Facilitator Note

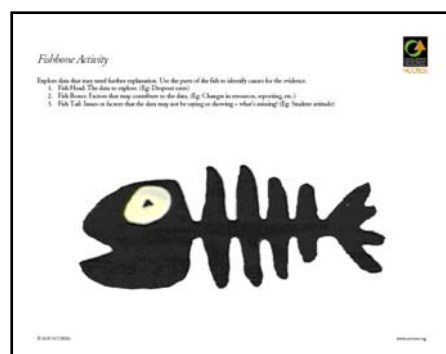
None

Activity

Refer the groups to the *Fishbone Activity* and ask them to complete the parts of the fish.

The head should be the issue they decide to analyze more in depth from their *District Data* handout. The fishbones should be possible contributing factors to the issue. The tail should be points the group comes up with to the question: “What is the data NOT saying/showing? – what’s missing?”

For example: The dropout rate may change student population, resources, and staff, etc. The data about the attitudes of the dropouts may not have been collected.



Activity 1, Part 3: Debrief

Facilitator Materials

None

Participant Materials

None

Activity Purpose

This activity allows participants to collectively share what factors contribute to a single piece of evidence.

Activity Time Limit

10 minutes

Facilitator Note

None

Activity

Return to whole group. Small groups should share the data they examined and one factor from their fish bones and fishtail.

Lecturette 1: Richness and Complexity of Student Data

This lecturette outlines various assessment formats and potential uses for the evaluations.

Facilitator Materials

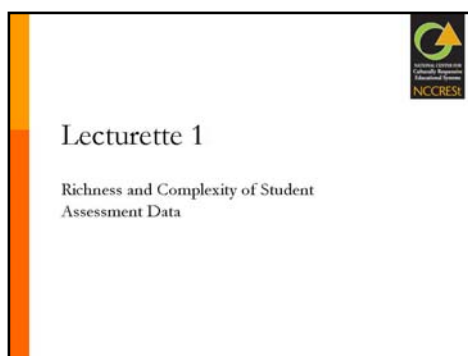
Lecturette 1 PowerPoint

Outcomes Met In Lecturette

- Establish an ongoing process for measuring change effects.

Complete Lecturette Takes 20 Minutes

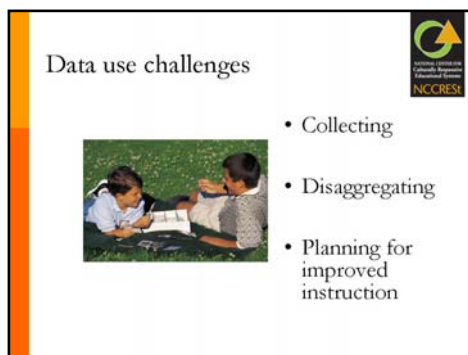
Slide
1



Lecturette 1: Richness and Complexity of Student Assessment Data:

Data can be an educator's best friend. In this segment we identify and discuss the challenges faced by educators in collecting, disaggregating and planning for improved instruction using data.

Slide
2



Data Use Challenges:

Collecting data is a challenge because gathering the information that can help provide robust pictures of what is currently happening requires systematic approaches to accumulating and compiling information from students, families and school professionals. Schools need to identify the data sources that will help them become more culturally responsive and then create systems that will ensure that data are collected in cycles. By collecting the same information

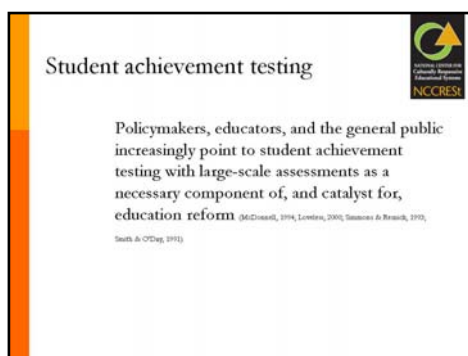
in several cycles, the building leadership team, grade level teams and other interested groups can monitor change over time.

Disaggregating data is another challenge. A more complete picture is presented when data are sorted into groups that provide a way of comparing the same information across different populations. For example, the second grade team might want to know, by ethnicity, which groups of readers are most and least proficient at comprehension. Or, the math department may want to take a look at which group of high school students are most likely and least likely to choose advanced calculus or trigonometry. Breaking data out by subgroup helps the school and departments or teams understand where they are being successful and where they may need to improve their practices.

A third area that challenges schools is selecting measures of student performance that are completed

frequently enough for teachers to be able to adjust their practice in order to teach specific groups of students more effectively. Grades at the end of a quarter are summative. They tell teachers how well groups of students did in performing against the teacher's standard for that particular subject for that particular grading period. Since the grade comes as the end of the grading period, the teacher will not go back later and re-teach a concept or coach students through a particular algorithm. What teachers need is information about how well students are grasping a particular concept and which students are grasping the concepts. This helps a teacher plan ahead to reteach to some students, offer more practice, and then accelerate other students who may need more time to develop new skills. This is formative evaluation: the teacher is using information to guide changes in instruction.

Slide
3



Student Achievement Testing:

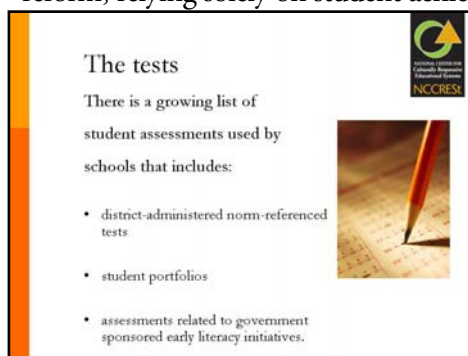
In response to demands for higher levels of academic performance in our nation's schools, it is student achievement testing that is most relied on as the data to measure student learning. While standardized achievement is a central tool for measuring the success of various reform efforts, it is not sensitive enough to use for educational planning in classrooms. Achievement testing can be thought of as a way of benchmarking progress over time. However, as many educational researchers have demonstrated it is not sufficient to tell the whole story

about what students know and are able to do. An important aspect of achievement testing is the degree to which all students' performances are included in the aggregation and disaggregation of data. Where all students are said to "count," we have seen increased attention to sound instructional practice for students who need more individualized or personalized instruction.

Facilitator Instructions:

Ask participants to discuss incidents when they've seen this process happen. When did educational reform, relying solely on student achievement tests, affect their own school or position?

Slide
4



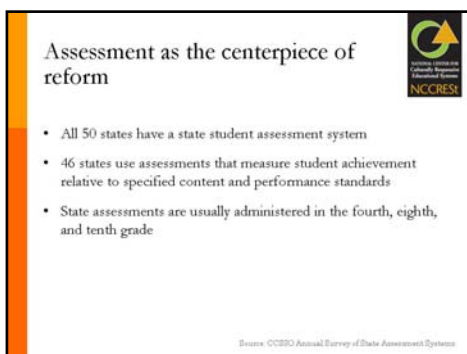
The Tests:

Recent waves of new or expanded state-mandated assessments have added to the already lengthy list of student assessments.

Facilitator Instructions:

Ask participants to name specific student achievement tests of which they know or use.

Slide
5



Assessment as the centerpiece of reform

- All 50 states have a state student assessment system
- 46 states use assessments that measure student achievement relative to specified content and performance standards
- State assessments are usually administered in the fourth, eighth, and tenth grade

Source: CCSSO Annual Survey of State Assessment Systems

Assessment as the Centerpiece of Reform:

Most states have made student assessment the focus of their school reform and improvement efforts. Consider the following: Many schools work diligently to integrate a multitude of assessments.

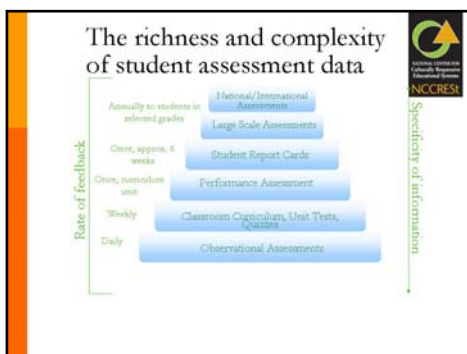
Facilitator Instructions:

Have a group discussion on why states or the federal government focus school reform and improvement efforts solely on assessments. What led to this? How is this

connected to No Child Left Behind?

Note: Try not to get into a debate as to whether this is a good or bad practice, keep it focused on why this is the current trend. Keep the discussion to 5 minutes.

Slide
6



The richness and complexity of student assessment data

Rate of feedback (left axis): Daily, Weekly, Once, midyear unit, Once, approx. 6 weeks, Annually to students in selected grades

Specificity of information (right axis): Observational Assessments, Classroom Assignments, Unit Tests, Quizzes, Performance Assessment, Student Report Cards, Large Scale Assessments, National/International Assessments

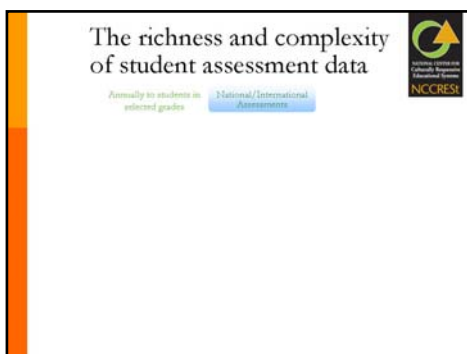
The Richness and Complexity of Student Assessment Data:

We use lots of data to discover if students are learning. Whether or not states look at all of it, instructors should use the feedback to improve daily instruction to maximize student achievement.

Featured in the next slides are the challenges faced by educators in this endeavor and common strategies used by schools to overcome these challenges.

In addition to these, recent waves of new or expanded state mandated assessments have added to the already lengthy list of student assessments used by schools, including district administered norm referenced tests, student portfolios, and assessments related to government-sponsored early literacy initiatives (Cromey, 2000).

Slide
7



The richness and complexity of student assessment data

Annually to students in selected grades

National/International Assessments

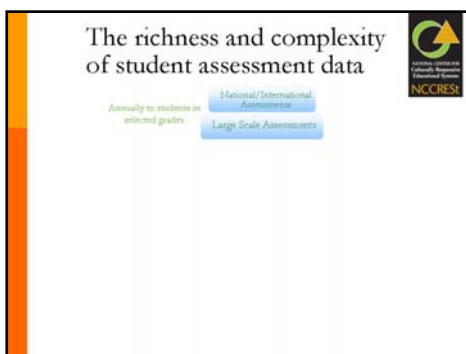
National/International Assessments:

The challenge: How does aggregated student performance vary across systems?

National and international assessments compare students to others with similar numbers of years in school. They do not account for differences in student access to learning materials, high quality teaching, curriculum, cultural and linguistic diversity or abilities. Additionally, a high test score may simply reflect a student's ability to test well, rather than demonstrating true understanding of the

material. At best, national and international assessments of progress help systems, rather than schools or classrooms, understand their performance in relationship to other systems. But many of the underlying factors that contribute to individual student performance are not revealed in this kind of accountability information.

Slide 8



Large Scale State Assessments

The challenge: To what extent are students meeting state standards?

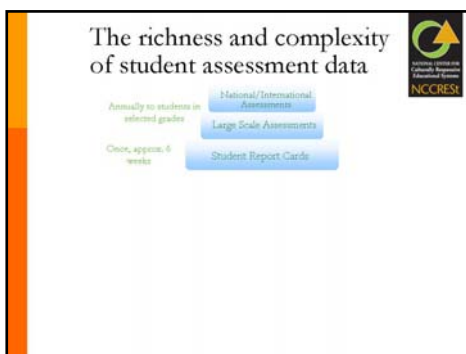
These assessments help to examine aggregated student performance across local school agencies (districts) within a state. Because states have developed or purchased statewide assessment systems, the data are not comparable across states. This is further complicated by the fact that state assessments may or may not have been specifically designed to measure the state standards. In some cases, the state

standards are being measured by a prepackaged, commercial assessment system that was designed for several states and may or may not have been adequately tailored to a specific set of state standards.

The assessments are predetermined and do not account for curriculum differences in various schools, districts, or educational situations (home schooling, magnet schools, etc.).

Performance on state assessments helps local education agencies understand how well their system is educating students in comparison to other systems within the state. A good use of these data would be to visit other schools or systems where schools may be producing better results with similar populations of students. This kind of analysis and data gathering might help a school understand how to structure its services, redesign its professional development or reach out to the community.

Slide 9



Student Report Cards:

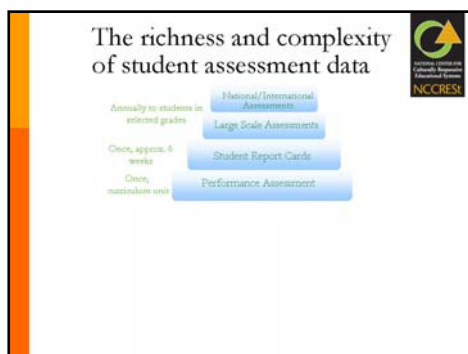
The challenge: How do individual teachers judge student performance in their own classrooms?

Report cards provide information about student progress in individual courses. Grades are highly idiosyncratic. That is, teachers develop and use their own judgment in determining the value of work accomplished in their classrooms and its relative worth in relationship to an overall grade for a course or a grading period. Therefore, a grade in Mr. Smith's 9th grade algebra class is likely to

mean something different than a grade from Mr. Jones in 9th grade algebra, even if both men teach in the same school using the same textbooks. If the math faculty in a particular school work collaboratively to evaluate student work samples, build a shared grading strategy, then there is more reason to assume that grades in one class can be compared to grades in another class.

Parents can use grades to help flag areas where their children may be struggling or succeeding in the curriculum. But everyone needs to bear in mind that grades are ultimately products of individual teacher judgment.

Slide
10



Performance Assessment:

The challenge: Can students apply and generalize what they have learned?

Performance assessments require students to perform a task rather than answer questions as on standardized tests. Such assessments include:

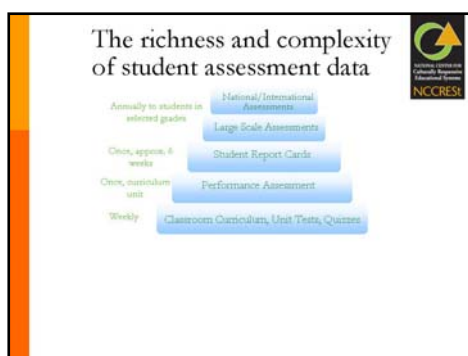
Open-ended questions such as, “How does El Niño affect weather around the globe?”

Extended tasks such as drafting, reviewing, and revising a poem

Portfolios of best pieces of work in a specific subject

These assessments provide evidence of student learning. Depending on how they are constructed performance assessments may provide more ways of demonstrating learning. Since performance assessments often require complex responses, they also provide feedback to the students who complete them. Students may develop a better sense of what they understand and what they need to develop since they will have a difficult time completing a performance based assessment without well developed knowledge and skills.

Slide
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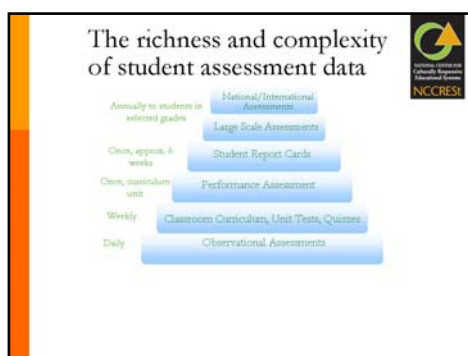


Classroom Curriculum, Unit Tests, Quizzes:

The challenge: What do students know? These tests can be formative. They can assess students’ knowledge and skill development. Quizzes can help teachers identify which students grasped this week’s curriculum. Teachers may be able to determine whether they are on the right track or whether they need to reteach a concept. Compiling information from their students’ performances on exams gives teachers information about which students may need support or if the entire class needs more opportunities to

develop their understandings.

Slide
12



Observational Assessments:

The challenge: Are students learning it?

As teachers observe students learn, they collect information. Who’s struggling? Who’s getting it? What’s working – not working? Is it the activities that are being used to teach a concept? Is there a problem with handling the materials? Do the students have adequate direction for the task? Do they understand what they are supposed to achieve? Do students have the vocabulary they need to master the activity? Have the students been divided into functioning

learning groups or are there adjustments that need to be made? Answers to these questions provide immediate feedback so teachers can instantly change gears to make sure that they are including all their learners in a lesson. This seamless assessment-instruction pairing takes time to master, but provides the opportunity to adjust so that the classroom becomes a more stimulating learning environment.

Activity 2: Understanding the Challenges: Assessing Your School's Student Achievement - Background

This activity affords the participant the opportunity to examine daily use of data and the challenges that such generation and use present.

Outcomes Met In Activity

- Match the kinds of data that can be collected with those questions generated in activity 1.

Activity Sections

- Part 1: Data Reliability
- Part 2: Pulling Together Data

Complete Activity Takes 20 Minutes

Activity 2, Part 1: Data Reliability

Facilitator Materials

None

Participant Materials

District Data

Activity Purpose

This activity allows participants to widen their perception of how data is presented and how to follow through with data information.

Activity Time Limit

10 minutes


Facilitator Note

Other questions may come up. Don't limit the discussion to these questions.

Activity

Begin with a brief group discussion. Discuss where the data from the handout came from. Is it reliable? What does it tell us? What doesn't it tell us? How do we verify the data? Where can we get more information?


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



District A

	General and Special Education Enrollment					Total
	White	African American	Hispanic	Asian/Pacific Islander	American Indian	
General Education Enrollment	1,554	4,261	11,341	1,242	339	18,537
Special Education Enrollment	315	1,242	1,726	1,914	60	5,557
Disability Categories						
Mental Retardation	50	95	20	133	1	300
Hearing Impairments	15	0	10	20	0	45
Specific Learning Disabilities	433	1,211	1,010	313	17	3,084
Emotional Disturbance	80	282	74	48	11	495
Orthopedic Impairments	12	0	12	13	0	47
Other Health Impairments	41	50	12	43	4	130
Speech or Language Impairments	176	249	413	226	7	1,071
Visual Impairment	0	12	0	0	0	12
Verbal Impairments	0	7	4	14	0	25
Multiple Disabilities	17	12	27	30	0	86
Autism	40	17	35	54	0	146
Transition State Entry	7	41	0	1	0	49
Educational Environmental Categories						
Onsite Regular Class -11%	149	51	507	1,090	30	3,317
Onsite Regular Class -21-60%	66	180	179	152	8	585
Onsite Regular Class -60%	112	449	448	431	11	2,551

District B



	General and Special Education Enrollment					Total
	White	African American	Hispanic	Asian/Pacific Islander	American Indian	
General Education Enrollment	422	62	7,891	1,862	15	10,252
Special Education Enrollment	75	86	876	93	1	1,031
Disability Categories						
Mental Retardation	12	0	0	12	1	25
Hearing Impairments	4	1	11	2	0	18
Specific Learning Disabilities	0	0	28	4	0	34
Emotional Disturbance	0	0	4	0	0	4
Orthopedic Impairments	0	0	0	0	0	0
Other Health Impairments	0	0	14	0	0	14
Speech, Language Disabilities	0	0	21	0	0	21
Visual Impairment	0	0	0	0	0	0
Verbal Impairments	0	0	0	0	0	0
Multiple Disabilities	0	0	15	0	0	15
Autism	0	0	12	0	0	12
Transition State Entry	0	0	0	0	0	0
Educational Environmental Categories						
Onsite Regular Class -11%	20	0	143	22	0	165
Onsite Regular Class -21-60%	0	0	119	0	0	119
Onsite Regular Class -60%	52	13	729	820	1	1,615

Activity 2, Part 2: Pulling Together Data

Facilitator Materials

None

Participant Materials

Pulling Together Data

Activity Purpose

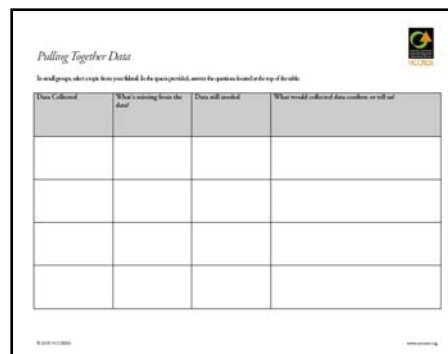
This activity is designed so that participant groups can begin listing data to further understand the importance and use of that data.

Activity Time Limit

10 minutes

Facilitator Note

None



Pulling Together Data

In small groups, select a topic from your fishtail. In the space provided, answer the questions listed at the top of the table.

Data Collected	What's missing from the data?	Data still needed	What would collected data confirm or tell us?

© 2005 NCCRESt

Activity

Organize participants into small groups. Have groups select a topic from their fishtail (The “What’s missing from the data?” part of the *Pulling Together Data* handout) and complete the remainder of the *Pulling Together Data* handout.

Lecturette 2: Using Student Data: Understanding the Challenges

This lecturette outlines issues that influence data collection and use. The lecturette builds on Activity 2. It provides the basis for Activity 3.

Facilitator Materials

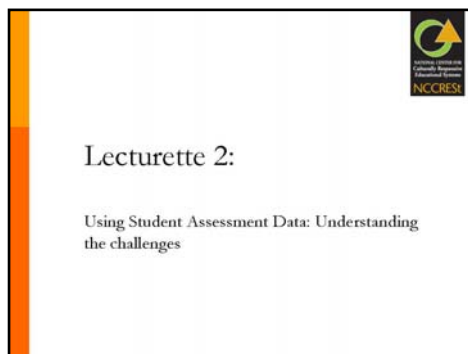
Lecturette 2 PowerPoint

Outcomes Met In Lecturette

- Understand the impact of progress in the building from a complex framework of change mechanisms.

Complete Lecturette Takes 20 Minutes

Slide
1



Lecturette 2: Using Student Assessment Data: Understanding the Challenges:

Earlier in the Academy we identified and discussed the various sources and uses of student data to inform instruction for all students. In this final phase of the Academy, we will turn our attention to strategies that focus our attention on overcoming obstacles and moving forward. We will generate a list of recommendations to support better use of assessment data in schools.

Slide
2



Professional Development:

Neither teachers nor administrators routinely receive formal training on how to assess students or how to apply assessment information to instruction (Cizek, 2000; Schafer & Lissitz, 1987; Wise, Lukin & Roos, 1991).

Facilitator Instructions:

Poll participants – how many have professional development experience in assessing students or applying assessment information to instruction?

Slide
3

Analytical training

Without professional development training, teachers struggle with increasing levels of assessment-linked accountability.

(Cook, 2000)

Analytical Training:

In a study conducted by North Central Regional Education Laboratory, they found that many schools either lacked the resources needed to build capacity in their staffs, or reported insufficient communication between those with analytical skills and those without. Unable to take full advantage of the students' assessment data, these educators seemed to struggle with increasing levels of assessment linked accountability. Not surprisingly, these educators seemed to view the results from some assessments as

punitive and punishing rather than vehicles for school improvement.

Slide
4

Training for educators

Although a foundation in data analysis and assessment is necessary, it is not sufficient for them to effectively synthesize assessment data at the school level.

Training for Educators:

When training is provided, information on data analysis and assessment is not enough. How do teachers use this information? Teachers must be given skills as well as the theoretical knowledge on assessment and data analysis. Teachers must be trained in the use of data. Follow-up and support systems are ideal for this application. Educators are likely to have questions and need additional training as they apply their new skills.

Slide
5

Continuous improvement

Educators need a process for data use that supports ongoing, continuous improvement.

Continuous Improvement:

How will educators use the data? Why should they collect it? Without meaningful reasons for data collection and use, educators will not have reason to follow-through on the data collection initiative. In addition to reasons for data collection they should also be given appropriate tools for data collection.

Slide
6

Lack of face validity

- Face validity refers to what a test appears to measure.
- For some principals and teachers, large-scale assessment data in particular are sometimes deemed invalid and untrustworthy because they are not perceived to accurately measure the achievement of their students.

Lack of Face Validity:

Face validity is the appearance of what is measured. Does the test measure a specific skill such as word identification?

Sometimes a test appears invalid because it doesn't measure the real knowledge and skills of the students. Educators can sometimes rebel against large-scale assessments because the data doesn't accurately reflect student achievement.

However, one must look deeply into the purpose of the test and the data before making the validity determination.

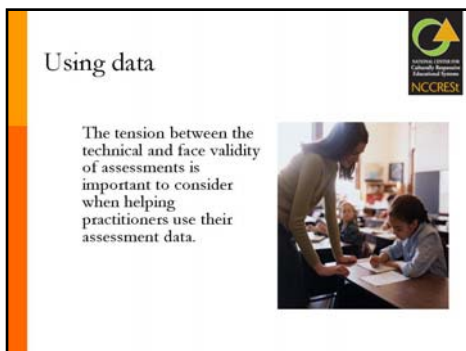
Base your use of data on the purpose of the assessment.

Facilitator Instructions:

What assessments have the participants run into that they have found invalid or untrustworthy?

What were the situations? Reiterate that an assessment is not invalid, only inaccurate use of the data. Use assessment for the purpose that makes sense.

Slide
7



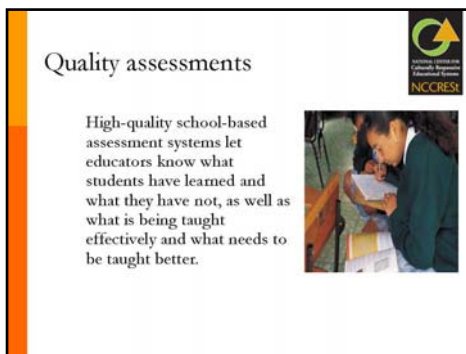
Using data

The tension between the technical and face validity of assessments is important to consider when helping practitioners use their assessment data.

Using Data:

Siphoning the legitimate data from data that is invalid can be difficult. Be careful to check the validity of your assessments before using the data to change practice.

Slide
8



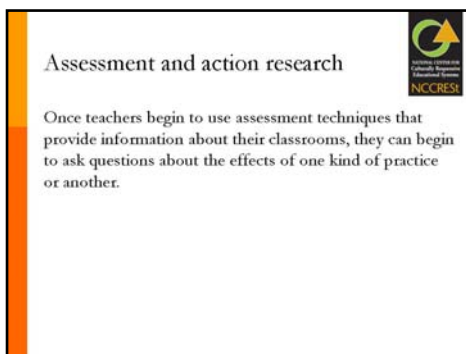
Quality assessments

High-quality school-based assessment systems let educators know what students have learned and what they have not, as well as what is being taught effectively and what needs to be taught better.

Quality Assessments:

Quality assessments give the educator data that supports the instructional process. It provides information on what students are learning and what needs to improve. Assessment is a valuable tool in the education process and is often the first place reformers look to make changes.

Slide
9



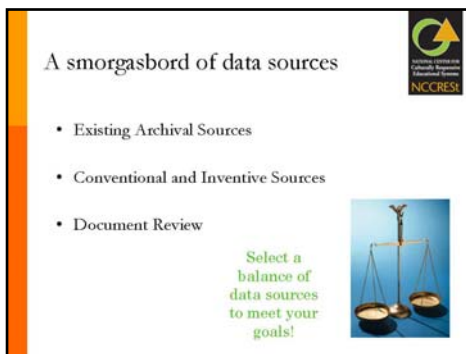
Assessment and action research

Once teachers begin to use assessment techniques that provide information about their classrooms, they can begin to ask questions about the effects of one kind of practice or another.

Assessment and Action Research:

Once teachers begin to use assessment techniques that provide information about their classrooms, they can begin to ask questions about the effects of one kind of practice or another. This is called Action Research.

Slide
10



A smorgasbord of data sources

- Existing Archival Sources
- Conventional and Inventive Sources
- Document Review

Select a balance of data sources to meet your goals!

A Smorgasbord of Data Sources:

A resource list or a springboard for generating data sources for collaborative action research to support more culturally responsive schools and classrooms.

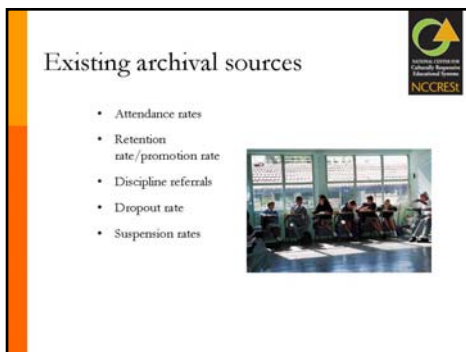
Selecting Data Sources for your action research - This can be a simple process if you have already identified your collective goal around culturally responsive practices. Once you know what your goal is, you need to have an action plan that includes information about what is happening now, a set of processes for implementing your plan and

then, a way of evaluating or assessing its effectiveness.

Use multiple sources of data. For each kind of information that you want, make sure that you have

a timeline for collecting the information and have assigned someone the task of getting it done. Review your completed action plan to ensure that you are collecting data from the appropriate sources. Make sure that have built in time to aggregate and disaggregate data so that you can look at effects of your work on various populations of students and families.

Slide
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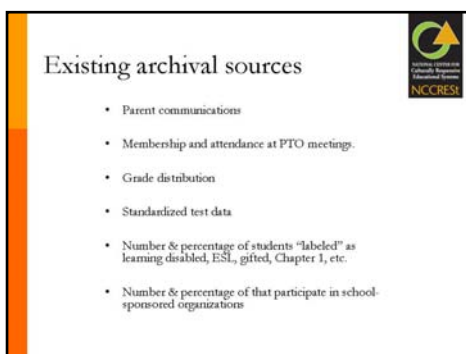


Existing Archival Sources:

Attendance rates
Retention rate/promotion rate—by school, grade level, teacher, and particular groups (e.g., male/female, race/ethnicity).
Discipline referrals—by school, grade level, classroom, particular groups.
Dropout rate—by school grade level, classroom, particular groups.
Suspension rates—by school grade level, classroom,

particular groups.

Slide
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Existing Archival Sources:

Number and percentage positive (and negative) parent communications—by school, grade level.
Membership in parent/teacher organization (PTO) (percent of parents; attendance at PTO meetings).
Grade distribution in science, math, social studies, etc.—by SES, race/ethnicity, gender.
Standardized test data (ITBS, criterion-referenced, academic proficiency)—use raw scores for comparison from year to year.

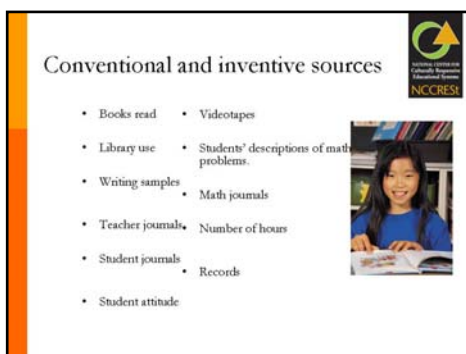
Number & percentage of students “labeled” as learning disabled, ESL, gifted, Chapter 1, etc.—by school, grade level. May also want to look at years student has been labeled.

Number & percentage of that participate in school-sponsored organizations (e.g., DECA, Future Business Leaders, Drama Club, Yearbook)—by school, grade level, classroom, academic “track,” particular groups.

Facilitator Instructions:

Lead a short discussion on why these existing sources would be beneficial. Keep it to 5 minutes.

Slide
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Conventional and Inventive Sources:

Number of books read by students and by school staff—by school, grade level, class.
Library use—by school, grade level.
Writing samples.
Teacher journals—focused on the school wide initiative.
Student journals—focused on the school wide initiative (e.g., 5 minutes spend writing about today’s class).
Student attitude surveys about reading or math, followed by interviews.

Videotapes of students working in cooperative groups.

Videotapes of students solving math problems.

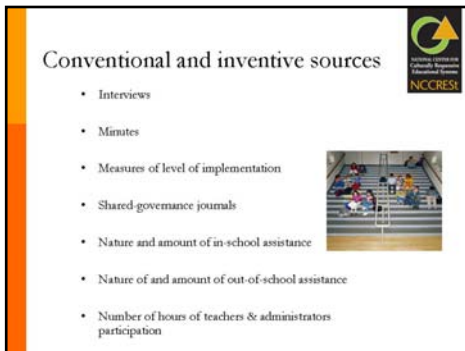
Students' written descriptions of math problems.

Math journals (students draw pictures or write equation for work problems.)

Number of hours allocated to formal student assessment, for state standardized tests and for end of unit/level tests—by grade level, teacher.

Records.

Slide
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Conventional and inventive sources

- Interviews
- Minutes
- Measures of level of implementation
- Shared-governance journals
- Nature and amount of in-school assistance
- Nature of and amount of out-of-school assistance
- Number of hours of teachers & administrators participation

Conventional and Inventive Sources:

Interviews about school wide initiative—when surveys do not provide enough information.

Minutes from follow-up meetings after staff development sessions.

Measures of level of implementation—fidelity to models used in staff development.

Shared-governance journals. Minutes from shared governance, council, or task force meeting.

Nature and amount of in-school assistance in curriculum

implementation, data analysis, staff development from central office or regional service agencies.

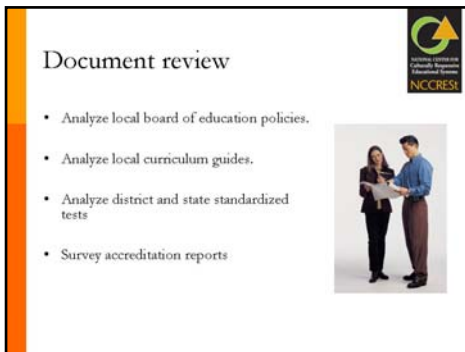
Nature of assistance, numbers of and amount of time contributed by volunteer parent or community members—school, grade level.

Number of hours teachers & administrators participate in required staff development activities and in voluntary professional development activities—by school, grade level.

Facilitator Instructions:

Lead a short discussion on why these conventional sources would be beneficial. Keep it to 5 minutes.

Slide
15



Document review

- Analyze local board of education policies.
- Analyze local curriculum guides.
- Analyze district and state standardized tests
- Survey accreditation reports

Document Review:

Analyze local board of education policies, rules and regulations pertinent to the school's instructional initiative.

Analyze local curriculum guides for information pertinent to the school's instructional initiative.

Analyze district and state standardized tests and their accompanying technical and content manuals and the numerous reports sent to school district for information pertinent to the school's instructional initiative.

Survey accreditation reports for information pertinent to

the school's instructional initiative.

NOTE: Remember to assign a number or code to "anonymous" information, such as parents' attitude surveys, so that you can compare them over several years.

Slide
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Overcoming the challenges






Overcoming the Challenge:

Ways to make sure educators are using assessments and data accurately and efficiently:

- Align assessment, standards, curriculum, and instruction.
- Provide professional development opportunities in student assessment for all teachers and staff.
- Make time to involve teachers in planning and implementing school assessments.
- Define the purpose of assessment.

Slide
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Schools that have committed

Schools that Have Committed:


Schools committed to improving practice based on reliable assessments and data collections:

- Monitor student progress.
- Evaluate where assessments converge and diverge.
- Judge the efficacy of local curriculum and instructional practices.

In spite of the barriers that have been described, some schools in the NCREL survey were making significant efforts to use student data to guide their school improvement efforts.

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Policy Options for Local and District Leaders



Policy Options for Local and District Leaders:

Local and district leaders can decide which tests and assessments are necessary. They can involve teachers to develop assessment practices that satisfy local needs, align with state frameworks, and track student progress over time. Finally, they may allocate more time, or modify existing schedules so teachers can analyze and reflect upon student assessment data, plan for revisions to their curricula and teaching practices, and receive in-service support on how to use student assessment data effectively.

Activity 3: Tracking Change - Background

The activity is designed to assist participants in examining the types of changes that might or should occur, how to identify those changes and how to incorporate them in a school improvement schema.

Outcomes Met In Activity

- Establish an ongoing process for measuring change effects
- Understand the impact of progress in the building from a complex framework of change mechanisms

Activity Sections

- Part 1: Day-to-Day Data
- Part 2: Measuring Change

Complete Activity Takes 15 Minutes

Activity 3, Part 1: Day-to-Day Data

Facilitator Materials

Chart paper, an overhead, or presentation slide

Participant Materials

None

Activity Purpose

This activity allows participants to examine the various ways in which they use data in their everyday working situations.

Activity Time Limit

5 minutes

Facilitator Note

None

Activity

Now that the participants can use and follow-through on data, ask them to identify some data they regularly use. Ask the participants: *What kinds of day-to-day data do you use?* List the responses on chart paper, an overhead, or presentation slide.

Activity 3, Part 2: Measuring Change

Facilitator Materials

None

Participant Materials

Measuring Change

Activity Purpose

This activity allows participants to determine how they can follow-through with their daily interaction with data.

Activity Time Limit

10 minutes

Facilitator Note

The completion rate of the handout will vary. Some groups will analyze more data than others. This is fine as long as the groups are thoughtfully analyzing the data.

Activity

Organize participants into small groups.
Ask small groups to complete the *Measuring Change* handout using one or more of the responses identified in Part 1 of the activity. When they identify what data they will use, they will have to answer these questions:

What is the data used for? This probably has more than one answer.

How often do we use the data? Daily? Monthly? Yearly?

Who looks at the data? The student? Teacher? Parents? Community?

How do we know change is happening? How does follow-up happen?

What is the data?	What is the data used for?	How often do we use the data?	Who looks at the data?	How do we know change is happening?

Leave Taking

Leave Taking, Part 1: Self Assessment

Facilitator Materials
None

Participant Materials
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.



Academy 2 Self Assessment

This is a non-graded, anonymous self-assessment. Take 10 minutes to complete the following questions taken from the content of this academy. After the time the group will have the opportunity to share answers. Your feedback will be used to reflect these self-assessments to increase the effectiveness of the academy.

1. What have increased the use of a single data source for evaluating student performance?
2. Why is it important to use the data you generated in daily activities? Explain how you rely on it in related activities.

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.

Activity Time Limit

10 minutes

Facilitator Note

None

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 module 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 along with the *Self Assessments*.

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.

Academy Evaluation
Data Mining Academy 2: Identifying School-Wide Factors of School Improvement

I am a

General Ed Teacher

Administrator

Special Ed Teacher

Parent

Paraprofessional

Other _____

How well do you understand the topics and activities?

1	2	3	4	5
Never				Always

How well do you understand the strategies, modeling, and research-based practices?

1	2	3	4	5
Never				Always

I am affiliated with which?

Elementary School

Middle School

Secondary School

Please suggest 2-3 things that could be made even better... Add this!

1. _____

2. _____

3. _____

If I were on the next academy planning team, I would...

As a result of my participation in this academy, I am going to...

Resources

Armstrong, J. & Anthes, K. (2001). How data can help. *The American School Board Journal*, 188(11), 38-41.

A study explored how districts can use data more effectively. Data were obtained from six schools in five different states that had reputations as particularly effective users of data. It emerged that districts that make good use of data share several characteristics. These common factors are strong leadership; a supportive district wide culture for using data for continuous improvement; a strong service orientation toward principals and teachers; partnerships with universities, businesses, and nonprofit organizations; a mechanism for supporting and training personnel to use data; close accounting of every student's performance on academic standards; a focused flexibility in how time is used; and a well-defined, data-driven school improvement process.

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, 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.

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

Marzano, R. J. (2003). Using data: Two wrongs and a right. *Educational Leadership*, 60(5), 56-60.

Schools and districts often make two mistakes in their efforts to be data-driven. The first mistake occurs because schools use measures of student learning that are not sensitive to the actual learning occurring in classrooms. The second mistake comes about when a school or district has no system or plan for interpreting and using the data. Education research has revealed 11 student, teacher, and school factors that affect student learning. These are a guaranteed and viable curriculum, challenging goals and effective feedback, parent and community involvement, a safe and orderly environment, staff collegiality and professionalism, teachers' instructional strategies, classroom management, classroom curriculum design, home atmosphere, learned intelligence and background knowledge, and student motivation. A survey instrument that can be used to identify specific elements for each of the 11 factors that directly affect student achievement is discussed.

Parsons, B. A. (2003). A tale of two schools' data. *Educational Leadership*, 60(5), 66-68.

The different approaches to data collection and analysis that are taken at two school districts are discussed. In the first district, an examination of previous scores is conducted, a goal is set, and individual teachers are left to figure out how to reach this objective. In the second district, a diagnosis is made, a goal is set, a planning system based on program planning and action as well as evaluative inquiry is created, and an Action Team and an Evaluative Inquiry Team is developed for each subject area. The first district reports progress on overall math achievement on a yearly basis, but teachers do not know how to link this information to the variables they can control. However, the second district reports on research-based changes to improve student learning, how levels of implementation of the new methods are linked to progress in student learning, and how teachers are sharpening their instruction.

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 tests and analyzing data from standardized achievement tests.

Rudner, L. M. & Boston, C. (2003). Data warehousing: Beyond disaggregation. *Educational Leadership*, 60(5), 62-65.

Schools should consider data warehousing to ensure their data collection and reports comply with the new No Child Left Behind legislation and to provide a more precise tool for improving education. Data warehousing allows educators to use collected data for traditional purposes, to transform mountains of data into useful information, and to help policymakers identify and plan responses to key trends.

Thomas, R. S. (2003). Conversations that unlock knowledge in our schools. *Principal Leadership*, 3(8), 40-44.

Advice for school principals on how to develop the ability of faculty to discuss significant student learning issues is provided. This advice relates to the need to use several key categories of questions in faculty conversations if a school is to move from data to information to knowledge. These categories relate to understanding data, analyzing desegregated data, transforming data into information, benchmarking school performance against other schools, and using information to identify root causes of current achievement levels.

Thornburn, M. & Collins, D. (2003). Integrated curriculum models and their effects on teachers' pedagogy practices. *European Physical Education Reviews*, 9(2), 185-209.

There is increasing interest in how philosophy or overarching aims are articulated through the various planning stages to eventual teaching methodology. Accordingly, this paper analyses the interrelationship between teaching, learning and assessment through tracking the decision-making chain from teachers' intentions to the assessment of student outcomes. The context employs an integrated curriculum model, which attempts to link improving performance within activities with the development of an underpinning knowledge about performance-related concepts. The paper reports findings from 40 semi-structured and small group interviews with PE teachers and students in a purposeful sample of secondary schools in Scotland, all following a centrally defined integrated curriculum. Results highlight profound disparities in the pedagogy practices teachers adopt in attempting to translate a dictated 'practical experiential' rationale into performance-led practice. Consequently, this paper provides discussion points for the further review of policy and related methodologies.

References Cited

- Cromey, Allison (November, 2000) Using Student Assessment Data: What Can We Learn From Schools? *Policy Issues November 2000 Issue 6* North Central Regional Educational Laboratory.
- Cizek, G. J. (1995) The big picture in assessment and who ought to have it. *Phi Delta Kappan*, 77, 246-249.
- Doyle, D.P. (2002) Knowledge-based decision making. *The School Administrator*, 59(11), 30-34.
- Eight questions about implementing standards-based education. *Practical Assessment, Research & Evaluation*, 5(6).
- Bernhardt, V.L. (1998) *Data analysis for comprehensive school wide improvement*. Larchmont, NY: Eye on Education.
- AERA position statement concerning high stakes testing in pre k-12 education.
[<http://www.aera.net/policyandprograms/?id=378>]

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 an 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 refers to 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.