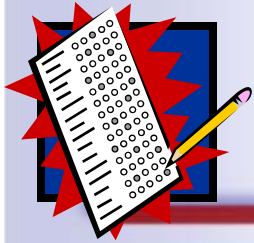


Using School Visits to Examine the Relationship Between Academic Index Scores and School Learning Environment and Instructional Practice in Kentucky

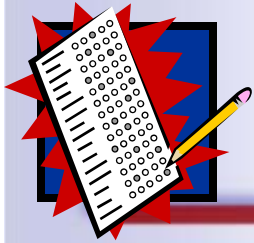
Presenter:
Emily Dickinson
HumRRO

October 9-11, 2008
National Evaluation Institute



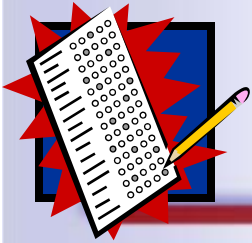
Presentation Overview

- Introduction to HumRRO
- Kentucky's Accountability System
- HumRRO's work in KY
- Documenting Instruction and School Learning Environment Study
 - Purpose
 - Methods
 - Results
 - Future work
- Questions



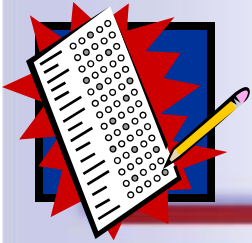
Who is HumRRO?

- Established in 1951
- Non-profit research company
- Three program areas dedicated to educational research
 - Center for Learning, Evaluation and Assessment Research (CLEAR)
Program Manager – Dr. Gene Hoffman (Louisville, KY)
 - Validity Investigations in Education and the Workplace (VIEW)
Program Manager – Dr. Art Thacker (Louisville, KY)
 - Educational Policy Impact Center (EPIC)
Program Manager – Dr. Sheila Schultz (Alexandria, VA)
- Perform both psychometric/quantitative and qualitative research for several states, College Board, and NAEP



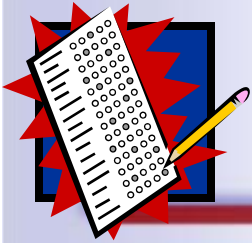
Kentucky's Accountability System

- State wide school reform of 1990 (KERA)
 - Kentucky Instructional Results Information System (KIRIS)
 - Baseline accountability index established
 - Biennial improvement goals set toward meeting common 20-year goal
 - Increased focus on higher order thinking skills
- System modifications
 - Commonwealth Accountability Testing System (CATS) (1999)
 - Added multiple-choice test results to the school accountability index
 - New goals established
 - Additional Changes in 2006-2007
 - New version of the Core Content for Assessment (4.1)
 - More grade levels assessed
 - Added norm-referenced tests
 - Align with NCLB requirements



HumRRO's Work in KY

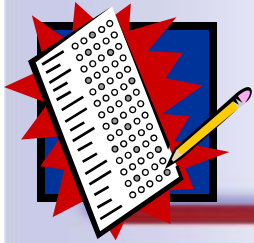
- Working for KY since 1996-97 performing a number of validity and reliability investigations
 - Independent replication of scaling and equating
 - HumRRO has acted as both primary and third-party checker over the years
 - Classification Accuracy
 - Student and School Level
 - Content Validity
 - Item Mapping
 - Convergent Validity
 - Correlations between CATS and other measures
 - Consequential Validity
 - Impact of school accountability system on curriculum and instruction



Documenting Instruction and School Learning Environment Study- Purpose

- **Kentucky Legislation**
 - As part of validity evidence to support the use of school-level accountability scores and classifications
 - “...the congruence of school scores with documented improvements in instructional practice and the school learning environment...” (KRS 158.6453 (5))

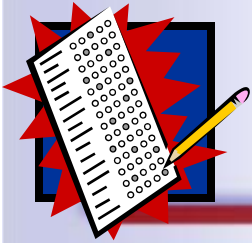
HUMAN



Documenting Instruction and School Learning Environment Study- Methods

➤ Year 1 (2006-2007)

- 30 school visits
 - 10 districts (1 High, 1 Middle, 1 Elementary in each)
 - Teacher and Principal interviews
 - Focused classroom visits
- Survey 150 schools
 - Includes the 30 schools visited
 - Web-based survey



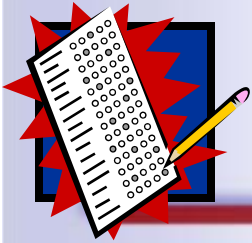
Documenting Instruction and School Learning Environment Study- Methods

➤ Year 2 (2007-2008)

- 60 school visits
 - 30 original Schools, plus 30 additional in 10 new districts
- Survey at least 300 schools
 - Including the original 150

➤ Year 3 (2008-2009)

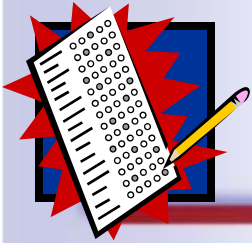
- 60 visits
 - Return to previous years' schools
- Survey all Kentucky public schools



Documenting Instruction and School Learning Environment Study- Methods

➤ School selection

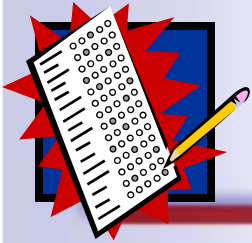
- High schools were sampled, and then a “triad” was built by adding a feeder middle and elementary school for each high school
- Purposeful sampling technique
 - CATS scores
 - Schools classified into highest, middle, and lowest scoring thirds
 - Selected 5 high-scoring and 5 low-scoring high schools
 - Feeder schools were in the same third as the selected high school (if possible)
 - High- and low-scoring groups were divided into thirds and high schools were selected from the middle third of each group
 - District type (urban, rural, mixed rural/urban/suburban/small city/large town)
 - Location within Kentucky (eight service regions)
 - Sample representative of numbers of types of schools



Documenting Instruction and School Learning Environment Study- Methods

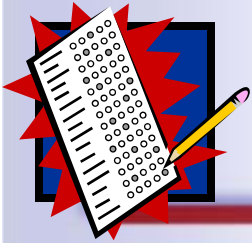
➤ Schools Selected – Year 1

- 1 highest third urban triad
- 1 lowest third urban triad
- 1 highest third mixed triad
- 1 lowest third mixed triad
- 2 highest third rural triads
- 3 lowest third rural triads
- 1 highest third independent-large town or small city triad



Documenting Instruction and School Learning Environment Study- Methods

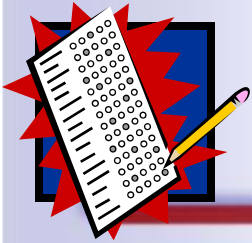
- School Visited – Year 2 (Same schools in Year 3)
 - 2 highest third urban triads (1 new)
 - 2 lowest third urban triads (1 new)
 - 2 highest third mixed triads (1 new)
 - 2 middle third mixed triads (all new)
 - 1 lowest third mixed triad
 - 2 highest third rural triads
 - 3 middle third rural triads (all new)
 - 4 lowest third rural triads (1 new)
 - 1 highest third independent-large town or small city triad
 - 1 middle third independent-large town or small city triad (new)



Documenting Instruction and School Learning Environment Study- Methods

➤ Protocol Development

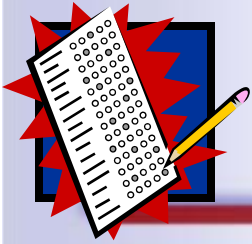
- Structured around *School-Level Performance Descriptors for Kentucky's Standards and Indicators for School Improvement*
 - Used in audits, reviews and internal reviews
 - Indicators shown to correlate with school performance (Koger & Thacker, 2004)
- Cooperative discussion between full-time and part-time HumRRO research staff
 - Part-time staff consists of retired Kentucky educators
- Piloted in a small number of schools



Documenting Instruction and School Learning Environment Study- Methods

➤ Interview Protocols (Year 1)

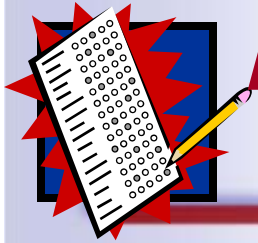
- Principal
 - Career background
 - School/Community Background
 - Instructional Practices
 - Assessments
 - Changes to CATS
- Teacher
 - Career Background
 - Lesson plan information (for classroom visit)
 - Instructional Practices
 - Alignment Activities
 - Pacing
 - Assessments
 - Remediation



Documenting Instruction and School Learning Environment Study- Methods

➤ Focused Visit Protocols

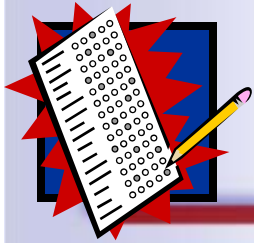
- General narrative description
- Focused questions
 - Lesson topic
 - Alignment to content standards
 - Instructional strategies
 - Student engagement
 - Technology
 - Assessment
 - Efficient use of time



Documenting Instruction and School Learning Environment Study- Methods

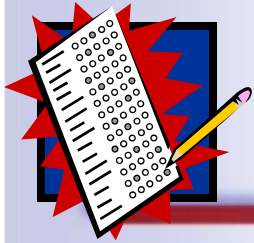
➤ Site Visit Structure

- Interview and visit as many teachers as possible
 - A broader range of perspectives
 - Limit interview to about 20 minutes
 - Limit visit to about 20 minutes
- Team of two researchers visit each school for two days (Year 2 - 1 day per school, Year 3 – 1 week per district)
 - Focus on main Core Content subjects (English/Language Arts/Reading, Math, Science, and Social Studies)
 - Also interviewed teachers of other assessed subjects, including Arts & Humanities, Practical Living/Vocational Studies, and special education and remediation teachers, time permitting



Documenting Instruction and School Learning Environment Study- Methods

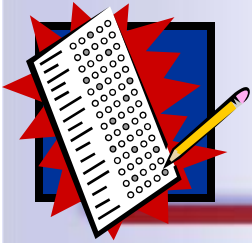
- Visit Team Composition and Assignments
 - Team Leader – retired educators (assistant superintendents, principals, and Kentucky HSE/DEs)
 - Team Leaders visited the same schools each year
 - Team leader schools were mixed—high, middle, and low in terms of academic index
 - Other team members were HumRRO researchers who work on educational assessment projects and were experienced in conducting school visits or other retired educators with experience similar to team leaders but less experience with HumRRO
 - Team members worked with different team leaders



Documenting Instruction and School Learning Environment Study- Methods

➤ Visit Team Training

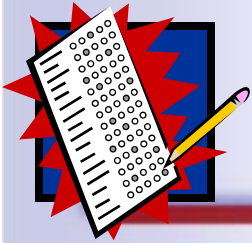
- Team Leader session
 - Reviewed video examples of teaching to establish key elements to be documented and how those should be coded and rated
 - Determined which examples should be presented, order of presentation, and discussion points
 - Discussed results of pilot testing and modified interview and focused visit protocols as necessary
- Full team session
 - Reviewed video examples of teaching with team leaders leading discussion of key elements and coding
 - Conducted mock interviews
 - Discussed school-level data analysis procedures



Documenting Instruction and School Learning Environment Study- Methods

➤ Year 1 –Data Analysis

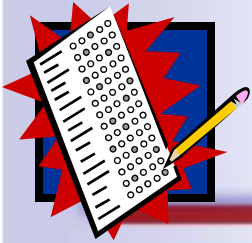
- Visit team conducted initial school-level analysis
 - Completed “Theme Sheet”
 - Curriculum Alignment
 - Pacing
 - Remediation
 - Evaluation/assessment
 - School Learning Environment
 - Instructional Practices
 - Professional Development
 - Use of time
 - Depth of Knowledge
 - Assigned positive, average, or negative rating to the body of evidence collected as examples of each of the nine themes
 - Provided examples
 - Included conflicting evidence
 - Partners met and assigned an overall rating for each theme (7-point Likert scale)



Documenting Instruction and School Learning Environment Study- Methods

➤ *Year 2 –Data Analysis*

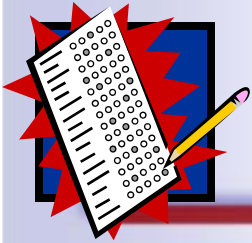
- Focus was on developing a school rating and a narrative summary based on themes developed for each of the three categories:
 - Instructional Practices
 - School Learning Environment
 - School Culture
- In all three years, school-level analyses were then passed on to the project director for further analysis, including correlations between theme ratings and school academic index, as well as looking for themes across schools.



Documenting Instruction and School Learning Environment Study- Results

➤ Year 1

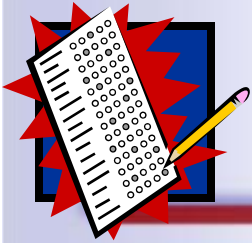
- HumRRO interviewed 30 principals and 567 teachers, and conducted 528 focused classroom visits
 - Average of 18.9 teacher interviews and 17.6 visits per school
- Found differences between high scoring versus low scoring schools and between schools categorized as *Meeting Goals* versus *Progressing/Assistance*
 - Statistically significant differences between high and low scoring schools on Instructional Practices, Remediation, Depth of Knowledge, and School Learning Environment
 - Statistically significant differences between *Meeting Goals* and *Progressing/Assistance* schools on all themes except Pacing and Professional Development



Documenting Instruction and School Learning Environment Study- Results

➤ Year 2

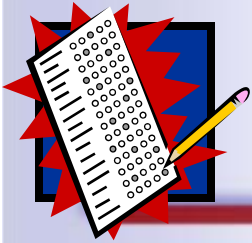
- HumRRO interviewed 60 principals and 577 teachers, and conducted 564 focused classroom visits
 - About 10 teacher interviews and 10 focused visits per school
- Found significant correlations between school-level academic index and Instructional Practices, School Learning Environment and School Culture
 - Only non-significant relationship was with instructional practices at the elementary level
 - Strongest correlations were with school culture (.61-.67)
- Four themes emerged from qualitative data
 - Leadership, student-centered instruction, student home environment, and professional learning communities



Documenting Instruction and School Learning Environment Study- Results

➤ Year 2 – Themes

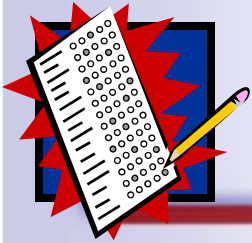
- Instructional Practices
 - Instructional Leadership
 - Focus on “how” rather than “what”
 - Level of student engagement
- School Learning Environment
 - Community/family/student attitude toward education
 - School actions to ensure student success
- School Culture
 - Unified staff with a common school goal
 - Professional learning community (DuFour, et. al., 2004, 2005)



Documenting Instruction and School Learning Environment Study- Results

➤ Year 2 – Instructional Practices Themes

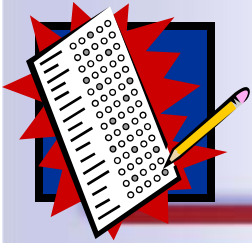
- Instructional Leadership
 - Higher rated schools
 - School leadership focused on continuously improving instruction
 - Leaders were in classrooms observing, mentoring, and modeling instructional practices
 - Lower rated schools
 - We did not see or hear a focus on instruction
 - Focus was on CATS-like testing
 - Leaders appeared to be less involved with classroom instruction



Documenting Instruction and School Learning Environment Study- Results

➤ Year 2 – Instructional Practices Themes

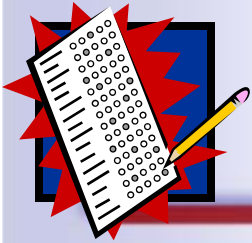
- Focus on “how” rather than “what”
 - Higher rated schools:
 - Teachers knew they were teaching content standards through a “living” curriculum
 - Moved beyond “what” had to be covered and were able to focus on “how” best to present the content to ensure student learning and mastery
 - Lower rated schools:
 - Teachers were intent on “checking off” that content standards were being taught



Documenting Instruction and School Learning Environment Study- Results

➤ Year 2 – Instructional Practices Themes

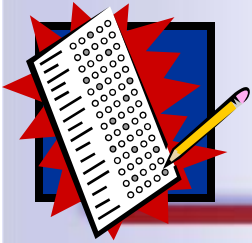
- Level of student engagement
 - Higher rated schools
 - Students were engaged in challenging activities that required relatively high depth of knowledge and interaction (teacher-student, student-teacher, and student-student)
 - Lower rated schools
 - Students were passive learners with little interaction (student-teacher or student-student) and low levels of depth of knowledge (mostly recall)



Documenting Instruction and School Learning Environment Study- Results

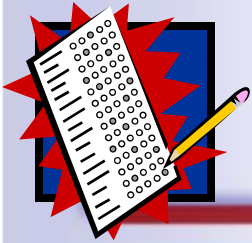
➤ Year 2 – School Learning Environment Themes

- Community/family/student attitude toward education
 - Upper range
 - High value on education (vital to success in life)
 - Demand for a high-quality, challenging curriculum that prepares students for the best colleges
 - Kindergartener reading “chapter books” fluently out loud in early fall
 - Lower range
 - Education is a threat to their families (children may leave the area)
 - Parents were not successful in school and provide little support or encouragement and can provide little assistance to their children
 - “I don’t send chores to school with my kids, don’t send my kids home with school work!”
 - Some elementary students get themselves up, get ready for school on their own, and get themselves to the school bus stop
 - Some students arrive in kindergarten having never seen a book and having no knowledge of letters or numbers



Documenting Instruction and School Learning Environment Study- Results

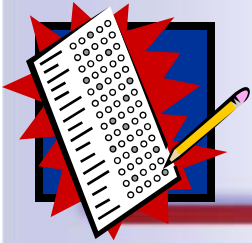
- Year 2 – School Learning Environment Themes
 - School actions to ensure success
 - Higher rated schools
 - Positive actions to make students successful in the classroom
 - Every assignment must be at the “Proficient” level or above
 - Assistance opportunities are built in and required
 - Enrichment activities built in as incentive
 - Lower rated schools
 - Accept low value on education
 - Low expectations are viewed as insurmountable obstacles



Documenting Instruction and School Learning Environment Study- Results

➤ Year 2 – School Culture Themes

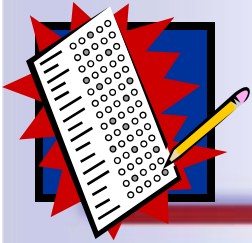
- Unified staff with a common school goal
 - Higher rated schools
 - School leaders brought the staff together around a common core of shared values centered on success for all students
 - Key word we heard in the interviews was “we”
 - Lower rated schools
 - No unifying force or common core of shared values
 - Divisive interaction between leaders and staff
 - Atmosphere of despair with an attitude that outside forces could not be overcome
 - Key word we heard in the interviews was “I”



Documenting Instruction and School Learning Environment Study- Results

➤ Year 2 – School Culture Themes

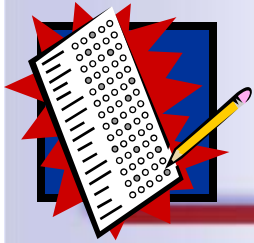
- Professional learning community
 - Higher rated schools
 - High standards and expectations for themselves and students
 - Work together in teams for continuous improvement in all areas
 - Lower rated schools
 - Low standards and expectations for students that carries over to standards for themselves
 - Isolated classrooms with individual pockets of hope and even excellence



Documenting Instruction and School Learning Environment Study- Future Work

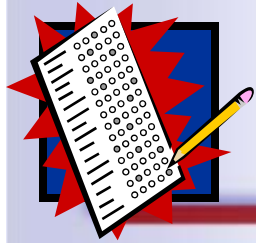
- Year 3 is in progress
 - Schools visits began on September 15 and should be completed before Thanksgiving
 - Research teams will spend about one week in a district visiting the three schools in that district

HUMPRO



Questions?

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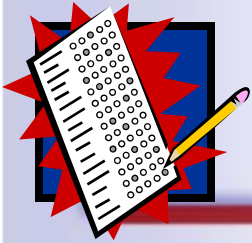


Reports

HumRRO Reports for KDE can be found at:

<http://www.education.ky.gov/KDE/Administrative+Resources/Testing+and+Reporting+/CATS/Accountability+System/CATS+Validity+and+Reliability+Studies.htm>

HUMRRO



Thank You!

- General questions or comments?

Contact Information

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