K-3 FAP Research Update





CEME

The NC KEA Pilot: Findings from the Field

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Background

In the fall of 2014, researchers from UNC Charlotte conducted case studies at 8 schools piloting a new kindergarten formative assessment known as the NC KEA. The purpose of this research was to provide feedback to the Department of Public Instruction regarding teacher and administrator perspectives on professional development for the KEA, the assessment's content and format, the electronic platform used during the KEA process, and how the KEA formative assessment worked in practice. The following presentation is a summary of these findings.

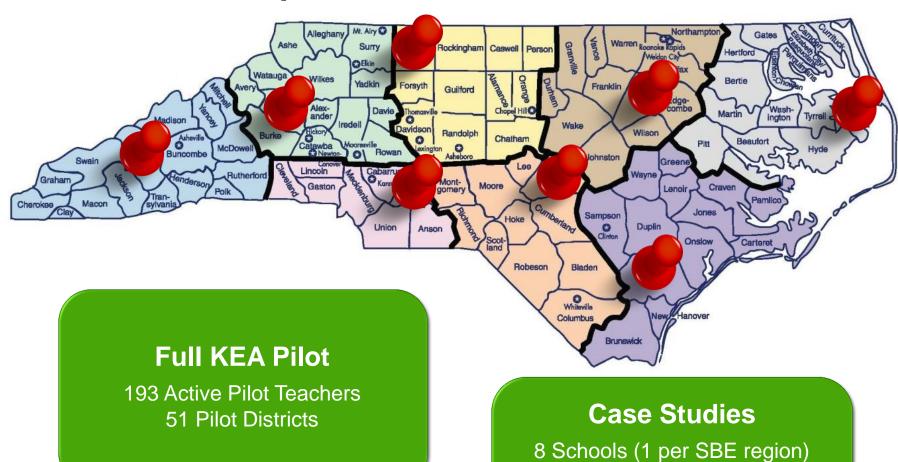


Presentation Overview

- Pilot Participation
- Feedback from the Field Summary of KEA Pilot Findings
- The Electronic Evidences How did Pilot Teachers use the Teaching Strategies® NC KEA System?
- Conclusions



Pilot Participants



23 Teachers

7 Principals
4 Districts Administrators
4 Instructional Coaches

Pilot Process

- Teachers were tasked with gathering and entering 'evidences' of learning:
 - Anecdotal notes
 - Photographs
 - Videos
 - Student work samples
- Evidences were used to denote the 'learning status' of students along different construct progressions:
 - Book and print awareness
 - Following directions
 - Letter naming
 - Number counting
 - Fine motor
 - Engagement in self-selected activities
 - Emotional Literacy

Data Sources

- Case Studies:
 - 6 schools visited twice, 2 schools visited once
 - 23 interviews (approx. 27 hours recorded)
 - 17 classroom observations
- Survey:
 - 72 total responses
 - 52 Teachers, 16 Administrators, 4 Instructional Coaches
 - 18 closed-ended questions (yes/no, Likert Scale)
 - 26 open-ended questions



CLASSROOM OBSERVATIONS

Methods

- Recorded on Observation Site Overview Form and in descriptive field notes
- Codebook generated and all observations were coded
- Coded data analyzed to identify patterns within and between classrooms where the KEA was observed in use as part of normal classroom instruction and classrooms where the use of the KEA was not evident.



Classroom Snapshot

- Average class size of 20 students (min 13, max 25)
- Average of 12 minority students
- 94% had a teaching assistant present during the entire observation
- Classroom technology available:
 - Smart board (86%)
 - Desktop or laptop computer (92%)
 - Tablet or other mobile device (46%)



A Spectrum of KEA Implementation

Implementing Classrooms

- Small class sizes: 14 student average
- Students easily transitioned from one activity to another independently
- School/District had a strong background in the use of formative assessment
- Teachers used self-created implementation resources to assist KEA documentation
- Teachers worked collaboratively
- Schools had strong PLCs with a continual focus on data driven instruction

Non/Minimally Implementing Classrooms

- Large class sizes: 22 student average
- Students struggled to transition independently between classroom activities
- Teachers often preoccupied with behavioral interventions
- School/District did not have a strong background in the use of formative assessment
- Teachers conceptualized and implemented the KEA as a summative assessment
 - Created new/additional activities to "test" each child's ability rather than using current instruction or assessment data



Teacher Created Resources



Construct	Child Name 1	Child Name 2	Class Cont'd
Emotional Literacy			
Fine Motor			
Book & Print Awareness			
Engagement			
Following Directions			
Letter Naming			
Object Counting			

INTERVIEWS AND SURVEY

Interview Methods

- Separate interview protocols developed for teachers and administrators
- Questions covered the following broad topics:
 - Pilot training
 - Current instruction and assessment practices
 - Integration of KEA into classroom practice
 - Use of the KEA electronic platform
 - Use of KEA data to inform instruction
 - Implementation supports provided and/or needed
- Teachers interviewed as a focus group
- Administrators interviewed one-on-one



Survey Methods

- Internet based survey hosted through SurveyShare.com
- A separate set of questions was developed for teachers and administrators/support staff
- Questions covered the following broad categories:
 - Pilot training
 - KEA assessment content
 - Use of the KEA electronic platform
 - Implementation supports provided and/or needed
 - Overall pilot experience



Analysis Methods

- Interview transcripts and open-ended survey questions were imported to NVivo 10 for grounded discourse analysis.
- A single codebook was developed:
 - 119 unique codes generated
 - 3952 total references to these codes noted in the data
- Coded data was analyzed to identify themes and patterns within the interview and survey responses.



Training

	Disagree	Neutral	Agree	n
The training was well organized.	29.41%	19.12%	51.47%	68
The training was sequenced appropriately.	27.94%	20.59%	51.47%	68
The training materials provided became a good resource when implementing the pilot.	30.88%	25.00%	44.12%	68
After attending training I understood the purpose of the KEA.	23.53%	16.18%	60.29%	68
After attending training I understood the formative nature of this assessment.	19.12%	14.71%	66.18%	68
After attending training I understood the content of the progressions.	36.76%	16.18%	47.06%	68
After attending training I understood when to use a situation/task.	33.82%	20.59%	45.59%	68
After attending training I could identify current instruction or assessment practices that could act as evidences for the progressions.	27.94%	14.71%	57.35%	68
After attending training I felt confident in my ability to upload evidences to the online system.	54.42%	14.71%	30.88%	68
After attending training I understood how to pull reports from the online system.	60.30%	16.18%	23.53%	68
After attending training I felt prepared to use the evidences and progressions to drive instruction.	50.00%	22.06%	27.94%	68
After attending training I understood how the domains affected one another.	39.70%	22.06%	38.23%	68

Color Legend		
	Structure and Materials	
	KEA Philosophy and Content	
	Gathering Evidences	
	Using Online System	
	Application to Instruction	





Training Continued

 Training should extend to additional school/district personnel:

	District	School	Instructional	Specialist	Teaching
	Administrator	Administrator	Coaches	Teachers	Assistants
References	17	32	11	18	26

- Real world examples of the KEA in use and sample student data should be incorporated into the training (39 references):
 - Provide preloaded documentation of various types (video, photographs, student work samples, etc.) that teachers can annotate, analyze, and place along the progressions.
 - Provide examples (video preferred) of a teacher using the KEA process in real time during normal classroom instruction.



Training Continued

- Greater focus is needed in the application of KEA data (i.e. how to make meaningful planning and instructional decisions based on the evidences and progression ratings). (39 References)
 - 57% of surveyed teachers stated they could not make meaningful instructional decisions from the evidence and progression ratings they entered.

"I'm putting all of this information in, but I'm getting nothing out. How is this supposed to help me get my students to a D in reading? That's all administrators and parents care about." ~Pilot Teacher



NC KEA Content

 71% of survey respondents felt the content was developmentally appropriate for kindergarten.

"This really validates what we do and deal with everyday...there's so much that needs to happen before you see a lot of academic changes. These young children are going to be growing socially tremendously [in the beginning of the year] and administrators need to understand [teachers] have all this other stuff to get in place before they can start moving academically."

~ Pilot Teacher



NC KEA Content Continued

- The NC KEA is developmentally appropriate BUT...
 - 34 cross references between code "KEA Instrument>Developmentally Appropriate" and code "KEA in Practice>Misalignment with Current Curriculum and Assessment Practices"

"Is this developmentally appropriate? Yes, but to be honest we don't have the 'freedom' to use it. We are mandated by so many other expectations for our children that there is no way to do the KEA the way it should be done and still be responsible for the content we must teach and then assess them on (state mandated summative tests by the way)." ~Pilot Teacher

"If this was 5 years ago this would have been perfect, but kindergarten is looking more and more like first grade. So while this IS developmentally appropriate, unfortunately it's now more suited for PreK because kids are expected to enter Kindergarten with most of these skills." ~Pilot Teacher



KEA in Practice

- The amount of time needed to complete the KEA was the foremost topic in every interview and survey response:
 - 133 references at code "KEA in Practice>Time Consuming"
 - There were 583 individual uses of the word 'time'!

Average Hours per Week Used to Upload and Analyze Evidences			
< 1 hour	14.29%		
1-2 hours	39.73%		
3-4 hours	18.37%		
5-6 hours	18.37%		
6-7 hours	4.08%		
8+ hours	8.16%		

Times when Evidences were Uploaded		
In-Class	28.57%	
Regular Planning Time	24.49%	
Immediately Before/After School	46.94%	
Personal Time at Home	79.59%	

Times when Evidences were Analyzed		
In-Class	8.33%	
Regular Planning Time	29.17%	
Immediately Before/After School	47.92%	
Personal Time at Home	79.17%	

KEA in Practice

 8 specific examples of the KEA process used appropriately were noted in the interviews and survey responses.

"When given the opportunity to select an activity on her own, one of my students would initially wander around the room looking for her sister (a twin). When she would see her sister playing with other children, the first twin would sit alone at her seat not choosing to be with other children. I started providing more partner games during my instruction that gave my fist twin a chance to interact with other children besides her sister. After several instances of this, she felt more comfortable joining groups with other children and interacting." ~Pilot Teacher

"I like the KEA assessment because it can be used with any child in kindergarten. I have an autistic, but very bright, student. He doesn't respond to standardized tests but with the KEA I had the time and ability to observe, identify, and document many strong skills from this child." ~Pilot Teacher



Supports and Resources

- Requests to assist implementation:
 - Additional planning time (43 references)
 - An alignment guide of KEA constructs to current district/state curriculum and assessments (49 references)
 - Real world examples of data collection during class instruction (39 references)
 - Peer networking or partnership (34 references)
 - Often cross-referenced with wiki or online blog (11 references)
 - Dedicated technology support, at the district level minimally (32 references)



ELECTRONIC EVIDENCES

Electronic Evidences Overview

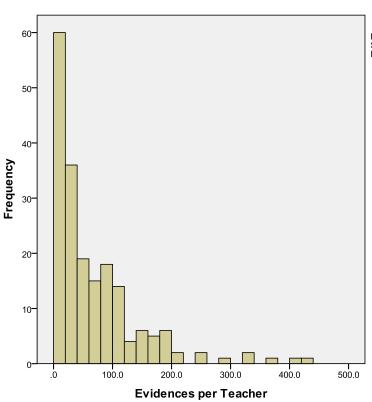
- 193 pilot teachers created/populated classes in the Teaching Strategies® NCKEA System
- A total of 13,422 pieces of documentation were entered over the course of the pilot.

Breakdown	Average
Evidences per teacher	67.79
Evidences per student	3.52

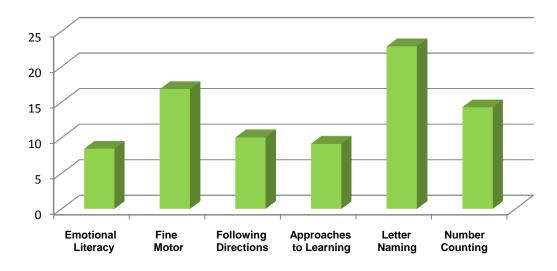
 More evidence was entered in September than any other month in the pilot.



Evidences per Teacher

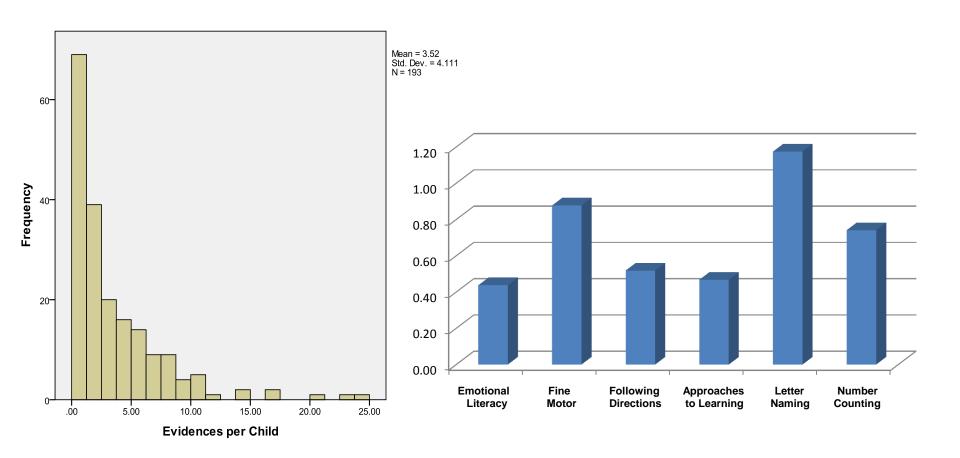


Mean = 67.79 Std. Dev. = 77.034 N = 193





Evidences per Child



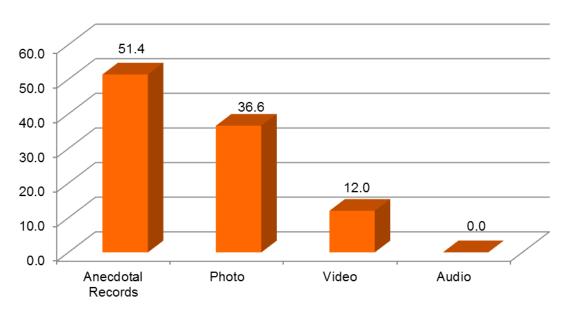


Further Analysis

- We are currently reviewing each piece of evidence
- Examining type and usefulness in assisting instructional decisions
- Currently, we have reviewed 4,290 evidences
 - 15 districts, 22 schools, 44 teachers



Further Analysis Continued



- Evidence is specific to a single child
 - Yes 80.1%
 - No 19.9%
- Evidence contains child specific information useful for placing children on the progressions
 - Yes 49.1%
 - No 50.9%



CONCLUSIONS

- Professional development needs a greater focus in areas outside of the assessment's core content:
 - Early childhood education
 - Using the electronic platform
 - Qualitative data collection and its use to drive instruction
- Schools and districts vary widely in the supports needed to effectively implement given their current capacities and resources.
- There was a spectrum of implementation initially, but many teachers quickly "learned by doing" and felt more confident in their ability to effectively use the KEA toward the end of the pilot.
- This type of formative assessment initiative will face some opposition, even suspicion, in the current academic climate.



CEME Technical Report

- A report summarizing these findings can be found at http://ceme.uncc.edu/ceme-technical-reports.
- For correspondence regarding this study please email:
 - Richard Lambert: rglamber@uncc.edu or,
 - Angela Ferrara: <u>aferrar2@uncc.edu</u>

