Measuring Curriculum & Assessment Implementation in QRIS

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About Child Trends

Child Trends is a nonprofit, nonpartisan research center that improves the lives and prospects of children and youth by conducting high-quality research and sharing the resulting knowledge with practitioners and policymakers.

We . . .

1. take a whole child approach
2. study children in the real world
3. want children to flourish
4. value objectivity and rigor
5. pursue knowledge development and knowledge transfer
Welcome & Overview

• How are QRIS supporting and measuring curriculum and assessment implementation and use?

• What is the curriculum and assessment process in New Mexico Pre-K, and how did it influence the state’s 3rd generation TQRIS?

• What insights might we learn about how to measure the implementation of curriculum and assessment practices from a validation study of the New Mexico’s Pre-K curriculum and assessment process?
## National Context: QRIS with Curriculum and Assessment Indicators

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2010 # of QRIS (n = 26)</th>
<th>2014 # of QRIS (n = 40)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td>Assessment Practices</td>
<td>11</td>
<td>21</td>
</tr>
</tbody>
</table>
Curriculum Indicator Examples

- Required use of a specific curriculum
- Use of a curriculum from an approved list
- Use of a curriculum that demonstrates alignment with the state Early Learning Guidelines
- Curriculum approved by a review committee
- Written narrative describing curriculum practices
- Submission of documentation (i.e., lesson plans)
- Onsite assessment and/or support from a coach
Assessment Indicators

- Required use of a specific assessment tool/list
- Use of an assessment that meets specific requirements (aligns with the curriculum, valid, culturally, linguistically, developmentally appropriate)
- Embedded in NAEYC requirements
- Written narrative describing the method, frequency of assessment is conducted with each age group, and or how it aligns with the ELGS and/or the curriculum in use, what domains it covers
- Coaching or assessor review of documentation
Are we measuring (and supporting) what really matters for teaching and learning?

Most indicators and their associated verification processes are related to the *tool* itself, not the *process* of implementing high quality curriculum & assessment practices.
Which of the following best fits your primary curriculum and assessment interests?

A. To learn more about current curriculum & assessment indicators in other TQRIS

B. To learn more about curriculum and assessment measurement and verification practices

D. I’m a researcher who has developed or is interested in new tools or methods for measuring curriculum and assessment practices

E. Other, none of the above, some of the above
New Mexico PreK
Invest Little
Get a Lot
New Mexico PreK

New Mexico’s statewide PreK began in 2005
- Mixed-delivery system
- Jointly administered by Children Youth and Families Department (CYFD) and Public Education Department (PED)
- Includes curricular planning standards for all children in the program
- In 2012-2013, funded at $19M, divided evenly between PED and CYFD programs
Where we started……..

The Assessment Observation Documentation and Curriculum Process

- Planning
- Observation
- Individualization
- Reflection
- Assessment

New Mexico Outcomes & Indicators
Authentic Observation Documentation and Curriculum Planning Process (AODCP)

New Mexico PreK curricular planning framework:
• Based on the NM Early Learning Guidelines and Essential Indicators
• Children’s outcomes and indicators for growth and learning give criteria for teachers to refer to regarding what children should know and be able to do
• AODCP is an ongoing cycle of assessment and lesson planning supported by consultation, training, and professional development
New Mexico’s Observation Documentation and Curriculum-Planning Process

Observe & Document

Plan

Implement

New Mexico’s Early Learning Guidelines

REFLECT

REFLECT

REFLECT

The Result: Happy, Healthy Children!
What is the NM PreK Observational Assessment Cycle?

Teachers gather information through **observation** and **authentic assessment** of children based on essential Pre-K outcomes and indicators for growth and learning:

- Listening, language, reading and writing
- Science
- Counting, shapes, sorting and measuring
- Coordination, hygiene, health and well-being
- Art, music, and movement
- Independence, problem-solving, thinking, and perseverance
- Appropriate behavior, social skills, and being a part of a group
Child Assessment Documentation

New Mexico PreK Portfolio Collection Form

Family/Teacher Summary Report

Essential Indicator Quick Look Recording Sheet

New Mexico 3- & 4-Year-Old Early Learning Outcomes 2015

Essential Indicators with Rubrics

Onsite coaching and support are a key component of New Mexico’s PreK

- Early Childhood Services Center Office at UNM Continuing Education provides T & TA, consultation and coaching, and maintains training and organizational materials.

- Each NM PreK site receives regular visits from Pre-K Consultants
NIEER PreK Evaluation from 2005 to 2009 found:

- Positive impacts in language, literacy, and math, plus economic impact rate of return estimated at 18.1%
- Impacts attributable to Pre-K based on the study’s regression-discontinuity design
- However, the NIEER study did not specifically examine the AODCP curricular approach
- Because of these positive results New Mexico has been working to expand the use of the AODCP to Head Start classrooms
AODCP & FOCUS TQRIS

July • 2014

New Mexico FOCUS: Essential Elements of Quality for Center-Based Child Care Programs
Eligibility Requirements for FOCUS Participation ..............................................................6

FOCUS: Essential Elements of Quality

ESSENTIAL ELEMENT I:

Foundations of Quality ........................................................................................................8

A. Full Participation of Each Child ......................................................................................10
B. Health Promotion and Developmental Screenings ..........................................................14
C. Professional Qualifications ............................................................................................15
D. Ratios and Group Size ....................................................................................................18

ESSENTIAL ELEMENT II:


A. Intentional Teaching: Authentic Observation Documentation and Curriculum Planning Process .................................................................22
B. Intentional Leadership: Continuous Quality Improvement ..........................................27

History of New Mexico’s Quality Rating and Improvement System .............................31

References ..........................................................................................................................36
Eligibility Requirements for **FOCUS** Participation .......................................................... 6

**FOCUS: Essential Elements of Quality**

**ESSENTIAL ELEMENT I:**

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**ESSENTIAL ELEMENT II:**

**Quality Practices that Support Children’s Growth Development and Learning** ........... 20

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References ................................................................................................................................. 36
AODCP Verification Process in FOCUS

Curriculum sources of evidence:

• **Lesson plans** for the previous 3 months reviewed for evidence of how program educators are using multiple sources, such as assessments, ongoing child observations, and family input using FOCUS Guides for Lesson Planning Procedures.

• **Weekly Lesson Plan forms** reviewed to ensure it is complete and made available for families, e.g. (dates for current week, and are for the correct classroom).

• Documentation of **reflections** for the previous 3 months

• Evidence of on-going **weekly planning time**
AODCP Verification Process in FOCUS

Assessment Practices sources of evidence:

• 25% of portfolios reviewed with the FOCUS Rubrics for Portfolios

• A minimum of 25% of the NM Quick Look Recording Sheets for the children enrolled during the last collection period reviewed, per classroom

• Documentation of family conferences

• Evidence of on-going participation in IFSP/IEP process
In what ways has your state considered including indicators related to the process of implementing curriculum & assessment practices? What might be doable/achievable?
Insights from the AODCP Validation Study for measuring curriculum and assessment practices in TQRIS
Current AODCP Validation Study

1. To what extent is the AODCP a valid observational assessment process?

2. To what extent do Pre-K teachers implement the AODCP process with fidelity and quality?

3. How are training, tools, and coaching implemented to support teachers’ use of the AODCP process? Are these supports adequate and related to higher fidelity and quality of implementation?

4. When the AODCP is implemented with high fidelity is there a relationship to children’s developmental gains over the prekindergarten year?
Measuring Curriculum Implementation Fidelity

Data Collection Methods:

1. Direct and indirect child assessments
2. Classroom observations
3. Teacher survey on curriculum implementation practices and rubric rating reliability
4. Classroom document review & analysis
1. Direct & Indirect Child Assessments

Direct Assessment Battery
- PPVT-4 (TVIP for Spanish speaking children)
- Bracken
- Woodcock Johnson III
  a. Picture Vocabulary
  b. Letter Word ID
  c. Applied Problems
- Peg Tapping

Indirect Direct Assessment Battery
- Preschool Learning Behavior Scale (PLBS)
2. Classroom Observations

Classroom Assessment Scoring System (CLASS)

- Emotional Support
- Classroom Organization
- Instructional Support
3. Teacher Survey

Curriculum Implementation & Reliability

- Pre-K program information
- AODCP practices
- Perceptions of each AODCP component
- Curriculum and assessment supports
- **Rubric Rating reliability vignettes** – compare teacher ratings to master ratings
- Family engagement practices
- Teacher education and training
3. Teacher Survey

Rubric Rating Reliability Vignettes

• Developed based on New Mexico PreK portfolios
• Portfolios draw from NM’s 23 Essential Indicators for growth and development
• We focused on 4 indicators:
  ✓ 7.2 Literacy – Enjoys Books
  ✓ 8.3 Literacy – Writing
  ✓ 11.3 Numeracy – Measurement
  ✓ 14.1 Scientific Concepts – Senses
3. Teacher Survey

Rubric Rating Reliability Vignettes

• Vignette rubric ratings will be compared to master codes to determine reliability
• Preliminary results do show some variability
• Most variability is within the Literacy-Enjoys Books and Numeracy indicators
• Least variability is within the Scientific concepts indicator
• Goal is to align these reliability results with other fidelity of implementation data
4. Document Review & Analysis

Curriculum Documents

1. Lesson Plans
2. Quick Looks
3. Student Portfolios (rubric ratings)

These documents are the basis for the AODCP planning, observation, and assessment cycles.

We are conducting a thorough review of these documents from fall and spring for over 60 teachers.
4. Document Review & Analysis: Operationalizing the AODCP

Analytic concepts of implementation

1. Completeness – Did the teacher fill out the forms as intended?

2. Quality – Did the teacher include authentic observation data about the child? Did the teacher include enough observation data to effectively complete the assessment (assign a rubric rating)?

Combine codes into an overall implementation score to identify low → high levels of implementation
4. Document Review & Analysis: Operationalizing the AODCP

Curriculum Document Coding

- Completeness and Quality are coded on a scale.
- Coding scales for portfolio quality were developed based on CYFD’s match, detail, and objectivity guidelines.
- We developed an instrument to systematically code across each document.
- We developed quality control procedures and a FOI Definitions Book to guide the coding and analysis process.
Coding & Analysis Example

This is one CYFD’s “match” guidelines for EI 8.3 Literacy – Writing

For EI #8 – 8.3 (Writing) What is the difference between “purposeful” marks or scribbles and identifying them as writing vs. writing in the environment? And can the words and letters be copied or do they have to write without prompts?
The expectation for “purposeful” marks or scribbles is in contrast to a child making random marks and scribbles and then identifying them as writing. “Purposeful” marks would be done IN ORDER to write. The child might say, “I’m making a grocery list.” Or “I’m writing a letter.” Then, the child makes marks, scribbles or letter/like shapes. The rest of the rubric says that the child IDENTIFIES the writing as words or as print in the environment (Like, a stop sign, or a restaurant name). YES, four-year-olds can copy when writing. Of course!
Coding & Analysis Example: Student Portfolio

This is pulled from the “portfolio” section of our FOI Definitions Book

There are 4 Required Portfolios:
1. LITERACY: Essential Indicator (EI)#6: (Indicator#7.2) Demonstrates comprehension of a story read aloud by asking relevant questions or making pertinent comments. (Enjoys books)
2. Essential Indicator (EI)#8: (Indicator#8.3) Increasingly attempts to represent meaningful words and print in the environment using the early stages of writing. (Writing)
3. NUMERACY: Essential Indicator (EI)#11: (Indicator#11.3) Demonstrates emerging knowledge of measurement. (Measurement)
4. SCIENTIFIC CONCEPTUAL UNDERSTANDINGS: Essential Indicator (EI)#14 (Indicator#14.1) Uses senses to investigate characteristics and behaviors in the physical and natural world and begins to form explanations of observations and explorations. (Senses)

Quality
5. Rate the Match of the anecdotal note/description and Essential Indicator (*see definitions and notes to rate “Match”)

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>Match</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF5_7_2</td>
<td>#6 - 7.2 Enjoys books</td>
</tr>
<tr>
<td>PF5_8_3</td>
<td>#8 - 8.3 Writing</td>
</tr>
<tr>
<td>PF5_11_3</td>
<td>#11 - 11.3 Measurement</td>
</tr>
<tr>
<td>PF5_14_1</td>
<td>#14 - 14.1 Senses</td>
</tr>
</tbody>
</table>

1 = No match to the indicator; the description is not about behaviors relevant to the indicator, or is too vague to determine match to the EI
2 = One part of the description could be stretched with difficulty to match the indicator identified
3 = The description somewhat matches the indicator (e.g., only one part of the description matches the indicator identified but the rest of the description does not match or is too vague
4 = The description mostly matches the indicator, or more than one part of the description matches the indicator identified, but a small part of the description may not match or be vague
5 = There is a clear match between the whole description of the child’s performance and the indicator identified

6. Rate the Match of the anecdotal note/description and Rubric Rating (*see definitions and notes to rate “Match”)

<table>
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1 = No match to the rubric identified; the description is too vague or incomplete to identify a rating; if you gave a 1 or a 2 to item #5 “Match to the Essential Indicator”, it’s likely item #6 will get a 1.
2 = The identified rubric rating is three or more points away from the rubric rating that best fits the description
3 = The identified rubric rating is within two points of the rubric rating that best fits the description (i.e., if the description best fits a “4” but the teacher identified a “2” or vice versa)
4 = The identified rubric rating is within one point of the rubric that best fits the description (i.e., if the description fits a “4” but the teacher identified a “3” or a “5”, and there is enough description otherwise to fit the “4”), and More than one part of the description matches the rubric identified (the rest of the description does not match)
5 = There is a clear match between the whole description of the child’s performance and the rubric rating identified
**Domain: LITERACY**

**Essential Indicator 8.3** Increasingly attempts to represent meaningful words and print in the environment using the early stages of writing.

<table>
<thead>
<tr>
<th>Child’s Progress toward the Outcome:</th>
<th>Circle the appropriate rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Not Yet Demonstrating</strong></td>
<td>First Steps</td>
</tr>
<tr>
<td>Makes marks or scribbles in response to adult suggestions for writing</td>
<td>Makes marks or scribbles and identifies them as writing</td>
</tr>
</tbody>
</table>

**Anecdotal Note:** Describe what you saw the child do and/or heard the child say.

[Child] was playing in the writing center. She took a marker and some paper and asked if I would help her draw a list. I told her that she should try using letters to make a list. She responded “Ok,” and began to sound out a few words. She started with “S-Ah-P-R-Ie-S” (surprise), and then went on to “P-Ah-R-K.” She then added a unicorn, hike, movie, aquarium, lunch, and library. She continued the list with another teacher adding that she wanted to go to toys-r-us, theater, ice cream, and dinosaur museum.
### Coding & Analysis Instrument

- Each variable name in Row 1 corresponds with codes and definitions in our FOI Definitions Book
- Also shows an example of our double coding procedure to ensure inter-rater reliability
- We will double code at least 20% of all documents to ensure consistent inter-rate reliability

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y |
| **Child ID** | **Provider ID** | **7.2 Enjoy books # submitted** | **8.1 Writing # submitted** | **14.1 Measures # submitted** | **7.2 Record #** | **7.2 Record contexts (yes/no)** | **7.2 Embedded Els (yes/no)** | **8.3 Evidence for embedded Els?** | **8.3 Match w Rating** | **8.2 Match w Rating** | **8.2 Detail** | **8.2 Objectivity** | **8.3 Child-directed** | **8.3 record rubric** | **8.3 record context(s) (all that apply)** | **8.3 Embedded Els (all that apply)** | **8.3 Evidence for embedded Els?** | **Have writing sample?** | **8.3 Match w El** | **8.3 Match w Rating** | **8.3 Detail** | **8.3 Objectivity** | **8.3 Child-directed** |
| 3 | 3001748 | NM155 | 5 | 5 | 5 | 5 | 3 | 1 | 1 | 2 | 5 | 5 | 5 | 5 | 3 | 5 | 999 | 1 | 1 | 1 | 1 | 4 | 999 | 999 | 5 | 4 |
| 4 | 3001750 | NM155 | 5 | 5 | 5 | 5 | 3 | 1 | 1 | 2 | 5 | 5 | 5 | 5 | 3 | 5 | 999 | 1 | 1 | 1 | 1 | 4 | 999 | 999 | 5 | 3 |
| 5 | 3001751 | NM155 | 5 | 5 | 5 | 5 | 3 | 1 | 1 | 2 | 5 | 5 | 5 | 5 | 3 | 5 | 999 | 1 | 1 | 1 | 1 | 4 | 999 | 999 | 5 | 4 |
| 6 | 3001753 | NM155 | 5 | 5 | 5 | 5 | 3 | 1 | 1 | 2 | 5 | 5 | 5 | 5 | 3 | 5 | 999 | 1 | 1 | 1 | 1 | 4 | 999 | 999 | 5 | 4 |
| 7 | 3001754 | NM155 | 5 | 5 | 5 | 5 | 3 | 1 | 1 | 2 | 5 | 5 | 5 | 5 | 3 | 5 | 999 | 1 | 1 | 1 | 1 | 4 | 999 | 999 | 5 | 4 |

**FOI Definitions Book**

- Each variable name in Row 1 corresponds with codes and definitions in our FOI Definitions Book.
- Also shows an example of our double coding procedure to ensure inter-rater reliability.
- We will double code at least 20% of all documents to ensure consistent inter-rate reliability.
Will any one of these methods (or a subset) provide an adequate insight into the quality of curriculum and assessment implementation?

Is there a middle ground for measuring curriculum and assessment practices that is meaningful, feasible, and sustainable for all parties?

What can you share about your use or understanding of new tools that are being developed to measure these practices?
Contacts

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