Lessons Learned from an Integrated Alternate Assessment Model for Students with Significant Cognitive Disabilities

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#### Session Overview

- Describe teachers' implementation of instructionally embedded assessments
  - Timing and frequency
  - Choices of content for assessment
  - Use of system recommendations
  - Relationship to student background and outcomes
- Two discussants
  - State partner: state implementation and technical assistance to districts
  - TAC member: technical and policy implications





#### **ASSESSMENT OVERVIEW**





#### Integrated Assessment Model

- Flexible blueprint choices within constraints
- Instructionally embedded assessments available to inform instructional decisions during the year
- Summative results based on testing conducted throughout the year





#### Using Instructionally Embedded Assessments



- Available September-February
  - Blueprint should be covered at least one assessment per chosen content standard (Essential Element)
- Access to on-demand progress report
- May retest on EEs and/or test extra EEs





#### Issues to Consider

- Defining fidelity when assessment is intentionally flexible -- allows for teacher choice in depth, breadth, and frequency of assessment
- How differences in administration patterns may relate to student characteristics and/or outcomes
- Implications for validity of inferences made from results





#### **Research Questions**

What choices are teachers making when using the instructionally embedded assessment system?

- 1. Blueprint coverage?
- 2. Which standards?
- 3. Select system-recommended linkage level or a different level?
- 4. Assess the same student more than once on a standard?
- 5. Peak testing days within the window?

Are there subgroup differences based on student background or achievement?





#### Data Set

2016-17 instructionally embedded testing

- 13,334 students with significant cognitive disabilities from 5 states
- 4,241 teachers selected and administered testlets
- 201,348 testlets administered





#### **TEACHER CHOICES**





# RQ 1: Blueprint Coverage

- 2016-17 was first full length operational IE window
  - Some comparisons to two previous years to see trend across years
- Variation: some met, some exceeded, some did not meet
- Across years, there is an increase in students who met or exceeded blueprint requirement





#### RQ1: Blueprint Coverage

#### Percent of students who did not cover, met, or exceeded requirements

		2015-2016			2016-2017		
Subject	Under	Met	Exceed	Under	Met	Exceed	
ELA	25.1	42.9	32.0	28.5	53.5	18.1	
Math	37.9	43.2	18.9	17.7	64.2	18.1	





#### Coverage Across Years: Percent Met/Exceeded Blueprint Requirements

Subject	14-15	15-16	16-17
ELA	50	75	72
Math	58	62	82





#### **RQ 2: Most Selected Standards**

- Flexibility so that instruction and assessment occur in areas most relevant to the student's individualized curricular priorities
- Implications for students' opportunity to learn
- Reviewing each grade/subject, can see favorites and less preferred standards





#### Grade 3 ELA Example



### RQ 3: Choice of Linkage Level

- Prior to testing, all teachers complete a survey about each student's characteristics
- Responses to items in ELA, math, and expressive communication result in a complexity band for each content area





#### Correspondence of Complexity Bands to System-Recommended Linkage Level





#### Testlets Administered at Each Linkage Level

Linkage Level	EL	A	Mathematics		
	n	%	n	%	
Initial Precursor	23,654	23.5	25,836	25.7	
Distal Precursor	33,769	33.5	34,756	34.5	
Proximal Precursor	31,792	31.6	30,991	30.8	
Target	10,439	10.4	8,437	8.4	
Successor	1,041	1.0	601	0.6	





# Key Findings

• Most of the time, teachers accept the system recommendation

- If they do change, the tendency is to choose one level lower than recommended
- Slightly less likely to change in math than ELA





#### ELA Adjustment from System-Recommended Level

	Found	ational	Bar	nd 1	Bar	nd 2	Bar	nd 3
Change	п	%	n	%	n	%	n	%
-3							347	3.0
-2			-		2,528	6.6	1,014	8.6
-1			7,437	20.9	6,429	16.7	1,867	15.9
0	13,342	88.8	25,363	71.4	27,389	71.3	8,190	69.8
1	965	6.4	2,049	5.8	1,646	4.3	315	2.7
2	487	3.2	463	1.3	426	1.1		
3	140	0.9	215	0.6				
4	85	0.6						

*n* = instructionally embedded instructional plans





#### Math Adjustment from System-Recommended Level

	Found	ational	Bar	nd 1	Band 2		Band 3	
Change	n	%	n	%	n	%	n	%
-3							162	2.1
-2					2,420	6.1	598	7.8
-1			8,435	22.4	6,243	15.8	952	12.3
0	14,821	94.1	27,280	72.6	28,541	72.1	5,788	75.0
1	640	4.1	1,337	3.6	2,104	5.3	216	2.8
2	161	1.0	450	1.2	261	0.7		
3	95	0.6	91	0.2				
4	33	0.2						

*n* = instructionally embedded instructional plans





#### **RQ 4: Testing Same Standard Multiple Times**

- As instruction occurs, teachers can create additional instructional plans to re-assess the standard
  - Can be at same linkage level or a different linkage level
- Gets at idea of depth of instruction (versus breadth)





#### Testing on Multiple Linkage Levels in a Standard

- In majority of cases, teacher chose not to re-assess
- 90% of students who tested on a standard more than once, tested on it twice.
- 2,604 (19.5%) students tested on more than one linkage level within a standard
- In 23 instances across all students and standards (0.01%), the students tested on all five linkage levels within the standard





### RQ 5: Peak Testing Patterns

- The 2016-2017 window was available September through February
  - Short break in December winter holiday
- Teachers have choice of when and how frequently to assess their students within that time period
- Gradual increases with peaks in late fall and near end of window
- Two patterns of use





#### Peak Testing by Week







#### Average Number of Testlets Administered to Students per Week



Average number of testlets taken by students who took <= 10 testlets in a week

Average number of testlets taken by students who took > 10 testlets in a week





#### **IMPLEMENTATION AND STUDENT VARIABLES**





#### **Student Variables**

- Background: complexity band
  - Indicator of prior achievement + communication

- Achievement: performance level for 2016-17
  - Includes all IE and spring assessments
  - Emerging, Approaching the Target, at Target, Advanced





# Examples of Findings

- Change in linkage level:
  - most often seen for students at Emerging performance level
  - Emerging vs Advanced changed in different directions
- Test standard more than once:
  - Most often in middle complexity bands and at the Emerging performance level





#### Changing the Linkage Level From System-Recommended

Level	n	%	
Emerging	10,513	43	
Approaching the target	6,470	26	
At target	5,719	23	
Advanced	1,963	8	





#### Linkage Level Difference from System-Recommended by Student's Performance Level

Difference		Approaching the target		At target		Advanced		
	n	%	n	%	n	%	n	%
-3	91	>1	164	>1	114	>1	85	>1
-2	1,821	2	1,931	4	1,752	4	519	3
-1	13,848	18	8,072	17	5,827	13	1,713	9
0	57,207	76	35,690	74	33,330	75	14,228	75
1	1,827	2	2,157	4	2,675	6	2,038	11
2	465	1	534	1	691	2	433	2
3	91	>1	164	>1	114	>1	85	>1
4	1,821	2	1,931	4	1,752	4	519	3



#### Assessing on EEs More Than Once

#### Students by complexity band:

Band	n	%
Foundational	643	14
Band 1	1,686	38
Band 2	1,707	38
Band 3	441	10

#### Students by performance level:

Level	n	%
Emerging	1,696	38
Approaching the target	1,179	26
At target	1,037	23
Advanced	565	13 🕴

# Summary of Results

- Most students have appropriate content coverage – Improvement each year
- Teachers generally do not override system recommendations
  - May still reflect use of the system to meet state requirements rather than to inform instruction





### Implications for Fidelity

- Expectation for some minimum threshold of use (e.g., full blueprint coverage)
- To fulfill goal of informing instruction, ranges of actions are possible
  - Retesting on a standard, if time lapse between tests and instruction occurred
  - Testing fewer testlets in more weeks vs. in shorter, focused time blocks - may also be guided by state policies
- What actions are outside the likely bounds of useful assessment?
  - E.g., test on all standards and levels in a short time period





### Next Steps

- Teacher survey: choices made during instructionally embedded testing, how progress reports were used to inform instruction
- Defining a measure of implementation fidelity
  - Explore whether there are two general patterns slow & steady, condensed
- Look for within-student and within-teacher patterns







# NORTH DAKOTA DEPARTMENT OF **PUBLIC INSTRUCTION**





#### North Dakota: Blueprint Coverage

		2015-2016			2016-2017	16-2017	
State	Under	Met	Exceed	Under	Met	Exceed	
Math							
ND	53.8	27.6	18.6	15.7	61.4	22.9	
All states	37.9	43.2	18.9	17.7	64.2	18.1	
ELA							
ND	47.1	30.6	22.3	30.4	43.0	26.6	
All states	25.1	42.9	32.0	28.5	53.5	18.1	



#### ND Goal Setting Process

#### 2015-2016

Instructionally Embedded Window

#### 2 Testing Windows: Fall/Spring

Grade Level	<b>Instructionally Emb</b> 09/2016-02	Spring As Win 3/2017-	ssessment dow -6/2017	
	Required Number of	Required Number Math	System Selects	System Selects
2		EEs*	ELA EEs	Math EEs
3	7	6	5	5
4	7	8	5	5
5	7	7	5	5
6	7	6	5	5
7	7	7	5	5
8	7	7	5	5
9*	10	6	5	5
10*	10	6	5	5
11	10	6	5	5

#### 2016-2017

#### Instructionally Embedded Window

#### 3 Testing Windows: Fall/Spring

Grade Level	Fall Assessment Window 9/2016-12/2016		Winter Assessment Window 12/2016-2/2017		Spring Assess 3/2017-6	<b>sment Window</b> 5/2017
	Number	Number	Number	Number	System Selects	System Selects
	of ELA	of Math	of ELA	of Math	ELA EEs	Math EEs
	EEs	EEs	EEs	EEs		
3	3	3	4	3	5	5
4	3	3	4	4	5	5
5	3	4	4	3	5	5
6	3	3	4	3	5	5
7	3	4	4	3	5	5
8	3	4	4	3	5	5
9*	5	5	3	3	5	5
10*	5	5	3	3	5	5
11	5	5	3	3	5	5





#### SUCCESS

- Teachers, Administrators, and Parents are changing expectations
- Data is not only for accountability reporting
- Specific guidance was needed initially
- Excitement reported from teachers
- Demand for PD continues
- Percent of "Met" blueprint coverage increased in ELA and Math





#### Activities leading to SUCCESS

- Communication:
  - First Contact Survey and PNP
  - Importance of blueprint coverage and teacher choice
  - Who should be participating in the instructionally embedded system
- LEA's have established PLC time strictly for instructionally embedded "learning"
- Providing teacher choice





#### ND Improvements

- 2014/2015: Initial General Overview Training (State wide) on the DLM Instructionally Embedded System
- 2015/2016: Advisory Group which consisted of general and special education teachers, school psychologists, and local administrators
  - Help plan professional development activities for instruction that supports instructionally embedded model
  - Assisted in the planning the sequence of the instructionally embedded window





#### ND Continuous Improvements

- 2016/2017: PD activities for DTC on extracts for monitoring purposes
- Enhanced communication with local education agencies and special education unit directors





#### ND Future Enhancements

#### 2016/2017

- Refocus with enhanced PD on instructional practices

   Bring back advisory group members
- General Education and Special Education Partnerships
- Continue to increase expected blueprint coverage for ELA and Math
- Focus Group Panel:
  - What is working
  - What are immediate and long term needs, goals





#### Discussion, Technical/Policy Perspective

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PHOEBE WINTER

NATIONAL CONFERENCE ON STUDENT ASSESSMENT

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#### Administration Features

- **Constrained Flexibility** 
  - Selection of content
    - Which EEs
    - Number of EEs
  - Timing of administration
- Less Flexibility
- Scoring
- Entry level

#### Technical Considerations

Instructional relevance

Comparability/fairness

Aggregation

Evaluation

System quality

Modeling

Inferences

# Questions and Discussion







#### THANK YOU!

For more information, please visit <u>dynamiclearningmaps.org</u>

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