Exploring Teacher Choice When Using an Instructionally Embedded Alternate Assessment System

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Session Overview

- Background on the assessment system & population
- Summary of teacher choice using instructionally embedded assessment during 2016-2017
- Implications and next steps

ASSESSMENT OVERVIEW

Background

- The DLM consortium administers assessments to students with significant cognitive disabilities

- Five states participate in the integrated model blueprint, which provides summative results based on testing conducted throughout the year for English language arts and mathematics

- Assessment designed to occur alongside instruction and inform subsequent instructional decision making

Creation of Instructional Plans

- Teachers create instructional plans using an online system

- They select the content standard and level at which they want to instruct and assess the student
  - Alternate achievement standards are "Essential Elements"

- Assessments are available at five levels, known as linkage levels, for each content standard

| Initial Precursor | Distal Precursor | Proximal Precursor | Target | Successor |
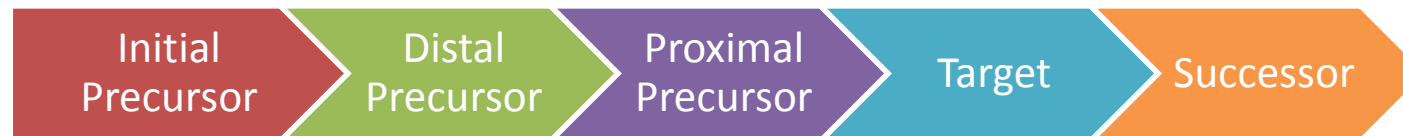
Assessments at Different Levels

ELA.EE.RI.6.4 Determine how word choice changes the meaning of a text.

Initial Precursor:

- Can demonstrate a receptive understanding of the property words that describe the objects that accompany familiar games or routines

Distal Precursor:

- Can demonstrate an understanding of words with opposite meaning (e.g., cold, hot, up, down)

Proximal Precursor:

- Can understanding that words might have a slightly different meaning or use depending on the specific context in which they are used

Target:

- Can ascertain how the meaning of an informational text is altered by the specific word choices the author makes

Successor:

- Can determine how word choice in an informational text is used to persuade or inform

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Blueprint

- Flexible design is intended to allow teachers to assess students at a frequency and level that best meets their students' needs, IEP goals, etc.

- Standards are organized within Claims and Conceptual Areas of similar content

- The blueprint specifies content standards available and guidelines for selection for each grade and subject
  - E.g. Choose 3 standards within Conceptual Area 1.1

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Issues to Consider for Instructionally Embedded Assessments

- Consider how we define fidelity in context of an assessment that intentionally allows for teacher choice in depth, breadth, and frequency of assessment

- Examine differences in administration patterns and how they relate to student performance

- Determine the implications for the validity of inferences made from results when there is intended flexibility in student testing experience

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Research Questions

1. When are the peak times during which teachers choose to administer more testlets?

2. Do teachers select the linkage level recommended by the system or a different level?

3. Which standards do teachers tend to choose from among those available on the blueprints?

4. To what extent do teachers assess the same student more than once on a standard?

Participation

- 13,334 students with significant cognitive disabilities from 5 states
- 4,241 teachers created instructional plans and administered testlets
- Each instructional plan is measured by a 3-8 item testlet
  - Measures a single content standard at a single linkage level selected by the teacher
- Total of 201,348 testlets were administered during 2016-2017 instructionally embedded testing

TEACHER CHOICE WITHIN THE SYSTEM

RQ 1: Peak Testing Patterns

- The 2016-2017 instructionally embedded window was available from September through February for teachers to administer assessments covering the full blueprint

- Teachers have choice of when and how frequently to assess their students within that time period
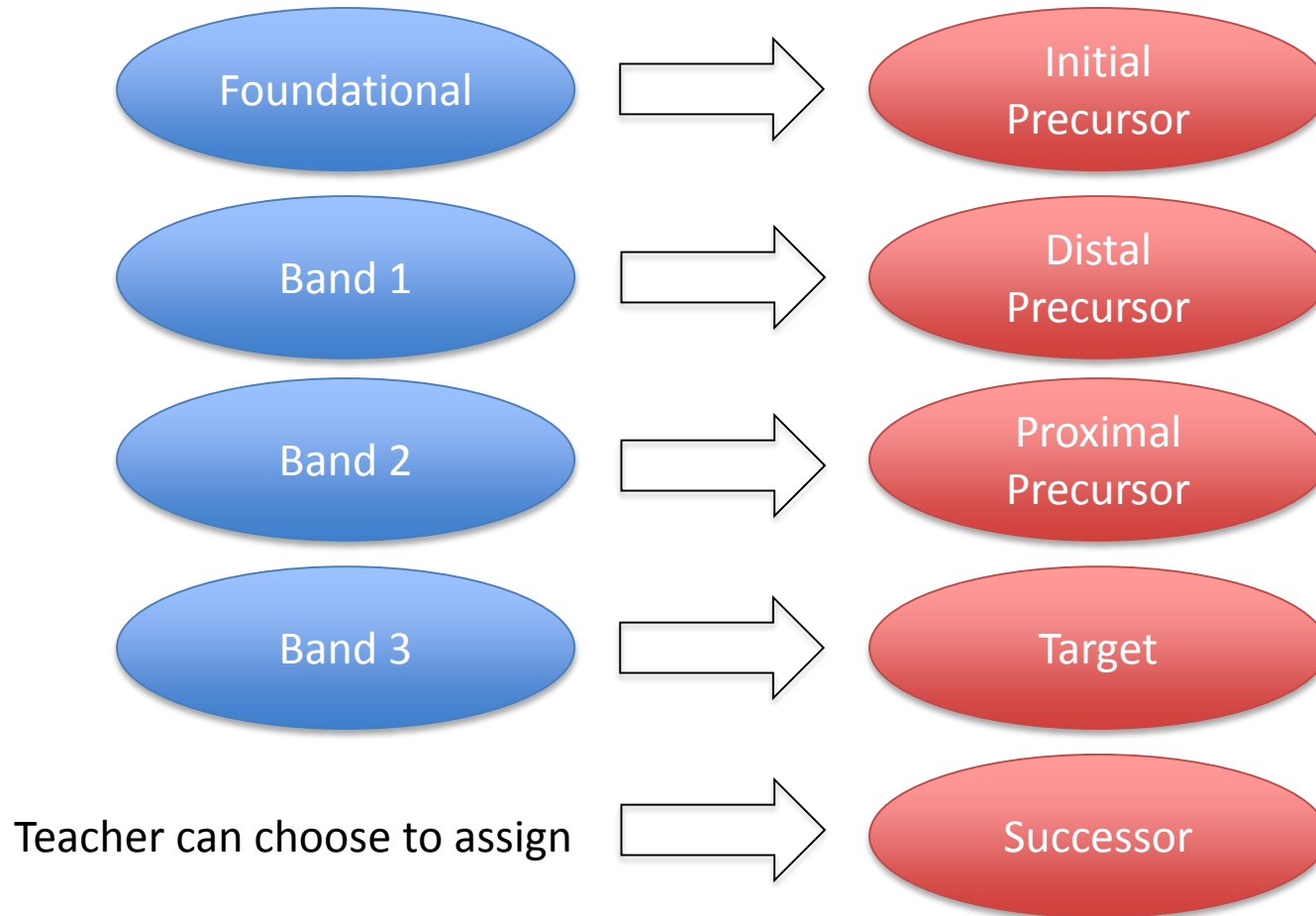
Peak Testing by Week
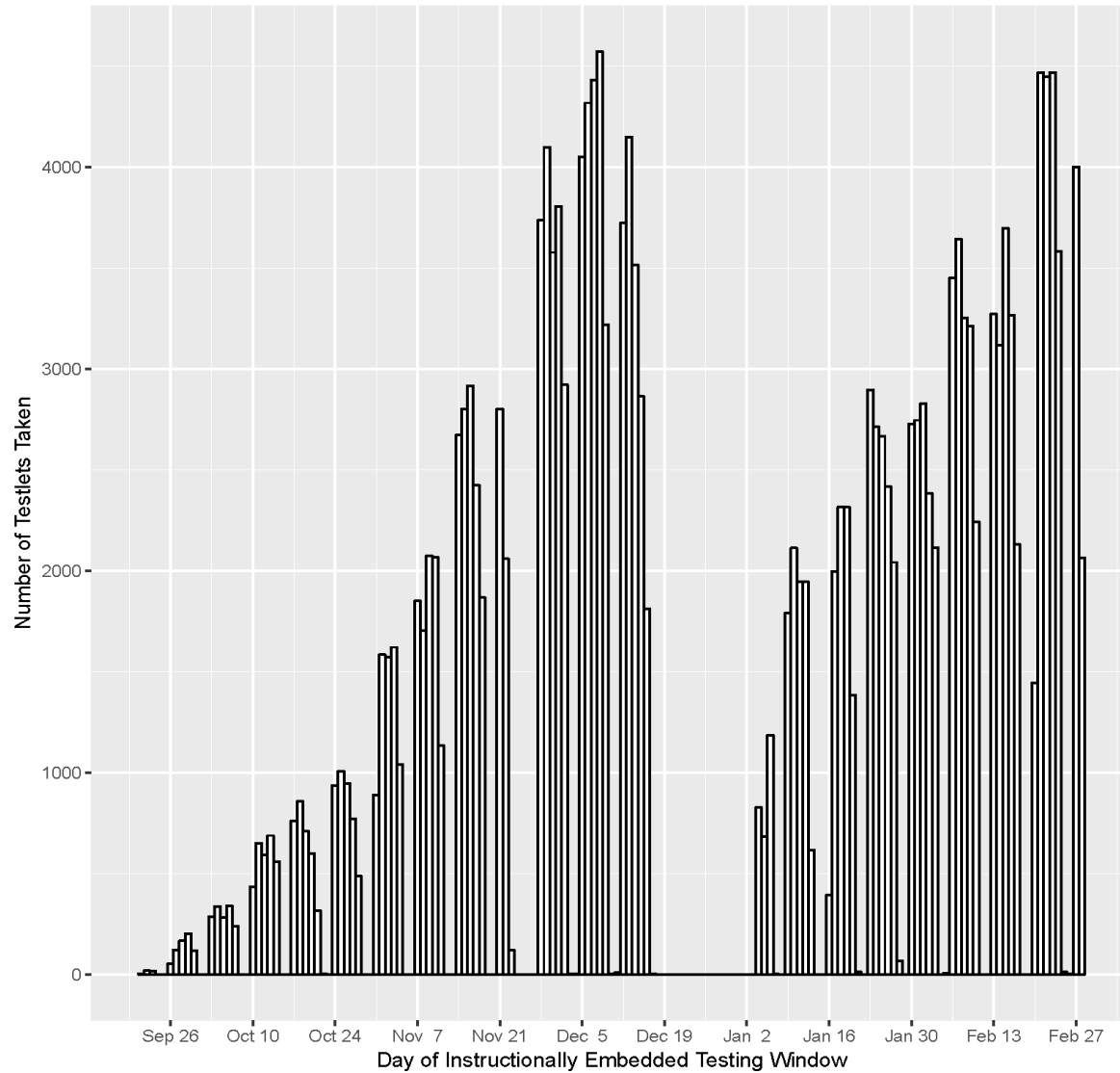
Average Number of Testlets Administered to Students per Week
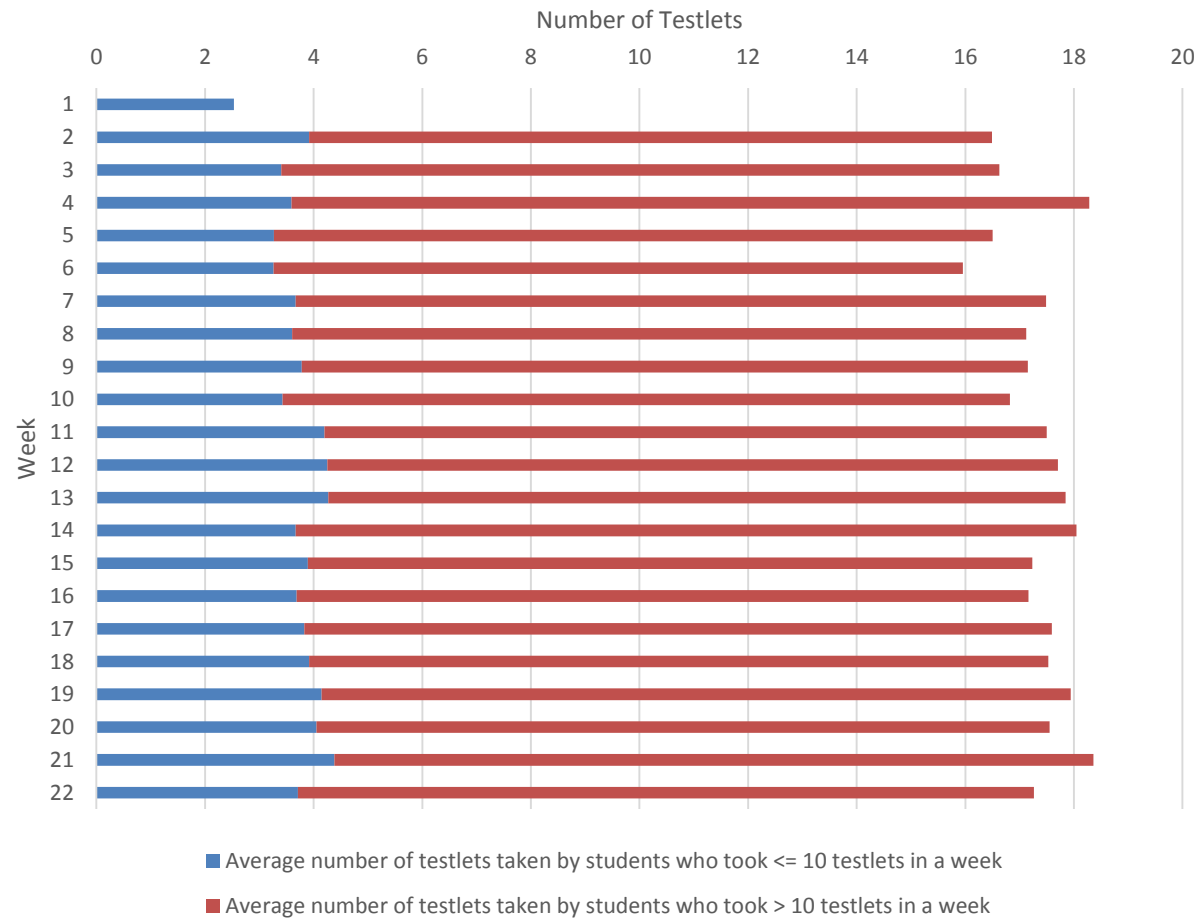
RQ 2: System-Recommended Linkage Level

- Prior to testing, all teachers complete a survey for each student of learner characteristics

- Responses to items in ELA, math, and expressive communication result in a complexity band for each content area

- Four total complexity bands:
  - Foundational, Band 1, Band 2, Band 3

Correspondence of Complexity Bands to System-Recommended Linkage Level

Foundational → Initial Precursor

Band 1 → Distal Precursor

Band 2 → Proximal Precursor

Band 3 → Target

Teacher can choose to assign → Successor

ELA Adjustment from System-Recommended Level

Change	Foundational		Band 1		Band 2		Band 3	
	n	%	*n*	%	*n*	%	*n*	%
-3	N/A	0.0	N/A	0.0	N/A	0.0	347	3.0
-2	N/A	0.0	N/A	0.0	2,528	6.6	1,014	8.6
-1	N/A	0.0	7,437	20.9	6,429	16.7	1,867	15.9
0	13,352	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	N/A	0.0
3	140	0.9	215	0.6	N/A	0.0	N/A	0.0
4	85	0.6	N/A	0.0	N/A	0.0	N/A	0.0

n = instructionally embedded instructional plans

Math Adjustment from System-Recommended Level

Change	Foundational		Band 1		Band 2		Band 3	
	n	%	n	%	n	%	n	%
-3	N/A	0.0	N/A	0.0	N/A	0.0	162	2.1
-2	N/A	0.0	N/A	0.0	2,420	6.1	598	7.8
-1	N/A	0.0	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	N/A	0.0
3	95	0.6	91	0.2	N/A	0.0	N/A	0.0
4	33	0.2	N/A	0.0	N/A	0.0	N/A	0.0

n = instructionally embedded instructional plans

Testlets Administered at Each Linkage Level

Linkage Level	n	%
Initial Precursor	49,502	24.6
Distal Precursor	68,533	34.0
Proximal Precursor	62,795	31.2
Target	18,876	9.4
Successor	1,642	0.8

RQ 3: Most Selected Standards

- Blueprint incorporates teachers flexibility so that instruction and assessment occur in areas most relevant to the student's instructional plan and IEP goals

- Blueprint requirements allow teacher choice:
  - e.g. Choose 3 EEs within Conceptual Area 1.1

- Interested in which EEs teachers actually choose
  - Implications for students' opportunity to learn

Grade 3 ELA example

EE Frequency by Conceptual Area
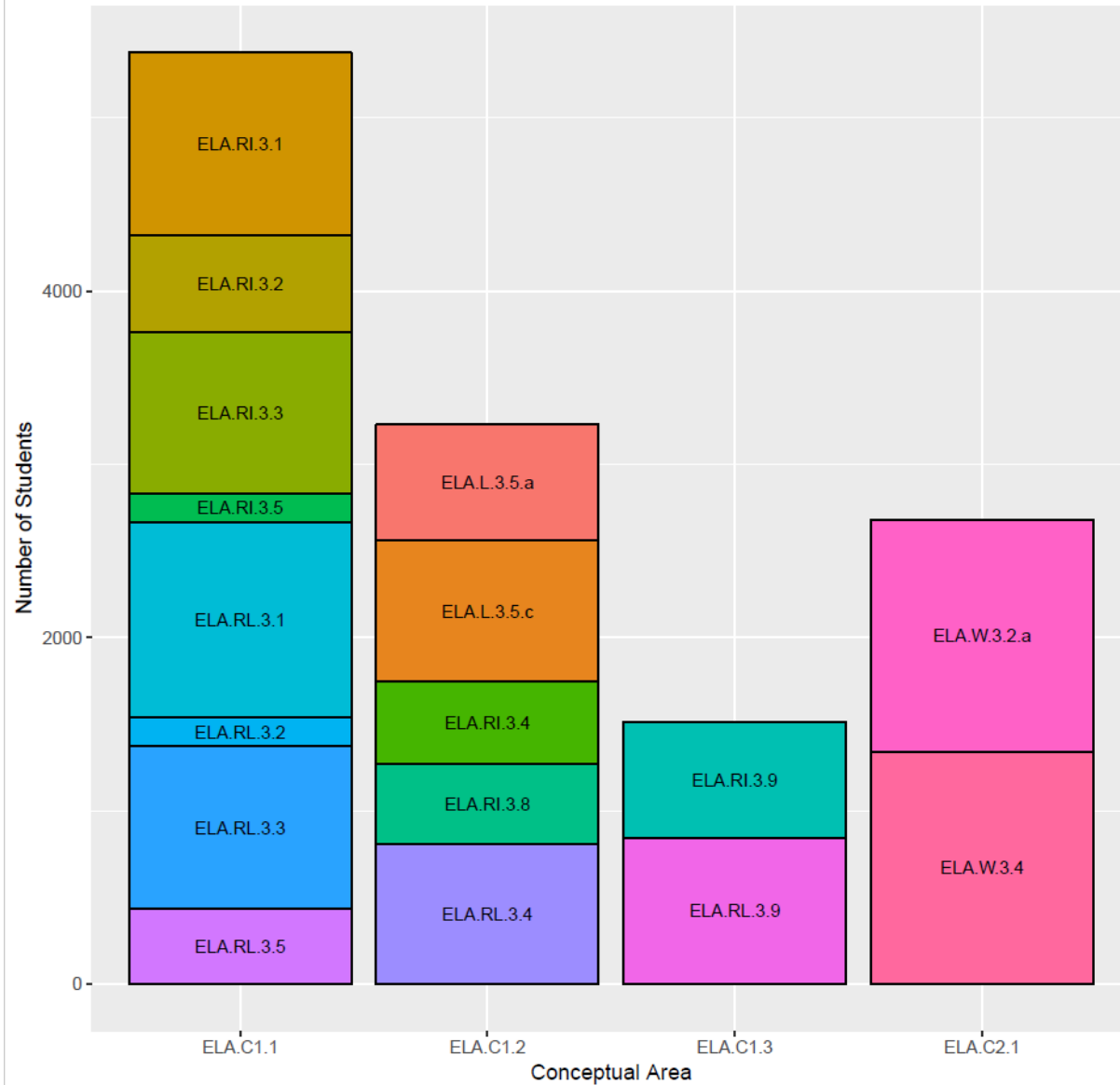
RQ 4: Testing Same Standard Multiple Times

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

Given that a particular EE was tested on more than once, 90% of students tested on it twice
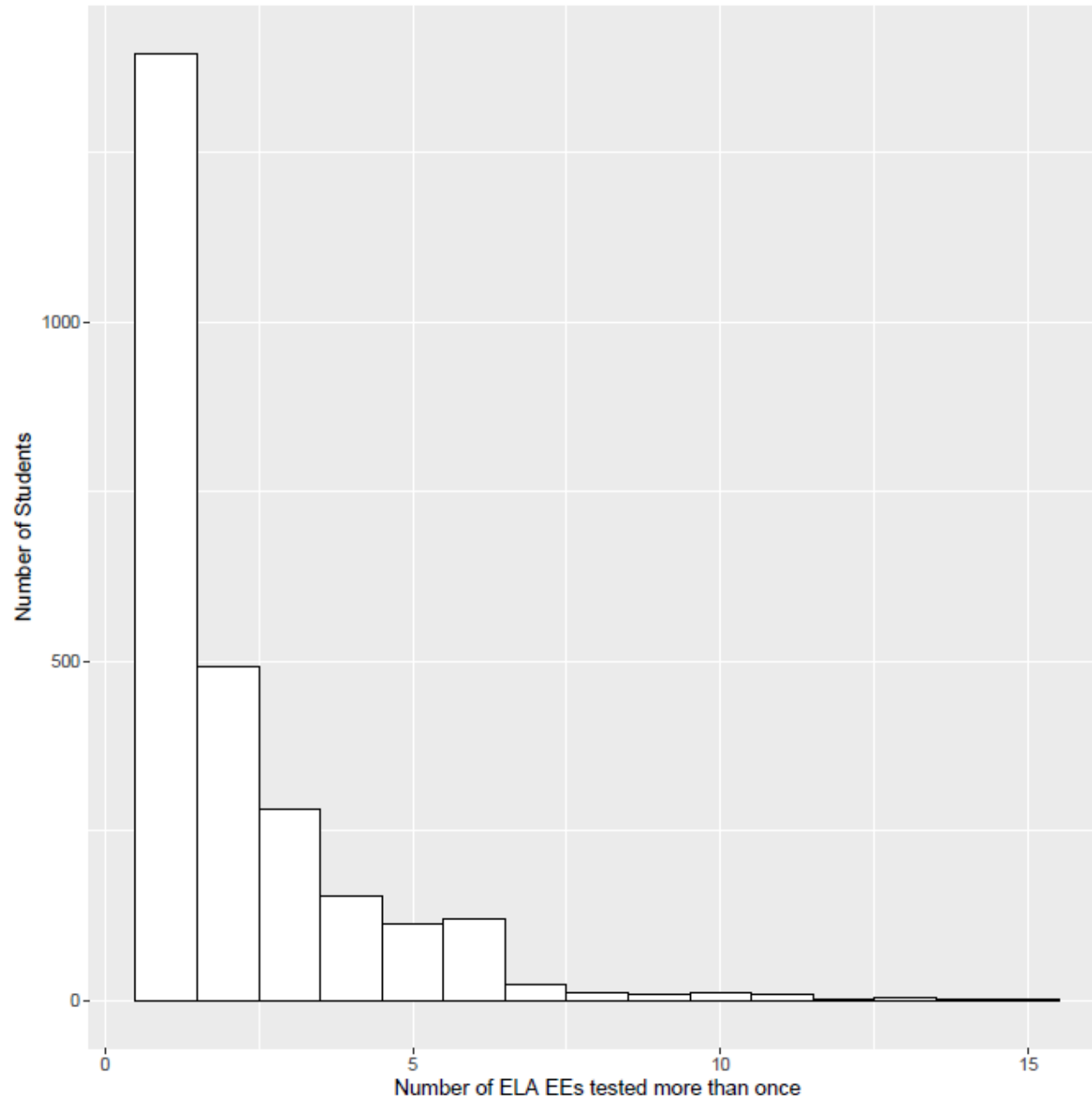
Testing on Multiple Linkage Levels in a Standard

- 2,604 (19.5%) tested on more than one linkage level within a standard

- Of students who assessed the same standard at more than one linkage level, most assessed at two different linkage levels (mean = 2.1, median = 2)

- However, in 23 instances across all students and standards (0.01%), the students tested on all five linkage levels within the standard

Frequency of Level Assessed More Than Once Across All Students and Standards

- 2.5% of the time, student tested on the same linkage level for the standard more than once

Linkage Level	*n*	%
Initial Precursor	1,182	23.5
Distal Precursor	1,641	32.6
Proximal Precursor	1,569	31.2
Target	633	12.6
Successor	7	0.1

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DISCUSSION

Summary of Results

- Overall patterns of use show students have at least appropriate content coverage
- Teachers generally do not override system recommendations
  - System appears to assign testlets at the correct level for students to access the content
- May still have practice in place of using system to meet requirements rather than to inform instruction
  - AA-AAS historically seen as fulfilling legislative mandate rather than providing feedback on student performance (Nitcsh, 2013)

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

- After spring 2017 data is collected:
  - Is there a relationship between use of the instructionally embedded assessment system and students' summative assessment results?
- Teacher survey data collection currently underway to gain feedback on choices made during instructionally embedded testing and how progress reports were used to inform instruction
- Defining a measure of implementation fidelity
- Looking at within-student and within-teacher experience for testlet administration

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