

Documenting Growth for Students with Significant Cognitive Disabilities

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Diversity and Testing Issues
Session for NCME

Abstract

In this presentation, different growth models will be presented for two different populations: (a) a transition matrix will be used to show growth (across years) for students with significant cognitive disabilities taking a statewide test, and (b) hierarchical linear model to show (within year) growth for students with significant cognitive disabilities participating in alternate assessments based on alternate achievement standards. Both analyses highlight the need for complete and accurate data in making appropriate inferences on growth.

Qualified Assessor & Qualified Trainer

■ Qualified Assessor (QA)

- Prepares materials and setting for individual administration of the assessment
- Administers assessments directly to students
- Scores student responses fairly
- Delivers scores to online data entry system
- Interprets results for student, family, or educational team
- Maintain security status through District Security Administrator

■ Qualified Trainer (QT)

- All QA tasks, plus:
 - Serves as the local point person
 - Provides training and coaching to local Qualified Assessors
 - Fluent in updates and changes
 - Awards certificates*

Alternate Assessment Home Page

Welcome Gerald Tindal

Gerald Tindal **Super Admin**

(Last login was on 2/11/2014 at 11:18 am. [View History](#))

 **Training**

Learn to administer and score the Oregon Extended Assessments. [Training »](#)

 **Proficiency**

Test your proficiency and become a Qualified Assessor. [Proficiency »](#)

 **View Materials**

Access training materials and other QT files, as well as practice tests for each subject. [View Materials »](#)

 **Admin**

Certify other users, view login history, and access other restricted functions. [Admin »](#)

 **Account**

Change your password and edit other account information. [Account »](#)



Note: It is highly recommended that you use headphones when viewing and listening to the videos in both the Training section and the Proficiency section of this web site.

Reading – Training on Administration

g Practice 4 - STD

Reading Practice 4 - STD



- [Scoring Protocol](#)
- [Student Materials pages 1 2 3 4](#)
- [Answers](#)
- [Explanation of Answers](#)
- [Transcript of all Reading Training \](#)
- [All Reading Practice Supporting D](#)

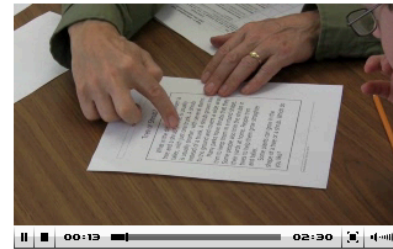
Oregon Extended Training - Reading Practice 4 - STD

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Reading Practice 4 - STD

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- [Scoring Protocol](#)
- [Student Materials pages 1 2 3 4](#)
- [Answers](#)
- [Explanation of Answers](#)
- [Transcript of all Reading Training Videos](#)
- [All Reading Practice Supporting Documents](#)

Size: 320 | 480

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Consider **Standard Administration** of Extended Assessment if:

- **The Student:**

- Performs well below grade level based on progress monitoring data.
- Has academic difficulties that are generalized (to all subject areas) and are significant.
- Reads significantly below enrolled grade level.

- **Instruction:**

- Is from specialized (but not functional) materials that are reduced in depth, breadth, and complexity.
- Is accommodated and modified to allow access to instructional information.

Consider **General Assessment** (with or without accommodations) if:

- **The Student:**

- Performs at or around grade level based on progress monitoring data.
- Has academic difficulties that are “mild to moderate” and can typically be addressed by using simplified language.
- Is reading is within two to three grades of enrolled level.
- Has academic difficulties that primarily surround reading, but performance in other subject areas is similar to grade-level peers.

- **Instruction:**

- Is designed from primarily grade level materials.
- Is accommodated for the student only to access instructional information.

Extended Assessment Format

- 4 subject areas (Reading, Writing, Mathematics, Science)
- 2 administration options per area (Standard, Scaffold)
- 3 grade levels (Elementary, Middle, High)
 - Reading is the only subject presented in grade bands.
- Internal structure:
 - Prerequisite Skills
 - Independence to Access
 - Content Prompts



Task1: Prerequisite Skills

Levels of Independence				
A – Student <u>Already</u> has this skill	1 - Full Physical Contact for response <i>(e.g., hand over hand)</i>	2 - Partial Physical Contact for response <i>(e.g., nudge or adjust body)</i>	3 - Visual: Materials Movement <i>(e.g., move into line of vision)</i> - Verbal: Auditory Statement <i>(e.g., more than repeat prompt)</i> - Gesture: Hand Signal <i>(e.g., tap table, pick up card)</i>	4 - Independent: No contact and no prompting
I – <u>Inappropriate/ Inaccessible</u> based on the nature of the student’s disability				
R - <u>Refusal</u> : Student does not complete or participate with or without assistance				

Prerequisite Skills	Independence for Success						
	A	I	R	1	2	3	4
1. Attention: Hello or Hi _____ (student’s name). Student responds to assessor.							
2. Interaction: Touch a piece of paper. (Tell/Show me when I touch a piece of paper.)							
3. Letter: Where is a letter? (Tell/Show me when I touch a letter.)							
4. Word: Where is a word? (Tell/Show me when I touch a word.)							
5. Word: Where is a word that starts with the letter M? (Tell/Show me when I touch a word that starts with the letter M.)							
6. Letter Sound: What is the sound of this letter? (while pointing to the letter b). (Tell/Show me the letter that makes the “ba” sound.)							
7. Sentence: Where is a sentence? (Tell/Show me when I touch a sentence.)							
8. Story: Where is a story? (Tell/Show me when I touch a story.)							
9. Story: Where is the title of a story? (Tell/Show me when I touch the title of a story.)							
10. Paragraph: Where is the beginning of a paragraph? (Tell/Show me when I touch the end of a paragraph.)							
TOTAL							

Independence for Access (circle the most frequently occurring level from above)	1	2	3	4
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Prerequisite Codes

Entry Code	Administration note	Definition
A	Already (has this skill)	Student already has this skill. (Assessor/teacher judgment).
I	Inappropriate item	Item is inappropriate for administration due to the design of the item and the (sensory) nature of the student's disability.
R	Refusal	Student does not complete or participate.
1	Full Physical	Full physical contact is necessary for the student to respond to this item (e.g. hand-over-hand).
2	Partial Physical	Student requires some physical contact in order to respond to this item.
3	Verbal, visual, or gestural	A statement, adjustment, or movement is necessary in order for the student to respond to this item.
4	Independent	Student responds to this item without assistance of any sort.

Calculating Independence to Access (Support for Access) Score

- To determine the level of support to provide when moving into the Content Prompts, the Assessor will select the mode (i.e. the most commonly occurring level of Independence score from the student's Prerequisite Skills responses). If there are two modes (i.e., two groups with the same number of scores), select the lower of the two.

Content Prompt Codes

Entry Code	Administration note	Definition
D	Too Difficult	Item is determined too difficult and is not administered to the student based on Assessor/teacher judgment.
I	Inappropriate item	Item is inappropriate for administration due to the design of the item and the (sensory) nature of the student's disability.
0	No credit	Student response is incorrect.
1	Partial credit	Student response is partially correct based on rubric. Student response demonstrates partial understanding but is incomplete.
2	Full credit	Student response is correct based on rubric.

Participation by Extended Assessment Subject and Disability Category

- On average...
 - 5400 students participate in Reading
 - 4900 students participate in Math
 - 2100 students participate in Writing
 - 1600 students participate in Science
- While all disability categories are represented, the majority of students who participate primarily come from these three disability categories:
 - Intellectual Disability
 - Specific Learning Disability
 - Autism Spectrum Disorder

Transition in Proficiency – Gr 3 to 4

Transition Matrix from Grade 3 (2009) to Grade 4 (2010)

		Grade 4				Off Diagonal Level Change
		Low	Nearly Meets	Meets	Exceeds	
Grade 3	Low	156	35	9	0	
	Nearly Meets	33	53	48	8	0 (+3 levels)
	Meets	5	40	143	114	17 (+2 levels)
	Exceeds	0	1	21	115	197 (+1 level)
	Off Diagonal Level Change		0 (-3 levels)	6 (-2 levels)	94 (-1 level)	467 (no change)

Note. There were no students in the lowest level (*Very Low*). Level Change indicates the number of students that changed achievement level (i.e., sum of the diagonal and off-diagonals).

Transition in Proficiency – Gr 4 to 5

Transition Matrix from Grade 4 (2010) to Grade 5 (2011)

		Grade 5				Off Diagonal Level Change
		Low	Nearly Meets	Meets	Exceeds	
Grade 4	Low	163	13	3	0	
	Nearly Meets	42	48	29	4	0 (+3 levels)
	Meets	15	28	99	49	7 (+2 levels)
	Exceeds	3	2	41	95	91 (+1 level)
	Off Diagonal Level Change		3 (-3 levels)	17 (-2 levels)	111 (-1 level)	405 (no change)

Note. There were no students in the lowest level (*Very Low*). Level Change indicates the number of students that changed achievement level (i.e., sum of the diagonal and off-diagonals).

Unconditional Model

Unconditional Model Parameters (Robust Standard Errors)

Fixed Effects	Fixed Effect		
	Coefficient	SE	p-value
Intercept, β_{00}	102.38	0.60	<0.001
Slope, β_{10}	4.60	0.23	<0.001

Random Effects	Variance	p-value
Intercept, r_{0i}	333.66	<0.001
Slope, r_{1i}	11.35	<0.001
Level-1 residual, e_{ti}	54.12	N/A



Conditional Model

Fixed Effects	Fixed Effect		
	Coefficient	SE	p-value
Intercept, β_{00}	86.10	1.47	<0.001
Gender, β_{01}	-1.73	0.90	0.053
Ethnicity, β_{02}	-0.85	0.85	0.318
<u>EconDis</u> , β_{03}	3.18	1.04	0.002
Disability, β_{04}	0.11	1.30	0.933
<u>GenEd</u> , β_{05}	-4.90	1.04	<0.001
<u>PerfLevel</u> , β_{06}	26.27	1.13	<0.001
Slope, β_{10}	6.36	0.65	<0.001
Gender, β_{11}	-0.44	0.48	0.357
Ethnicity, β_{12}	-0.32	0.49	0.516
<u>EconDis</u> , β_{13}	0.91	0.52	0.081
Disability, β_{14}	-0.61	0.57	0.287
<u>GenEd</u> , β_{15}	-2.06	0.53	<0.001
<u>PerfLevel</u> , β_{16}	-1.77	0.52	<0.001
Random Effects	Variance	p-value	
Intercept, r_{0i}	134.92	<0.001	
Slope, r_{1i}	10.27	<0.001	
Level-1 residual, e_{ti}	53.89	N/A	

Display of Change

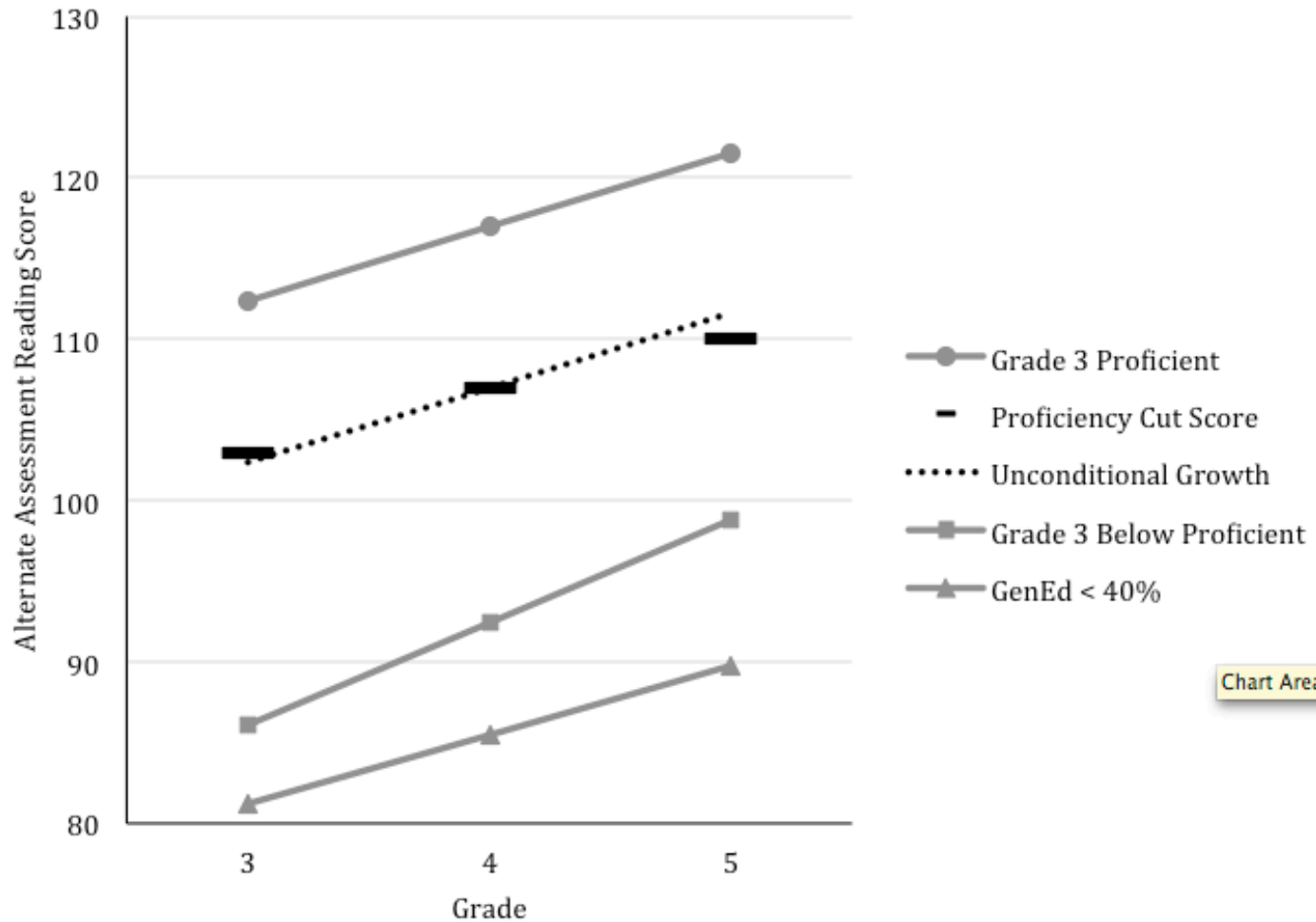


Chart Area