Oregon Extended Assessment

Item Reviews – Fall 2014

Behavioral Research and Teaching (BRT)
University of Oregon
November 5, 2014

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Objectives

- To understand the development process of Oregon Extended Assessment (ORExt) items.
- To become familiar with the steps associated with the reduction of depth, breadth, and complexity of state content standards as it relates to English Language Arts, Math, and Science.
- To ensure understanding of the standard essentialization process.
- To ensure the ORExt test items align to Oregon's essentialized standards, while maintaining fidelity to the reduction process.
- To make judgments about SPED and Bias of the field test items.

Why Are We Doing this Work?

- Conduct a professional review by experts (you)
- Use a structured and credible process to evaluate the alignment to essentialized standards, SPED student accessibility, and Bias of the items on the OrExt
- To make changes to the field test items as suggested by you

Ultimate Goal

Improving academic achievement for students with significant cognitive disabilities by linking

- Academic standards
- Instruction, and
- Assessment

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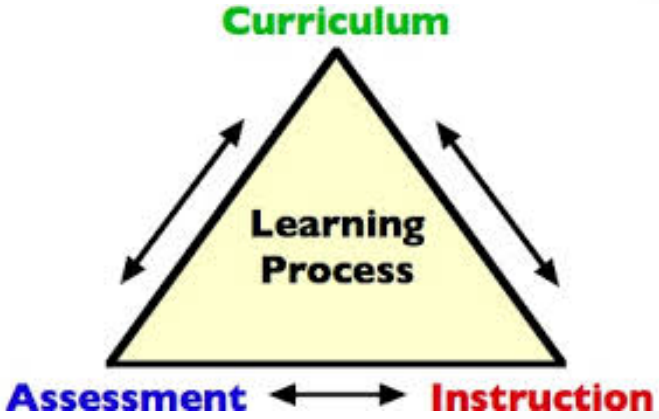
Big Picture

- All students in Oregon are required to demonstrate proficiency on grade-level content standards.
- Students with significant cognitive disabilities need to demonstrate progress toward reaching proficiency on grade-level content standards.
- The ORExt is designed to assess the progress of students with significant disabilities toward meeting these (essentialized) content standards.



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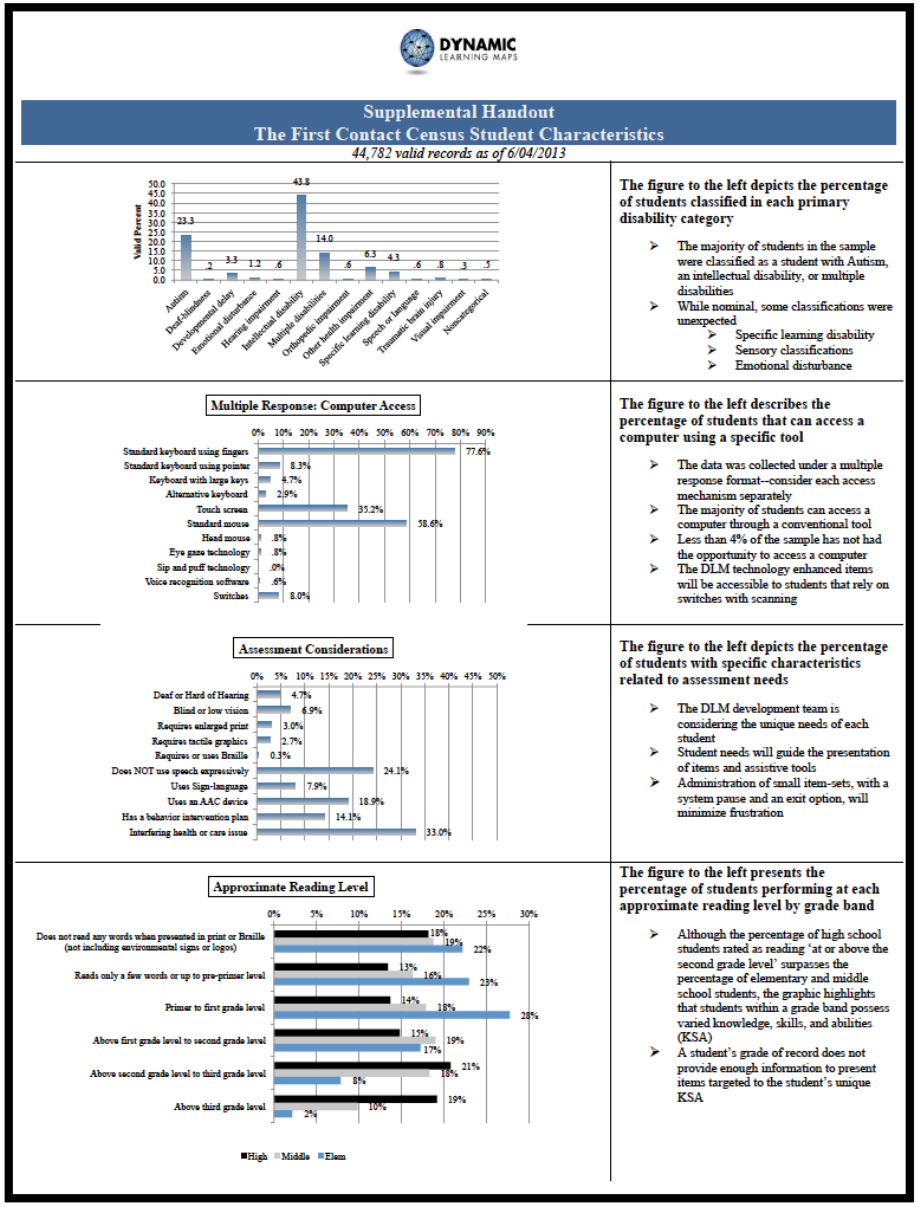
Students with Significant Cognitive Disabilities (SWSCDs)



DYNAMIC LEARNING MAPS

Supplemental Handout
The First Contact Census Student Characteristics
44,782 valid records as of 6/04/2013

The figure to the left depicts the percentage of students classified in each primary disability category

- The majority of students in the sample were classified as a student with Autism, an intellectual disability, or multiple disabilities
- While nominal, some classifications were unexpected
  - Specific learning disability
  - Sensory classifications
  - Emotional disturbance

Multiple Response: Computer Access

The figure to the left describes the percentage of students that can access a computer using a specific tool

- The data was collected under a multiple response format--consider each access mechanism separately
- The majority of students can access a computer through a conventional tool
- Less than 4% of the sample has not had the opportunity to access a computer
- The DLM technology enhanced items will be accessible to students that rely on switches with scanning

Assessment Considerations

The figure to the left depicts the percentage of students with specific characteristics related to assessment needs

- The DLM development team is considering the unique needs of each student
- Student needs will guide the presentation of items and assistive tools
- Administration of small item-sets, with a system pause and an exit option, will minimize frustration

Approximate Reading Level

The figure to the left presents the percentage of students performing at each approximate reading level by grade band

- Although the percentage of high school students rated as reading 'at or above the second grade level' surpasses the percentage of elementary and middle school students, the graphic highlights that students within a grade band possess varied knowledge, skills, and abilities (KSA)
- A student's grade of record does not provide enough information to present items targeted to the student's unique KSA

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Video of Student Population of Oregon Extended Assessments

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Guidelines for the OrExt

- Each test item focuses on a specific essentialized standard or standards.
- Items are written to cover a range of difficulty (low – medium – high).
- Items are written at different cognitive levels (think Bloom's Taxonomy)

  Remember, Understand, Apply
- Items should be free of age, gender, religious, ethnic or disability stereotypes, and bias.

General Guidelines for ORExt Multiple Choice Items:

- Are comparable in length and parallel in structure.
- Have only one correct answer.
- Have one near and one far distractor.
- Are clearly-worded and are appropriate for students in the assigned grade and population in terms of reading level, interests, and experience.
- Answer choices will be arranged with sufficient white space on the page to ensure that there is no opportunity for distraction or confusion of responses.

General Guidelines for ORExt Multiple Choice Items, cont.

- Test items should not be worded in the negative ("Which of these is NOT . . . "), except in rare instances when it offers substantial advantages for the item construction or representation of the targeted construct.
- Do not be overly-concerned with scaling of the item graphics/text or additional text in answer options (e.g., ; A, ; B, ; C), as the graphics will be scaled/ edited during the test form development process, and font will be 18-pt or larger for all text.

Items which must be edited or rejected:

- Do not match any essentialized standard
- Have more than one possible correct answer
- Are not accessible to the student population
- Are “tricky” or confusing (text and/or graphics)
- Are potentially biased in terms of age, gender, religious, ethnic, or cultural issues
- Are grammatically incorrect (unless purposefully so)
- Address English Language Arts, Math, and Science content or vocabulary incorrectly

Item Review: Content Review

Critical Content Related Questions:

Is this English Language Arts, Math, or Science?

Is this item an adequate representation of the essentialized standard?

Is the item appropriately reduced in terms of breadth, depth, and complexity?

Is this item accurate with the suggested response?

Is the intent of the item clear?

Any suggested rewording (for clarity of wording, accuracy, or intent)?

Item Review: Bias/Sensitivity

- Gender
- Race/Ethnicity/Culture
- Age
- Disability
- Religion
- Socioeconomic Status
- Region (e.g., local vocabulary)
- General

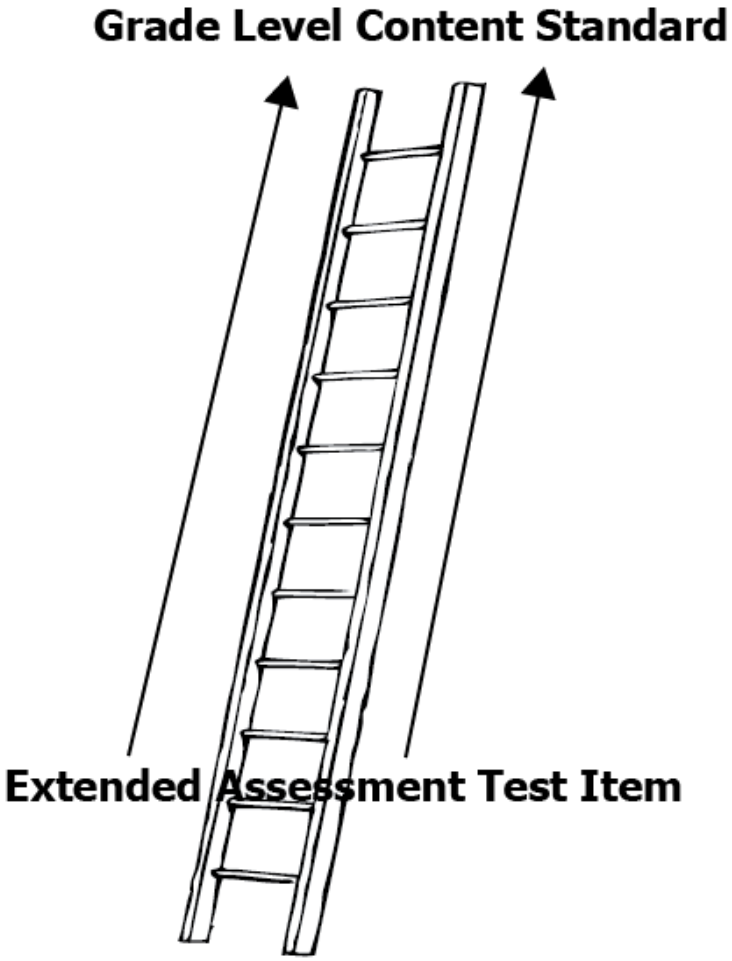
Item Review: Special Education

- Will students with significant cognitive disabilities understand this language?
- Will students with significant cognitive disabilities understand the intent?
- Do you have suggested rewording/graphics edits (for clarity and universal access)?

ORExt Items

- Are linked to OR Content Standards by the Essentialized Standards
- Essentialized Standards are systematically reduced in:
  - Depth
  - Breadth
  - Complexity

Linking Content Standards with ORExt Test Items



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Essentializing Oregon Content Standards

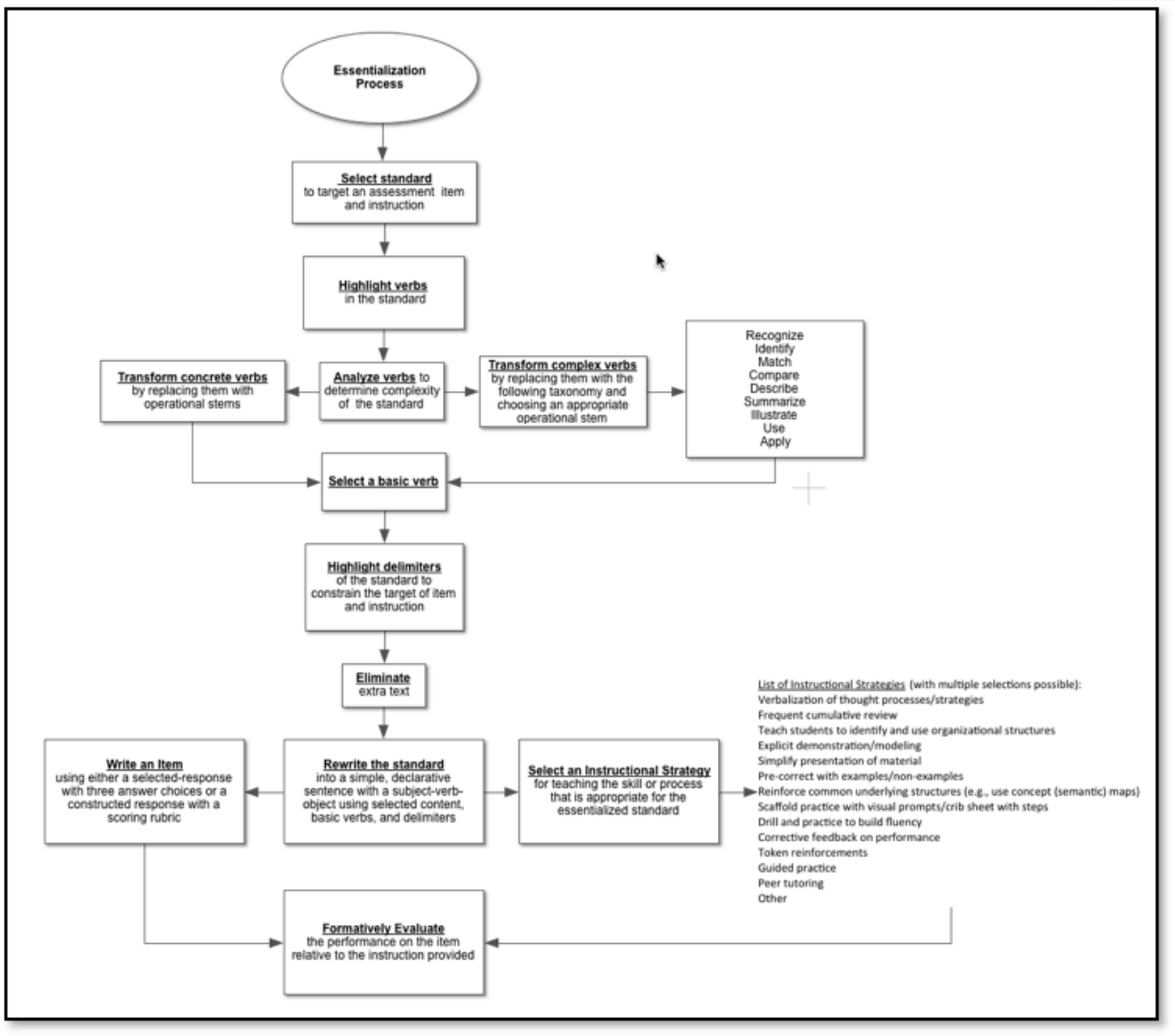
Essentializing Coding System

- (a) Essential content (nouns) is boxed
- (b) Essential intellectual operations (verbs) are underlined (with complex verbs also **bolded**), and
- (c) Delimiters (of content or intellectual operations) are *italicized*.

Essentialization Process

- Select standard
- Code using essentialization system
- Reduce depth, breadth, and complexity by:
  - transforming complex verbs
  - limiting scope of content/verbs
  - eliminating extra text
- Generate the essentialized standard

Essentialization Flow Chart



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Example 1: How to Essentialize a Standard (Reading)

- 4.RF4 - Read with sufficient accuracy and fluency to support comprehension.
- **Read** text *with sufficient accuracy and fluency to support comprehension*.
- Essentialized standard: **Read** *appropriate* text *with accuracy*.

Example 2: How to Essentialize a Standard (Writing)

- 11-12W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- **Produce** *clear and coherent* writing *in which the* development, organization, *and* style *are appropriate to task, purpose, and audience*.
- Essentialized standard: **Write** *relevant* text *with accuracy*.

Example 3: How to Essentialize a Standard (Language)

- 11-12L1 - Demonstrate command of the conventions of standard English grammar and usage when speaking or writing.
- **Demonstrate** *command of the* conventions *of standard English grammar and usage when speaking or writing*.
- Essentialized standard: *Accurately* identify icons *when using expressive language.*

Example 4: How to Essentialize a Standard (Math)

- 4.NBT4 - Fluently add and subtract multi-digit whole numbers using the standard algorithm.
- *Fluently* add *and* subtract *multi-digit* whole numbers *using the standard algorithm.*
- Essentialized standard: Add *two-digit* whole numbers *with fluency*.

Example 5: How to Essentialize a Standard (Science)

- 5-PS1-3 - Conduct an investigation to determine whether the mixing of two or more substances results in new substances.
- **Conduct** *an* investigation *to determine whether the mixing of two or more* substances *results in new substances.*
- Essentialized standard: Recognize *when* substances *are mixed together*.

The OREXt Item Review Process

Item Review: The Process

1. Each item contains the Scoring Protocol (question that an Assessor reads to the student), Student Materials (what is placed before the student), the associated Essentialized Standard/s, and three questions for you to answer.

2. Rate the Alignment of the Item to the Essentialized Standard/s – **0**, **1**, *or* **2** (see the following slides for example ratings).

3. Answer the question about whether the item is Accessible for a student with significant cognitive disabilities – **Yes** *or* **No**.

4. Answer the question about whether the item is free of Bias (i.e., gender, race, ethnicity, culture, age, disability, religion, region) – **Yes** *or* **No**.

5. Write in the comment box any comments or suggestions you have for each item. Your comments are critical improving item alignment to the standard/s when you rate an item alignment as a "0". Also, if you have any suggestions for making the item more accessible to students with significant cognitive disabilities or less biased when you answer "no" to either question, please include those in the comments box.

Three Independent Judgments

1. **Item Alignment**

   Identify the level of alignment b/t items and Essentialized Standards – **0**, **1**, *or* **2**
2. **Item is Accessible to SPED Students**

   Yes *or* **No**
3. **Item is Free of Bias**

   Yes *or* **No**

Item Alignment Scale

2 = Item is ***strongly aligned*** to the Essentialized Standard

1 = Item is ***sufficiently aligned*** to the Essentialized Standard

0 = Item is ***not sufficiently aligned*** to any part of the Essentialized Standard

**Make note of difficulty level based on item code, L – M – H, when gauging alignment.

Example of Items and Alignment Ratings - ELA

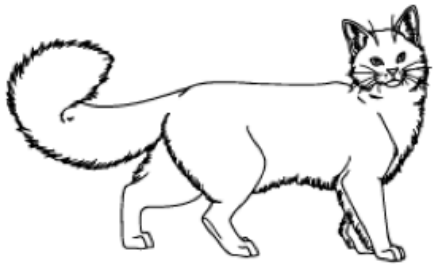
Example of a 0 = insufficient alignment:

ELA - Grade 11 Essentialized Standard RL1 - H item

Answer questions about a text that is read to student.	L - Paragraph of 4 sentences read to student M - Paragraph of 5 sentences read to student H - 2 paragraphs read to student

Here is a picture. (Point to picture.) Which word is a description of the picture: dog, cat, or bird?
[0 = incorrect / 1 = cat]

Which word is a description of the picture?



dog	**cat**	**bird**

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Example of Items and Alignment Ratings - Math

Example of a 1 = sufficient alignment:

Math - Grade 7 Essentialized Standard TNS - M item

Match rational numbers to their corresponding decimal (.5, .25, .75 with multiples of 1/2, 1/4, 3/4).	L - match .5 with 1/2, 2/4, 3/6, and 4/8; M match .25 with 1/4, 2/8, 3/12, and 4/16; H- match .75 with 3/4, 6/8, 9/12, and 12/16.

Here are three answer choices. (Point to each.) Which fraction is the same as .25: 6/32, 7/32, or 8/32?
[0 = incorrect / 1 = 8/32]

Which fraction is the same as .25?

$\frac{6}{32}$ $\frac{7}{32}$ $\frac{8}{32}$

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Example of Items and Alignment Ratings - Science

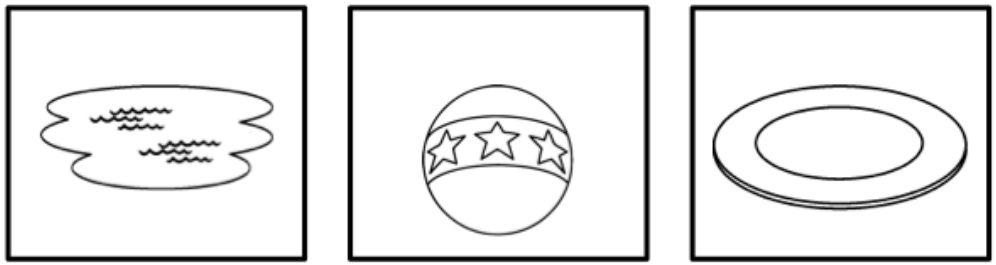
Example of a 2 = strong alignment:

Science - Grade 5 Essentialized Standard S05ESS2.2 - L item

Identify features made of water, and compare the amount of water in different reservoirs on Earth.	L - Restricted to questions about what Earth features that are made of water (i.e., oceans, lakes, rivers, streams) as compared to common objects that aren't (i.e., rock, brick, toy, ball

Here are three pictures. (Point to each.) Which one is a lake: A, B, or C?
[0 = incorrect / 1 = A]

Which one is a lake?



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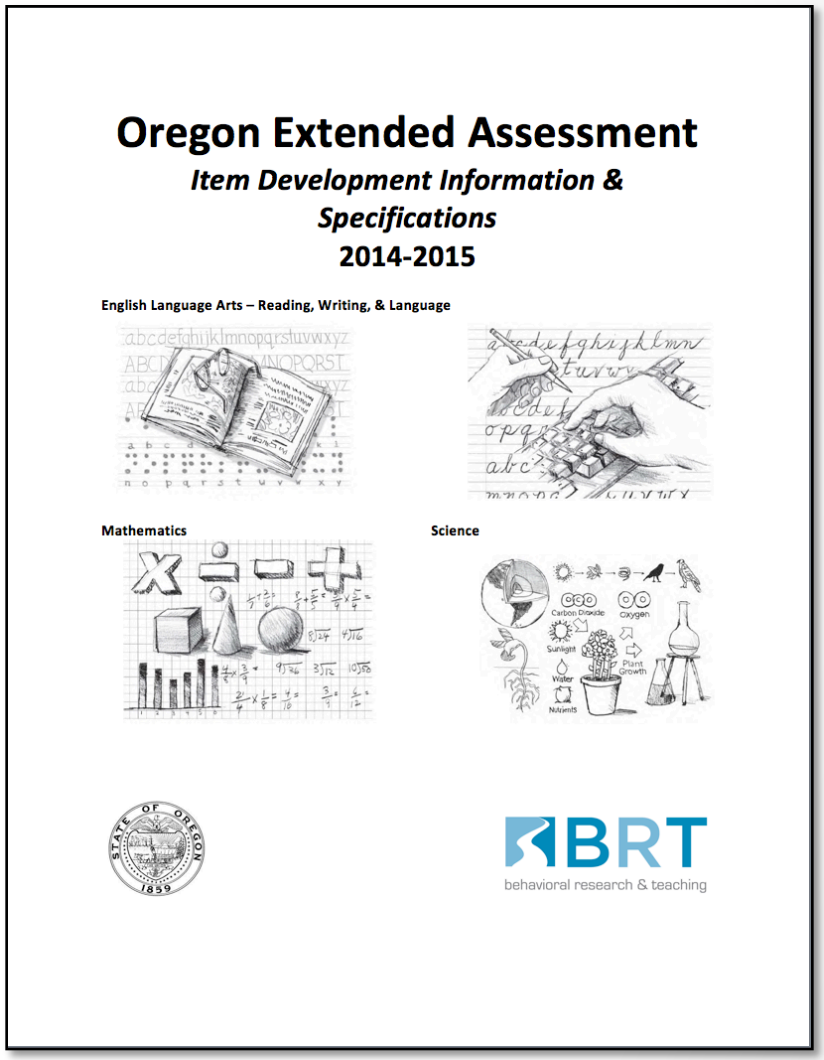
Resources to Support Your Review

- The following documents will support accurate and consistent decisions during your review
  - Dynamic Learning Maps SWSCD Survey Results
  - Item Development Information & Specifications (please read this in its entirety, so you can see exactly what we asked item writers to do)
  - Accessibility Manual (for your reference, p. 35-41)
  - Training Slides
- Videos of this webinar and student population

Item Development Information & Specifications



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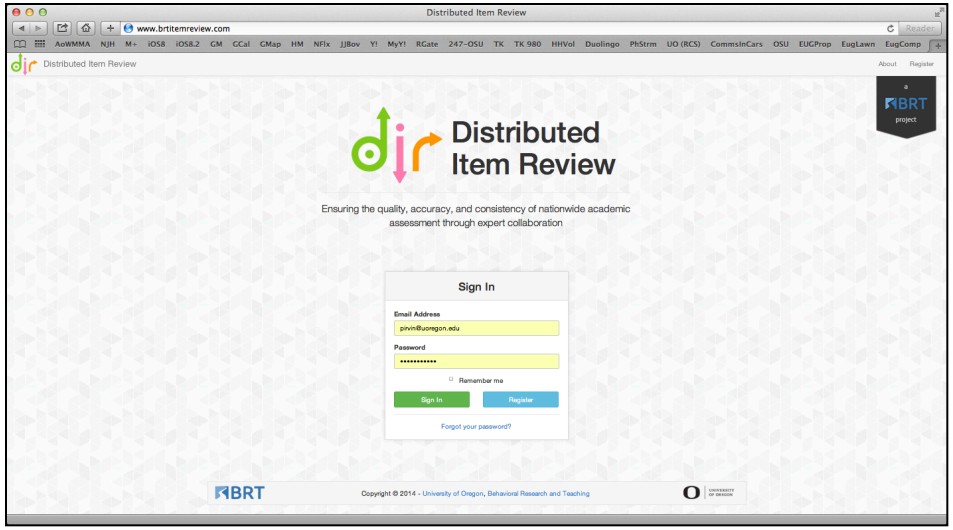
OREXt Item Development Information & Specifications

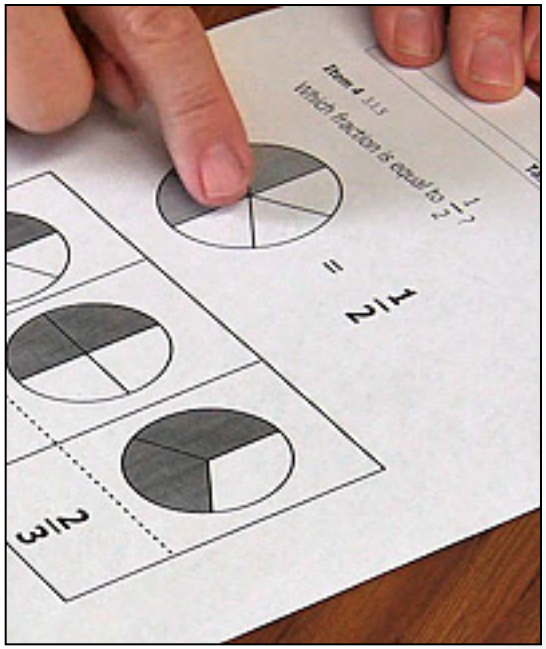
- Background (p. 2)
- RDBC (p. 2)
- EAFs (pp. 3-4)
- OREXt Test Design (pp. 4-6)
- Test Development Considerations (pp. 6-9)
- Item Specifications (pp. 10-11)
- Anticipated Accommodations (pp. 12-14)

Distributed Item Review (DIR)

http://www.brtitemreview.com

A web-based system for presenting ***test items*** to ***experts*** across a ***broad geographic region*** so they can ***review*** them for important dimensions of ***bias, sensitivity, and alignment with standards***.





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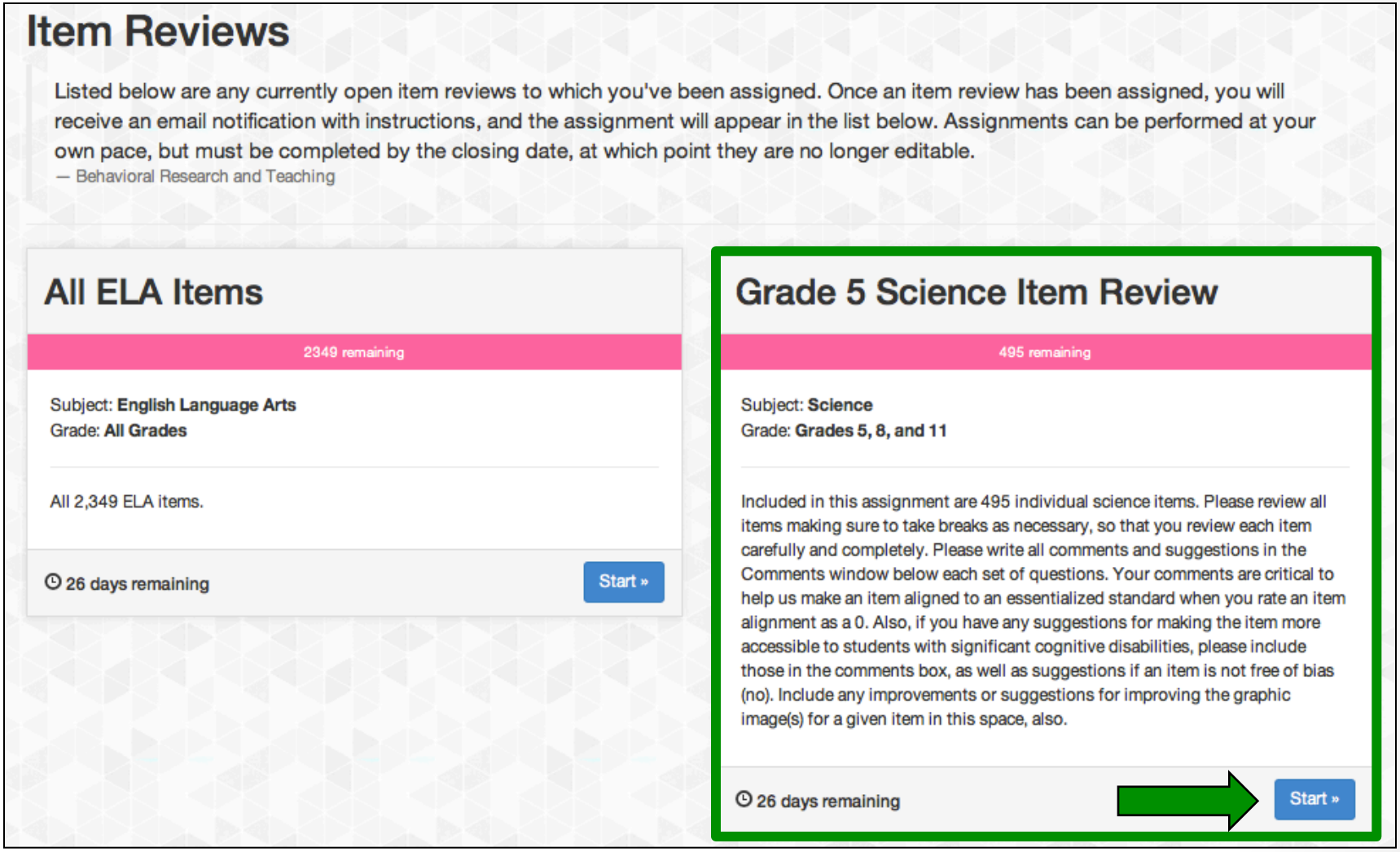
Accessing Your Grade-level Assignment in the DIR

1. Carefully look over the review (i.e., subject, grade, details).
2. Get going by clicking on “Start” button.

Grade 5 Science Item Review Example



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Accessing Your Grade-level Assignment in the DIR, cont.

3. Carefully review specific details (i.e., dates, # items, PDF resources, video resources, instructions).
4. Begin reviewing items by clicking on "Next" button.

Items

Filter Items

- S05PHS1.1LSAMPLE
- S05PHS1.1L01
- S05PHS1.1L02
- S05PHS1.1L03
- S05PHS1.1M04
- S05PHS1.1M05
- S05PHS1.1M06
- S05PHS1.1H07
- S05PHS1.1H08
- S05PHS1.1L09
- S05PHS1.1L10
- S05PHS1.1M11
- S05PHS1.1M12
- S05PHS1.1M13
- S05PHS1.1H14

Grade 5 Science Item Review

Subject: **Science**
Grade: **Grades 5, 8, and 11**
Opening Date: **10/24/2014**
Closing Date: **11/30/2014**
Number of Items: **495**

PDF Resources

Resources

OrExt Item Development and Specifications 2014-2015

Videos

Video of Representative Student Population

Video Resources

Instructions

Welcome to the Oregon Extended Assessment Reading and Writing, Math, and Science Field Test Item Review. There are many test items for each grade level for you to review, and three questions to answer for each item. The three questions are: Alignment of Item to Essentialized Standard (0, 1, 2), Accessible to SPED Students (yes, no), and Item is free of Bias/Sensitivity Issues (yes, no). Please refer to the Training Slides in the Resources section to learn about each of these questions you will be rating. Please write all comments and suggestions in the Comments window below each set of questions. Your comments are critical to help us make an item aligned to an essentialized standard when you rate an item alignment as a 0. Also, if you have any suggestions for making the item more accessible to students with significant cognitive disabilities, please include those in the comments box, as well as suggestions if an item is not free of bias (no). Each item is on one page and before proceeding to the next page please be sure to click on the Save & Continue button at the bottom of each page. A green check mark will appear next to the item number on the left side of the page after you answer all three questions and click the Save & Continue button. Thank you for reviewing these items! If you have any questions please contact Steve Jonas at sjonas@uoregon.edu (ELA), or Shawn Irvin at pirvin@uoregon.edu (Science), or Dan Farley at dfarley@uoregon.edu (Math). Alternatively, you may call the HelpDesk at 1-800-833-3163.

Instructions and Help Info

Next »

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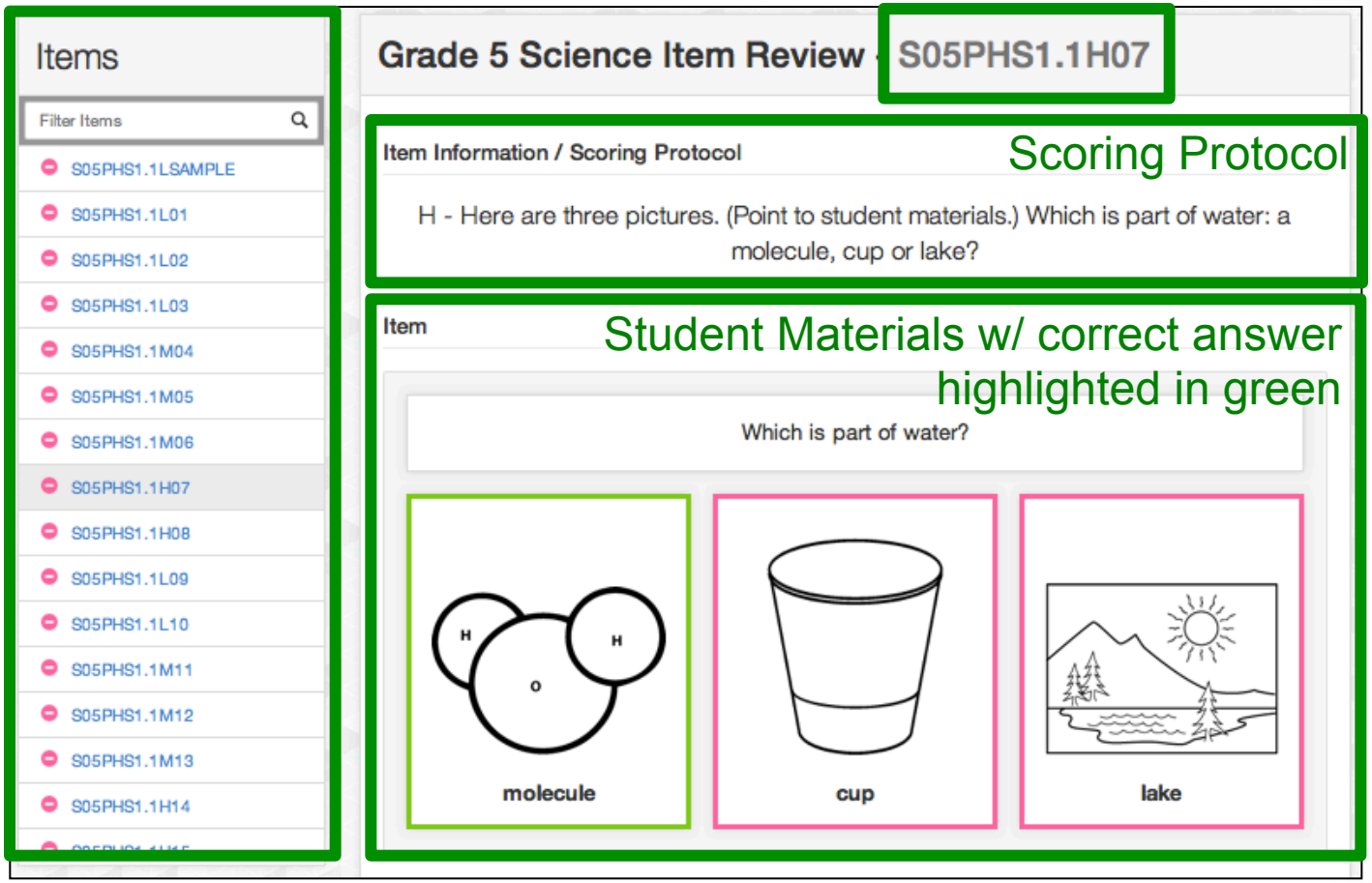
Reviewing Items in the DIR

5. Carefully review the item code, scoring protocol, student materials, and three answer options – one correct, near distractor, and far distractor

Item code w/ difficulty level (H)

Item list w/ current item shaded



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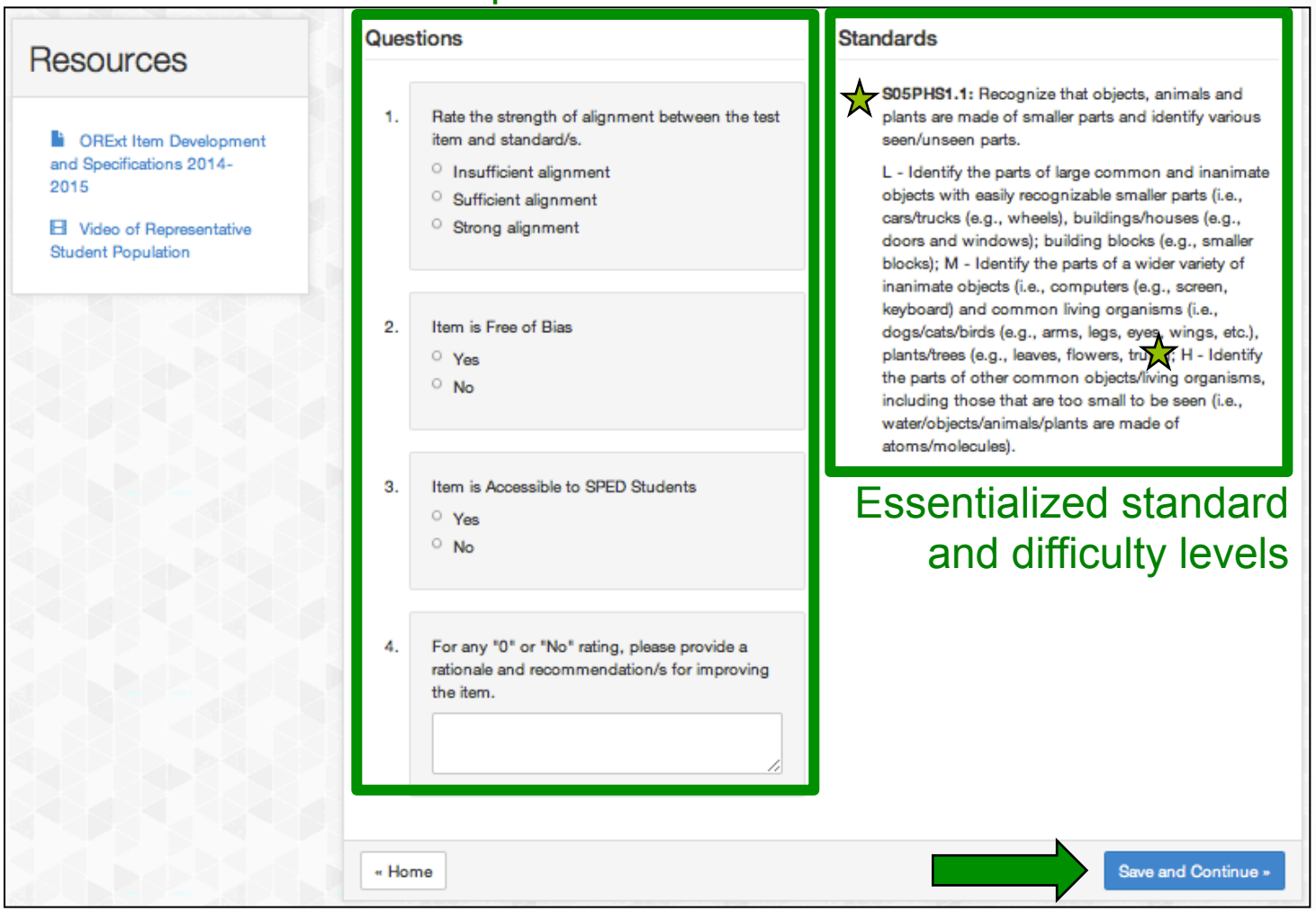
Reviewing Items in the DIR, cont.

6. Carefully answer all three questions below the test item (i.e., alignment rating, SPED, Bias).
7. Provide information in comment box for any rating of '0' or any response of 'No'.
8. Click "Save and Continue" to move to next item.

Three questions and comment box



Essentialized standard and difficulty levels

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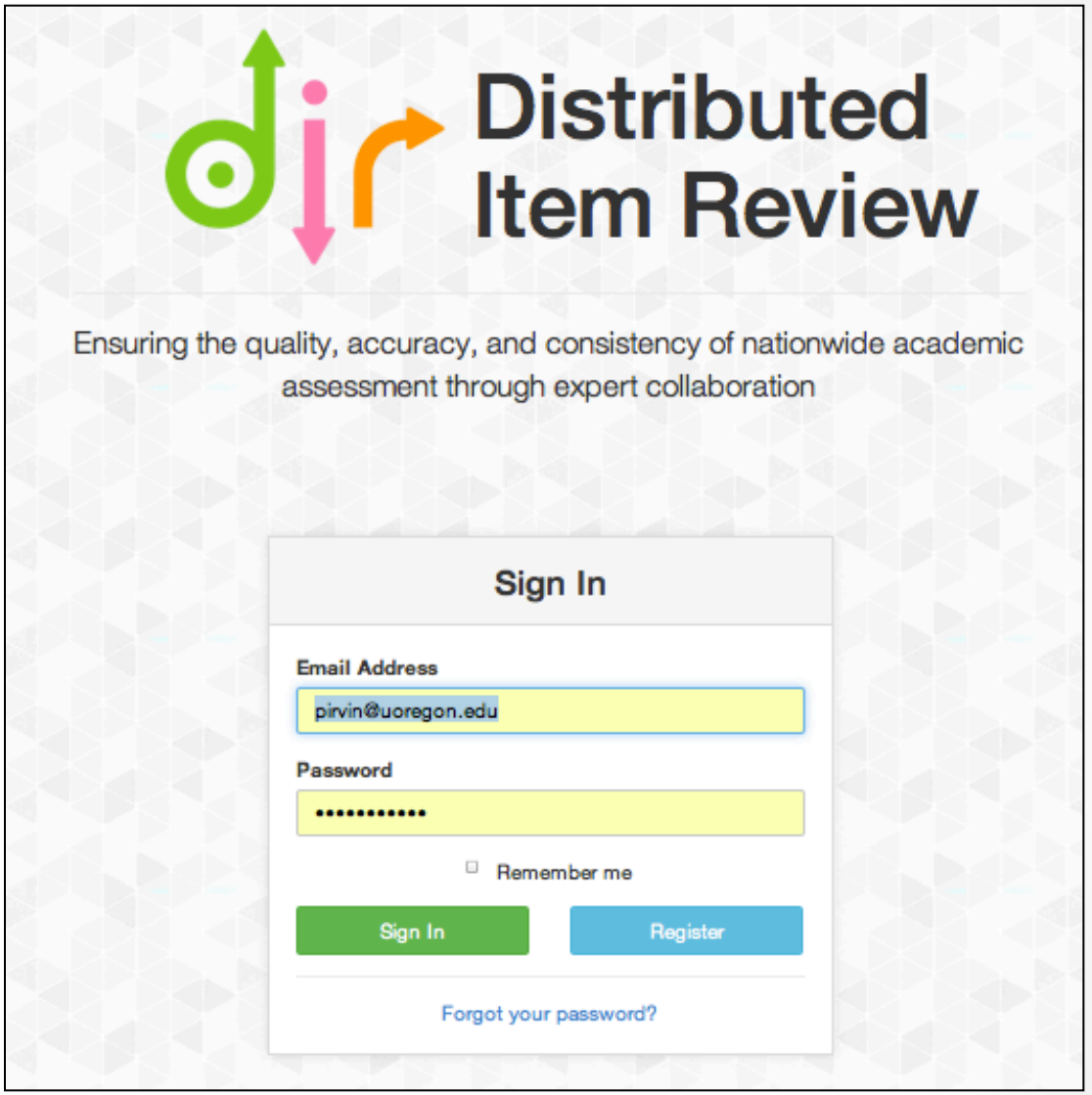
Important Things to DO

- You may (and should) stop and start your review at anytime and any number of times – the DIR keeps track of your spot by giving you a green dot (•) next to the item ID code.
- You may go back and edit an item by scrolling/clicking on it in the Item List – click “Save and Continue” to keep changes.
- Please budget your time such that you can meet all required deadlines, as compensation is dependent upon completion of item assignments and meeting item review deadlines (Nov 17 and Dec 1)

Important Things to AVOID

- This process is aimed exclusively at determining the alignment of items to essentialized standards, potential bias/sensitivity issues in the items, and access to these items for SWSCDs. You are not being asked to review the essentialized standards, nor make judgments regarding the appropriateness of statewide assessment, etc. Policy issues are not our concern here.
- Do not be overly-concerned with scaling of the item graphics/ text or additional text in answer options (e.g., ; A, ; B, ; C), as these will be adjusted during the test form development process, with font at 18-pt or larger.
- Do not be overly-concerned with math coding systems, as we will ensure that the items will be appropriate when presented to students (e.g., using 8x^2 instead of the appropriate exponent of $8x^{2)}$

DIR Walk-Thru



http://www.brtitemreview.com

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Next Steps

- Register and login to the Distributed Item Review (DIR) website: http://www.brtitemreview.com/
- Rate the item alignment to the essentialized standard with a 0, 1, *or* 2 for each of the items.
- Answer the Yes/No questions about SPED accessibility and Bias.
- Write comments or suggestions for improving an item, as needed, in the comments box.
- For any item rated as '0'/'No', provide suggestions for making the item a 1 or 2/more accessible/free of bias.
- Complete half of your judgments and comments by **November 17, 2014 – we will be monitoring progress.**
- Complete all of your judgments and comments by **December 1, 2014 – we will be monitoring progress.**

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Next Steps, cont.

- Make sure that you send Dan Farley a copy of the following two documents
  - Scope of Work
  - W-9
  - dfarley@uoregon.edu OR FAX at 541-346-5689
- Invoices will be distributed by e-mail in late November, to give you a chance to complete the work and submit the invoice for payment near the final due date of December 1, 2014.

Follow-up

Questions/Comments Contact:

- Item Review Project overall or Math
  - Dan Farley at dfarley@uoregon.edu, or 541.346.3133
- Science
  - Shawn Irvin at pirvin@uoregon.edu
- English Language Arts:
  - Steve Jonas at sjonas@uoregon.edu
- If you have questions for ODE, contact:
  - Bradley J. Lenhardt at Brad.Lenhardt@state.or.us or 503.947.5755