

**Technical Report # 1603**

**Distributed Item Review:  
Administrator User Guide**

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## **Distributed Item Review: Administrator User Guide**

The Distributed Item Review (DIR; Behavioral Research and Teaching, 2013) is a secure and flexible, web-based system designed to present test items to expert reviewers across a broad geographic area for evaluation of important dimensions of quality (e.g., alignment with standards, bias, sensitivity, and student accessibility). The DIR is comprised of essential features that allow system administrators to design and conduct customized review studies, in which test items are bulk uploaded, paired with target academic content/performance standards and images, and then organized and assigned for review by selected experts (e.g., content and field experts, education leaders and practitioners, education researchers, and test and curricula developers). Administrators can choose from predefined item review questions, or design new review questions pertinent to their study. A variety of administrator-designed support resources can be uploaded and associated with item review studies. Web-based reporting features offer administrators a “quick view” of reviewer progress and study completeness; comma separated value (.csv) reporting functionality allows data files to be securely downloaded and saved in a table-structured format for use in statistical analyses (e.g., SPSS, R).

The following document provides detailed information about the DIR system, framed by a step-by-step administrator’s guide to successfully creating and conducting test item reviews using the DIR. A DIR administrator may alter the sequence of the steps outlined, and possibly omit or alter a given step, we present the steps in the order that follows to comprehensively and parsimoniously discuss the principle steps, having successfully conducted several review studies across diverse research contexts. This administrator user guide can be downloaded at:

<http://www.brtpjects.org/publications/technical-reports>.

Prior to reading this user guide and attempting to create a DIR item review, we recommend prospective administrators view the DIR System Introduction—downloadable as a Portable Document Format (.pdf) at: <http://www.brtprojects.org/publications/presentations>. The slides give prospective DIR administrators an overview of the system, offering a jumpstart to proceeding through this guide.

### **Step One: Registering a *User Account* in the DIR**

Prior to registering an account with the DIR, a prospective administrator or user should ensure their device meets the system requirements. The DIR system is largely platform independent (i.e., Windows, Android, Macintosh), functional across devices (e.g., desktop, laptop, tablet, and mobile), and compatible with common web browsers (e.g., Internet Explorer, Firefox, Chrome, Safari). Additionally, upon creating an account a DIR user assents to our User Agreement and Privacy Policy, which can be found along with a complete listing of system requirements at: <http://brtitemreview.com/about#system-requirements>.

To register a new user account with the DIR, click the “Register” button at the bottom of the DIR homepage (<http://brtitemreview.com>), displayed in the screenshot, below. On the *New*

*User Registration* page, complete the required fields and click “Register”.

Additional fields (e.g., *Educator Role, Years Experience,*

The screenshot shows the homepage of the Distributed Item Review (DIR) system. At the top left, there is a logo for 'dir Distributed Item Review'. To the right, there are links for 'About' and 'Register'. Below the logo, the text reads 'Distributed Item Review' and 'Ensuring the quality, accuracy, and consistency of nationwide academic assessment through expert collaboration'. In the center, there is a 'Sign In' form with the following elements:

- Email Address:** A text input field with the placeholder 'Email Address'.
- Password:** A text input field with the placeholder 'Password'.
- Remember me
- Sign In:** A green button.
- Register:** A blue button.
- [Forgot your password?](#)

*Degrees*) are helpful for disaggregating item response data, and should be required of all review study participants (see screenshot, below).

Once a new user account has been registered, users receive an email welcoming them to the DIR system. If intending to register as an administrator, a researcher from Behavioral Research and Teaching (BRT) at the University of

**New User Registration**

Thank you for offering to help improve academic assessments by providing your expert knowledge and feedback as an educator. For the best possible experience, please ensure you meet our [system requirements](#). By creating an account, you agree to the terms and conditions of our [Privacy Policy](#) and [User Agreement](#).

**First Name \***   
**Last Name \***   
**Email Address \***   
**Password \***   
**Confirm Password \***

**Educator Role**  ⌵  
**School District**   
**Position**   
**Years Experience**   
**Degrees**

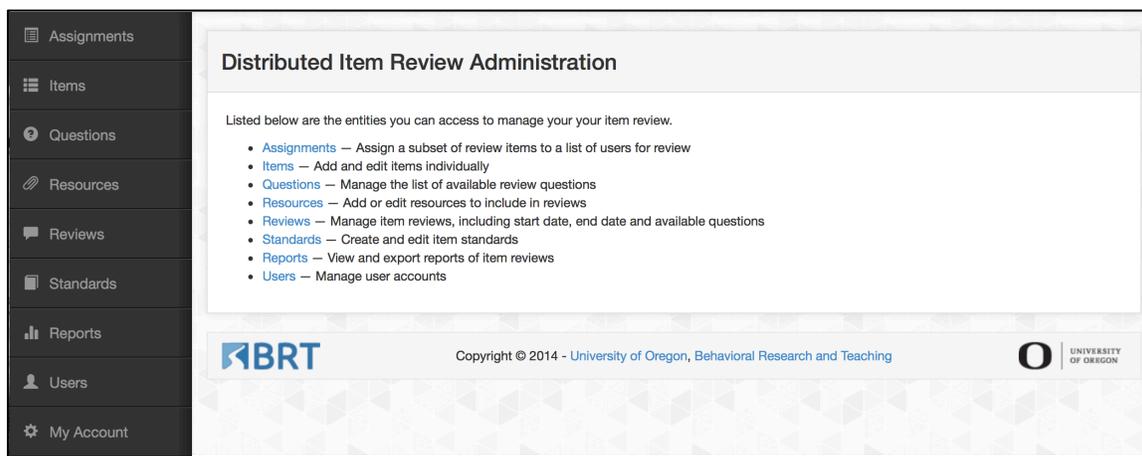
**Address**   
**City**   
**State**   
**Zip Code**

Oregon (<http://www.brtprojects.org>), the developers and managing directors of the DIR system, will adjust the status from *user* to *administrator* once approved, giving the ability to create and conduct item reviews in the DIR. Once a DIR administrator, reviewer user accounts are accessible through the “Users” button located in the left essential features panel.

### **Step Two: Creating a Review in the DIR**

The DIR is comprised of several essential features. *Reviews* are the broadest essential feature, and can be thought of as the main house that frames other system features necessary for conducting item reviews using the DIR. Administrators create and define *Reviews* based on their

item review study’s design and goals. Once logged into the DIR, a panel of essential feature buttons always appears on the left side of the *DIR Administration* page (see screenshot, below).



To create a new *Review*, click the “Reviews” button. A list of existing *Reviews* appears—click “Create Review” to navigate to the *Reviews / Create* page. Several fields define a *Review*. These fields are displayed in Table 1, along with a description of their purpose and functionality. All fields are typically completed to describe the item review study for reviewers.

Table 1  
*Review Field Names and Associated Descriptions*

Reviews / Create Field	Description
Subject	Content area subject (English Language Arts, Math, or Science)
Title	Title of the item review (may house multiple <i>Assignments</i> —see Step 7)
Date	General date description for item review (e.g., Fall 2016)
Start/End Dates	Calendar dates that control when the item review study opens and closes to reviewers
Grade(s)	Description of the grade(s) level
Resources	List of support <i>Resources</i> —see Step 6—that can be selected for use across <i>Reviews</i> and <i>Assignments</i>
Review Instructions	Instructions for the item review
Email Notice Message	Email notification that reviewers receive once they create a DIR user account
Questions	List of item review <i>Questions</i> —see Step 5—that can be selected (drag/drop) for use across <i>Reviews</i> and <i>Assignments</i>
Review Questions	Item review <i>Questions</i> selected for a particular review

The *Reviews / Create* (or *Edit*) page is shown, below. When populating fields that require substantial amounts of text (e.g., *Review Instructions*, *Email Notice Message*) administrators should draft the text in a word processing program, and then copy/paste the desired text into the target field, to better ensure accuracy. A screenshot of a sample *Review* with populated fields is shown, below. Note that the *Review* fields are populated through a

combination of drop-down selection (e.g., *Subject*), point-and-click (e.g., *Start / End Date*, *Resources*), and typed-text (e.g., *Title*, *Review Instructions*)

procedures. Note, also, that some *Review* fields require essential features be previously defined. For example, to select and order *Review Questions* (drag-and-drop from *Questions*), they must first be created in the DIR (see Step 5).

Similarly, in order to select *Resources*, they must first be

created and uploaded into the DIR (see Step 6). In other words, the DIR administrator creates a new *Review* in order to provide the framework for the study they are conducting, and because a *Review* must exist in order to create *Items* in the DIR (see Step 4); however, an administrator

The screenshot displays the 'Reviews / Edit' interface. At the top, the title 'Reviews / Edit' is shown. Below it, the form is organized into several sections:

- Subject:** A dropdown menu currently set to 'English Language Arts'.
- Title:** A text input field containing 'ORExt English Language Arts Items'.
- Date:** A text input field containing 'Fall 2014'.
- Start Date:** A date picker field showing '02/27/2016'.
- End Date:** A date picker field showing '03/05/2016'.
- Grade:** A dropdown menu set to 'All Grades'.
- Resources:** A list of three items: 'ORExt Essentialization Flowchart', 'DIR Training Webinar Recording', and 'PASA Essentialization Process'. Each item has a checkbox and an external link icon.
- Review Instructions:** A text area containing detailed instructions for reviewers, including a note to refer to training slides and a request for comments.
- Email Notice Message:** A text area containing the message 'Thanks for registering for the review!'.
- Questions:** A section with a 'Comments' text area and a 'Review Questions (in order)' list. The list contains one question: '1. Rate the strength of alignment between the test item and standard/s.' with three radio button options: '0 - Insufficient alignment', '1 - Sufficient alignment', and '2 - Strong alignment'.

typically returns to the *Review / Edit* page several times over the course of creating, refining, and finalizing a test item review study in the DIR.

### **Step 3: Creating and Uploading Standards in the DIR**

Typically, the essential feature addressed after creating a *Review* is creating/uploading academic content or performance *Standards*—created either individually or in bulk (recommended). To create *Standards* using the DIR’s bulk upload functionality, click the “Standards” button, located in the left essential features panel, to navigate to the *Standards / Bulk Upload* page (see screenshot, below). The administrator must create a .csv spreadsheet (for example, using Excel) with four column headers: *Standard ID*, *Subject*, *Domain*, and *Description*. The *Standard ID* and *Subject* fields are required to contain information in the .csv

**Standards / Bulk Upload**

To upload standards in bulk, the *Standards File* must be in .csv format and contain the following columns in order:

- **Standard ID** - Unique standard identifier
- **Subject** - Must be one of: *english*, *math*, or *science*
- **Domain** - (optional)
- **Description** - (optional)

**Standards File (.csv)**

Choose File no file selected

Upload

spreadsheet. *Domain* and *Description*, while not required to contain information, are almost always populated in the .csv, as they typically convey relevant information for reviewers evaluating the alignment between test items and target standards. A portion of a sample .csv is shown in the screenshot, below. Note, in this example the optional *Domain* and *Description* fields contain information. The two Math standards shown are from the Oregon Extended Assessment, for which we developed essentialized standards by decreasing relevant Common Core State Standards (CCSS) in depth, breath, and complexity. Therefore, in this sample .csv information in the *Domain* field represents the CCSSs standard, and information in the

*Description* field

represents the essentialized standard at three levels of complexity (Low [L], Medium [M], and High

	A	B	C	D	E	F
1	Standard ID	Subject	Domain	Description		
22	M03GEO1.1	math	Use attributes of triangles, squares, and circles to classify shapes.	L - identify triangles (all shapes in answer choices same-size); M - identify squares (shapes in answer choices of various sizes); H - identify circles (shapes in answer choices of various sizes).		
23	M03GEO1.2	math	Use unit squares to determine 1/2 or the whole.	L- use unit squares to identify whole areas shaded up to 2X2; M - use unit squares to identify whole or 1/2 areas shaded up to 3X3 (with shading done only one side); H - use unit squares to identify whole areas shaded up to 4X4 or 1/2 of any square figure up to 4X4 (with shading done on diagonals).		

[H]). In a different review study, the *Domain* field might represent the CCSS domain (e.g., Geometry, Functions), while the *Description* field would then represent the actual CCSS standard. Thus, the type of *Standards* created for the test item review, and therefore, the way in which the .csv spreadsheet is populated with information, depends on the particular review study that the administrator is conducting in the DIR.

Each row in the .csv spreadsheet represents a single academic content or performance standard. **Of critical importance is that each *Standard ID* is unique, so that it can be associated with a target *Item*.** Typically, *Item IDs* contain the target *Standard ID* to which it is aligned. Item naming convention is discussed in greater detail, below (see Step 4). Once the .csv is populated with all standards, including across *Subjects* (currently, *english*, *math*, or *science*) if necessary, the .csv file is uploaded by clicking on the “Choose File” button,

navigating to the location of the .csv, selecting it, and then clicking “Upload” on the *Standards / Bulk*

**Standards** 18 Records

GEO   View 50

Create Standard Bulk Upload Delete

Subject	Standard ID	Domain	Standards	Edit	Delete
Math	M03GEO1.1	Use attributes of triangles, squares, and circles to classify shapes.	L - Identify triangles (all shapes in answer choices same-size); M - Identify squares (shapes in answer choices of various sizes); H - Identify circles (shapes in answer choices of various sizes).		<input type="checkbox"/>
Math	M03GEO1.2	Use unit squares to determine 1/2 or the whole.	L- use unit squares to identify whole areas shaded up to 2X2; M - use unit squares to identify whole or 1/2 areas shaded up to 3X3 (with shading done only one side); H - use unit squares to identify whole areas shaded up to 4X4 or 1/2 of any square figure up to 4X4 (with shading done on diagonals).		<input type="checkbox"/>
Math	M04GEO1.1	Identify points, line segments, and angles.	L - Given a point, line, and angle, student identifies point; M - identify line segments; H - identify angles.		<input type="checkbox"/>
Math	M04GEO1.2	Identify triangles, circles, squares, and rectangles.	L - Identify triangles; M - identify squares and circles; H - identify rectangles.		<input type="checkbox"/>

*Upload* page. Once uploaded into the DIR, an administrator should consider spot-checking several standards to ensure correctness. Simply, click on the “Standards” button located in the left essential features panel to navigate to the *Standards* page, and then click on a particular standard (see screenshot, above). Completing spot-checks is particularly important for standards that contain non-alphabetic symbols (e.g., division/square root symbols in math standards) as they may display improperly during bulk upload from the .csv to the DIR.

#### **Step 4: Creating and uploading *Items* in the DIR**

Once *Standards* are uploaded into the DIR, the administrator typically creates *Items*, and associates them with target standards. Like *Standards*, *Items* can be created either individually or in bulk (recommended). To create *Items* using the DIR’s bulk upload functionality, click the “Items” button located in the left essential features panel, to navigate to the *Items / Bulk Upload* page (see screenshot, below).

**Items / Bulk Upload**

To upload items in bulk, the *Items File* must be in .csv format and contain the following columns in order (optional fields may be left blank):

- **Item ID** - Unique item identifier
- **Group** - (optional) Item group / task
- **Standards** - A colon-delimited set of standards
- **Item Information** - (optional) Scoring protocol and information
- **Prompt** - (optional) Item prompt text
- **Option A** - (optional) Response option A text
- **Option B** - (optional) Response option B text
- **Option C** - (optional) Response option C text
- **Correct** - (optional) Letter of correct response option (a, b, or c); 'a' is assumed to be correct if missing

To include images for items, the *Images Archive* must be an archive in .zip format containing the images. Item images must have a file name of the corresponding Item ID, while item option images must have a file name of the corresponding Item ID followed by an underscore "\_", followed by the option letter. Accepted file formats are JPEG, PNG, GIF, and SVG.

Example: For an item with ID '123XYZ', the following are valid image file names: 123XYZ.jpg, 123XYZ\_a.png, 123XYZ\_b.svg, and 123XYZ\_c.gif.

---

**Review**

ORExt English Language Arts Items

**Items File (.csv)**

Choose File NO file selected

**Images Archive (.zip)**

Choose File NO file selected

The administrator must create a .csv spreadsheet with nine column headers (fields): *Item ID*, *Group*, *Standards*, *Item Information*, *Prompt*, *Option A*, *Option B*, *Option C*, and *Correct*.

Column fields a description of their purpose and functionality are displayed in Table 2—also shown on the *Items / Bulk Upload* page in the DIR. *Item ID* and *Standards* fields are required to contain information in the .csv; populating additional column fields once again depends on the nature of the test items to be reviewed in the DIR.

Table 2

*Items .csv Field Names and Associated Descriptions*

Items / Bulk Upload	Description
Item ID (required)	Unique item identifier
Group (optional)	Item group / task (e.g., Grade level of test item)
Standards (required)	A colon-delimited standards identifier that ideally links to Item ID
Item Information (optional)	Scoring protocol and information (i.e., for test administrator booklets)
Prompt (optional)	Item prompt text (i.e., test item prompt that the student sees in their testing booklet)
Option A (optional)	Response option A text (i.e., for selected-response item types)
Option B (optional)	Response option B text (i.e., for selected-response item types)
Option C (optional)	Response option C text (i.e., for selected-response item types)
Correct (optional)	Letter of correct response option (a, b, or c); 'a' is assumed to be correct if field is missing information

For example, if test items exist in the form of image files (e.g., screenshots of items from a computer-based testing environment, or screenshots of items from a .pdf/.docx of a testing booklet), the DIR administrator could follow these seven steps—essentially providing information in the *Item ID*, *Standards*, and possibly the *Correct* column fields in the .csv—to upload and associate *Items* with corresponding *Standards* and images:

1. Populate the *Item ID* and *Standards*, fields for all items (rows) in the .csv.

2. Create a zipped folder (.zip) containing the image files (e.g., .jpg, .png, .gif, .svg) with individual file names of the corresponding *Item ID*.
3. Optionally, for items with three response options (i.e., like the Oregon Extended Assessment) the administrator can populate the *Correct* field with the correct response option for each test item (a, b, or c).

4. Select the proper *Review* from the drop-down menu on the *Items / Bulk Upload* page.

5. Upload the .csv file by clicking on the “Choose File” button under *Items*

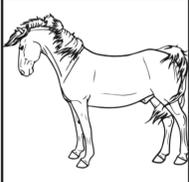
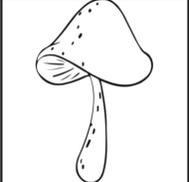
*File*, navigating to the location of the .csv, and selecting it.

6. Upload the .zip folder containing the test item images by clicking on the “Choose File” button under *Images Archive*, navigating to the .csv location, and selecting it.

7. Click “Upload” at the bottom of the *Items / Bulk Upload* page.

A sample screenshot of an image file of a publically released

Item 4  
Which is an animal?

		
horse	mushroom	tree

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

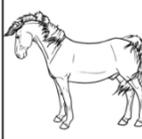
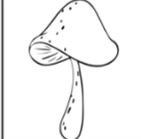
Resources

- ORExt Item Development and Specifications 2014-2015
- Oregon Accessibility Manual: 2014-2015 School Year
- The First Contact Census Student Characteristics: Supplemental Handout
- DIR Webinar Training Slides
- ORExt Essentialization Flowchart
- Video of Representative

Grade 5 Science Item Review - ITEMS\_GR5SCIPRACTICE

Item

Item 4  
Which is an animal?

		
horse	mushroom	tree

Questions

1. Rate the strength of alignment between the test item and standards.
  - 0 - Insufficient alignment
  - 1 - Sufficient alignment
  - 2 - Strong alignment
2. Item is Free of Bias
  - Yes
  - No

Standards

- S05LFS2.1: Recognize that living organisms need different things to grow and survive.
  - L - Identify which is an animal, plant and decomposer using pictures of common organisms, and including non-living objects as comparators; M - Identify that animals eat food (plants, other animals) and drink water to survive, and that plants need materials in soil, air and water to survive (i.e., compared to common objects/features they don't need) - emphasis is on the matter these organisms need; H - Expand to include where in the environment such matter needed for survival might come from.

Grade 5 practice science item from the Oregon Extended Assessment is shown above, followed by a screenshot just below of what the item looks like from a reviewer’s perspective once it is uploaded into the DIR and associated with a standard and image file following the seven steps enumerated above. Note that additional DIR essential features are also shown in the latter screenshot (i.e., *Questions* and *Resources*), which are discussed in greater detail, below (see Steps 5 and 6, respectively).

Alternatively, if test items do not yet exist in an electronic form like an image file, an administrator could populate the additional column fields in the *Items* .csv, and essentially build the test items in the DIR. In the screenshot shown below, all column fields in a sample .csv are

	A	B	C	D	E	F	G	H	I
1	Item ID	Group	Standards	Item Information	Prompt	Option A	Option B	Option C	Correct
2	M03OAT1.1_L04		3 M03OAT1.1	(L) Here is a feather on a hat. This hat has one feather. (Point to the student materials.) If you have one hat, how many feathers do you have: 1, 2, or 3?	If you have one hat, how many feathers do you have?	1	2	3	a
3	M03OAT1.2_L04		3 M03OAT1.2	(L) Here are 4 hats with a dashed line between them. (Point to student materials.) How many hats are on one side on the dashed line: 1, 2, or 3?	How many hats are on one side on the dashed line?	1	2	3	b
4	M03OAT4.9_L02		3 M03OAT4.9	(L) Here are some grapes. (Point to student materials.) How many grapes are there: 5, 6, or 7?	How many grapes are there?	5	6	7	c
5	M03NBT1.2_L03		3 M03NBT1.2	(L) Here is an addition problem. (Point to student materials.) $6 + 8 =$ which number: 8, 10, or 14?	$6 + 8 =$ ___?	8	10	14	c
6	M03OAT1.2_M08		3 M03OAT1.2	(M) Here are two trees with some apples. (Point to student materials.) There are 8 apples all together. How many apples are on one tree: 4, 5, or 6?	How many apples are on one tree?	4	5	6	a

populated. This particular .csv was used to build and bulk upload publically released Grade 3 practice math items for the Oregon Extended Assessment. Notice these math items are selected-response item types, with three answer options (a, b, and c). Thus, it is worth emphasizing once again that the manner in which an administrator uses the .csv to create *Items* in the DIR is wholly dependent on the nature of the test items to be reviewed in the DIR.

Additionally, in the sample .csv above, note the similarity between the information in the *Item ID* and paired *Standard* fields. Earlier, it was mentioned that the *Item ID* typically contains

the associated *Standard ID* to which it is aligned, and that is the case in this example. The first test item in the above .csv (row 2) is identified using an *Item ID* of M03OAT1.1\_L04. The first 9 characters of that *Item ID* are the same (in order) as the associated *Standard* to which it is aligned, where: *M* = Math, *03* = Grade 3, *OAT1.1* = Operations and Algebraic Thinking (essentialized CCSS domain/standard), and *L04* = Low complexity level item #4 (a coding particular to the Oregon Extended Assessment). **Thus, for the purpose of conducting test item reviews in the DIR it is critical that both *Item IDs* and *Standard IDs* are unique. Further, it is highly recommended that these unique identifiers consist of relevant information that conspicuously associates test *Items* with their target *Standards*.** In the example *Item ID*, the test item identifier (M03OAT1.1\_L04) provides relevant information such as content area, grade, and complexity levels, specifically contains the standard identifier, and yet, is unique from other items in a manner that maintains database integrity for later analysis of test item review data.

### **Step 5: Creating Questions in the DIR**

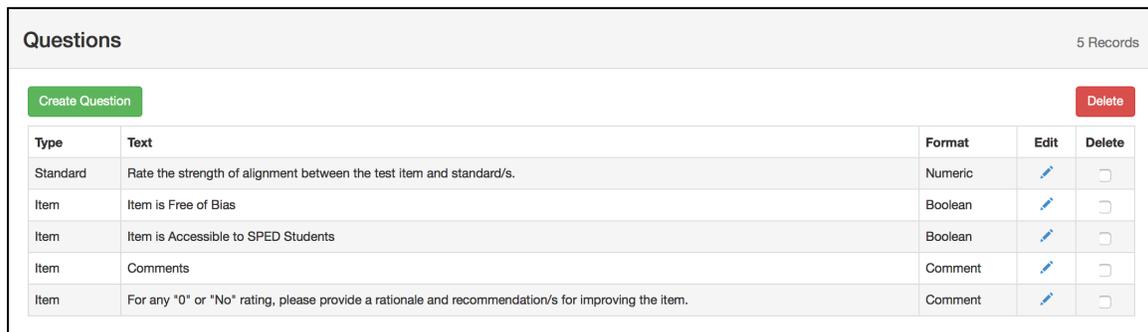
Review *Questions* are study-specific, and once created by administrators, are selected and assigned to all *Items* in *Reviews* from the *Review / Create* or *Edit* pages (see Step 2, above).

*Questions* are customizable, and allow test items to be reviewed by experts for important dimensions of quality, including alignment with standards, bias, sensitivity, and student accessibility. Current response option formats include:

- *Yes/No* (binary) e.g., Item is free of bias,
- *Numeric* (Likert / ordinal rating scale) e.g., Rate the strength of alignment between the test item and standard/s,
- *Text Box* (single-line constructed response) e.g., Reword the item prompt to be more inclusive of diverse populations, and

- *Comment* (multiple-line constructed response) e.g., For any "0" or "No" rating, please provide a rationale and recommendation/s for improving the item.

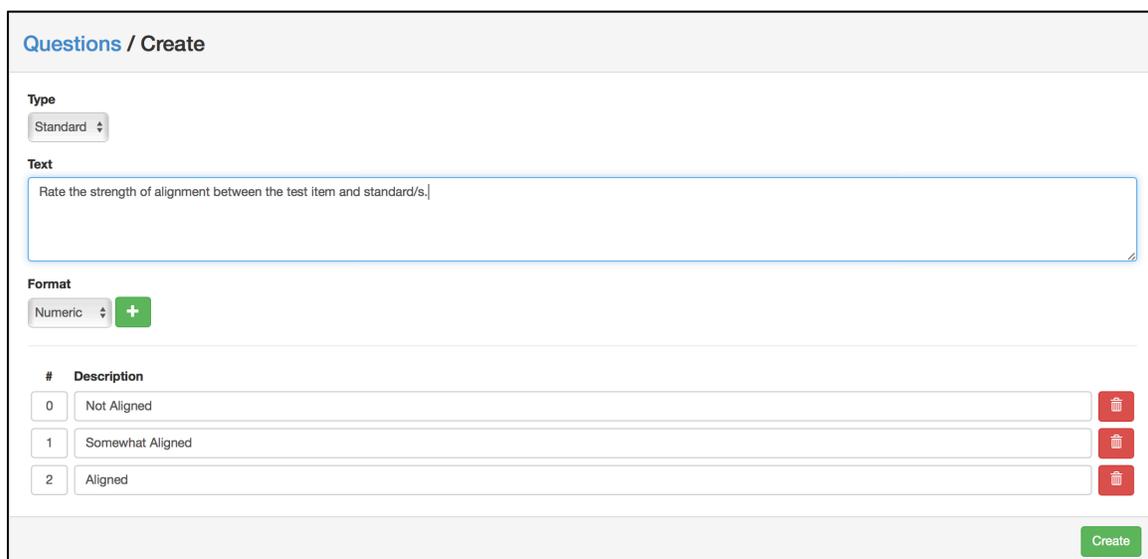
To create *Questions*, click the “Questions” button, located in the left essential features panel, to navigate to the *Questions* page (see screenshot, below). Next, click the “Create



The screenshot shows a table titled "Questions" with 5 records. The table has columns for Type, Text, Format, Edit, and Delete. A "Create Question" button is visible at the top left, and a "Delete" button is at the top right.

Type	Text	Format	Edit	Delete
Standard	Rate the strength of alignment between the test item and standard/s.	Numeric		<input type="checkbox"/>
Item	Item is Free of Bias	Boolean		<input type="checkbox"/>
Item	Item is Accessible to SPED Students	Boolean		<input type="checkbox"/>
Item	Comments	Comment		<input type="checkbox"/>
Item	For any "0" or "No" rating, please provide a rationale and recommendation/s for improving the item.	Comment		<input type="checkbox"/>

Question” button to navigate to the *Questions / Create* page. Select *Type* and the response *Format*, add relevant *Text*, including any text explicative of numeric response options, and then click “Create” to save the question. An example *Question* with a three-point numeric response option is shown in the screenshot, below. Once created, *Questions* are selected from the *Review / Create* or *Edit* page using the DIR’s drag-and-drop functionality (see Step 2).



The screenshot shows the "Questions / Create" page. It includes a "Type" dropdown menu set to "Standard", a "Text" input field containing "Rate the strength of alignment between the test item and standard/s.", and a "Format" dropdown menu set to "Numeric" with a "+" button. Below these are three response options with their respective descriptions and delete buttons:

#	Description	Delete
0	Not Aligned	
1	Somewhat Aligned	
2	Aligned	

A "Create" button is located at the bottom right of the form.

## **Step 6: Creating Resources in the DIR**

*Resources* are study-specific, and once created by administrators, are selected from the *Review / Create* or *Edit* pages (see Step 2). The purpose of the *Resources* essential feature is to allow DIR administrators to create/upload electronic resources that are pertinent to their research study and that support reviewers in the process of examining test item quality. Current *Resources* formats include, but are not necessarily limited to:

- *PDFs* (e.g., reviewer/study training slides, academic content/performance standards, state accessibility/accommodations manuals),
- *Word (or other word processing) documents* (e.g., item-development templates),
- *Videos* (e.g., reviewer/study training webinars, representative testing population, test administration examples), and
- *Image files* (e.g., standard essentialization flow chart, sample item images).

To create *Resources*, click the “Resources” button, located in the left essential features panel, to navigate to the *Resources* page (see screenshot, below). Next, click the “Create Resource” button to navigate to the *Resources / Create* page. Enter a *Title* for the *Resource*, and add any relevant descriptive text to explain what the *Resource* is and how it should be used

Resources					9 Records
Create Resource				Delete	
Title	Created By	Edit	Delete		
 Video of Representative Student Population	Steve J.		<input type="checkbox"/>		
 ORExt Item Development and Specifications 2014-2015	P. Shawn I.		<input type="checkbox"/>		
 Oregon Accessibility Manual: 2014-2015 School Year	P. Shawn I.		<input type="checkbox"/>		
 The First Contact Census Student Characteristics: Supplemental Handout	P. Shawn I.		<input type="checkbox"/>		
 DIR Webinar Training Slides	P. Shawn I.		<input type="checkbox"/>		
 ORExt Essentialization Flowchart	P. Shawn I.		<input type="checkbox"/>		
 DIR Training Webinar Recording	Steve J.		<input type="checkbox"/>		
 PASA Essentialization Process	Dan F.		<input type="checkbox"/>		
 PASA Item Writer Training PPT	Dan F.		<input type="checkbox"/>		

in the context of reviewing test items. Click on the “Choose File” button, navigate to the location of the desired *Resource*, and then click “Create” to upload and save the resource in the DIR. An example video *Resource* is shown in the screenshot, below. Once created, *Resources* are selected from the *Review / Create* or *Edit* by clicking on the bubble next to each *Resource* pertinent to a particular *Review* study (see Step 2).

**Resources / Edit**

**Title**  
Video of Representative Student Population

**Description**  
Video of seven different students who represent the student population that participate in Oregon's Extended Assessment. Please note, this video must be viewed using Safari, Internet Explorer or Google Chrome - Firefox will not work.

**File** (OregonExtended\_StudentPopulationsV2small.m4v)  
Choose File no file selected

Update

### **Step 7: Creating Review Assignments in the DIR**

Once the preceding essential features relevant to a particular review study are created/uploaded into the DIR (i.e., *Reviews*, *Items*, *Standards*, *Questions*, and *Resources*), and once all prospective reviewers have registered DIR *User* accounts, *Assignments* are created. *Assignments* directly reflect the review study design, including how study participants (reviewers) are matched to test items. Essentially *Assignments* allow DIR administrators to:

- Bulk select/group and order test *Items* (and therefore, associated standards/images) by content area, grade, and/or other item-level characteristics,
- Select and designate reviewers to selected/grouped *Items*, and
- Provide assignment-specific directions to reviewers.

To create an *Assignment*, click the “Assignments” button, located in the left essential features panel, to navigate to the *Assignments* page (see screenshot, below). Next, click the

“Create Assignment” button to navigate to the *Assignments / Create or Edit* page. Using the drop-down menu, select the *Review* that will house the *Assignment* to be created, enter a *Title*, and add any relevant descriptive text to explain what the *Assignment* is, and how it should be completed, including any specific recommendations or suggestions necessary for completing the *Assignment* review successfully. In the *Reviewers* box, click the boxes next to the names of each reviewer assigned to the group of *Items* associated with the *Assignment*.

Assignments						19 Records
Create Assignment					Delete	
Review	Title	Closing Date		Edit	Delete <input type="checkbox"/>	
ORExt English Language Arts Items	All ELA Items	03/05/2016	5		<input type="checkbox"/>	
ORExt Science Items	Grade 5 Science Item Review	03/05/2016	4		<input type="checkbox"/>	
ORExt Science Items	Grade 8 Science Item Review	03/05/2016	3		<input type="checkbox"/>	
ORExt Science Items	Grade 11 Science Item Review	03/05/2016	3		<input type="checkbox"/>	
ORExt Math Items	Grade 3 Math Item Review	03/26/2016	3		<input type="checkbox"/>	
ORExt Math Items	Grade 4 Math Item Review	03/26/2016	3		<input type="checkbox"/>	
ORExt Math Items	Grade 5 Math Item Review	03/26/2016	4		<input type="checkbox"/>	
ORExt Math Items	Grade 6 Math Item Review	03/26/2016	3		<input type="checkbox"/>	
ORExt Math Items	Grade 7 Math Item Review	03/26/2016	3		<input type="checkbox"/>	
ORExt Math Items	Grade 8 Math Item Review	03/26/2016	3		<input type="checkbox"/>	
ORExt Math Items	Grade 11 Math Item Review	03/26/2016	3		<input type="checkbox"/>	

To select and order *Items* to appear in a given *Assignment* (and *Review*), use the drag-and-drop functionality to move test items from the *Items* box to the *Assignment Items* box in the exact order desired. The *Paste Item IDs* functionality allows *Item IDs* to be organized in bulk in the desired order in another program (e.g., Excel), and then copy/pasted into the *Assignment Items* box—convenient for *Assignments* consisting of many *Items*. An example *Assignment*, with reviewers selected (Steve and Shawn, a special educator and a general educator, respectively), is shown in the screenshot, below. Based on the *Review* and *Title* fields this *Assignment* is organized by grade (Grade 5) and content area (science). Additionally, *Items* were selected using

the bulk ordering feature through an Excel spreadsheet consisting of the relevant *Item IDs*—this particular *Assignment* consisted of 496 *Items*, with a “sister” *Assignment* consisting of the same *Items*, counter-balanced (reverse-ordered) in their presentation to reviewers.

**Assignments / Edit**

**Review**  
 OREx Science Items

**Title**  
 Grade 5 Science Item Review

**Description**  
 Included in this assignment are 495 individual science items. Please review all items making sure to take breaks as necessary, so that you review each item carefully and completely.  
 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

**Reviewers**

<input checked="" type="checkbox"/>	Jonas, Steve <sjinor@yahoo.com>
<input type="checkbox"/>	Glasgow, Aaron <aglasgow@uoregon.edu>
<input type="checkbox"/>	Cords, Trevor <tcords@gmail.com>
<input type="checkbox"/>	Megert, Raina <rainam@uoregon.edu>
<input checked="" type="checkbox"/>	Irvin, Shawn <p.shawn.irvin@gmail.com>
<input type="checkbox"/>	Aazzerah, Rachel <rachel.aazzerah@state.or.us>

**Items**

S08PHS1.2LSAMPLE
S08PHS1.2L01

**Assignment Items (in order)**

1. S05PHS1.1LSAMPLE
2. S05PHS1.1L01

## Step 8: Using DIR Reports Features

The DIR offers two types of *Reports* features: (a) an HTML (web-based) report that offers administrators a “quick view” of reviewer progress, and thus, *Review/Assignment* completeness, and (b) a .csv report that allows data files to be securely downloaded and saved in a table-structured format for import into spreadsheet and statistical programs (e.g., Excel, SPSS, R). Access both types of

DIR Distributed Item Review		About My Account Logout
Assignments	OREx English Language Arts Items	02/27/2016 - 03/05/2016
Items	OREx Science Items	02/27/2016 - 04/29/2016
Questions	OREx Math Items	02/27/2016 - 03/26/2016
Resources	PASA Sample Item Review	04/21/2015 - 05/29/2015
Reviews	Demonstration Review	01/01/2015 - 12/31/2020
Standards	 Copyright © 2014 - University of Oregon, Behavioral Research and Teaching 	
Reports		
Users		
My Account		

*Reports* by clicking on the “Reports” button located in the left essential features panel, and navigating to the *Reports* page (see screenshot, above). Reports are organized by *Review*, and then by *Assignment* (once a *Review* is selected). An example of an HTML, or “quick view”, report is shown in the screenshot, below, followed by a sample .csv report.

ORExt English Language Arts Items		02/27/2016 - 03/05/2016
All ELA Items		
Jonas, Steve	0%	
Cords, Trevor	0%	
Megert, Raina	28%	
Farley, Dan	0%	
Tindal, Gerald	0%	

	A	B	C	D	E	F	G	H	I	J	K	L
1	First Name	Last Name	Email	Assignment	Item ID	Question	Response					
2	Reviewer 1	Reviewer 1	Rev1@egdistrict1.com	Grade 11 SciltemRev	S11ESS1.1H10	Rate the strengt 1 - Sufficient alignment						
3	Reviewer 1	Reviewer 1	Rev1@egdistrict1.com	Grade 11 SciltemRev	S11ESS1.1H10	Item is Free of B Yes						
4	Reviewer 1	Reviewer 1	Rev1@egdistrict1.com	Grade 11 SciltemRev	S11ESS1.1H10	Item is Accessibl	Yes					
5	Reviewer 1	Reviewer 1	Rev1@egdistrict1.com	Grade 11 SciltemRev	S11ESS1.1H10	For any "0" or "I	Image is a bit too busy - consider getting rid of some surrounding stars.					
6	Reviewer 1	Reviewer 1	Rev1@egdistrict1.com	Grade 11 SciltemRev	S11ESS1.1H14	Rate the strengt 2 - Strong alignment						
7	Reviewer 1	Reviewer 1	Rev1@egdistrict1.com	Grade 11 SciltemRev	S11ESS1.1H14	Item is Free of B Yes						
8	Reviewer 1	Reviewer 1	Rev1@egdistrict1.com	Grade 11 SciltemRev	S11ESS1.1H14	Item is Accessibl	Yes					
9	Reviewer 1	Reviewer 1	Rev1@egdistrict1.com	Grade 11 SciltemRev	S11ESS1.1H14	For any "0" or "No"	rating, please provide a rationale and recommendation/s for improving the item.					
10	Reviewer 2	Reviewer 2	Rev2@egdistrict2.com	Grade 11 SciltemRev	S11ESS1.1H10	Rate the strengt 2 - Strong alignment						
11	Reviewer 2	Reviewer 2	Rev2@egdistrict2.com	Grade 11 SciltemRev	S11ESS1.1H10	Item is Free of B Yes						
12	Reviewer 2	Reviewer 2	Rev2@egdistrict2.com	Grade 11 SciltemRev	S11ESS1.1H10	Item is Accessibl	Yes					
13	Reviewer 2	Reviewer 2	Rev2@egdistrict2.com	Grade 11 SciltemRev	S11ESS1.1H10	For any "0" or "No"	rating, please provide a rationale and recommendation/s for improving the item.					
14	Reviewer 2	Reviewer 2	Rev2@egdistrict2.com	Grade 11 SciltemRev	S11ESS1.1H14	Rate the strengt 2 - Strong alignment						
15	Reviewer 2	Reviewer 2	Rev2@egdistrict2.com	Grade 11 SciltemRev	S11ESS1.1H14	Item is Free of B Yes						
16	Reviewer 2	Reviewer 2	Rev2@egdistrict2.com	Grade 11 SciltemRev	S11ESS1.1H14	Item is Accessibl	Yes					
17	Reviewer 2	Reviewer 2	Rev2@egdistrict2.com	Grade 11 SciltemRev	S11ESS1.1H14	For any "0" or "No"	rating, please provide a rationale and recommendation/s for improving the item.					
18	Reviewer 3	Reviewer 3	Rev3@egdistrict3.com	Grade 11 SciltemRev	S11ESS1.1H10	Rate the strengt 2 - Strong alignment						
19	Reviewer 3	Reviewer 3	Rev3@egdistrict3.com	Grade 11 SciltemRev	S11ESS1.1H10	Item is Free of B Yes						
20	Reviewer 3	Reviewer 3	Rev3@egdistrict3.com	Grade 11 SciltemRev	S11ESS1.1H10	Item is Accessibl	Yes					
21	Reviewer 3	Reviewer 3	Rev3@egdistrict3.com	Grade 11 SciltemRev	S11ESS1.1H10	For any "0" or "No"	rating, please provide a rationale and recommendation/s for improving the item.					
22	Reviewer 3	Reviewer 3	Rev3@egdistrict3.com	Grade 11 SciltemRev	S11ESS1.1H14	Rate the strengt 2 - Strong alignment						
23	Reviewer 3	Reviewer 3	Rev3@egdistrict3.com	Grade 11 SciltemRev	S11ESS1.1H14	Item is Free of B Yes						
24	Reviewer 3	Reviewer 3	Rev3@egdistrict3.com	Grade 11 SciltemRev	S11ESS1.1H14	Item is Accessibl	Yes					
25	Reviewer 3	Reviewer 3	Rev3@egdistrict3.com	Grade 11 SciltemRev	S11ESS1.1H14	For any "0" or "No"	rating, please provide a rationale and recommendation/s for improving the item.					
26	Reviewer 4	Reviewer 4	Rev4@egdistrict4.com	Grade 11 SciltemRev	S11ESS1.1H10	Rate the strengt 1 - Sufficient alignment						
27	Reviewer 4	Reviewer 4	Rev4@egdistrict4.com	Grade 11 SciltemRev	S11ESS1.1H10	Item is Free of B Yes						
28	Reviewer 4	Reviewer 4	Rev4@egdistrict4.com	Grade 11 SciltemRev	S11ESS1.1H10	Item is Accessibl	Yes					
29	Reviewer 4	Reviewer 4	Rev4@egdistrict4.com	Grade 11 SciltemRev	S11ESS1.1H10	For any "0" or "I	Increase size of the close-up of fusion.					
30	Reviewer 4	Reviewer 4	Rev4@egdistrict4.com	Grade 11 SciltemRev	S11ESS1.1H14	Rate the strengt 2 - Strong alignment						
31	Reviewer 4	Reviewer 4	Rev4@egdistrict4.com	Grade 11 SciltemRev	S11ESS1.1H14	Item is Free of B Yes						
32	Reviewer 4	Reviewer 4	Rev4@egdistrict4.com	Grade 11 SciltemRev	S11ESS1.1H14	Item is Accessibl	Yes					
33	Reviewer 4	Reviewer 4	Rev4@egdistrict4.com	Grade 11 SciltemRev	S11ESS1.1H14	For any "0" or "No"	rating, please provide a rationale and recommendation/s for improving the item.					

## Summary and Contact Information

The DIR is a flexible, online system designed to securely distribute test items to experts for review of important dimensions of quality (e.g., alignment with standards, bias, sensitivity, and student accessibility). The DIR’s essential features allow system administrators to design and conduct customized review studies, in which test items are bulk uploaded, associated with academic content/performance standards and item imagery, and then organized and assigned for

evaluation by recruited reviewers (e.g., content and field experts, education leaders and practitioners, education researchers, and test and curricula developers). A variety of resources can be uploaded and associated with item review studies to support reviewers in their examination of test items. Reporting features allow administrators to quickly assess reviewer progress and study completeness, or securely download review data in a table-structured format for use in statistical analyses (HTML and .csv, respectively). For more information about the DIR, or to discuss use of the system, please contact Dr. P. Shawn Irvin at BRT by email at [pirvin@uoregon.edu](mailto:pirvin@uoregon.edu), or phone at (541) 346-3535.

## References

Behavioral Research and Teaching. (2013). Distributed Item Review. Eugene, OR: Behavioral Research and Teaching, University of Oregon. Retrieved from <http://www.brtemreview.com>