This document describes some of the basic principles of, and assists you in getting started with Responsive Course Design™ (RCD) titles in Lectora® and Lectora® Online. For more information about RCD, check out these resources:

- Inspiration Wednesday recording: Responsive Course Design in Lectora
- White paper: Responsive Course Design
- Information Center (aka Help): Working with Responsive Content

Creating a Responsive Title

There are several ways to create a responsive title in Lectora:

- Getting Started > New Responsive Title
- File > Create New Title > Responsive Title
- Design ribbon > Title Options > Enable Responsive Title

All of these methods enable the Responsive Course Design features and display the RCD ribbon. Change the title options to convert an existing title to an RCD title.

Use the RCD ribbon to select and edit each device view and orientation:

- Phone Portrait
- Tablet Portrait
- Desktop
- Tablet Landscape
- Phone Landscape

Responsive Design Inheritance

RCD inheritance flows from the desktop to the tablet, and then from the tablet to the phone as shown in the illustration below:
Anything you do on the desktop view will affect—be inherited to—the tablet. And any changes you make on the tablet will affect—be inherited to—the phone (in the corresponding orientation).

**Adding Objects, Deleting Objects, and Removing Objects**

The “best practice” for RCD is to design and build your title on the desktop view, just as you would in previous versions of Lectora. As you add objects to the desktop view, Lectora will attempt to automatically scale the position and size of the objects to be appropriate for the tablet views and the tablet will in-turn scale the object for the phone. For each page, examine and adjust how your objects and actions will appear and function across the other devices and orientations.

Regardless of which view you are currently working in, inserting an object will add it to the Title Explorer and therefore insert it across all views. Similarly, when an object is deleted it is removed from the Title Explorer and consequently removed from all views. Adding is adding. Deleting is deleting. If you want an object to not be seen in a particular view, simply remove it from the view by dragging it off the canvas and into the gutter, just as you can for standard (non-responsive) Lectora titles. (This ability was new in Lectora 12 and Lectora Online 2.)
Overriding Lectora’s Inheritance

Changing any property of an object disconnects the standard RCD inheritance for that property only and creates an “override” for that property only. For example, if on the tablet you move an image to a different location than it inherited from the desktop view, an override for the position (X and Y coordinates) is created on the tablet and the link to the standard RCD inheritance from the desktop is disconnected. Moving the object on the desktop will now no longer affect the position of the object on the tablet (or phone). However, changes to any other property of that image (for example, Width/Height, Offset from Right, etc.) will still be inherited from the desktop to the tablet. Only the position was overridden.

How do you know what is overridable, and what has been overridden?

Not all properties for all objects are overridable. Only a limited set of items can be changed uniquely on a device. When viewing the properties ribbons for an object, any field label displayed in color indicates an overridable property for the object:

- **Blue label:** the property is overridable, but has not been overridden. It is receiving standard RCD inheritance (in the current orientation).
- **Green label:** the property is overridable and has been overridden on the tablet (in the current orientation). Changes to this property on the desktop view will not be applied on the tablet or phone.
- **Orange label:** the property is overridable and has been overridden on the phone (in the current orientation). Changes to this property on the desktop or tablet will not be applied on the phone.

In addition, if the object contains an override for any property, the adorner (selection rectangle) for the object will be colored on the page: Green on the tablet and Orange on the phone.
Working with Text Blocks and Scaling

By default Lectora will scale a text block’s size to fit on mobile views. It will become more narrow to fit the smaller screen widths, and grow longer to accommodate all of the text within it. As described above, you can change—override—the size and position of text blocks on mobile views. However, the text within the text block remains constant across views. Any change to the text or text properties will affect all views. One customization available is to make text appear larger (or smaller) for improved readability on mobile devices. To do this, use the Text Scaling panel to apply a percentage scaling factor.

The scale factor will be applied on the current mobile view, and if that is a tablet, the change will also be inherited by the phone (in that orientation). Increasing or decreasing the scaling factor will not change the actual base font size.
Changing the base font size using the drop-down list or the quick keys tells Lectora to set a new size for the text block (across all views) and remove any scaling.

**Restoring RCD Inheritance**

If you need to restore the standard RCD inheritance (that is, cancel the overrides) for an object, click the Reset button on the object’s Properties ribbon.

You can reset the overrides for the object in the current view only, or across all views.

**Moving and Resizing Objects**

Remember RCD inheritance flows from the desktop to the tablet, and then from the tablet to the phone. Moving or resizing an object on a “parent” device will cause the object to be moved or resized proportionally in the “child” view(s), unless an override for the position or size was already created in the child view.

If you need to move or resize an object (or multiple objects) across all views—even though you may have already overridden the natural RCD inheritance by making a unique change—there is a way to do that. Simply press and hold the Ctrl and Shift keys together (Ctrl+Shift) while dragging the object(s) on the page to move, or dragging the edge of the object to resize it. This will make the change to the object(s) across all views while still maintaining proportionality of the object’s location on the page and relationship to other objects.
Triggers, Actions, and Conditions

All Lectora actions are available in RCD titles. Actions within RCD titles are not overridable. They apply to all views and will occur regardless of the device and orientation in which the student is viewing the content. However, you can create actions which are specific to a particular view. To do this, there is a special trigger and reserved variable:

Trigger: Device Rotation
Reserved Variable: CurrentView

The CurrentView reserved variable will always equal one of the following five values*:

- Desktop
- TabletLandscape
- TabletPortrait
- PhoneLandscape
- PhonePortrait

You can use the CurrentView variable as an action condition. For example, you can set an action to execute only when the student is viewing the content on a tablet or phone:
*Note: Remember that when using variables as a Condition, all spelling, punctuation, and capitalization is examined. Values must exactly match the contents of the variable. In the example above the Condition would fail if the Values had been entered as “tablet” or “phone” without the capitalization. Likewise, a condition of “Tablet Portrait” would fail because the variable contents would not contain a space between the words.

You can also execute an action based on the Device Rotation of a tablet or phone from one orientation to the other. And you can use the CurrentView reserved variable as a condition. For example, you could set a message to display during an exercise if that exercise were set up to work best in landscape orientation:

(Note: In this scenario, you might also want to duplicate the same action triggered on page “Show” in case the device is already in portrait orientation.)
Other Tips:

Use Page Layouts

Page Layouts are a convenient way to organize basic content and know how it will appear on each device and orientation. Each layout has been specifically designed to provide the best look on each device. You can create a new page using a layout from the Add Structure panel on the Home ribbon, or apply a layout to an existing page on the Page Properties ribbon.

For more information on using layouts, read the article Using Page Layouts in Lectora and Lectora Online.

Skipping Pages and Other Unique Navigation by Device or Orientation

Like any non-responsive title, Lectora will go from one page to the next regardless of the device or orientation in which your student is viewing content. If you want to have pages that are seen in some view(s) and not seen in others, you will need to use a conditional Go To action combined with the CurrentView reserved variable. For example, if you wanted the student to skip ahead to Chapter 3 unless they were viewing the content on a PC, you would use a Go To action with a condition to check the device and orientation being used. If the CurrentView is not “Desktop” Go To Chapter 3, otherwise, Go To the next page.
Questions, Tests, and Surveys

You will probably want to adjust how questions appear within each device view to take advantage of the screen size available. You can change the position, size, text font size, etc. for the objects which comprise the question. However, the question properties are not overridable. Changes to the question text, choices, scoring, feedback, and attempts will apply across all devices and orientations. This is also true for Test and Survey properties. All settings on the Test & Survey Behavior ribbon and the Results ribbon will apply regardless of the device and orientation. If you want to have different behavior for a question, test or survey based on the device, create a unique instance of that question, test, or survey and use navigation and the CurrentView reserved variable to control what is seen by the student. (Note: If you are grading the test or running your course through a learning management system, you’ll want to make sure that your results are being scored and passed appropriately.)

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