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# The R.I.S.E. Guide to Checking for Gaps in Alignment Among Course Elements

## Introduction

One of the ways that we can teach with rigor is to take a careful approach to course design. This means ensuring that we have clear, measurable, and appropriately challenging learning outcomes or objectives and that all design decisions, like how to facilitate and assess student learning, revolve around those outcomes and any secondary goals we have for student learning. (For an explanation of the difference between a learning outcome/objective and a goal, see this guide.)

Consider your current approach to designing a course (or preparing a syllabus). Where do you start? Do you decide which textbook to use? Do you think about how to fit in everything you "need to cover"? Maybe you design the course to look like the one you took on the same topic when you were a student. Or maybe you design around the chapter topics and sequence provided by the author(s) of the text you've chosen. While none of these represents a "bad" way to design a course, a more rigorous approach to design starts from a different place: the end, or the results you desire for student learning.

Backwards Design, a course design approach articulated by Wiggins & McTighe (2005), tells us that starting from the learning outcomes and goals that you have for students will lead to a focus on the most significant content as well as the design of purposeful assessments, learning methods, and learning and materials. Furthermore, designing backwards will ensure alignment among these course elements. In other words, if we begin with the target in mind, we're much more likely to hit the mark!



## Rigorous course design



## Explanation

For a more thorough but still succinct overview of Backwards Design, take a few minutes to watch this Learning Academy tutorial: <u>Backwards Course Design</u>.

After watching the video, try to list 3 things that you learned about Backwards Design that you can incorporate into your approach to course planning. Consider employing this method the next time you are designing a new course or preparing to teach one you've taught before. If you've already started the semester and you're interested in making small teaching changes to enhance rigor in your course design, we recommend checking for gaps in alignment among your course elements. If you find one or more gaps, you can make adjustments to assessments or learning activities or materials to bring things into better alignment without disrupting your students' experience – in fact, you'd be making that experience better!

The video tutorial mentioned above reviews one example, but here's another to help you see how to check for issues with alignment:

# See any gaps?

Learning outcome	Learning Assessment	Learning methods and materials
Explain differences between types of financial statements and their uses.	Multiple choice exam	Textbook reading Lecture Discussions about case studies



Do you see any gaps here? Is the assessment well-aligned with the outcome? Would a multiplechoice exam easily allow students to explain the difference between types of financial statements and their uses?

There could be better alignment here between the outcome and assessment. A multiple-choice exam would likely only assess students' ability to distinguish among financial statement types rather than giving them the opportunity to explain the differences among them.

What type of assessment might work better? An exam with short answer or essay questions would be better, or a presentation, a paper, or even homework questions would better assess students' ability to distinguish concepts.

Now, look at the example again and assume that the multiple-choice exam is still the mode of assessment. Do you see any gaps between the assessment and the learning materials and methods?

Ideally, you want to prepare students to demonstrate their learning on a summative assessment (an evaluation of student learning that comes at the end of a unit or chapter or segment of the course or even program) by giving them the chance to practice and get feedback through formative assessments (tools for identifying how student learning is progressing and help you and the students to identify gaps or misunderstandings). So, while lecture and case studies might be a fine way to learn the concepts, there are learning activities that would be better aligned to the summative multiple-choice assessment here. For example, students could answer multiple choice questions about a case study or take low-stakes quizzes that test their knowledge of the concepts. These would more closely approximate the way they will be assessed on the exam. If this feels like "teaching to the test," ask yourself this: Wouldn't you want to get the chance to try baking a cake before you enter a baking contest? The same applies to assessing student learning. If you want to support student achievement of the learning outcomes as demonstrated in a summative assessment, it makes sense to give them chances to try out their skills and test their knowledge beforehand so they can get coaching on where they've gone wrong or how they can improve.





https://courses.lumenlearning.com/suny-oneonta-education106/chapter/2-1-blooms-taxonomy/

Review <u>Bloom's Revised Taxonomy</u> to help you to write or revise your learning outcomes, visit <u>this resource</u> to help you with associated verbs to use, and review the examples provided below.

#### **Example Learning Outcomes**

#### Mathematics

Apply mathematical knowledge, skill, and reasoning to solve real-world problems.

#### Writing

Effectively write for various audiences to explain (narrative, expository), entertain (creative), persuade (persuasive), and help others perform a task (technical).

#### History

Describe the chief political, social, economic and/or cultural characteristics of important ancient and pre-modern civilizations, cultures, and societies.



#### Sculpting

Use the formal elements and principles of 3-dimensional space (including line, shape, mass and volume, light and shade, texture, color and organizations of forms in space) to make sculptural objects.

#### **Criminal Justice**

Discuss determinate and indeterminate sentencing and the social implications of each.

#### Exercise Physiology

Identify equipment used to measure and evaluate various physiological aspects of human performance.

To review some additional information and research on checking for gaps in alignment among course elements before completing some practice activities, look over some of the resources listed below. Additional research can be found in the references section located at the end of this guide.

- <u>What is Understanding by Design? Grant Wiggins responds</u> (includes actual examples)
- Understanding by Design Professional Development Workbook
- <u>A Self-Directed Guide on Creating Significant Learning Experiences, L. Dee Fink</u>

If you have any questions or wish to discuss this teaching strategy in more depth, please contact your <u>R.I.S.E. scholar</u> or the Learning Academy.

## Let's practice!

#### Checking for gaps in alignment in one of your courses

Checking for gaps in alignment among the elements of your course – and making adjustments – is a good way to enhance rigor in your course design. Using <u>this simple template</u>, you can chart your learning outcomes and goals (to understand the difference, watch the Backwards Design tutorial above or read <u>this guide</u>), the ways you currently assess student learning associated with each outcome or goal, and the ways you facilitate student learning related to each outcome or goal. Then, follow the same steps from the example above to check for gaps in alignment. Ask yourself, *do the assessments provide students the opportunity to effectively demonstrate the knowledge and skills I'm hoping they've learned? Are there better ways to assess that learning? Do the things that I ask students to do in and outside of class prepare them well to demonstrate their learning when they get to the summative assessment(s)?* 



We hope that this teaching strategy information encouraged you to check for gaps in your alignment among all elements in your courses to help enhance rigor and improve student learning. If you have any questions or wish to receive feedback on your ideas for the practice activities, please contact your <u>R.I.S.E. scholar</u> or the Learning Academy.



## **References and More Resources for Checking for Gaps in Alignment**

Armbruster, P., Patel, M., Johnson, E., & Weiss, M. (2009). Active learning and student-centered pedagogy improve student attitudes and performance in introductory Biology. *CBE—Life Sciences Education*, *8*(3), 203–213. <u>https://doi.org/10.1187/cbe.09-03-0025</u>

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