

# Introduction to Backward Design

As teachers we are continually designing assessments and lesson plans in an attempt to convey key concepts in a manageable way. What we call curriculum is the path by which we accomplish this in a concise and coherent manner. Unfortunately, many of us still rely heavily on textbooks and activities that focus on mastering the content without paying much attention to how students understand the material. Although these resources are necessary in any classroom, it is important to remember the rationale for assigning a particular reading or explaining what a student should be able to demonstrate after said assignment. Backward Design is an attempt to explain the process of constructing a unit that begins with the end in mind first. What is essential to know and how will you ensure they understand the material? This should be your guiding question as you map out your curriculum. The stages of Backward Design that Grant Wiggins and Jay McTighe describe in their book *Understanding by Design, Expanded 2<sup>nd</sup> Edition* (Upper Saddle River, NJ: Pearson Education, Inc., 2006) include identifying desired results, determining acceptable evidence, and planning learning experiences and instruction.

## Stages of Backward Design

The first stage is where you consider your national, state, and district content standards, if applicable. You want to establish the skills and understandings all students should possess by the end of a given unit, hence the label “backward.” This is where you would reflect on what is essential for students to know and be able to accomplish at the end of the grade level. For example, you may feel that teaching about the Book of Revelation is important but not necessarily essential to a Scripture course. This might be important to know, but it is not a topic that every teacher will cover in her or his planning. It does not mean that you should not teach about this (or any other) particular book, but rather it affirms the notion that “desired results” also entails performance tasks, such as projects or other ways of checking in with students and their grasp of the material.

The next stage, which is called acceptable evidence, involves a way of thinking about what good learning artifacts look like. When we ask our students to write papers that are “A” quality, what exactly do we mean? Must it use proper grammar and syntax? Must it have an introduction, a body, and a conclusion? Must it use key terms from previous lessons? This stage of Backward Design challenges us as educators to evaluate the relationship between what we ask our students to know and what we ask them to do. Many times students become acutely aware that there is a discrepancy between the two. What they are told they need to know does not always align with what they are asked to do inside and outside of the classroom. This is where the distinction between content-focused design and results-focused design may be helpful. The former is typically how we frame lesson planning, by considering what topics to cover in a given semester or academic year. Unfortunately, many students can become confused or disenfranchised with this approach because they tend to compartmentalize lists of content from their various classes—math, social studies, foreign language, and so on. The value of the latter approach to design is that students can begin to see across subjects and see connections among different content areas. If a student is studying the Renaissance in social studies, he or she may not see any way that it could pertain to his or her math, science, or religion classes unless the curriculum is grounded in the language of why this important humanist period is relevant to the twenty-first century. By focusing on skills, you may be able to help the students to see the role geometry plays in the construction of the era’s architecture; in science, the importance of the scientific method and novel discoveries about the universe; and in religion, the way European philosophers contemplated what it meant to be a rational human being. The shift here is not what the teaching is doing, but knowing what the students should be able to do!



The third stage in Backward Design is where you plan out how you are going to convey the material in a concise and coherent fashion. The coordination of instructional methods, lesson sequencing, and resource materials now becomes the planning focus after the desired results and acceptable evidence are outlined. Once again the label “backward” refers to the typical method of planning where we begin with this last stage and teach with the hope that students understand the required material for the exam. But this stage is more specific than simply planning the scope and sequence of instruction; it recognizes that particular methods are needed at particular times in the school year. You may want to have students do collaborative group work on a contemporary case study pertaining to social justice, but it may not be educationally appropriate to begin a lesson with that form of instruction. In this example, an introductory lecture may be more appropriate to your goals. This stage calls for a greater discussion about what good teaching looks like. What is a teacher doing when students are engaged in the material, participating in the planned activities, and taking ownership of their learning experience? The answer to this question comes from properly discussing what learning experiences and instructional methods coincide with a given lesson. (This can be a helpful way to bridge discussion across departments, as the agenda is not concerning content but rather pedagogy. Answering the sentence stem “A constructive lesson plan is one where the teacher . . . and the students are . . .” is a useful way of allowing teachers to explain what they see as essential tools for classroom learning.)

A fourth stage that may be included in this list involves analyzing data. This is the process by which a teacher or group of teachers analyzes and revises the construction of these desired results, acceptable evidence, and forms of instructional methods. This is ideally completed at the end of a unit or school year while the material is still fresh and where individual reflections of what worked well and what did not can contribute to a refined design of curriculum. Teachers can begin to anticipate areas where students had difficulty with a particular concept or instruction along with collaborating with other teachers to ensure similar expectations. This can be viewed as a justice issue for students so that although teachers may bring their unique personalities and delivery styles to the classroom, students can be assured that they are learning the same central ideas as their peers.

## Assessments

If the process of Backward Design begins with considering what we want all students to know and be able to do, then assessments are the means by which we measure how successful they (and we) have been in achieving established goals. The standard distinction between formative and summative assessments may prove useful here. Formative assessments typically refer to those ways in which we check in with students to gauge how comfortable they are with a concept; for example, “On a scale of 1 to 10, from completely confused to very clear, where are you?” These are normally subconscious actions we do on a daily basis to ensure that our pace is adequate and does not overlook common and recurring questions from students or spend too much time on a topic the class is familiar with and is comfortable explaining. These are not always graded in a strict sense. Formative assessments attempt to do just that—form student awareness and reform misconceptions about the material. For example, before a lesson plan, you may choose to give a preassessment, asking students where they are in their understanding. It could be as simple as asking them to write out responses to the questions “What do I know?” “What do I think I know?” and “What would I like to know?” The students’ responses may better equip you to plan out material and know where the class is strong and weak on certain topics. A preassessment like this also helps to anticipate difficulties in the upcoming material. But formative assessments can also take a more personal form by asking students to assess their own contribution to a group project or to evaluate a paper draft from their peers.



Summative assessments are more quantitative measures of student performance, such as a unit test or final exam. They help us to measure the students' grasp of the main course objectives. They are normally accompanied by a rubric, which creates transparency between teachers and students so that all parties know how they are being assessed. They may also come in the form of a "high-stakes" test, such as the SAT or ACT. But they can also take the form of a brief reading quiz or some creative performance assessment task, such as creating an imaginary dialogue between two figures who were not contemporaries or making a multimedia presentation that summarizes the salient points of a lesson. The bottom line with these types of assessments is that they are generally used to see if students truly understand the presented material.

It is important to remember that the root word of *assessment* comes from the Latin word meaning "to sit beside." All too often teachers use assessments to catch students unprepared or after an insufficient amount of process time between introducing a topic and measuring understanding of that material. This should give us pause to re-evaluate why we assess student performance. If it is to help a child's development and intellectual growth in a subject, then we should be transparent in our approach, establishing clear expectations and guidelines. Authentic teaching is when teachers promote collegiality by sharing resources and constructing assessments together. Unfortunately, this type of collaboration tends to come at the end of a grading period when teachers have to submit a cumulative exam instead of being regular practice throughout the year. Some common myths about assessments may help to bridge the stages of Backward Design and the role of formative and summative assessments.

One misconception is that "teaching to the test" is bad practice for teachers. This phrase overlooks the fact that if the assessment in question is aligned with desired results and course objectives, then it is perfectly acceptable to teach this way because you ultimately want students to demonstrate their understanding!

A second misconception is that every assessment needs to be graded. If anything, you should have more formative assessments than graded summative assessments. Rather than promoting the grade culture many of our students feel trapped in, work to develop lifelong learners who can evaluate and synthesize new ideas in creative ways.

Another misconception about the role of assessments and Backward Design is how teachers give unannounced or "pop" quizzes. Though sometimes this may be justified in light of this results-oriented framework, you should be thinking about the end first instead of how to catch students off-guard. Transparency in the classroom builds rapport between teachers and their students. To model this, you may consider giving the summative exam questions out ahead of time. If this appears shocking or unrealistic, it is exactly why Backward Design creates a paradigm shift from the usual way of thinking about curriculum and assessments. If you have established clear objectives and learning outcomes that every student should achieve, why not inform them about what it would look like? Students still need to prepare material to sufficiently address the questions. Informing them along the way could also promote peer collaboration among students as they study for more summative assessments.

The final myth about assessments is the belief that creativity is not a valid measure of understanding. But if there is a clear rubric for how a student's work is to be evaluated, and if the work meets the desired results, why shouldn't we promote more student ownership? When students identify with the curriculum as something that speaks to their experience, authentic understanding is attainable. If assessments continue to be removed from the reality of adolescents, then they are merely performances teachers and students disregard.



## Conclusion

Backward Design presents teachers with a practical methodology for framing learning and planning appropriate teaching strategies to accomplish curricular goals. Rather than creating more work for teachers, it alleviates the burden of creating assessments at the last minute and allows for greater flexibility when it comes to preparing new material. For students it removes the complications surrounding the common refrain, “Will this be on the test?” because it is explicit in explaining what all students need to know. Additionally, it could allow for more creative ways for students to demonstrate the central ideas for any discipline. When students feel empowered, teachers can attend to the students’ formation and their ability to see connections between disciplines and how education is truly a lifelong process.

## About the Author of This Article

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