Chapter 1

Surfacing Backward Design

INTRODUCTION

I yanked open the door of the English building, only moments to spare before class was due to begin. Along with several students who were cutting it equally close, I hurried up the stairs to my First-Year Composition classroom on the second floor. Reaching the open doorway mere seconds before 8:00 a.m., I rushed into the room, gown flying behind me (well, not literally, but you get the idea) like *Harry Potter*'s Snape bursting into his dungeon Potions classroom.

I slung my professorial-looking leather school bag onto the table in the front of the room and pulled out my green "Modern Class Record" attendance book, the one supplied by the English department to every graduate teaching assistant (GTA). I took my place behind the lectern, opened my authority-bestowing book, and proceeded to call roll. My sleepy (or bored) students – it was difficult to distinguish between the two – took turns responding with a mumbled "here," or occasionally (for variety) "present."

Having completed the housekeeping, I opened my college-ruled spiral notebook, the one in which I jotted down my lesson plan for each day. As I skimmed over my hasty and underdeveloped agenda, I drawled, "Let me seeee heeeeeere ...." while I tried to remember what we would do that day and why.

Every. Single. Day. Every single day of my very first semester teaching college, I began class with those not-so-inspiring words—or so my students told me at the end of the semester (I didn't realize I was doing this). The class met at 8:00 a.m., four days per week. And every day I would race into class, take roll, and say, "Let me see here," while trying to figure out what the plan was. Not exactly a great start to my teaching career.

I've thought a lot about that semester. At only 22, I faced a sullen bunch of 18- and 19-year-olds every morning across the podium. That their sullenness might be related to my teaching only occurred to me later. It came as a shock to me that not everyone loved writing papers. Didn't everyone find joy and satisfaction in expressing themselves in the written word?

Somehow or other, I made it through that first semester. Prior to the first day of class, I and the other new GTAs had sat through a few days of training. After the semester started, we met every week to continue learning how to teach First-Year Composition. We'd discuss the content, the writing assignments, and sometimes even teaching methods. What we never discussed was the overall *purpose* of the course. What were the objectives of the course? Certainly we wanted students to become better writers. But *better* in what sense? For what purpose? To get jobs? Become novelists? Write better memos in their business careers?

Since I didn't have a clear view of the specific purpose of the course, I didn't have a clear sense of how all of its elements came together. The course seemed like a collection of different parts and practices – assignments, classroom activities, grading – that were each their own thing. But what connected them all? Why, for example, were the papers assigned and structured the way they were? What was the purpose of peer review? Why had the course readings been selected? None of this was apparent to me.

I suspect that many of us learned to teach college courses in the same way that I did: by the seat of our pants. Of course, flexibility and agility are virtues in our teaching, and every successful

teacher must learn to improvise in the classroom. But that doesn't mean we should not also begin with a robust, systematic, and purposeful overall plan for the course. Having such a plan allows us to flex within the boundaries of our well-designed class, one that has developed answers to the kinds of questions articulated above.

Cue backward design.

IN THEORY

Imagine you are planning a road trip for your summer vacation. Do you hop in the car one day and mindlessly drive wherever the road leads? The more free-spirited among you might well try something like that. But most of us decide on a destination first. Where do we want to go?

Having settled on the destination, we make other plans to help us get there. We consider various routes for the trip. We research and select incremental milestones: Where might be a good place to break the journey for meals or exercise? Where should we stay overnight? We also have to make decisions about supplies we might need, the tools to make a successful journey. What do we need to pack? Do we need beach chairs and sunscreen for a trip to the ocean? Or are hiking boots and trekking poles needed for a mountain adventure?

Very few of us begin journeys without thinking about where we are going, how we will get there, and what we will need on the way.

In their seminal book *Understanding by Design,* Grant Wiggins and Jay McTighe propose taking a similar approach to the design of educational experiences. They suggest beginning the process of teaching a course by thinking about the end first. If you're not familiar with this book, I highly recommend reading it before you teach your next class, as it provides many useful strategies for putting their theory into practice. You might also look at

Dee Fink's *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses* (2013), which takes a parallel – and equally thorough – approach to the process of creating a meaningful learning experience for your students.

The very short version of the arguments that both books make is that we should begin the course-planning process by focusing first on the most essential goals that we have for our students. Wiggins and McTighe refer to those goals as the "enduring understanding" that we want students to take away from the course. They explain that in order for an understanding to qualify as enduring, it should have "endured over time and across cultures because it has proved so important and useful," and also that it should "endure in the mind of the student … it should be learned in such a way that it does not fly away from memory once the unit is over or the test is completed" (Wiggins and McTighe, 2005, p. 136). Only after we have identified those deep goals should we worry about the content of the course, or the methods of instruction, or the kinds of assessments we will invite students to undertake. Everything must be anchored in the goals for enduring understanding; everything stems from those goals. New faculty members often begin the course-planning process by selecting the content: the textbooks and lecture materials. The backward-design process forces them to forget about the content until they decide what they really want students to learn.

When you backward design a college course, you might consider how you would answer three large questions, drawn from the road-trip analogy:

- *Where do we want to go?* What are our primary goals for the course? What do we want students to know and be able to do by the end of the term? This should form the basis of our thinking around course learning objectives or outcomes. Early in your career you might have taught courses without a clear sense

of what the learning objectives listed on the syllabus actually say or really mean. Maybe you inherited a syllabus or a course shell from someone else, or maybe you just whipped up some objectives in order to fill a spot on a required course template. When we take a backward approach to designing our course, we think carefully about our destination. Where do we want students to end up? This helps us to slow down and consider both the substance and the wording of our objectives.

- *How will we know if we have arrived?* Once we are clear about the course learning objectives, it's essential to measure students' achievement of those objectives to determine whether they attained them. We do this by way of both summative and formative assessments. Summative assessments such as final exams, papers, and projects allow students to demonstrate their mastery of our course learning objectives. Formative assessments such as low-stakes quizzes or weekly reflections help us to know whether students are making good progress. Planning intentional measures designed to reveal whether students are achieving the course outcomes forms a critical part of deliberate course design.
- *What will we need to help us get there?* After deciding on the destination and effective ways of measuring whether or how well we arrived there, the final core step in backward design is to consider what students will need in order to succeed on our assessments. Here is where we (finally) select course materials such as textbooks and other content. We design activities that help students engage with and process new information and concepts. We devise a course schedule with milestones, often in the form of incremental deadlines or formative assessments that keep students accountable and allow us to give feedback on their work along the way. In doing so, we help our students make steady progress toward the destination – that is, achieving the course learning objectives.

We've provided here only the barest sketch of backward design, because the core concept of it is relatively simple to understand. You can find a much more thorough explanation of the idea from either Fink or Wiggins and McTighe, as well as plenty of overviews through some simple online searching.

The goal of this chapter is to help you make sure that the work you put into backward design has the desired impact on your students. When you have lots of time to spend with your students in a face-to-face environment, you have frequent, informal opportunities to remind them about the larger purpose of the course, connect classroom activities to the course learning objectives, and provide the reasoning behind your assessments. You can write all of those same things to your online students, but when students are viewing everything through a screen, such text can become white noise that they filter out while they are getting to the requirements. So online teachers need to work a little harder to ensure that students see the purposes that underlie the activities they are undertaking. They need to ensure that their backward design floats a little closer to the surface, visible in multiple ways throughout the semester.

The small teaching strategies in this chapter will ensure that your carefully designed course demonstrates to students that you have created meaningful goals for them, reveals to them how the assessments will help them achieve those goals, and ensures – both for you and for them – that all of the course content has been created with the end in mind.

MODELS

The concept of alignment underpins the theory of backward design. Course materials, learning activities, assessments, and objectives should all align. In other words, every element of a

course should line up with and support the achievement of the learning objectives. You have worked hard to create that alignment in your well-designed course, but it's important to make it transparent to your students, who otherwise might view some aspects of the course as busy work. Helping your students understand what they are to do and why it's valuable is especially important in online classes, because you don't have the opportunity to detect confusion and answer assignment-related questions in real time the way you would in the physical classroom. The small teaching strategies described will help to clarify course learning and assessment activities as well as the purpose of each. This will help your backward-designed online course to have the greatest positive impact on the learning of your students.

Begin Work on the Final Assessment in Week 1

One of the challenges of online classes is that major assignments can get buried in endlessly nested content folders or learning modules. I've known many students who were caught by surprise toward the end of an online class. Somehow they overlooked the part of the syllabus or the course site that describes the final paper or project or exam. Suddenly, after navigating and completing the majority of the course, students stumble across a major assessment they were not expecting.

Of course, students should take responsibility to thoroughly review the syllabus, familiarize themselves with the entire course site, even review assignments that are not due until the last week of class. We can even help them do this. For example, we may require a syllabus quiz to obtain cursory agreement that students read and understood the course requirements. But it can still be hard for students to "see" everything in an online class, especially once they are deep into the semester, and taking other courses as well. There can be a lot of material to sift through, and we lack the advantage

of getting together in the classroom to review important details. We can send emails, make announcements, and otherwise beg our students to pay attention to course requirements, but these methods may not be enough.

Instead of policing student compliance, we can encourage their meaningful engagement with the end-of-term assessment (which might carry more weight than any other assessment) right from the very start. If you've taught online for any length of time, you know that busy online students tend to skip any task for which they are not held accountable. If there are no points attached, for example, students may not read your helpful announcements, watch your videos that provide additional guidance, or even read your assignment feedback.

Knowing this, create an online activity in the first week that requires students to familiarize themselves with the final assessment and – more importantly – to do something with it. Maybe they share initial ideas for the final project in an online discussion forum. Maybe they ask at least one question about what to expect on the final exam in the discussion board – this way, others benefit from answers that emerge from the posts. Perhaps they take a low-stakes quiz that presents questions in the same format as they will find on the cumulative final exam. Or students can read the instructions for the final paper and submit a brief written assignment in which they describe the assignment purpose and requirements in their own words.

This model aligns well with one of the principles articulated in *Small Teaching*. In that book, Jim reviewed evidence that suggested that students receive significant cognitive benefits from trying learning tasks *before they are ready*. In other words, we often think we must teach content and skills to students, and then give them tasks that will put that knowledge or those skills to use. But research from the learning sciences tells us that when we ask

people to complete tasks before they learn something new, they will learn it more effectively (Lang, 2016, pp. 41–62). The authors of *Make It Stick: The Science of Successful Learning* explain that "unsuccessful attempts to solve a problem encourage deep processing of the answer when it is later supplied" (Brown, Roediger, and McDaniel, 2014, p. 88). In other words, when we give students a cognitive task at the beginning of the semester, before they have learned the skills they will need to complete it, we are creating that "fertile ground" for their learning throughout the semester.

So this first model has both cognitive and metacognitive benefits. It helps students learn, and it helps them become more aware of the major assessment of the course, which will allow them to plan their learning and study more effectively.

Consider, then, creating a (low-stakes) graded assignment in the first week that gives students a preview of the final product, provides a little taste of what to expect, and requires them to begin thinking about and working on it. Start with the end in mind, and require interaction with that final assessment. Tell your students why, too. They'll appreciate your transparency and will be more motivated to engage meaningfully when they see the relevance of class activities beginning in the first week.

Make the Purpose of Class Activities Explicit

When you develop your online course using backward design, you have good reasons for every design decision you make. With specific and measurable course learning objectives in mind, you create assessments that allow students to demonstrate mastery of the objectives. You select readings, videos, and learning activities that enable students to gain new knowledge and practice using and applying it before they are assessed on that new information. You write instructions that provide clear guidance on what

students should do to succeed on learning activities, assignments, and assessments.

All of the logical and carefully considered reasons for these decisions are crystal clear to you. You thought it all through. Everything makes sense in your own head. But your students aren't in your head. It's possible, even quite likely, that your students don't know why you are asking them to do what you're asking them to do.

You should therefore make it a regular part of your online teaching practice to keep the rationale for your decisions in full view of your students. This principle lends itself especially well to small teaching applications that you can make throughout the semester in regular bursts.

For example, at the beginning of each online module or unit, provide a short, written description that introduces that module's content, describes what students are doing, and explains why they are doing it. I like to open each module with a two- to three-sentence overview of the module, an explanation of how module content and activities will help students succeed in the class (or help them achieve academic and career goals, become better employees, better citizens – think big!), and a list of four to six learning goals or objectives for that module that align with the course learning objectives.

You can begin your list of learning goals with something like, "After successfully completing this module, you will be able to … " and then provide a bulleted or numbered list of specific demonstrable skills students will acquire as they complete the module work. Provide this guidance in a short, written element at the beginning or top of each module in order to clearly establish why they are doing what they are doing in that module. Alternatively, or in addition to your text-based overview, you may want to give a quick video introduction to each module, in line with the principles of Universal Design for Learning (UDL).

Reinforce the reasoning behind class activities using announcements at intentionally timed intervals throughout the course. Video announcements are perfect for this. Written announcements are also an option, but in my experience students are more likely to click on and view a (brief!) video thumbnail than to read yet another wall of text.

Most Learning Management Systems (LMSs) include native or third-party integrated tools that allow you to capture a quick webcam video of yourself talking to the camera. The YouTube app on your smartphone also makes it relatively easy to record and upload these kind of casual videos. Studies show that students appreciate informal class videos that reveal your personality (Guo, 2013; Cavanagh, 2016). Don't stress too much about creating professional-looking videos that require editing skills you may not have. Prepare a few talking points to further explain the purpose and the reasons for engaging in that week's classwork. Share some examples, tell a story that illustrates your pedagogical thinking, or describe a video or blog post that you just came across that reminded you of the relevance of that week's work. Remember to provide captions, a text transcript, or a text-based outline for any videos in your online class (Tobin and Behling, 2018). And then provide a link to the media or news item that caught your attention, and might likewise catch the attention of your students.

… and Do the Same for Assignments

Everything I've said above about the clarity of classroom activities in your head, and the potential lack of such clarity to your students, applies to your assignments as well. Create assignment instructions that provide a clear rationale for the work your students will do, as well as clear directions for how they can accomplish it successfully. You can also relate the task to the current module and to the course learning objectives.

John Warner, the author of two excellent books on the teaching of writing, provides one great model for how to do this in his book *The Writer's Practice* (2019), which contains multiple samples of assignments you can give to students to improve their writing. Each of those assignments – which he calls "experiences" – comes with a written explanation that contains four core components: audience, process, reflect, and remix. As he walks students through these core aspects of the assignment, he has plenty of opportunity to help them understand what that particular writing experience will help them accomplish. They might be learning to tailor their prose to different audiences, for example, or learning to become a more careful evaluator of sources. Whatever the purpose, they learn about it from the way Warner has structured the assignment and instructions.

Mary-Ann Winkelmes has researched the impact of the kind of transparent assignment design we're talking about. Her work has led to the creation of the Transparency in Learning and Teaching in Higher Ed project, with extensive data on how this approach helps students and many examples and support materials to help you begin to incorporate this into your own teaching. You can find a great deal more information at https://tilthighered.com.

I've had a lot of success with a method similar to those proposed by Warner and Winkelmes. My husband, who has been my personal sounding board and instructional designer since Day 1 of that First-Year Composition class over two decades ago, helped me develop an approach that I've been using for a long time now, one that I find particularly helpful in online classes, where busy students want concise yet thorough information about what they have to do. I offer it here as another variation so you can expand your thinking about what your assignment prompt might contain. My husband's advice was to follow a simple template

when creating instructions for an online assignment, discussion forum, or project. I now use these headings in the instructions I give to my students:

Here's what I want you to do: I explain the task.

Here's why I want you to do it: I explain the reason this task will contribute to the student's success in class and beyond.

Here's how to do it: I provide detailed instructions, rubrics, checklists, and exemplars to help students clearly see and understand my expectations.

You would verbally provide this guidance and explanation in your in-person class, but somehow this often gets neglected online. Create assignment instructions that clearly convey the *what, why,* and *how* of each assignment. Your effort will pay off in two important ways: You'll get fewer student questions about what they should do, and better-quality work that demonstrates student learning and achievement of outcomes.

Have Students Reflect on and Respond to Learning Objectives

Reflection on our learning is a significant part of making learning durable. Turning again to *Make It Stick: The Science of Successful Learning*, we find multiple cognitive benefits of reflection:

> Reflection can involve several cognitive activities … that lead to stronger learning. These include retrieval (recalling recently learned knowledge to mind), elaboration (for example, connecting new knowledge to what you already know), and generation (for example, rephrasing key ideas

> in your own words or visualizing and mentally rehearsing what you might do differently next time. (Brown, Roediger, and McDaniel, 2014, p. 89)

Additionally, reflection is a key part of learning to regulate our own learning – a crucial skill for our students to develop (Nilson, 2013). A perfect way to structure this reflection while also reinforcing the intentional design of our classes is to require students to review learning objectives at various points of the class.

For example, in the first week of class, have students reflect on and respond to course learning objectives as stated in the syllabus. We typically default to written assignments in higher education, but you can just as easily invite reflection through audio or video, which aligns with UDL principles and might provide a welcome alternative for some of your students. Hesston College faculty members Karen Sheriff LeVan and Marissa E. King argue:

> [B]ecause we often rely on writing as the primary mode of metacognitive reflection, some students, especially those who struggle with college-level writing, may not experience the full cognitive benefits of reflection. For such students, the stress of writing can compromise their focus on reflection. (2016)

They advocate for the use of quick audio reflection assignments to encourage a more informal and reduced-stress response.

Many LMSs and widely used third-party tools facilitate the recording of such media. On the flip side, there will always be students who prefer writing over audio. You could accommodate both preferences by allowing students to choose whether to submit their reflection in writing or as a recording. The point is to get

students to think carefully about what they are about to learn in this course.

Asking students to respond to the learning objectives also ensures that they know what the objectives say and mean, or alerts you to the need to clarify the objectives if students struggle to articulate their response. But students might feel overwhelmed by the requirement to respond to all of the objectives. You could ask them to select a few objectives that they are most interested in, or think are most valuable for them personally, or that they are the most concerned about. Many students don't even read the course learning objectives, so requiring a written or recorded response to some or all of the objectives facilitates their engagement with these goals right from the start.

You can also build in a regular opportunity to review and reflect on module learning objectives. In my graduate online class on technology fluency, students answer a series of questions at the end of each module. One of the questions on each of these assignments asks them to list each module learning objective and to write about how they made progress that week, why the learning goal is significant or important, and what they need to do to continue their learning in this area. Students write a sentence or two about each objective. It's not an overwhelming activity in terms of the time it takes to write or to grade, but it pays off in significant learning dividends. Students actually have to read, pay attention to, and think about what we said we would do in that module and how it helps them achieve the objectives for the course. I've received some initial pushback on this activity, but once my students get used to the idea, they like the opportunity to actively think about what we're doing and why.

With a little thought, you can find many ways to continually draw students' attention to the learning goals. Doing so pays off in important ways in developing self-aware, productive students who

will likely become more successful learners in both their online and face-to-face courses.

Look Back, Look Ahead

Magnify the impact of your course alignment by building in one final opportunity to think about what students have accomplished in the course. As a concluding activity in the class, zoom out from the weekly or module learning goals. Take a high-level look at where students have come from, at how much they've achieved. Reinforce their learning, solidify important concepts, and further motivate your students to become lifelong learners.

One way to do this is to revisit an activity from Week 1 (Lang, 2019). If you asked your students to reflect on and write or talk about the course learning objectives in a syllabus review assignment, have them review what they said then. Ask them where we said we were going. Did we get there? Why or why not? What was particularly helpful in reaching the destination? What might have helped them make even better progress along the way? It's amazing how far students can come even in the four- to eight-week condensed online classes we often teach. Point this out to them, or better yet, guide their discovery of their growth. Depending on what you ask in your prompt, you may also get constructive feedback to help you refine and improve the course. Either way, you will help your students develop important reflection skills that will benefit them in any new learning context, be it personal, academic, or professional.

One of my favorite ways to get at this, while also helping students see for themselves the personal value and relevance of the course, is to include a Three Takeaways assignment. Ask students to think about the three most important things they have learned in your course. Ask how they will continue to develop that learning and apply it in a future academic, workplace, volunteer, or family life setting. Their submission could be in the form of

a journal entry, blog post, written assignment, or audio or video recording posted to the class discussion board.

You'll want to think carefully about whether individual, private reflection is best for this task, or whether you want students to learn from each other's insights in a more public way. If you were teaching in the classroom, would you ask students to write this down and turn it in as they leave the room? Or would you structure a Think-Pair-Share activity, which becomes a discussion that the whole class engages in? The differences between public and private reflection are important to consider. Think about your purpose for this activity and decide whether that's best achieved by having students submit privately or asking them to submit something for public consumption and discussion.

I use the Three Takeaways in my Technology Fluency and Leadership class, offered as part of a master's degree leadership program at Northern Arizona University (NAU). The students are almost always working professionals who balance family obligations with school; to a person, they seek career advancement and personal betterment of their situation. But I get a wide range of tech savviness in the course. I've had IT professionals who could be teaching the class, administrative professionals who are nervous about trying new tech, and people in service or retail industries who, for example, aren't required to create PowerPoint presentations in their work, but know that in order to make a career move, they need new skills. Every student arrives at a different place in the journey. The Three Takeaways assignment allows each individual to think carefully about their own learning and growth and to consider how they plan to apply what they have learned to their personal and professional context. They can choose to write or talk about class concepts or more metatopics, like what they learned by being a first-time online student. Whatever their three takeaways are, there are always insightful revelations that help them develop as an individual and reinforce the learning we experienced in the class.

PRINCIPLES

Helping your students see and benefit from the intentional design of your course pays off in important ways: They'll be more engaged when they know why they are doing what they're doing, and how it will benefit them in the course – and in other contexts, too. Better engagement leads to more meaningful learning. A few principles can help guide your approach.

Design with the End in Mind

This is just basic backward design: Keep your final destination squarely before you in every phase of your planning process. Articulate where you want your students to arrive. Plan a final assessment that will measure whether they got there. Then think critically about what they need along the way: readings and media content to provide information and knowledge they need to get where they are going; incremental tasks and assessments to act as signposts and to let students know whether they are making good progress; and learning activities and tasks to help them practice using and applying the new knowledge before being tested on their mastery of it. Equip your students with the necessary tools and supplies to help them reach the final destination.

Provide Frequent Reminders of the Purpose of Content and Activities

Using written instructions, video announcements, and weekly reminders, help students clearly see the purpose behind course activities and assessments. These reminders accomplish two goals.

First, they help *you* think through the purpose of classwork. You'll have lots of opportunities to remind yourself that there's a reason you've assigned various readings and tasks. Keeping your

purpose in view will help you avoid giving students busy work, an accusation commonly made about online classes.

These reminders will also help your students stay engaged. Tell your students – often – that you deliberately designed tasks to help them learn and succeed in the class. When they see the relevance of coursework, the thread that ties everything together, students are more willing to complete activities and assessments in a way that promotes meaningful learning.

Point Students Back to the Core Objectives

You put a lot of careful design work into the creation of your class. Make the design overt for students to maximize the impact of your efforts. Create tasks that draw students' attention to course and module learning objectives. In many college classes, students don't even know what the objectives are. Have students read, think about, and respond to objectives as part of a syllabus review or orientation to the course. Provide module learning objectives that detail how module work supports course goals. Require an end-of-module or post-assessment reflection in which students evaluate how well they achieved module objectives, or what they might do differently next time. In your announcements, emails, even in individual feedback, reinforce the core objectives again and again. We all perform better when we know what the goal is. Encourage your students to achieve their best learning by repeatedly pointing out the learning goals for the class.

Connect the Beginning and Ending

Bookend your class with activities that help students see the end at the beginning, and conversely, see the beginning at the end. In Week 1, get students working toward the final assessment. In the final week of the class, have them reflect back on where

they started. Doing this enables your students to see the direct connections between the beginning and the end of class. They'll see, and value, the straight path that led them from where they were on Day One to where they got to by the end.

SMALL TEACHING ONLINE QUICK TIPS: SURFACING BACKWARD DESIGN ONLINE

Learning activities, content, assessments, and core objectives must all align to ensure successful arrival at the final destination. Help your students recognize the intentional design of your course in order to maximize their learning.

- *Get students working on the final assessment in Week 1.* Is there a piece they can tackle right up front? Create a (low-stakes) graded task that requires students to read and think about the final project instructions or begin to plan the topic of their final paper. Or assign a quiz that mirrors the format of the final exam and gives them practice with that format. Explain that because you want students to succeed on the final, they'll begin preparing for it in the first few days of the class. Set them up for success by starting with the end.
- *Clarify the purpose of classwork and assessments.* What might seem clear to you could be mystifying to your students. Throughout the term, tell them why they're doing any given task so students see the connections between activities and core objectives for themselves.
- *Assign tasks that foster self-reflection on learning as it relates to course objectives.* At the beginning or middle of class, ask students to read, think about, and respond to learning goals and their progress toward or achievement of them.

- *At the close of the semester, have students reflect on where they've come so far and what they intend to do to continue their learning.* Create opportunities to think about learning objectives to reinforce and maximize the design of the course.

CONCLUSION

When the wheels of your car are in alignment, travel proceeds in the intended direction. The wheels respond correctly to the input you provide through the steering wheel. You arrive at your destination smoothly, almost effortlessly. When you have proper alignment, you don't even notice. All works harmoniously as it should to get you where you want to go.

Contrast that to what happens when a wheel is out of alignment. The vehicle keeps veering slightly to one side, requiring constant pulling on the steering wheel to stay on track. More effort is required to drag the car along its intended path. Misalignment creates additional wear and tear on the tires, too, which can become costly and dangerous.

When we have effectively applied backward design, all course components are aligned. We arrive at our destination more smoothly, with less effort, less wear and tear, and less frustration and confusion than we (and our students) experience when intentional design has not been part of the course-creation process.

The value of starting with the end in mind is clear. The small teaching approaches outlined here ensure that we are getting the most out of our backward design. In so doing, we can significantly increase the quality and effectiveness of our online classes without significantly increasing the time and effort required from us.