Backward Design, Forward Progress

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Readers of *Faculty Focus* are probably already familiar with backward design. Most readily connected with such researchers as Grant Wiggins, Jay McTighe, and Dee Fink, this approach to course construction asks faculty to initially ignore the specific content of a class. Rather, the designer begins the process by identifying desired learning goals, and then devising optimal instruments to measure and assess them. Only thereafter does course-specific content come into play—and even then, it is brought in not for the sake of "covering" it, but as a means to achieve the previously identified learning objectives. Courses designed this way put learning first, often transcend the traditional skillset boundaries of their discipline, and usually aim to achieve more ambitious cognitive development than do classes that begin—and often end—with content mastery as the primary focus. Although the advantages of backward design are manifest, it's probably still the exception to, rather than the rule of, course planning.

Yet, backward design has benefits beyond those outlined above. Just as the technique is advantageous to the students we teach, it is valuable to our own growth trajectory as educators, and serves as a useful bridge to interactions with faculty outside of our disciplines.

Making tough decisions

First, (re)designing a course via backward design forces us to step back from our fields of expertise, which we know so well and hold so dear, and approach the learning process as novices. That is to say, we are so familiar with our disciplines and their content that it's hard to imagine anyone not endowed with such knowledge or a burning desire to acquire it. Even more importantly, we love the content that makes up our fields, and it can be downright painful to imagine excluding parts of it for the sake of skill development or the realities of semester time limits.

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Backward design forces us to make tough decisions about what content is really needed for our students to achieve their learning goals. Maryellen Weimer writes that our attitude toward basic content "has always been dominated by one assumption: more is better" (p. 46). If that construct embodies the typical "coverage" approach, then perhaps "just enough content—and no more" could define the course built around backward design principles. And in forcing us to make fundamental decisions about learning and the role of basic content therein, we must confront the very nature of what we seek to achieve as educators. Is it simply for students to know a lot about our field? Or is it primarily for them to develop the habits of mind that typify practitioners? The former aims low at the Bloom's Taxonomy target, while the latter requires an elevated trajectory.

Ken Bain writes about "expectation failure" (p. 28) as a necessary component to students' cognitive breakthroughs. That is, students must be placed in a situation where they realize their extant ways of knowing won't serve them adequately. Only then can they make their way through the "learning bottlenecks" (in the language of Díaz et al.) which populate our fields. I'd like to push Bain's analogy further: it is often only through our own expectation failures that we as faculty can devise more authentic and meaningful learning experiences for our students. For better or for worse (and usually it's for worse), most of us started out teaching the way we'd been taught ourselves—and many of us still do. Only when we realize that these approaches can't achieve our desired learning goals do we stare into the instructional abyss to contemplate the fundamental riddles of education. If we're lucky, we can seek help from a peer, or stumble across a good pedagogical read. And if backward course design is deemed a solution, we just might squeeze through our own instructional bottleneck and offer something so much better.

Breaking down silos

Second, it is precisely this type of work—the fumbling, the grappling, the eureka moment—that allows us to bridge the chasms between ourselves and faculty in other fields. Too often we remain siloed in our disciplines, knowing little about what our brethren do and assured they couldn't possibly understand us. But if we momentarily remove discussion of specific course content and focus instead on desired learning goals, we find that we actually have a great deal in common. Is clear and correct writing a goal only of composition classes? (*Of course not.*) Do we relegate critical thinking to the field of logic? (*I sincerely doubt it.*) Are group work, information literacy, and quantitative reasoning skills that can be developed and synergized across a broad spectrum of classes in disparate fields? (*Absolutely.*) Conversations and workshops about backward design necessarily raise these issues, help us emphasize the commonalities (rather than the differences) of seemingly unrelated fields, and serve as vehicles to interdisciplinary empathy and cooperation in ways that content-based curriculum development fails to do.

In the 1998 film *Patch Adams*, Robin Williams plays a physician with quirky but effective approaches to helping his patients. When questioned about his focus on the patient rather than the disease, he replies, "You treat a disease, you win, you lose. You treat a person, I guarantee you: you'll win, no matter what the outcome." I think there's a parallel here for course design. Lead with content, and maybe the more ambitious learning happens, maybe it doesn't. Lead with learning goals, as epitomized by backward design, and educational outcomes can't help but have an impact on students' development. And in adopting such a scheme, we become a more self-aware and interconnected faculty. It's hard to see a downside.

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References:

Ken Bain, *What the Best College Teachers Do* (Cambridge: Harvard University Press, 2004)

Arlene Díaz, Joan Middendorf, David Pace & Leah Shopkow, "The History Learning Project: A Department 'Decodes' Its Students," *Journal of American History* 94/4 (2008), 1211-24

L. Dee Fink, *Creating Significant Learning Experiences* (San Francisco: Jossey-Bass, 2003)

Patch Adams, dir. Tom Shadyac (Universal Pictures, 1998)

Maryellen Weimer, *Learner-Centered Teaching: Five Key Changes to Practice* (San Francisco: Jossey-Bass, 2002)

Grant Wiggins & Jay McTighe, *Understanding by Design,* expanded second edition (Upper Saddle River, NJ: Pearson, 2005)