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Abstract

In this essay I explore the topic of curriculum design in business and management education from the perspective of my current role as Associate Dean, Learning and Teaching. Using Biggs' (1999a) constructive alignment as an organizing framework, I summarize a number of challenges for management educators and administrators in the design and evaluation of programs and courses, and highlight the increasing complexity of the task. I conclude by arguing that, from an associate dean's perspective, management educators must increasingly adopt the role of designer, rather than teacher, and offer suggestions to help with that transition.

Keywords: Curriculum design, constructive alignment, learning outcomes, learning design

Introduction

I have been an academic working in a business school for nearly a decade. For the past three years, I have served as the associate dean responsible for learning and teaching programs and processes. Unsurprisingly, the central theme of my duties is enhancing student learning. What might be surprising to some is the scope of what this role entails. At my institution, I am responsible for both leading the design, delivery, and financial viability of all academic programs as well as working with the executive dean and other academic leaders to develop university and school-level strategies, priorities, procedures, policy, and resources to guide the learning and teaching activities within the school. My duties encompass managing our continuous improvement processes, staffing all course offerings, administering our performance reporting and recognition, coordinating our grading processes, and representing the school on a number of standing and ad hoc committees within the university relating to learning and teaching policy and procedure. As with many leadership roles, I am regularly confronted with difficult decisions aimed at resolving ill-defined problems with incomplete information, involving conflicting stakeholder interests, and unclear, yet potentially significant consequences. In short, I occupy just the sort of organizational role for which we are trying to prepare our students.

Aware of my new adventures in academic administration, I was approached by one of the editors of the *Journal of Management Education* (*JME*) to address the theme of teaching and learning from a dean's perspective. Presented with such a broad canvas, I was excited at the opportunity to address a topic that is central to my role as an administrator, central to the success of all business schools, and significantly influences the very nature of academic work of management educators – curriculum design.

The design and redesign of courses and degree programs is central to my role as associate dean and, fortunately, there exists a wealth of resources regarding curriculum

design that helps me (and my colleagues) develop our skills in this area. Curriculum design (or instructional design, as it is often discussed) was originally grounded in behavioral and cognitive psychology (Gagné, 1985; Gagné & Briggs, 1974). Although the contributions of these early approaches as well as others (e.g., information processing approach) are still relevant, constructivist approaches (O'Donnell, 2012) represent the newest frontier of our understanding of learning. From a constructivist view, learners construct knowledge and meaning from their experiences. The learner plays an active, central role in the learning process, as do others (e.g., peers, teachers). Not surprisingly, research investigating learner motivation and meta-cognitive skills has also gained increasing attention with recognition of the shift in the responsibility for learning from teacher to student. From a constructivist perspective, the teacher's role is about designing effective learning experiences, curating relevant learning resources, and facilitating the learning experience to both challenge and guide the student's learning.

In approaching curriculum design from a constructivist view, my colleagues and I are guided by three fundamental questions. The first is 'what do our students need to learn?'. As a clarifying and focusing question, this is often the most difficult to answer, as it requires consideration of all of the various stakeholders of the education process. We then ask, 'how can we help our students to learn?' From a constructivist perspective, learning occurs as a result of what a student does, not what the teacher does. Thus, this question addresses the selection and design of appropriate activities to foster and motivate student learning and how those activities can be effectively organized. Finally, we ask 'how do we know our students have learned?' In an assurance-of-learning-focused environment, this question is both obvious and crucial to providing important feedback on, and evaluation of, student learning, as well as appraising and improving the quality of the curriculum itself.

Not by accident, these three questions align with Bigg's (1999a) system of constructive alignment, which is a useful framework to guide the design and evaluation of curricula. Constructive alignment is an outcomes-based approach to curriculum design that is grounded in constructivist learning theory (Biggs, 1996; Biggs, 1999b). Despite its widespread use in higher education, constructive alignment has barely been mentioned in the management education literature (e.g., Tomkins & Ulus, 2016; Wright, Nichols, McKechnie, & McCarthy, 2013).

What Do Our Students Need to Learn?

Designing curricula using an approach such as constructive alignment begins by considering the end. That is, what is it that we want our students to achieve at the end of a program of study? When the task is approached as a collective endeavor by academic colleagues, it can also provide consensus and alignment regarding the purpose of the curriculum amongst relevant teaching staff. In my experience, accomplishing this also requires considerable professional development of academic staff in the principles and application of constructive alignment, as well as the more specific elements of curriculum design.

There are many factors that demand consideration in defining learning outcomes. First and foremost, stakeholder considerations are critically important for this question and, as such, represent a core conversation for curriculum designers. Students may have professional, civic, and other personal development goals for enrolling in a particular degree program. Employers have an expectation that graduates of a particular program will have the necessary skills and attributes to meet their needs as future workers. Government and professional accreditation agencies are also likely to have specific requirements governing the content, structure, or delivery of the program. The university itself often has expectations regarding certain skills or attributes for all graduates, regardless of program. These and other

stakeholder interests must all be considered, reconciled, and incorporated into the design of each program offered by the business school.

Additionally, curriculum designers must also determine the appropriate balance of breadth and depth of each course outcome with respect to the overall purpose of the course and its intended sequence in the program. For example, deans wrestle with growing demand for shorter, more flexible program structures such as micro-credentialing and stackable degrees as the increasing demand for lifelong learning necessitates that business schools have a robust, agile curriculum management system to respond in a timely and effective manner. Increasingly, curriculum designers are trying to determine how these smaller units of formal learning can be assessed, compared, aggregated, and credentialed by the university.

Like many business schools in countries with advanced economies, the student cohort at our university includes a growing mix of nationalities as well as older, and non-traditional students. While this diversity has many benefits, it also creates many challenges, not the least of which is ensuring fluency in the language used in the curriculum. As governments have pushed for greater higher education participation for their citizens, the resulting massification leads to increased variance in student aptitude and motivation. All of these forces make assumptions regarding educational preparation and assumed knowledge of incoming students a difficult curriculum design challenge.

How Can We Best Help Our Students to Learn?

One of the most robust conclusions drawn from multiple, well-designed studies is that the impact of a university education is largely a function of a student's individual effort and engagement in the curricular, co-curricular, and social aspects available to them (Pascarella & Terenzini, 2005). Thus, a priority for my design team and me is crafting learning experiences that engender student motivation and engagement. Learning activities that fall under one or more of various labels—experiential learning, project-based learning, team-based learning,

problem-based learning, service-learning, action learning, work-integrated learning, and others—are all touted to have the potential to offer students deep, engaging learning experiences. The challenge for curriculum designers is both identifying, selecting, and adapting these activities to the needs of a specific course as well as ensuring they are being implemented thoughtfully and ethically (Bradford, 2018).

Complicating matters further, technological changes over the past three decades have created once unimagined opportunities for student learning. Rather than just considering the traditional face-to-face learning context, curriculum designers have a constantly changing range of technology tools to create a blended approach to enhance student learning. Whether the learning mode is face-to-face, completely online or somewhere in between, student needs and diversity necessitate the effective and efficient use of information technology to organize and enable student learning activities and resources. These decisions may enable certain options for learning activities, but they also create unique constraints as well.

How Do We Know Our Students Have Learned?

It is easy to assume that students appreciate the significance and centrality of learning outcomes as much as administrators and teachers do. In my experience, that couldn't be farther from the truth. More often than not, students focus on one question – what is going to be on the test? Yet, the design of assessment tends to have far more influence on what and how students learn than does the design of learning activities (Biggs, 1999a; Biggs, 1999b; Whetten, 2007). At my own institution, my colleagues and I have increasingly emphasized the use of authentic assessment tasks that replicate real-world challenges and standards of performance (Koh, 2017). This helps students to perceive the value of what is being learned, promoting deep engagement and sustained effort in the learning process. The authentic nature of the tasks also helps to prepare students for working in actual organizations during internships and after graduation.

Designing effective assessment requires an understanding of the different types of assessment and their respective purposes. There are two main reasons for assessing student learning: (1) to provide feedback during learning (i.e., formative feedback) and (2) to evaluate the degree to which the learner has achieved the intended learning outcomes (i.e., summative assessment). While most curriculum designers are familiar with this distinction, it is often blurred in practice. This is partially due to the fact that designing an overall assessment strategy for a course can be a complex challenge. In practice, we try to emphasize and balance a number of considerations in designing assessments for a course, including variety in assessment, assessment weight (e.g., eliminating or minimizing "high stakes" final exams), and spacing (to help with the sequencing of learning, to facilitate reinforcement and/or extension of key learning outcomes, and to provide early and ongoing performance feedback). Finding the right balance amongst these criteria often involves some iterative refinement over multiple semesters. For us, our assurance of learning process has been particularly helpful in this regard.

Of course, one of the perennial challenges related to assessments—for both academics and administrators alike—is grading. From a dean's perspective, the aim is to create a system that can validly and reliably evaluate a range of student performance outcomes. Again, the use of constructive alignment has helped us to design assessments that enable our educators to evaluate different levels of student performance with respect to specific learning outcomes. Also, using these learning outcomes to help define clear standards and levels of performance helps to improve the reliability of our assessment "instruments" within a single course in a given semester and over time. Although the use of rubrics has a number of advantages and disadvantages (Bailey, 2014; Cohen & Billsberry, 2014; Kenworthy & Hrivnak, 2014 Riebe & Jackson, 2014), their adoption can be helpful in facilitating assessment reliability.

A final challenge for my work with assessment design is academic integrity. While plagiarism and cheating have always existed in educational contexts, the Internet and other new technologies have enabled creative new forms academic dishonesty such as contract cheating (Walker & Townley, 2012). Addressing this problem only through assessment design is unlikely to be successful, so our approach has been to focus on prevention. At an institutional level, this includes promoting a culture of integrity and ensuring that students understand what plagiarism is and the importance (both practically and philosophically) of academic integrity. At the course level, effective learner-centered course design can be a powerful deterrent to academic dishonesty. This includes ensuring that assessments are aligned with learning outcomes, ensuring that students clearly understand the requirements of the assessment (and know the standards by which they will be evaluated), and providing effective formative and summative feedback.

Implications for Management Educators

If you are wondering who these "curriculum designers" are to whom I keep referring, let me make my point explicit. They are all of us, administrators and faculty alike. Truly adopting a learning-centric approach means saying goodbye to 'delivering a lecture' or 'covering content' and other traditional views of teaching. Instead, we need to become designers of contexts, activities, and assessments that provide rich learning experiences for students and align with thoughtfully considered learning outcomes.

Like most academics in higher education, management educators (and the business school leaders they are or may later become) have little, if any, formal training in teaching or pedagogy, let alone instructional design. Further, in a world where literally millions of videos, books, articles, recordings, and other media are available to our students via the nearest internet-connected device, the role of teacher as a fount of knowledge is long past. Far more valuable from a student learning perspective is having a guide to help navigate and

curate this morass of information, and, in the process, help students develop these capabilities for themselves. Finally, continuous changes in educational technology provide new tools for management educators to enable, monitor, and evaluate student learning, but once again, the challenge is keeping up with the changes and learning to use these new tools.

How can we possibly cope? The individuals who inspire me have integrated their efforts across the teaching, research, and academic service domains to have a compounding effect that is self-reinforcing. Below are a few suggestions I have learned from them over the years to help you adopt a similar approach.

- Look for professional development opportunities to enhance your knowledge and skills as an educator and as a curriculum designer. Most colleges and universities have a range of these offerings on campus. You can also network with colleagues at nearby institutions and attend some of their offerings. There are also a number of professional bodies (MOBTC, Academy of Management) that regularly offer diverse professional development opportunities.

- Get involved in a project involving curriculum review, assurance of learning, or the design of a new subject. Alternatively, revise one of the courses you teach and consider how you can make it more learner-centric. Start by reviewing the learning outcomes and how each is assessed. Enlist a colleague or two to add additional perspectives, ideas, and support.

- Volunteer for a service role in your institution with a focus on learning and teaching and engage yourself in the process that shapes the policies, procedures, and resources that impact student learning.

- Read the leading management education journals and related outlets. This literature is invaluable in providing new learning activities (e.g., Nichols & Wright, 2015) and assessment practices (e.g., Bacon & Stewart, 2017), reviews of valuable education

resources (e.g., De Massis & Kotlar, 2015), applications of new technology tools (e.g., Loughry, Ohland, & Woehr, 2013), approaches to curriculum design (e.g., McIver, Fitzsimmons, & Flanagan, 2016), and much more. Better yet, become a reviewer. It will help to motivate you to stay current with developments in the field and may even inspire a research project of your own.

- Use travel time or other "hands free" periods of your time to engage in learning through listening to podcasts and similar media devoted to design, creativity, and curriculum best practices. Learn what other practitioners in other fields are doing about curriculum design and what can be drawn from their experiences.

- Listen to *JME's* podcast series (http://journals.sagepub.com/page/jme/podcasts) to learn about cutting edge provocative articles and issues in the management education field.

- Engage in management education research to inform the design of our courses and programs. For example, learning activities have long been a central focus of business education journals such as *JME* and its new partner journal *Management Teaching Review (MTR)*, but more quality research is needed to guide curriculum designers in making evidence-based decisions (Hrivnak, in press). We need more empirical studies that evaluate the effectiveness of learning activities using direct measures of student learning relative to different types of learning outcomes.

- Politely say "no" to research and service opportunities that don't align with your overall goals for teaching and learning to enable you to become a "go to" person who can be called upon to enhance teaching and learning efforts in all three areas of the faculty domain.

Conclusion

In this essay I provided a summary of our approach to business school curriculum design. For those who have been involved in a business school accreditation review, assurance of learning process, or other curriculum review, many of these challenges probably seem quite familiar. The purpose of my summary was to not only highlight some of the current and future challenges faced by management educators but also share that this role is changing in meaningful and exciting ways. Anticipating and preparing for these changes is essential for all of us to successfully adapt and thrive in the evolving context of business education.

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