Learning Outcomes, Assessment, and Our Academic Future Katherine Eggert Professor of English and Quality Initiative Leader, Office of the Provost

The phrase "learning outcomes" prompts either puzzlement or dread in most members of the teaching faculty. Puzzlement, because the phrase is unfamiliar to many faculty, despite their devotion to their teaching. Dread, because those who know what learning outcomes are associate their formulation with externally imposed review processes. It is the thesis of this white paper that we faculty should not dread learning outcomes' arrival or bemoan their necessity. Rather, we should take control of the process. Defining learning outcomes and devising ways to assess them is a tremendous educational opportunity: it can be a way for units to understand their mission and envision their own academic futures.

What are learning outcomes? You might hear many other terms, including learning goals, objectives, competencies, and so forth. But they're all the same thing. Simply, learning outcomes are what we want our students to *know* and *be able to do* at the end of an academic offering, whether that offering be a course, a major, or a degree. Most of us faculty have a good idea of how learning outcomes work in a course, even if we might grumble about having to put them in writing or resist including them on a syllabus. We articulate those learning outcomes fairly easily, for example, if we are working with colleagues to outline the goals of a course taught in multiple sections. And we also articulate learning outcomes fairly easily when we are designing a course that serves a highly sequenced curriculum. Whether students have taken Professor Lu's section or Professor Jackson's section of Polymath Studies 1000, they should be confident that they have learned what they need to learn to go on to Polymath Studies 2000. Even if your own particular course isn't multi-sectioned or even if it isn't precisely sequenced within a major, thinking of it as if it *were* one of these things allows you quickly to formulate the course's learning outcomes.

Thinking about a course in terms of its learning outcomes means something quite different than "covering the material." Instead, you are deciding, first of all, how you want your students to apply the material they are learning. Most of the literature on learning outcomes from specialists in education or cognitive science employs a recent, somewhat revised version of Benjamin Bloom, et al.'s 1950s organization of types of learning objectives.¹ In the revised version, these objectives are divvied up according to six verbs describing what you want your students to be able to do. What do you want them to *remember, understand, apply, analyze, evaluate,* and *create*? In the English department's popular "Shakespeare for Non-Majors" course, for example, I might want my students, by the end of the semester, to be able to *recall* the important themes of the plays we have read (*remember*), *distinguish* how those themes differ from one play to the next (*understand*), *examine* where such themes occur in plays (*apply*), *illustrate* how these passages from the plays develop those themes (*analyze*), *interpret* what we can conclude once all those themes are put together, and *write* that interpretation in clear, persuasive prose (*create*). Once I have defined in this way what I want my students to learn, I have just clarified the purpose of my course much more artfully and cogently than if I say "this course teaches students to comprehend and appreciate Shakespeare."

Where devising learning outcomes gets truly interesting is on the level of the department, college/school, and university. In such an exercise, I and my colleagues in the English department, for

¹ Lorin W. Anderson and David R. Krathwohl, ed., *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives* (New York: Longman, 2001).

example, would ask not what a student should learn from individual courses, but rather what an English major should know and be able to do by the time of graduation. And then we would get into the true work of thinking about learning outcomes. How is our department's curriculum supporting or not supporting those goals? Are our courses sequenced correctly? Will students be making their way toward those goals on every level of coursework, from the gateway course to the senior seminar? How is our discipline distinguishable in its learning outcomes goals from other disciplines? How does a degree in English differ from one in history or communication? This kind of examination isn't easy, but it is truly intellectual work that allows us to see our teaching as more than a scattershot collection of individual faculty styles and aims, and our majors and minors as more than a collection of different types of courses.

The same holistic view becomes available when colleges/schools, and the entire campus, define their own set of learning outcomes and see how departments' goals mesh with the college's/school's and with CU Boulder's. The campus's statement of learning goals for our undergraduate students is as follows:²

Baccalaureate Graduates of the University of Colorado Boulder will be able to:

- Think critically, comprehensively, and creatively about texts, artifacts and problems
- Communicate clearly in written and oral forms for various audiences
- Understand and apply high ethical standards to all endeavors
- Formulate and investigate research, creative work and open-ended questions
- Sustain complex arguments with appropriate evidence
- Locate, evaluate and apply relevant evidence and technologies to solve problems in their disciplinary areas of study
- Understand and appreciate multiple historical and cultural viewpoints in their social
- contexts
- Work collaboratively and individually
- Solve problems even with ambiguous, contradictory and controversial information
- Participate in lifelong learning for professional and personal development
- Contribute actively as civically literate citizens of the community, the state and the world

How do we know whether our students have achieved these goals? Learning outcomes are tied to the activity of assessment, something that is mandated by every accrediting agency to which our campus reports. Faculty have mastered the work of assessment on the course level—that's what all those assignments and grades we give are all about. Assessment by individual faculty members also happens more informally, as we check in with our students about how well they are grasping and applying what they're learning. On a departmental or college/school level, however, assessment requires a different set of tools and measurements. Such measures can be direct evaluations of student accomplishments, such as a standardized exam or an external evaluator's review of student portfolios. Or they can be indirect evaluations, such as those provided by students themselves when they complete an exit survey at the end of their degree program.

What do we as faculty and CU Boulder as an institution get out of the admittedly huge expenditure of thought and time involved in articulating and assessing learning outcomes? On the campus level, what

² <u>https://www.colorado.edu/academicaffairs/sites/default/files/attached-files/academic_policies-1.pdf</u>

we get is a chance to improve our curricula and our teaching. The learning outcomes exercise is worth our while only if we use it to create an iterative loop of improvement. We discover what we're doing less well than we'd like, and we figure out how to do it better. And in addition to defining our own disciplines, as I mention above, articulating learning outcomes can also help us see cross-departmental and cross-campus commonalities and connections that we may not have noticed before. If, say, both the Geography department and the Media Studies department want their students to be able to evaluate how world populations are portrayed in news and social media, the two departments might see opportunities for their students to learn from each other's courses. Applying this process to graduate education can provide the same kinds of benefits. For example, thinking about learning outcomes can help us distinguish better between the goals of a master's degree and those of a professional master's degree. Such an exercise might help justify and strengthen current graduate programs as well as help make the case for new graduate degrees.

On the broadest scale, defining learning outcomes and assessing our students' accomplishments gives us the chance to be masters of our own academic futures. Our choice is stark. We can let accrediting organizations such as the Higher Learning Commission (HLC), which reviews CU Boulder every ten years, impose their cut-and-dried templates of assessment upon us. Or we can show how our assessment procedures and routines are driven by the faculty's own vision of what our students should learn. In the latter case, the faculty's intellectual and academic aims for our students are front and center. In an era in which credentialing and "product" have (unfortunately) become watchwords of higher education, we can establish our bona fides based on our own mission for teaching rather than on some less applicable idea of what higher education is "for." As a research university, CU Boulder is especially on the hot seat for demonstrating our commitment to quality teaching, and we're better off if we can show that commitment in writing and have the data to back it up.

CU Boulder's next HLC review will be completed in 2019-2020, meaning that "learning outcomes" will have to be on our minds in the next several years whether we like it or not. As "Quality Initiative Leader" in the Office of the Provost—a position title devised, I hasten to add, by the HLC, not by anyone at CU Boulder—I am helping to marshal the campus accreditation process. In this role, I have been working to integrate the development of learning outcomes and regular assessment into the process of program review (ARPAC), so that every degree-granting unit will be ready, in time, for what is coming down the pike from our campus's accrediting agency. I am happy, however, to help any department or program with this process, no matter how far away its next program review may be. In addition, the Vice Provosts for Graduate Education and Undergraduate Education, Ann Schmiesing and Mary Kraus, have just spearheaded the hiring of a new Assessment Coordinator to help units devise and carry out assessment. Departments and programs will have the support they need to make this process work. The faculty's first task, however, is to understand how to make it *work for us*.