



A Case for Inefficiency in Higher Education

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For the past several decades, critics have been decrying the corporatization of higher education. They bemoan the metamorphosis of American colleges and universities from intellectual communities of learning and discovery to businesses with customers and bottom lines. Instead of being viewed as an opportunity to learn and grow both intellectually and personally, these critics lament, education is being marketed and sold as a commodity. Just look at the obsession with measuring the "return on investment" of higher education, they say.

They have a point.

Universities increasingly are focusing on majors that are deemed "marketable," such as engineering and computer science, while eliminating humanities majors, such as history and philosophy. They are emphasizing the bottom line rather than focusing on how to provide the most meaningful educational experience to students. And they are focused on the product: a piece of parchment that provides proof that students are qualified for a particular job rather than a well-rounded education that prepares students to be engaged, thoughtful citizens of the world.



Is higher education becoming more efficient as a result of these shifting priorities? In certain aspects, absolutely. Many universities have identified ways to control their costs and improve operations. But as former Stanford administrator and president emeritus of the Association of American Universities Robert M. Rosenzweig wrote, "The values of the market are not the values of the university." To maintain their mission, universities cannot be managed solely with the goal of corporate efficiency, and not all decisions can be based on whether their associated outcomes increase revenue.

In fact, many of these so-called efficiencies endanger the invaluable, inherent mission of higher education: the pursuit and expansion of disciplinary and interdisciplinary knowledge, truth, research, and learning. At Southwestern University, this vision for higher education is mirrored in our mission, which states, in part, that we are "committed to an undergraduate liberal education involving both the study of and participation in significant aspects of our cultural heritage, expressed primarily through the arts, the sciences, the institutions, and the professions of society."2 In other words, we strive to provide individualized education to help our students become better citizens and contribute to the well-being of humanity.

When you myopically focus on efficiency, you lose sight of the bigger picture and greater purpose of higher education. It is not about how quickly we can print out those diplomas. In reality, efficiency can be less effective and detract from the quality of students' educational and co-curricular experiences. If the purpose of higher education is to offer a life-en-

riching opportunity that empowers students to think, create, make meaning, and lead fulfilling lives, then to deliver that experience, one requires inefficiency.

For example, at an "efficient" institution, faculty (and graduate students) teach lecture classes in uninviting auditoriums to several hundreds of students sitting in the dark. These large lectures often constitute more than half of a student's course load in the first and second years of undergraduate study.

A high student-faculty ratio and large class sizes decrease costs and increase efficiency. Of course, such a system is profoundly ineffective. Students are intimidated, overwhelmed, and do not build a mentoring relationship with their instructors or even take advantage of office hours. In such classes, students are passive observers (assuming they are paying attention), and there usually is no opportunity for active or discovery learning. Instructors do not know their students, who can easily "hide" in the back and enjoy the technological distractions of their texts, emails, and social feeds. Such large lectures can also fail to support diverse types of learners. Opportunities for personal and intellectual growth through the subject at hand are close to nil.

At Southwestern, we embrace a different approach. Our student-faculty ratio is 12:1, with an average class size of 18, and 60% of academic classes have fewer than 20 students.³ All tenured or tenure-track faculty hold a doctorate or the highest degree in their respective fields; we do not have graduate programs, so we do not rely on graduate students to play the role of professors.

As a result of these smaller, far less "efficient" class sizes, courses are studentcentered rather than instructor-centered. Socratic dialogue and active learning around a table, which challenge and expand student thought, are the norm rather than the exception. Our faculty know all their students, helping students recognize their individual strengths, interests, and needs and develop their passions through effective collaboration and personalized education. Students are better able to understand more deeply and find greater meaning in the ideas at hand because they are warmly welcomed into the discipline and truly engaged.

Southwestern professors listen to their students and adapt their teaching accordingly. It is not uncommon for them to throw out a planned lesson for the day when students come to class with specific questions they are considering or new approaches they want to test. Students are active participants in their education at Southwestern. This kind of personalized attention helps our students have more ownership of, investment in, and accountability for their own learning processes and intellectual growth.

"Efficient" universities have not only large class sizes but also large student bodies. This reality means academic advising is more pro forma and transactional (and often online)—as if you were working with a financial advisor about a tax audit. At Southwestern, advising is intentionally inefficient in that it is personalized. The student-advisor ratio is 12:1.4 Advisors and students are matched based on major field of interest and individual characteristics (e.g., first-generation status, shared nonacademic interests, or similar backgrounds). Advisors foster and advance students' academic potential by helping them make connections among classes, experiential learning, and co-curricular programming, as well as challenging students to move out of their intellectual comfort zones.

¹Robert M. Rosenzweig, The Political University: Policy, Politics, and Presidential Leadership in the American Research University (Baltimore: Johns Hopkins University Press, 2001), 209.

At Southwestern, academic advising is a two-way street. Students meet with their advisors before they register for courses each and every semester. But they do more than check a task off a list when they engage in these conversations. They are expected to develop a collaborative relationship with their advisors. In fact, just as with our courses, there is an academic advising syllabus that describes the expectations for both the student and the advisor. These expectations include bringing questions to the meeting as well as sharing personal and professional short- and long-term goals. Through this dynamic and ongoing relationship, students are better able to navigate their academic careers and take better and wiser ownership of their futures.

Although we pride ourselves on so many of these inefficiencies in how we teach that make our students' educations more personal and meaningful, we are equally proud of the practical nature of what we teach. At Southwestern, our liberal arts curriculum is rooted in classical antiquity. In *De Oratore*, Cicero used the term

artes liberales to refer to the skills, crafts, and arts of citizens and freemen.⁵ In the Roman Republic, the liberal arts were the skills needed to be an effective, informed, voting citizen; they remain so today. A liberal arts education has long been valued for contributing to lifelong learning, enhancing and ennobling the human spirit, and helping individuals achieve a rich inner life. Of course, the liberal arts have historically included both literacy and numeracy: As early as the fifth century, the "seven liberal arts" comprised the *trivium* (i.e., grammar, dialectic/logic, and rhetoric) and the

quadrivium (i.e., music, arithmetic, geometry, and astronomy).⁶ At Southwestern today, the liberal arts similarly include the natural sciences, the humanities, the social sciences, and the fine arts.

While there is little agreement among researchers on how much automation and artificial intelligence will affect the workforce, scholars have argued that liberal arts graduates are better prepared for the inevitable future disruptions. Liberal arts majors are trained in understanding human behavior and can provide the human context in any situation, such as applying ethics to big data. They also are well versed in both cognitive competencies, such as problem-solving and communication, and noncognitive competencies or behaviors, such as collaboration and empathy. You might say that liberal arts majors are especially adroit at creativity, complexity, and thinking effectively.

It is easy to find examples of Southwestern humanities graduates who exemplify these intellectual traits. Rebecca Skinner '96, who majored in international studies and French, founded the International School of Brooklyn and is now associate head of school at the Dwight School Dubai. Fellow international studies major Madge Vásquez '94 is now CEO of Mission Capital, which provides support to nonprofits, startups, and individuals working to address inequity and complex social issues. Shau-

na Davidson '08, who received her degree in anthropology and studio art, co-founded the Nahla Nursery and Primary School in Orit Barpunu, Uganda. Southwestern is dedicated to doing the "inefficient" work of enhancing our students' lives through a liberal arts education.

Research is messy, time consuming, and sometimes costly; that winding path of discovery often defies the very definition of "efficient." But at Southwestern, we strongly encourage the research interests of our students. Through our Summer Collaborative Opportunities and Experiences (SCOPE) program, students spend eight weeks conducting research full-time alongside a faculty mentor. Our faculty-student research projects include collaborative research, faculty-supervised research, and intensive projects in the arts, music, and theatre. The King Creativity Fund supports students who are pursuing innovative and visionary projects, whether it's the design and creation of a new work of art or the desire to tackle an old problem in a new way.



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When Southwestern students are ready to showcase their hard work, they can present it at the annual Research and Creative Works Symposium. If they're presenting their research at a regional or national conference, they can apply for a grant from the Fleming Student Travel Fund to help cover their expenses. Our ongoing support ensures Southwestern students become independent researchers and creators of new ideas who take ownership of their own inquiry. They articulate significant, previously unexplored questions and test their own hypotheses, making original contributions to their fields.

As colleges and universities across the country become more corporatized and more "efficient," the degree is being recast not as a mark of distinction in acquiring knowledge, engaging in scholarship, and growing intellectually but rather as a mere credential necessary to embark on a first career. If we really want to develop the great original thinkers of tomorrow—if we want our students to become not just cogs in the corporate machine but true leaders, imaginative innovators, and responsible citizens of the world—we must resist the temptation to operate as corporations and remember the essential role universities play in creating a just and thriving society.

⁸Meilee Bridges, "Mission: Possible," Southwestern University, February 7, 2019, https://www.southwestern.edu/live/

news/13142-mission-possible

⁵Marcus Tullius Cicero, *De Oratore* (Cambridge: Harvard University Press, 1967), I.xvi.72-73.

⁶John Henry Newman, *Rise and Progress of Universities and Benedictine Essays* (Leominster: Gracewing-University of Notre Dame Press, 2001), 203.

Dr. Edward Burger is the president and a professor of mathematics at Southwestern University as well as a thought leader in education and creative thinking. He is the author or coauthor of more than 70 publications and video series, including the bestseller *The 5 Elements of Effective Thinking* and *Making up Your Own Mind: Thinking Effectively through Creative Puzzle-Solving*. He has delivered more than 700 addresses worldwide and is the recipient of more than 25 awards for his work in mathematics and education. His weekly podcast, *Higher Ed*, is produced by NPR's Austin affiliate, KUT.

Southwestern University is a nationally top-ranked private liberal arts and sciences undergraduate institution in Georgetown, Texas. Founded in 1840 as the first institution of higher education in the then-Republic of Texas, the university offers a rigorous and interconnected academic curriculum that integrates the fine arts, humanities, natural sciences, and social sciences. Through transformative experiences such as active learning, internships, community-engaged learning, and award-winning faculty-mentored undergraduate research, Southwestern students learn to advance the frontiers of knowledge, adapt quickly to change, create new ideas, and problem-solve complex challenges, preparing them not just for 21st-century vocations but more profoundly for lifelong learning.



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