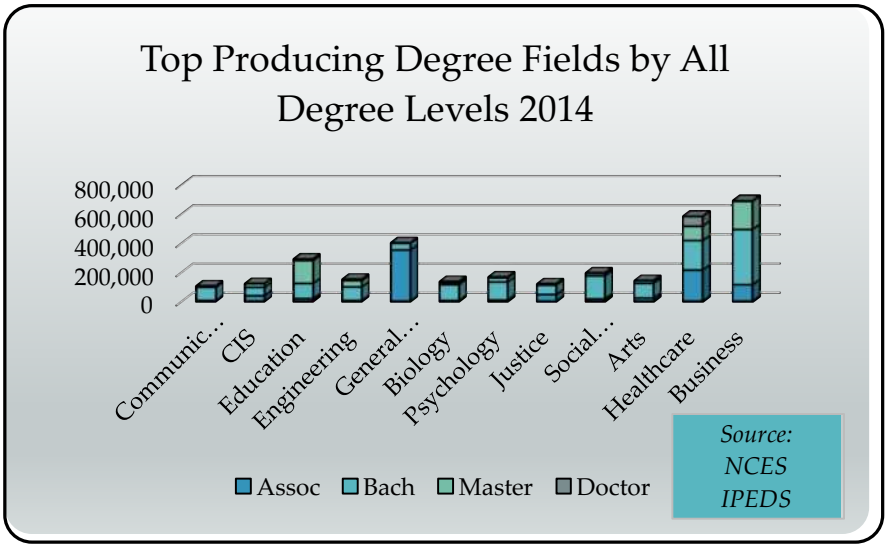
SYNERGIS EDUCATION

Strangers in a Strange Land: Instructional Design and the Academy

A recent report from the Chronicle of Higher Education[i] provides some interesting survey results regarding instructional design and its place in higher education. While the use of instructional design theory and professional designers has been given a boost by both the emphasis on outcomes assessment and the growth in online and hybrid delivery systems, it is clear that the dominant culture of the academy has not completely embraced instructional design (ID) and instructional designers (ID's), suggesting a continuing disconnect between what students need and what institutions provide.

Contemporary trends in higher education represent a shift in educational objectives for a majority of students. While the more "traditional" college experience still exists—and here I refer to the experience of a full-time residential student pursuing study with a firm basis in the Liberal Arts combined with a major that may or may not connect directly to an employment field—this is an increasingly elite phenomenon that does not represent the experience of the majority of students, who are "non-traditional" in their characteristics and largely career-oriented in their educational focus.



In addition to a stress on career preparation, we also see increased expectation for efficiency in delivery and outcomes. Demographic, technological, and cultural trends have increased the need for more sophisticated instructional design in higher education, particularly as the use of online and hybrid delivery modalities grow. The new *Chronicle* survey identifies these characteristics as factors creating a greater need for instructional design in higher education:

- The impact of technology—widespread access to personal computers, tablets, smartphones and the Internet make these technologies both familiar and expected elements in student learning.
- A growth in underprepared students—as access to higher education expands, so, too, do the numbers of students exhibiting some academic deficiencies, which in turn calls for new educational strategies.
- A growth in students with diverse background—which introduces differing approaches and opinions regarding the educational experience.
- The recognized presence of diverse learning styles—which is a product of psychological and educational research on the learning process as well as the expanded diversity of students.
- The recognized presence of learning disabilities—which reinforces the need to incorporate different approaches and technologies in the learning process.
- The drive in higher education to improve outcomes and reduce costs. (p.6) [ii]

Particularly at a point in time when there are widespread doubts about the benefit of higher education and skepticism regarding its cost and its benefits, we would assume that a structured approach to design, delivery and evaluation would be a major part of the academic life of colleges and universities.

Faced with these challenges and expectations, the field of instructional design (ID) has a real contribution to make to higher education. It's a scientifically-based approach to instruction and the use of technologies to support it.
Instructional design has these elements:

- an analysis of learning and performance problems,
- the design, development, implementation, management and evaluation, and management of a broad spectrum of processes and resources intended to improve learning and performance,
- designed for a number of settings, with a particular focus on educational institutions and the workplace.[iii]

As such, we would expect that ID should form a major part of curriculum and course design in higher education today. Particularly at a point in time when there are widespread doubts about the benefit of higher education and skepticism regarding its cost and its benefits, we would assume that a structured approach to design, delivery and evaluation would be a major part of the academic life of colleges and universities.

But ID is a relatively new phenomenon for the academy. Based in part on the scientific management movement of the early twentieth century, ID began to come to the fore during the Second World War, when the need to provide efficient and effective training for large numbers of people was a priority. In the decades that followed, continuing emphasis on developing more effective means of instruction, combined with the emergence of new technologies to assist, led to the development of ID as we know it today.[iv] But the recent nature of ID's development as compared with the medieval roots of the modern academy, combined with its roots in military

and business training, means that the field of ID is a relative newcomer to higher education. It is not simply that ID is a stranger, but that it is also focused on scientific application of principles and their measurement. As such, it strikes some in the academy as the antithesis of the more "holistic" developmental approach assumed to occur within a traditional liberal education. So ID is not merely a stranger, it is a stranger in a strange land.

The *Chronicle* survey reinforces the idea that broad acceptance of ID still has some way to go in higher education. The survey shows, for instance, that ID is largely focused on newer delivery modalities, despite its broad applicability to the educational process. The survey finds that ID's work with

- 96% of faculty in online courses
- 57% of faculty in hybrid courses
- 37% of faculty in ground-based courses (p.8)

In addition, we note a tendency for ID activity to be more heavily present in non-science and technical areas. The use of ID by discipline is as follows:

- Humanities 81%
- Social Sciences 79%
- Professional Schools 65%
- Biological Sciences 63%
- Computer Science 58%
- Physical Sciences 52%
- Engineering 37%
- Other 26% (p.9)

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So at a time when student performance is a concern in STEM areas, we find that the use of ID in this area lags use in other disciplines—ironically, the most "scientific" of areas appear the most resistant toward applying scientific principles to instruction.[v]

The ID-Resistant Academy

The survey suggests, despite the growth in ID and ID's, that there is still significant need for greater appreciation for and use of ID in course design and delivery. Part of the disconnect may be that most college professors are comfortable with more "traditional" approaches to teaching and learning. They have been successful in school—so successful that they have, in effect, never left. As a result, they "get" their subjects almost instinctively and have difficulty understanding why others—that is, the majority of students—don't. Rather than explore alternative methodologies for communicating, the tendency is to lay blame with student under preparedness, lack of motivation, etc. It is telling that the survey reports that for faculty who

have used ID's and ID, only 40% believe that the end result was better than they could have done alone (p.21). Note that the metric used for measuring effectiveness here is faculty opinion, not student outcomes, a fact that reinforces a certain solipsistic tendency in the academy.

This is worth exploring for all of us committed to seeing higher education thrive. As an anthropologist by training, I take a cultural approach to understanding the dynamics that have shaped the academy. As a result, I consider the experiences and formative conditions that have effected college faculty to be vitally important, since they play a critical role in perpetuating the culture of higher education.

Higher education is the realm of experts. Discipline-based knowledge sets are valued above all in the academy. This leads to a "pure" academic focus that reflects the interests of faculty, not students. However valuable the professorate is, we have to acknowledge it is an elite group with a minority perspective on higher education. In 2013/14, doctoral degrees made up only 6.3% of all college degrees awarded.[vi] College teachers, then, are drawn from a tiny segment of the graduating population in higher education. They have excelled in their studies and have experienced professional success and personal validation through the traditional system.

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Consider:

- A Self-Replicating Experience—the traditional system in higher education has both shaped college instructors and validated their exceptionalism. It is what they are familiar with, it is what they value, and it, in turn, labels them as experts. It worked for them—they are the minority that "get" and enjoyed school—and they see little reason to change it. They relate most strongly to people like themselves, and the educational system is designed to reward the characteristics they exhibit.
- Narrow Gates, not Wide Open Doors—education is perceived of as a winnowing and sorting tool that is meant to form part of the creation of a minority of highly trained specialists. As a result, a stress is placed on a student's ability to navigate the system as it is, not adapting the system to assist the student.
- Content Knowledge is King – professors are masters of specific knowledge domains and all their training is oriented around knowledge acquisition and demonstration. With very few exceptions, they are not trained in methods designed to assist others to gain such mastery—that would, in fact, throw the doors of the guild wide open.

Little wonder, then, that the power of instructional design appears to be both misunderstood and underappreciated in the academy. In the Chronicle survey, only 48% of ID's say they have effectively persuaded faculty of the power and potential of instructional technology in teaching and learning, and only 34% have persuaded leadership of the power and potential of

technology in teaching and learning (p14). Indeed, almost two thirds (62%) of ID's feel that others on their campus don't really understand what they do (p.15).

Even in the area where we see the most extensive use of ID and ID's—online learning—the academy still appears somewhat skeptical. Only 36% of faculty say work with ID's helped them to efficiently adapt course materials for online efforts (p.21). And despite available data[vii], 50% of faculty say that online education is not as valuable as other modalities (p.27). Finally, the survey suggests that faculty want to adopt instructional technology "…that doesn't complicate their jobs or infringe on their expertise" (p.29).

And here we approach the heart of the problem.

Structural Misalignment

There is a type of misalignment that exists in the academy between the preparation faculty receive and the expectations they hold on the one hand, and the realities of a teaching career and the needs and expectations of students on the other.

For some elite students fortunate enough to have the ability to thrive in a traditional university model (as well as the financial wherewithal to afford it) there is no problem. But for the large majority of college students, their expectations and needs are different.

While disciplinary expertise is a vital hallmark of higher education, this knowledge set is not enough for a professional educator. Knowing how to communicate knowledge and measure competencies is as valuable as is the knowledge itself. For most Ph.D.'s however, their training is largely devoted to knowledge acquisition that is research-oriented. Training in the skills of teaching is largely an afterthought. The assumption is that newly minted scholars will "learn as they go." Students are essentially thought of as lab rats. Some will do well; others will not. It's a phenomenon to be observed, not a condition to be changed.

At a time when large swaths of the public are clearly skeptical of the benefits of higher education and its ability to demonstrate concrete learning outcomes that justify its escalating expense, I'd say that this is an attitude that is not only ethically wrong but also poses a threat to the long-term viability of the academy.

I will acknowlegde that ideas about higher education and its purpose are varied, something pointed out decades ago when Clark Kerr coined the phrase "multiversity."[viii] This might suggest that the status quo is fine. For some elite students fortunate enough to have the ability to thrive in a traditional university model (as well as the financial wherewithal to afford it) this

may be so. But for the large majority of contemporary college students, their expectations and needs are different.

It's Not About Us, It's About the Students

Thus we have a real misalignment in higher education between public expectations and the academy's approach. For starters, there is the fact that there are divergent ideas about what higher education is for. Colleges and Universities are almost universally designed along a model that assumes students are interested in an intellectual adventure focused on traditional disciplinary studies. While this is nicely aligned with faculty interests and the idea of the university as an entity focused on advancing and spreading abstract knowledge, it is not well aligned with the majority views of students.

Most students conceive of college differently. No doubt they appreciate some intellectual adventure and the chance to explore different fields of study. But when push comes to shove, their degree preferences have a decidedly "applied" bent. In 2009 63% of bachelor's degree holders over 25 had degrees in fields closely linked to employment: science and engineering, business and education.[ix]

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Put simply, student consumers in higher education are largely focused on the linkage between college study and careers. Their educational paradigm is an instrumental one focused on what study can do *for* them, not *to* them. And this suggests that the challenge that lays before us is one in which we in the academy acknowledge this and adjust our approaches and our opinions. The academy needs to be a place that acknowledges and respects a variety of interests and desires on the part of learners. A small minority will be well suited to more traditional educational models and pursue advanced study. Today however, most students are seeking access to a higher education experience that may lead to an enhanced sense of self and the world, but most importantly will provide them with a clear path to a career.

This suggests that ID has an important role to play in making education more accessible and more effective for larger numbers of students. The implication is that faculty must come to see themselves as more than a cadre of self-replicating disciplinary experts, but expand their vision of their role as one that is oriented toward assisting students acquire knowledge and skills that will stand them in good stead throughout their lives, using whatever tools are at hand.

This involves moving outside an academic comfort zone, acknowledging that expertise in one area does not mean expertise in all areas, and the embrace of scientific techniques in

instructional design that can move the educational enterprise forward. Strangers often see things differently than we do. Sometimes, that's a good thing.

The Author

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[i] Rubley, Julie Nicklin. 2016. Instructional Designers in Higher Ed: Changing the Couse of Next-Generation Learning. Washington DC: The Chronicle of Higher Education. http://results.chronicle.com/instructionaldesigners

[ii] In the text, parenthetical page numbers refer to the Chronicle survey cited above.

[iii] Reiser, R. A. (2001). A history of instructional design and technology: Part II: A history of instructional design. *Educational Technology, Research and Development*, 49 (2), 57-67.

[iv] See Shrock, S. A. (1995). A brief history of instructional development. In G. J. Anglin (Ed.), *Instructional technology: Past present and future* (Second ed., pp. 11-18). Englewood, CO: Libraries Unlimited Inc.

[v] The situation may be more complex than that. Instructors in these hard science and quantitative disciplines may not perceive a need to abandon traditional instructional techniques. This may be because, in an environment where Americans in general perform poorly in hard science and quantitative disciplines, only students who "get" these subjects pursue them beyond the introductory level. The instructors are, in effect, preaching to the choir, teaching to students who think much as they do. As such, there is little perceived need to adapt new approaches.

[vi] See the data from the National Center for Education Statistics https://nces.ed.gov/programs/digest/d15/tables/dt15_318.30.asp

[vii] See Means, Barbara, Yukie Toyama, Robert Murphy, Marianne Bakia and Karla Jones. 2010. Evaluation of Evidence-Based Practices Online Learning: A Meta-Analysis and Review of Online Learning Studies. Washington DC: US Department of Education. https://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf

[viii] Kerr, Clark. 2001. The Uses of the University, Fifth Edition Cambridge Massachusetts: Harvard University Press.

[ix] US Census Bureau. https://www.census.gov/prod/2012pubs/acs-18.pdf