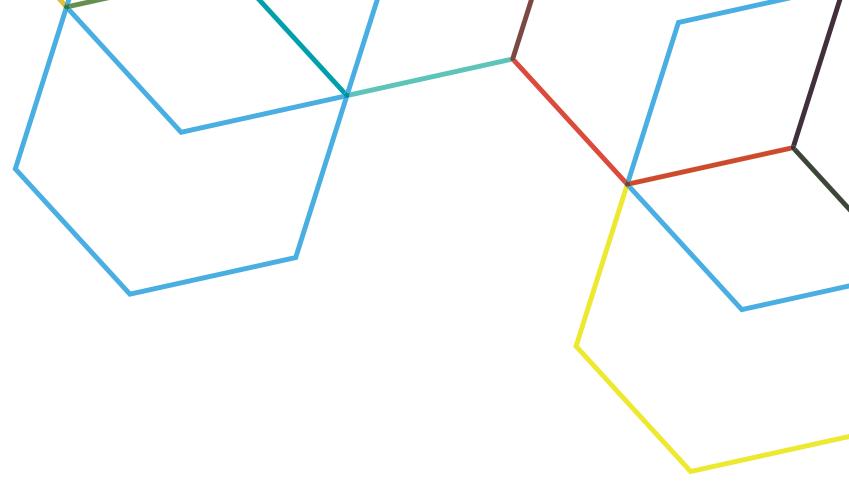


APRIL 2016

Instructional Design in Higher Education

A report on the role, workflow, and experience of
instructional designers



Introduction

Learning — to some it is the sound of chalk on blackboards, the search through stacks of scribbled notes, and backpacks full of heavy textbooks. For others with a less traditional lens, learning is the summoning of professors with a click of a mouse, assignments no longer living on paper, but in a cloud, and the ‘classroom’ being everywhere. Education has changed considerably in recent years and we don’t expect it to slow down anytime soon.

Because of the advancement of technology, institutions are able to reach more students than ever with the help of quality and accessible online courses. ‘eLearning’, ‘distance education’, ‘blended learning’, ‘online campuses,’ and other related programs have grown more prominent in higher education institutions. According to NCES data, there were 5.5 million students enrolled in distance education courses at degree-granting postsecondary institutions in fall of 2013.¹

There are many technologies flooding the market that help foster innovative teaching and learning. These tools, such as learning management systems, lecture capture systems, simulation creators, authoring, and video and audio tools, have flooded into the classrooms and lecture halls of higher education. However, the inference that these innovative tools aid learning should not be immediately assumed. With faculties’ full work load, learning and implementing new and often complex tools to improve their online pedagogy isn’t a priority. In fact, as the needs and tools of institutions have evolved, instructional designers have positioned themselves as pivotal players in the design and delivery of learning experiences. Instructional designers exist to bridge the gap between faculty instruction and student online learning. But who, exactly, are instructional designers? What do they do? Where do they fit in higher education?

In connection with the [Next Generation Courseware Challenge](#) from the Bill & Melinda Gates Foundation, we set out to find answers to these questions to help technology providers and institutions gain a better understanding about how instructional designers are utilized and their potential impact on student success.

In this report, we highlight the opinions instructional designers have of their backgrounds, experiences, and roles. We hope it lends a voice to their breadth of backgrounds, responsibilities, and viewpoints. This report, and the accompanying recommendations for change, can help you gain new insight and empathy for the potential of instructional design to accelerate effective innovation in higher education.

Acknowledgments

For making this possible, we’d like to thank first and foremost the many instructional designers who advised and participated in this research. Special thanks also goes to: the [Bill & Melinda Gates Foundation](#) for funding and encouraging our exploration; the [Acrobatiq](#) team for identifying this need and providing sage advice throughout the process; countless folks from the [Next Generation Courseware Challenge](#) grantee community; and the [Online Learning Consortium](#), [EdSurge](#), [The New Media Consortium](#), and [EDUCAUSE Learning Initiative](#) for all their advice and help in dissemination. Lastly, we’d like to thank Jack Horne for his help in analyzing our quantitative survey results.

This report is based on research funded in part by the Bill & Melinda Gates Foundation. The findings and conclusions contained within are those of the authors and do not necessarily reflect positions or policies of the Bill & Melinda Gates Foundation.

¹<https://nces.ed.gov/fastfacts/display.asp?id=80>

Summary of Findings

Instructional designers number at least 13,000 in the U.S alone.

Taking into account the difficulty of reaching people who identify as instructional designers and those who do the same job without that title, this number may be lower than the actual count. Although a conservative estimate, 13,000 speaks to their current presence on campuses.

They are highly and diversely qualified. Instructional designers are far from one-size-fits-all and bring a wealth of knowledge and experience to the table.

- 87% of respondents have masters' degrees, and 32% have doctoral degrees
- 87% of respondents have 3 to 11+ years in instructional design, 57% have 3 to 11+ years teaching in higher education, and 53% have 3 to 11+ years in technology development

Contrary to popular belief, they do more than just design instruction.

Instruction. There is a misconception that instructional designers are just glorified IT personnel who simply move courses online. Survey respondents described performing widely varied tasks day-to-day.

- Only 20% of respondents report creating new online courses and 17% report transitioning face-to-face courses to a learning management system multiple times a day
- 73% of respondents manage projects at least once a day
- 60% of respondents train someone in technology and 49% train someone in the use of online pedagogy at least once a day

Most instructional designers have four categories of responsibilities:



1. Design instructional materials and courses, particularly for digital delivery



2. Manage the efforts of faculty, administration, IT, other instructional designers, and others to achieve better student learning



3. Train faculty to leverage technology and implement pedagogy effectively



4. Support faculty when they run into technical or instructional challenges

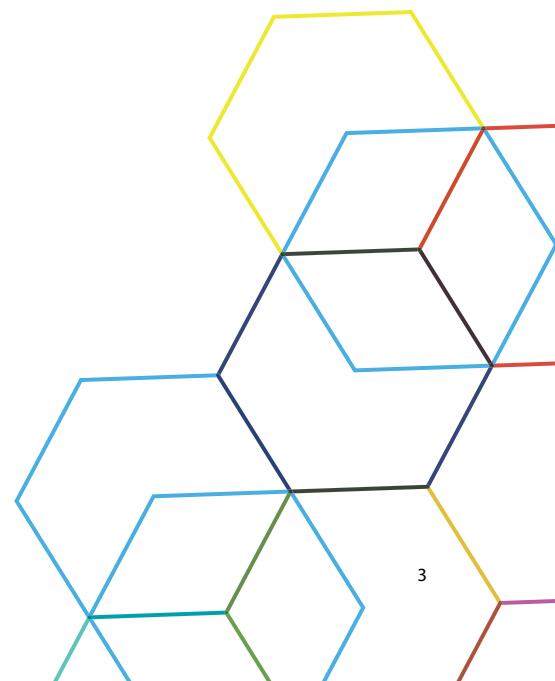
Above all, they struggle to collaborate with faculty. Difficulty in working with faculty is the number one barrier to success.

- Lack of time and resources were the next two most common concerns
- The lack of buy-in from faculty is thought to stem from a misconception about how online learning works:

"[T]he myth of online learning operating like a crock pot—set it and forget it—creates constant tension when I push instructors at all levels for the all-important engagement piece of teaching and learning."

One thing is certain: instructional designers are dedicated to improving learning with technology. Respondents declared their primary goal is student success. They said that doing whatever it takes to improve student learning outcomes is their job; they just want the support of administration and faculty to fully realize their capacity to improve the teaching and learning experience.

With this in mind, we hope this report furthers your appreciation for the complex work of instructional designers and the potential change that they can bring to higher education.



Methodology

We set out to understand the role of the instructional designer because there is so little public awareness of them. Due to this lack of awareness, our survey and analysis methods targeted places where people were already using the title and identified instructional design as a field.

Canvassing & Survey Design

We began by exploring publicly available resources and interviewing instructional designers. The survey was created using Survey Monkey based on preliminary research, as well as interviews of instructional designers and external knowledgeable partners.

Survey Dissemination

We distributed the survey to hundreds of individuals working in the field via professional organizations, listservs, and social media groups. Those that we know disseminated this to their communities include:

- Several Next Generation Courseware Grantees
- Online Learning Consortium (OLC)
- EDUCAUSE Learning Initiative (ELI)
- New Media Consortium (NMC)

Survey Analysis

To determine target audience, we used the following questions:

- "Do you work in instructional design, instructional technology, course design, or a related field?"
- "What type of organization do you work for?"

These questions allowed us to analyze responses from participants who were or are currently instructional designers and work in higher education institutions.

For closed-ended questions, we primarily utilized Survey Monkey's charts, graphs and tables. In all cases within the report, we've rounded percentages up to the nearest whole number.

With open ended questions, we used Survey Monkey's text analysis software wherever possible to simply communicate which words and phrases were most common in the responses.

For several open ended questions, we categorized responses by hand to obtain clearer and more comprehensive results. We used our best judgement based on read-throughs of all responses to come up with these categories.

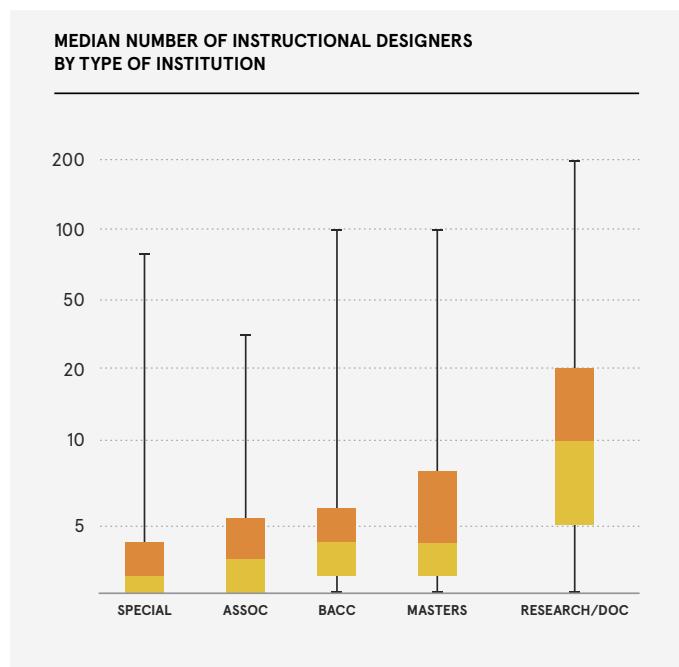
For aggregate results of our survey, please see page 6 in the appendix.

Sizing and Breakdown

We were happily surprised with the 853 total responses we received to our survey 'Instructional Design in Higher Education,' including:

- 780 of whom responded that they both worked for a 'higher education institution' and in 'instructional design, instructional technology, course design, or a related field'
- 586 of whom were based in the United States of America

According to NCES data there are 4,716 degree-granting postsecondary institutions in the U.S. (fall 2013).¹ Our quantitative data estimates there are at least 13,000 instructional designers working at those institutions. Based on our U.S. survey responses, they work at institutions of all shapes and sizes:



These are conservative estimates, broken down by Carnegie Classifications of Institutions. For more information, please see our methodology section on page 2 in the separately linked appendix.

For an in-depth analysis of how we arrived at this estimate, please see our separately linked appendix.

If you have any other questions or feedback about this report, please reach out to research@intentionalfutures.com.

¹https://nces.ed.gov/programs/digest/d14/tables/dt14_317.40.asp

Instructional Design in Higher Education

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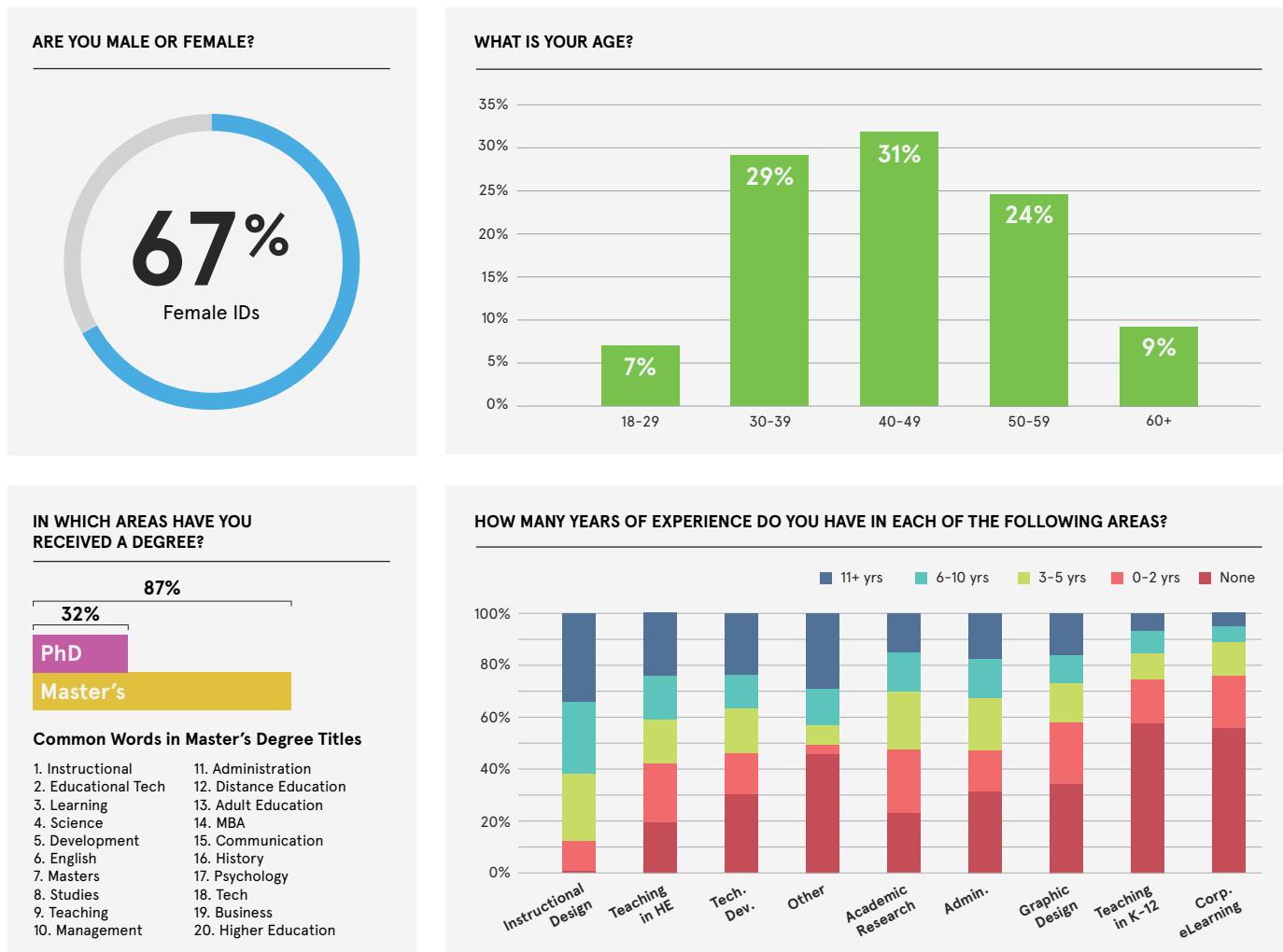
APPENDIX - SIZING &
SURVEY RESULTS

The Instructional Designer

Instructional designers are far from one-size-fits-all. Based on our survey results, **instructional designers are 67% female and their average age is 45.**

Instructional designers tend to be **highly and diversely educated**. For example, amongst those with master's degrees, 72% received a title related to education, including 'Master's in Teaching', 'Instructional Design and Technology', 'Curriculum Development', 'Educational Administration', and 'Library Studies'. A significant percentage studied something else entirely, such as mechanical engineering, aquaculture, divinity, or business.

Many instructional designers have a **breadth of work experience**. Folks emphasized their experience in areas such as web design, libraries, educational publishing, and unrelated fields like computer programming, journalism, architecture, and photography.



Personas

We developed three personas derived from the data we collected to illustrate the breadth of backgrounds and experiences of instructional designers. Entry-level instructional designers represented 14% of the survey population, mid/senior-level and director-level instructional designers represented 72% and 14%, respectively.



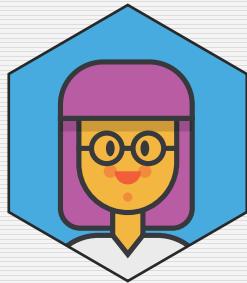
ROMAN
Instructional Designer

"I work with subject matter experts [SMEs] and graphic designers to develop engaging and interactive online content for higher education courses."

AGE
32 years old

INSTITUTION
Fully online non-profit

ABOUT ROMAN
After finishing his bachelor's degree in English, Roman worked for several years as a freelance journalist and graphic designer before returning to school for a master's in curriculum and instruction. Roman recently got a job at a large online competency-based higher education provider as an instructional designer. Never one to like downtime, he just started a PhD in English with the goal of becoming a university professor.



ELLA
Sr. Instructional Technologist

"I offer both one-on-one and group assistance for faculty, helping them implement effective, instructionally sound course design strategies. I also do project management for larger university instructional design initiatives."

AGE
46 years old

INSTITUTION
Public research university

ABOUT ELLA
Ella studied chemistry in college. After receiving her master's in teaching, she put her passion for science education to work for 14 years as a middle school science teacher. Looking for a change of pace, she completed a master's in education technology and has been working for the last 6 years as an instructional technologist in the Learning Technologies team of the IT department in her state's flagship research university. She hopes to continue working her way up to a leadership role.



NINA
Director of Digital Learning

"Our mission is 'partnering with faculty to create effective, engaging, and innovative instruction.' I oversee the instructional design team."

AGE
55 years old

INSTITUTION
Community college system

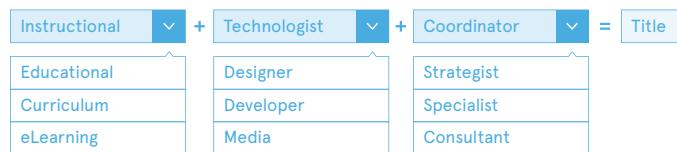
ABOUT NINA
Nina was a psychology major fascinated by the study of how people learn. She completed a PhD in educational psychology, and taught as adjunct faculty for 15 years. While continuing to teach, she completed an MBA, began leading the psychology department, and spearheading initiatives to utilize new technologies for better learning outcomes. Now Nina leads the community college system's Center for Digital Learning, while still occasionally teaching classes.

The Job

Not only have we seen the definition of instructional design differ from source to source, but we've also seen varying job titles between practitioners. The most common title reported was 'Instructional Designer' (49%). But, the remaining titles varied widely and included the likes of 'Instructional Technologist', 'Distance Education Specialist', 'Academic Developer', and 'Online Learning Consultant.'

These titles follow a general formula (represented to the right) with two or three of the following elements: **an education-related prefix, a technical root word, and a descriptive suffixed noun.** As the field of instructional design evolves, we expect that these titles will continue to vary to reflect different responsibilities.

As we have noted, instructional designers wear many hats and their actual duties fluctuate from day-to-day. **We have categorized their responsibilities into 4 roles to help capture the breadth of what they do: designer, manager, trainer, and support.** Instructional designers expressed a strong desire to develop more of a pedagogical supporting presence in all forms of teaching. And, in fact, some instructional designers admitted to "using the LMS [learning management system] as a Trojan Horse to get into a conversation with [faculty] around their pedagogy."



"While my title is 'Instructional Designer', my actual duties vary from day-to-day."

WHAT DO YOU ACTUALLY DO?

DESIGN

DESIGN NEW OR REDEVELOP OLD COURSES

"I design and develop course materials/ideas to support the professor. Whatever they ask, I find a way to accomplish, usually with free software."

AUTHOR INSTRUCTIONAL CONTENT

"I write and design curriculum, both digital and paper, for instructors and facilitators and provide them professional development."

QA TESTER

"I make sure course resources meet accessibility and quality assurance standards."

MANAGE

PROJECT MANAGER

"I provide project management from cradle to grave for the course."

CAMPAIGN FOR INSTRUCTIONAL DESIGN

"I work to promote services and policies for our students and faculty at a distance."

LIAISON

"I work as a liaison between our academic administration, faculty, curriculum designers, and IT."

TRAIN

TECHNOLOGY TRAINER

"I train faculty members on all tools used and the best practices for teaching with those tools."

PEDAGOGY TRAINER

"I teach faculty how to teach in the online environment."

PD EFFORTS

"I develop and deliver professional development courses and programs and coach/mentor new and experienced faculty in course design, curriculum, assessment, active learning, theory and practice."

SUPPORT

LMS GO-TO

"I manage the fast-paced, high volume course management system helpdesk with phone and email constituent requests."

TIMELY SUPPORT

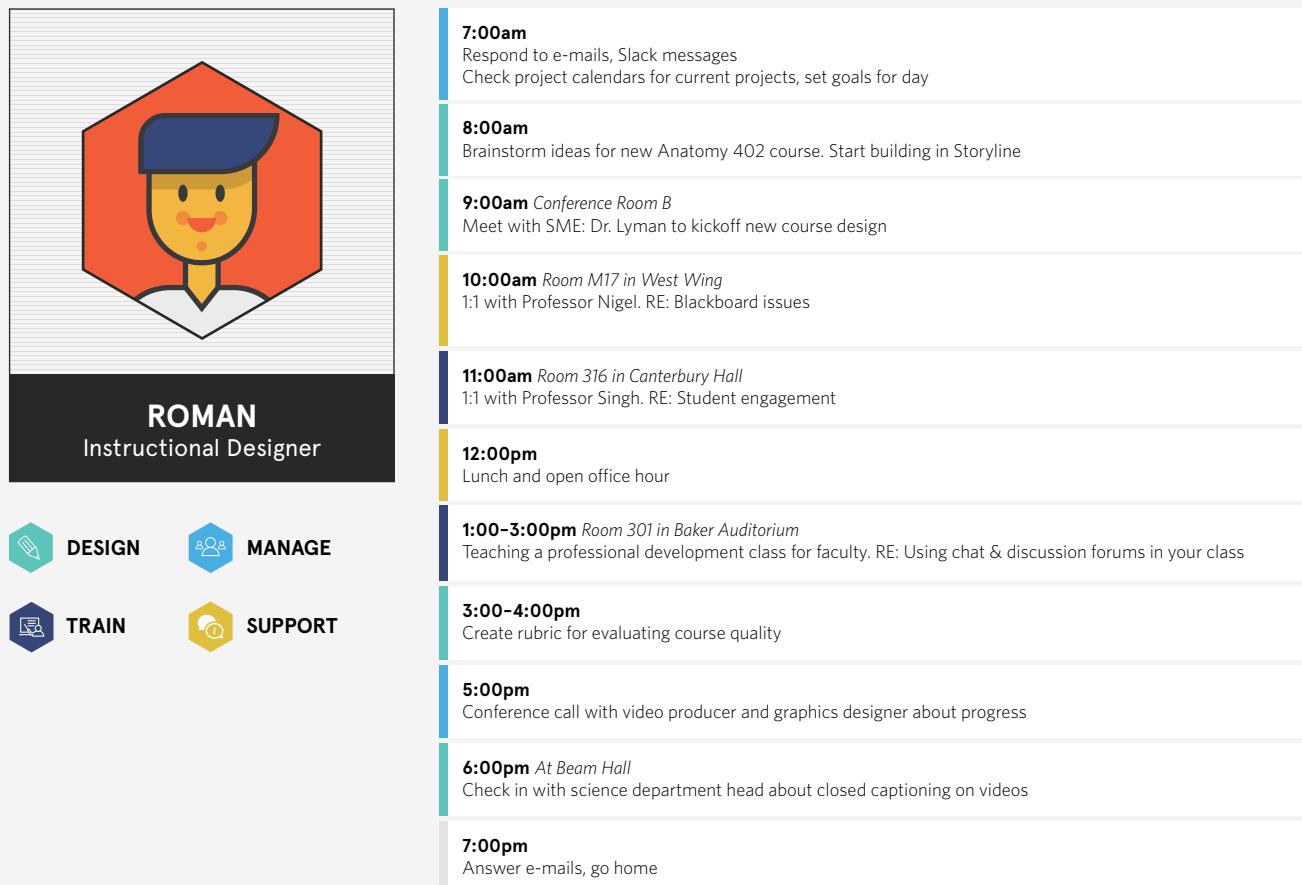
"I offer one-on-one consults for [faculty] looking to resolve anything from technical problems to instructional challenges that can be met using educational technologies."

MIGRATE FACE-TO-FACE COURSES

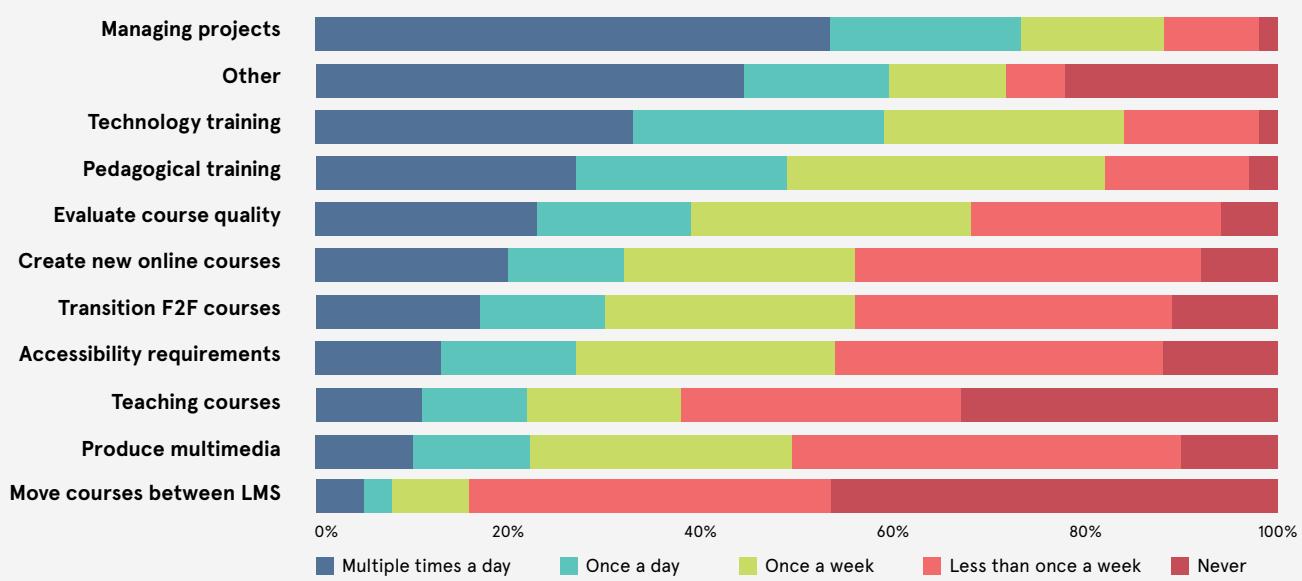
"I assist faculty in digitizing and delivering their course content via an online learning management system."

A Day in the Life

It may seem difficult to visualize playing all four roles in one day. Let's bring back our persona, Roman, to see how these roles could play out.



HOW OFTEN DO YOU UNDERTAKE THE FOLLOWING TASKS IN YOUR WORK?

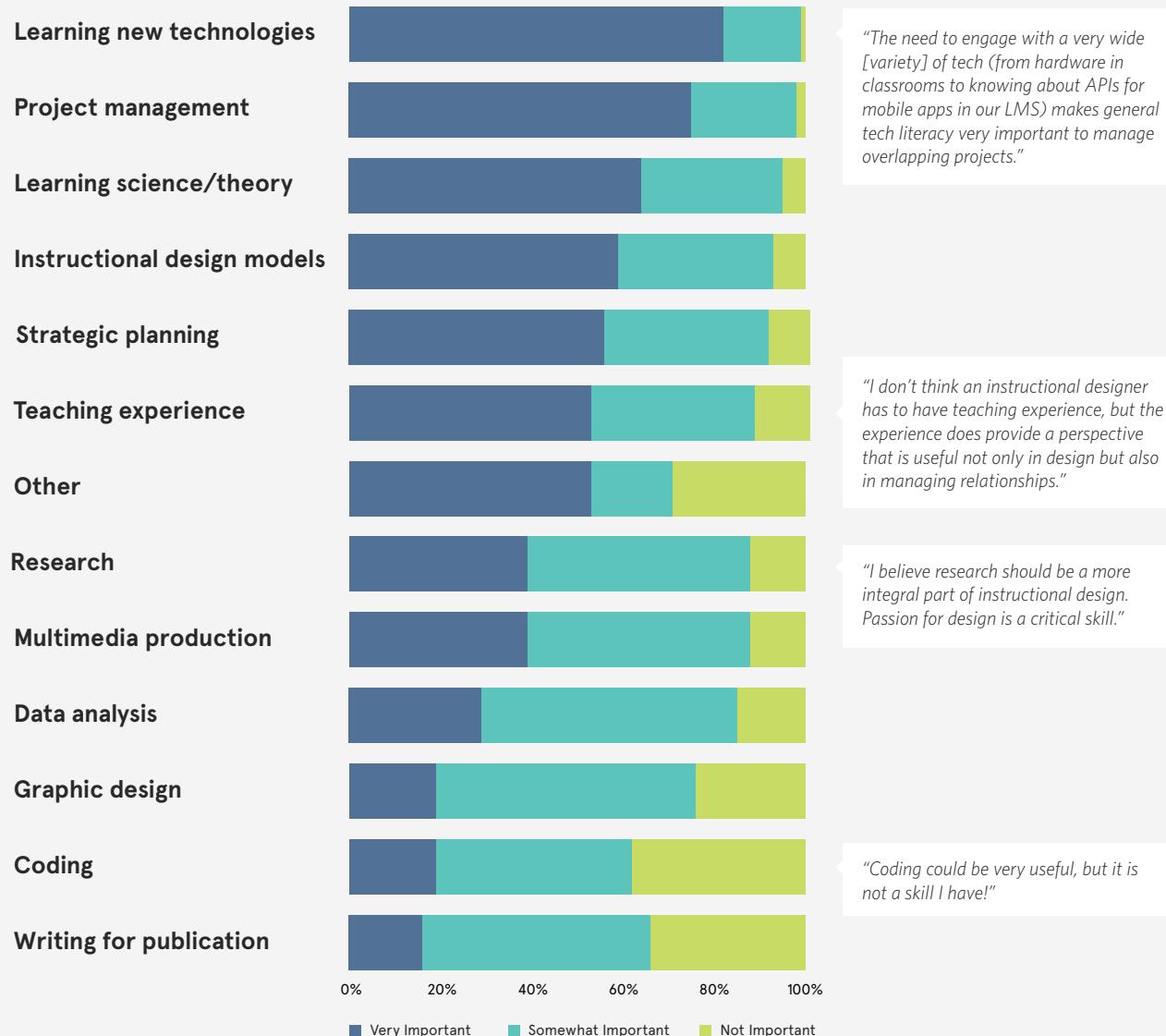


Skills

Respondents emphasized that being a 'full-stack' designer is key to being a successful instructional designer. **Entry-level instructional designers**, like Roman, identified learning new technologies (88%), project management (60%), and learning science/theory (57%) as skills being very important to their role. **Mid-level and senior instructional designers**, like Ella, felt similarly with more emphasis on project management and learning science/theory (83%, 76%, and 64% respectively). **Directors**, like Nina, spend significantly more time managing and planning in their role and therefore identified project management (89%), strategic planning (85%) and learning new technologies (73%) as being very important skills for their role.

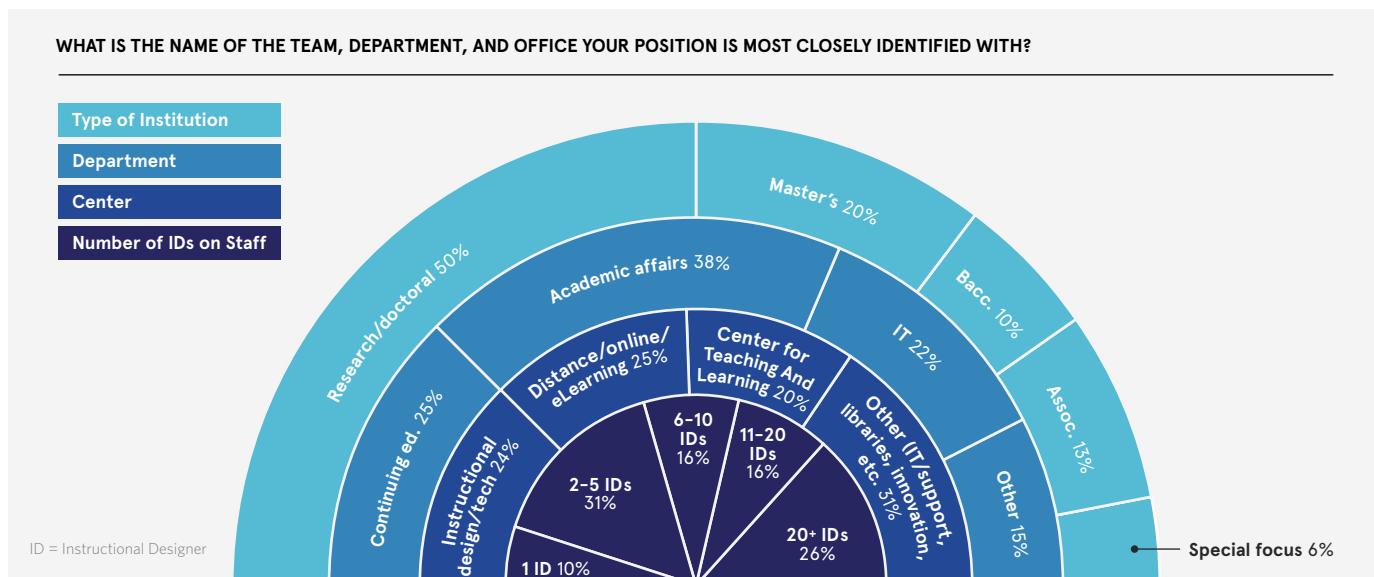
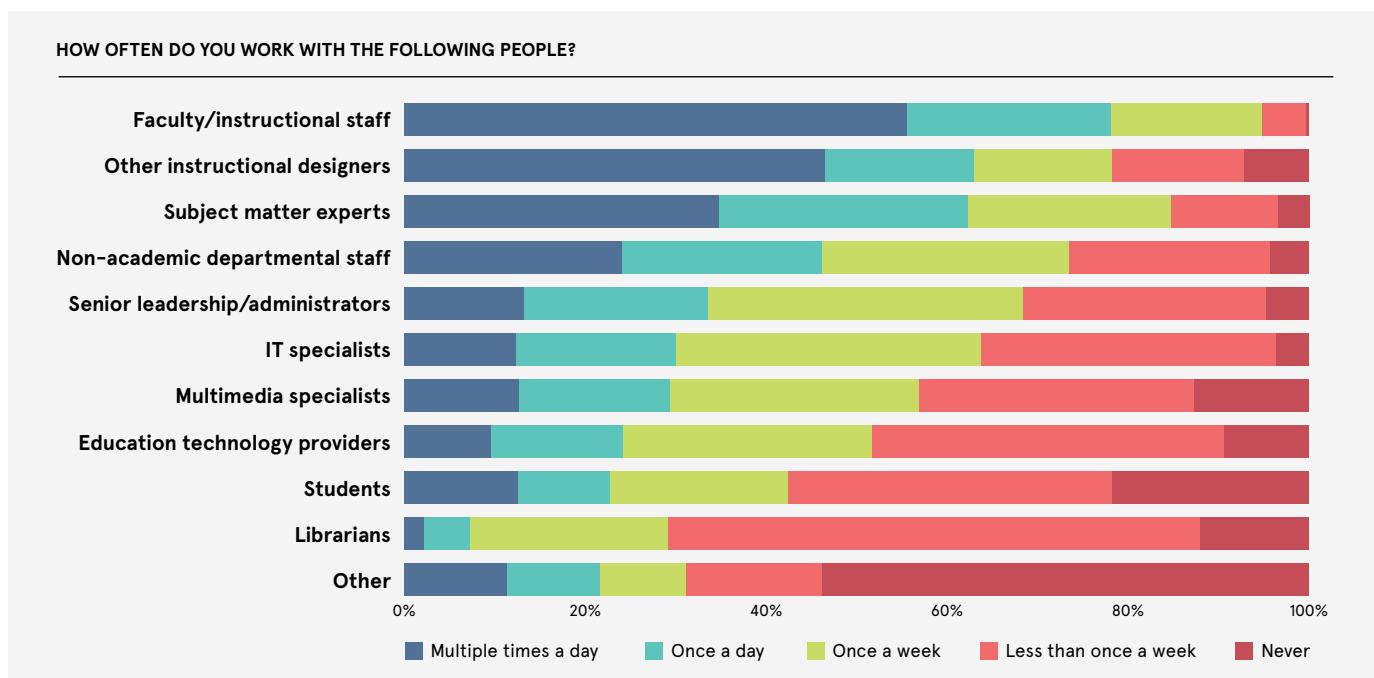
"While a 'jack-of-all-trades' can get by in instructional design, the best instructional designers are 'aces-of-many-trades', with authentic experience and training in all aspects of the process."

HOW IMPORTANT ARE THE FOLLOWING SKILLS/EXPERTISE IN YOUR CURRENT ROLE? (AGGREGATE RESULTS)



People & Places

The instructional designers surveyed reported working most frequently with faculty/instructional staff, other instructional designers, and subject matter experts. Interestingly, that is not the extent of the instructional designer's circle of collaboration. Many respondents interact multiple times a day with librarians, students, education technology providers, IT specialists, and others. **The most common scenario where you can find an instructional designer is on a team of 2-5, in the Distance/Online/eLearning center, in the Academic Affairs department, and in a Research/Doctoral institution.**



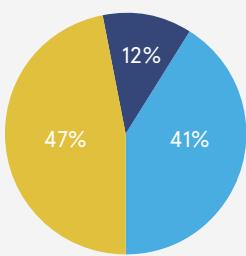
Tools

In higher education, the access to tools that are productive, interoperable, and user-friendly is minimal. This causes frustration for instructional designers. We posed the question, "Who makes decisions about the tools that are used in your day-to-day role?" For tools that don't require a subscription, instructional designers told us they have the freedom to choose. But, the majority of respondents reported that **the choice of enterprise-level tools and tools requiring a subscription is made by IT, department/center heads, or administration.** Faculty have influence as well. While many frustrations were expressed, the most common was that 'budgets dictate tools used.'

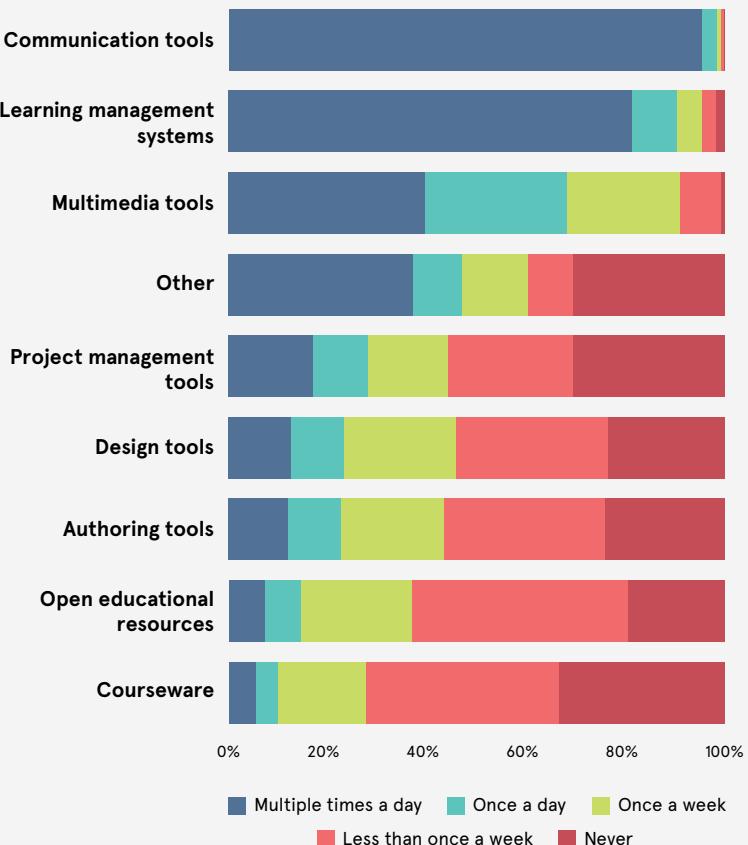
There are several inconsistencies in the list of favorite and least favorite tools reported by instructional designers. For example, 'Adobe products' is found on both lists. Also, the learning management system 'Canvas' was listed as a favorite tool while learning management system in general was the second least favorite tool. These inconsistencies may suggest that there is no collective agreement among instructional designers about what the most useful tools are.

"Management choose[s] tools that are cheap and never ask[s] about integration or accessibility. Then we spend enormous amounts of time trying to get them to work."

HOW MUCH SAY DO YOU HAVE IN CHOOSING THE DIGITAL TOOLS YOU USE?



HOW OFTEN DO YOU WORK WITH THE FOLLOWING DIGITAL TOOLS?



WHAT ARE YOUR FAVORITE & LEAST FAVORITE DIGITAL TOOLS THAT YOU USE?

FAVORITE TOOLS	LEAST FAVORITE TOOLS
1. Camtasia	1. Blackboard
2. Adobe products	2. LMSs (in general)
3. Canvas	3. Adobe products
4. PowerPoint	4. PowerPoint
5. Google Apps and Drive	5. SharePoint
6. Articulate Storyline	6. Outlook

Professional Development

To keep up with the demand for rigorous and quality online learning experiences, instructional designers benefit from a variety of materials, communities, and support systems. Participants of the survey were asked to list journals, blogs, conferences, etc. that best develop their skills and knowledge. The most frequently referenced resources in each category are outlined below.

WHAT SOURCES DO YOU READ/FOLLOW TO STAY UP ON YOUR FIELD?



JOURNALS

- [Chronicle of Higher Education](#)
- [EDUCAUSE Review](#)
- [TechTrends](#)
- [Journal of Online Learning and Teaching \(JOLT\)](#)
- [Association for Educational Communications & Technology](#)
- [Hybrid Pedagogy](#)



WEBSITES

- [EDUCAUSE](#)
- [Online Learning Consortium](#)
- [Inside Higher Ed](#)
- [Chronicle of Higher Education](#)
- [Faculty Focus](#)
- [The eLearning Guild](#)



CONFERENCES

- [EDUCAUSE/Learning Initiative](#)
- [Online Learning Consortium](#)
- [Quality Matters](#)
- [eLearning Guild](#)
- [Association for Talent Development \(ATD\)](#)
- [Instructional Technology Council](#)



BOOKS

- "Make it Stick," Peter C. Brown
- "How Learning Works," Susan A. Ambrose, et al
- "Design for How People Learn," Julie Dirksen
- "Understanding by Design," Grant Wiggins, et al
- "e-Learning by Design," Horton
- Work by Palloff & Pratt



BLOGS

- [eLearning Heroes](#)
- [e-Literate](#)
- [Rapid eLearning](#)
- [Cathy Moore](#)
- [Bryan Alexander](#)
- [Audrey Watters \(Hack Edu.\)](#)
- [SHIFT e-Learning](#)
- [ProfHacker](#)



OTHER

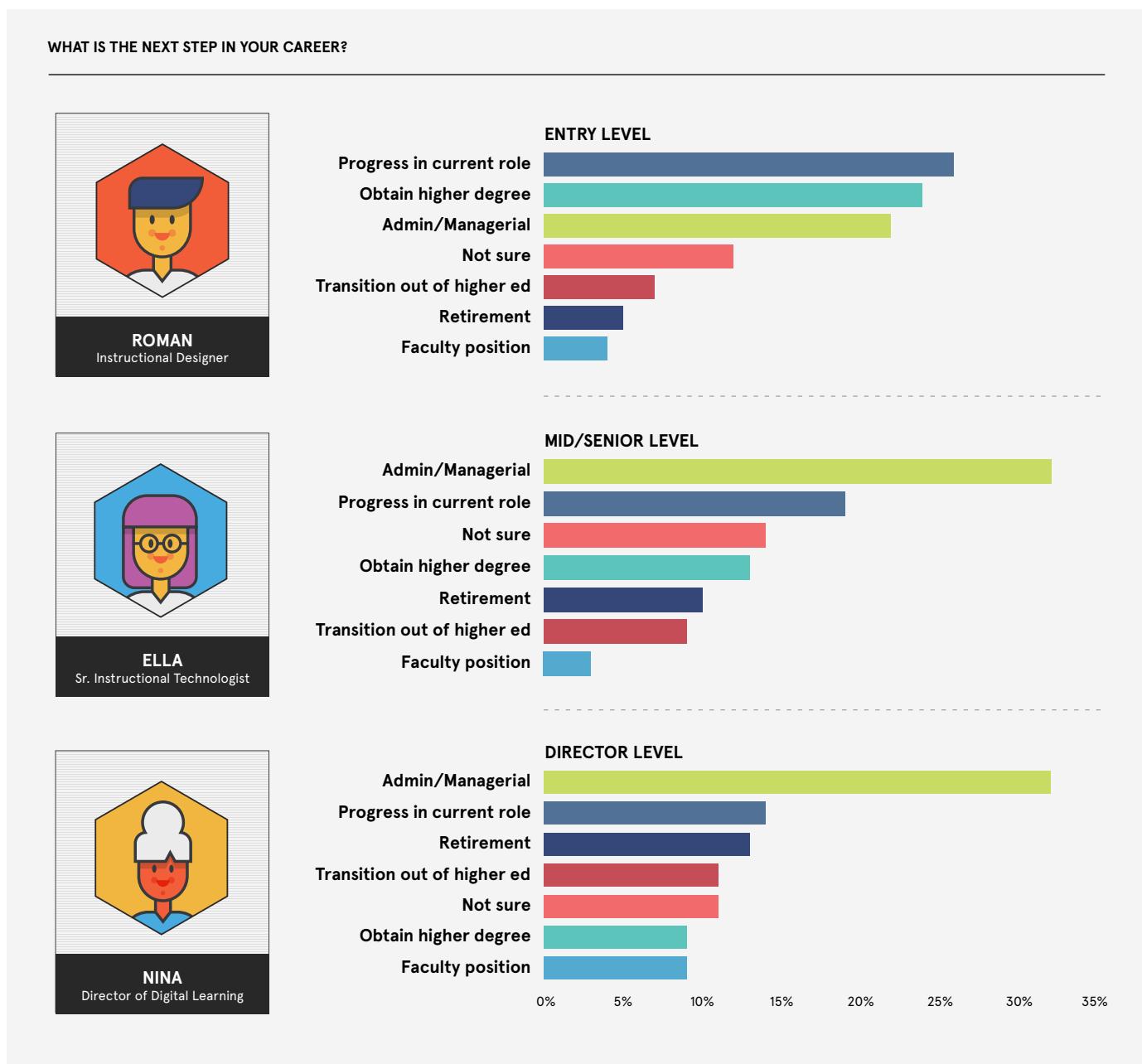
- Newsletters, including [NCAT](#)
- Related videos on YouTube, TED and Lynda.com
- Listservs, including [WCET](#)
- [EDUCAUSE](#)
- Online magazines: [Campus Technology](#)
- Related articles on Flipboard

Career Path

In order to understand how instructional designers position themselves in the workforce and gain insight into their aspirations, we asked survey participants to look into the future, near or far, and tell us their next career move.

Those career paths can be sectioned into **three main tracks: the academic route** (obtain higher degree, assume faculty or admin/managerial role), **transitioning out of higher education** (to a consulting role, the private sector, freelance, or a different career), or **forsaking a change altogether** (they'd like to progress in current position, are not sure of their next career move, or are waiting for retirement).

"It's actually really tough to think about growth paths for instructional designers. Long story short: there really aren't any!"



Barriers to Success

According to our survey, the number one obstacle that instructional designers face is a lack of faculty buy-in. This was described by instructional designers as part lack of knowledge, part lack of understanding. Faculty may be having a difficult time integrating new methods and practices when they are comfortable teaching what they know. Lack of time and resources, and leadership and institutional issues also ranked highly as barriers. Are we holding back improvements in higher education by not empowering instructional designers?

WHAT IS THE BIGGEST OBSTACLE TO SUCCESS IN YOUR WORK?

1. Lack of faculty buy-in

2. Time

3. Resources

4. Leadership/administration

5. Tools and technology

6. Institutional bureaucracy

7. Awareness

8. Project management

9. Pedagogy

10. Working with SMEs

NECESSITY OF FACULTY BUY-IN

The work of instructional designers requires constant faculty collaboration. Respondents described how administration isn't currently incentivizing that relationship.

- **The faculty's and administration's lack of understanding about the instructional designer's role and possible contribution**
"Faculty don't really understand what instructional design is and have a tough time realizing that I can help them in lots of ways. Most folks think of me as LMS help."
- **A lack of incentive for faculty to get design help, guidance, training, or support from instructional designers**
"University faculty resistance [is a barrier] because there is no incentive to change or improve their teaching."
- **Faculty that are not interested in changing their style of teaching or reconsidering their pedagogy to teach successfully in an online environment**
"Faculty who do not believe in online learning and do not want to move to the online environment [are a barrier to success]."

LACK OF TIME AND RESOURCES

Instructional designers report they don't have the adequate time and resources because they are playing so many roles in the institution.

- **They are asked to do too much with too little time**
"[I] have a tough time being able to meet with everyone who wants to meet with me and do the actual production work my position expects of me for the dozens of projects I'm responsible for at any given time."
- **They don't have the necessary resources in terms of people or funding**
"I'm a one person army."
- **They don't have the right tools and technology to conduct their job efficiently**
"Lack of good tools that are: affordable, have a reasonable learning curve, and make it VERY easy to grant access to persons outside of our system (e.g., subject matter experts) [is a barrier to success]."

LEADERSHIP AND INSTITUTIONAL ISSUES

Instructional designers express being held back from fully doing their job by leadership and institutional structure.

- **Leadership doesn't understand the implications of their own plans and initiatives**
"Administrators above my level who do not have an education or Instructional Design background impose the latest and greatest technology on my work. They often learn about the cool new thing and see it as a silver bullet without considering the true cost (not just financial) of implementation."
- **Leadership doesn't create structures to integrate instructional designers and utilize them effectively**
"The college administration has not created a programmatic model for course design, development, and improvement that includes my participation. The position was created with no plan for how to integrate it into the course life cycle. It's been nearly five years now..."
- **Instructional designers lack ownership to make improvements in the environments they work in**
"I'm given a lot of responsibility for this online class but little authority regarding larger pedagogical decisions. It's frustrating as I have the education and background to make these decisions and the person above me doesn't."

Calls to Action

To end this report, we'd like to provide a few recommendations to enable stakeholders to fully utilize their instructional designers.

RECOMMENDATIONS

Here are a few ways we think different roles can help instructional designers become game changers:

- **Institutional leaders and administration** - Involve instructional designers early, often, and throughout your technology transition. Develop clear standards that are expressed to all participants — institutional leaders, instructional designers, faculty, and students. Also, think about incentivising faculty to work with instructional designers from the get-go. Survey respondents made clear that they'd like more resources allocated to their work, which could have a high return on investment in terms of student success.
- **Faculty** - We know student success is top priority for you. An instructional designer can help you engage your students and give you more class time by using online tools. There is potential impact to be made for your students by collaborating and using new technologies that instructional designers can guide you to. They share your goal and want to see you shine for your students.
- **Technology providers** - Emphasize instructional designers as key stakeholders that will be using and teaching others how to use your products. As stated previously, 47% of respondents said they get to choose the digital tools they use. Invest the time and resources necessary to discover the qualities of tools instructional designers consider to be effective and efficient.
- **General audience** - You are reading this report and that is a great start! Continue your learning and investigation of the work of instructional designers and their impact on student learning. Join in on the conversations about instructional design at your local institution and those already happening online.

AREAS FOR FURTHER INQUIRY

The insights this report provides, though illuminating, are only the reflection of a portion of instructional designers' voices. We propose these areas for further thought and inquiry:

- What are the perceptions of faculty and administration about what instructional designers do?
- What strategies have instructional designers found effective in helping generate faculty buy-in and trust?
- Does a network of instructional designers exist? If not, how can one be established?
- How can instructional designers be better utilized?
- What are students' needs for successfully learning online? How do those needs change from institution to institution?
- What does a model institution dedicated to scaling online courseware look like? Do instructional designers play a key role?
- What institutional practices can improve the career pathways of instructional designers?

Please check out our appendix if you are interested in additional details on methodology and data from our survey results. And feel free to reach out to research@intentionalfutures.com with any further questions.

Thank you for reading.

