

People, Partnerships and Pedagogies

# Surveying LinkedIn Profiles of Learning Designers: Qualifications, Interpersonal Skills, and Career Pathways to inform career development

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This paper explores the diversity of qualifications, interpersonal skills, and career pathways of learning designers. Through a convenience sampling approach utilizing LinkedIn data, the study reveals that while education is a common qualification, it is not the sole determinant of success in the field. Notably, training, development, and leadership are identified as the most endorsed interpersonal skills. The research also identifies three distinct career pathways: hierarchical, industry-based, and traditional learning design pathways. Building upon these findings, we introduce a tool that defines core competencies and evidence for entry-level, mid-career, and senior learning designers. This tool can serve as a valuable resource for the recruitment and development of learning design staff, contributing to a better understanding and recognition of the pivotal role of learning designers in the teaching and learning process.

Keywords: Learning designer, instructional designer, third space, LinkedIn, career, competencies

## Introduction

During Covid-19 learning designers had an essential role to play in universities pivoting online. A report from the Melbourne Centre for the Study of Higher Education predicted that going forward, academic work might shrink while learning designer roles would take on greater responsibilities (Croucher & Locke, 2020). More importantly, the pandemic raised concerns that the role of the learning designer is misunderstood and, in some cases, not understood at all (Pilbeam, 2020). The roles performed by learning designers, even during the most essential time in the history of learning design, was largely migrating content online which manifested mostly in the role of technical support such as fixing broken links (Bellaby & Sankey, 2020).

To date, much research has focused on defining the role of the learning designer (Obexer & Giardina, 2016), its competencies (Koszalka, 2013; Ritzhaupt & Kumar, 2015; MacLean & Scott, 2011; Park & Luo, 2017), and what a learning designer does (Kickbusch et al., 2020; Slade et al., 2018). In this paper, we seek to answer similar questions using data from those who are already in the role. To do this, we apply a convenience sampling approach of using publicly available LinkedIn profiles of learning designers. Other researchers have analysed small data sets using the advanced search capability from LinkedIn to find useful results (Bradbury, 2011). For the purpose of answering our research questions we adapted the methodology designed by Ecleo & Galido (2017) which used a convenience sampling to survey 100 LinkedIn profiles in data scientist roles. In doing so, we collected and coded 100 LinkedIn profiles of learning designers to answer the following questions:

- 1. What qualifications do learning designers have?
- 2. What interpersonal skills do others view learning designers have in their role?
- 3. What are the career pathways of learning designers?

By addressing these questions, we aim to further the dialogue on how to recognize, define, and clarify the role of a learning designer. In doing so, we offer two valuable contributions to the learning design literature. Firstly, we delineate three distinct career pathways for learning designers and speculate on their implications for the future of this profession. Secondly, within the discussion section of this paper, we present our findings in tables that serve as a tool to illustrate the core competencies and evidence required for entry-level, mid-career, and senior-level learning designers. We envision this tool being utilized by universities and corporations to aid in the recruitment and career development of their learning design personnel. Additionally, we believe that it can assist aspiring learning designers in translating their experiences into practical skills. For current learning designers, this tool provides a practical framework for enhancing their competencies, fostering professional growth, and for understanding the competencies needed to achieve career progression.

#### Defining the role of a learning designer

Learning designer, learning experience designer, instructional designer, e-learning developer, learning strategist and curriculum developer in higher education are roles which work with academics to design courses. While some argue that these roles need greater semantic clarity (Schmidt & Huang, 2022), the logic between the outcome and that actor is the same. For example, an instructional designer employs methods to design topics and courses based on learning and performance analysis (Gagne and Biggs, 1974). An instructional designer creates strategies, activities, and resource to facilitate learning and deliver on the instructional design process (Sims & Koszalka, 2008). Similarly, learning designers apply a systematic process for translating principles of learning and instruction into plans for instructional materials, activities, information resources, and evaluation (Ragan & Smith, 1999, p. 2). In general, these roles have an understanding of learning outcomes – including procedures to define the outcomes and possible sequences of instruction or activities to achieve the outcomes. This understanding ensures that courses are designed to achieve constructive alignment.

For the purpose of this paper, we do not set out to argue the semantics of these roles. We adopt MacLean and Scott's (2011) definition of learning design as the process of designing effective learning experiences for a variety of contexts: including in the classroom or laboratory, in the field, online and via standalone packages using a range of media (p. 557). Those who design these experiences for a profession we refer to as learning designers. We acknowledge that we define generally what a learning designer does and that the day-to-day role is determined by institutional needs (e.g. strategies, frameworks, policies), and other circumstances such as those determined by regulatory and accrediting bodies. It should also be noted that the role of a learning technologists, whose role it is to manage, research, and support the use of technology to enable learning (Browne & Beetham, 2010, p. 6), is outside the scope of this paper.

#### Defining the skills and competencies of learning designers

Defining the skills and competencies of learning designers is crucial for their professional development and ensuring effective course design. Several approaches have been proposed in this area, aiming to capture the diverse aspects of the learning designer's role.

#### Approach 1: Sims and Koszalka (2008) - Competencies as an "Architect"

Sims and Koszalka (2008) proposed four general competencies for learning designers, emphasizing their role as "architects" rather than "builders." These competencies include professional foundations, planning, design and development, and implementation and management. However, it is important to note that this approach has not prevented learning designers from engaging in content copying and pasting, nor does it adequately acknowledge the transformative role they can play in course design and staff development.

#### Approach 2: MacLean & Scott (2011) - Mapping Exercise

MacLean and Scott (2011) conducted a mapping exercise by integrating six global competency frameworks to identify key skills for learning designers. Their findings highlighted the significance of generic management skills, design expertise at various levels, and project housekeeping skills. By incorporating multiple frameworks, they were able to include skills related to understanding how people learn without necessitating formal education training.

#### Approach 3: Analysis of Job Advertisements (Sun et al., 2018)

Researchers analyzed 53 job advertisements to identify the competencies sought by employers. The study revealed ten core competencies and three emerging competencies. The most common competencies sought by employers included content management, collaboration skills, and digital technology mastery. The emerging competencies addressed areas such as copyright understanding, programming language proficiency, and data analytical skills.

Despite the comprehensive range of skills and competencies identified through these approaches, there remain challenges and gaps. Explicit connections to the student experience and continuous course improvement are lacking. Additional perspectives, such as understanding learner psychology and emerging educational design concepts, shed light on the contextualized nature of the learning designer's role (Miller, 2007). For example, Arinto's (2013) competency-based view emphasizes content development, teaching strategies, learning activities, and assessment as key areas of focus. Ideally, the role of learning design should require an understanding of student learning, continuous course improvement, and making explicit what this looks like in

practice.

#### Defining the role of learning designers: Change agents, brokers, and evaluators

Learning designers have effectively always played a support role to keep academics from implementing unstructured approaches to course design. For instance, the laissez-faire approach results in the course evolving organically, whereas the lone ranger approach results academics producing courses in isolation relying on their personal technical and pedagogical knowledge (Bates, 2020). However, the learning design role isn't limited to support. Learning designers have come to represent change agents, brokers, and evaluators.

As change agents, learning designers are well placed to shift institutional structures such as new teaching strategies, while also maximising and supporting sustained changed (Obexer & Giardina, 2016). This example can be observed with the adoption of a new teaching framework (e.g. blended learning) or the adoption of a new learning management system (see for example, Pechenkina & Branigan, 2018). On the ground, learning designers enact their change agency through having critical conversations about learning with subject matter experts (SME's). For example, some learning designers have persuaded SME's to develop social citizens or to promote equity and inclusion within their faculty's curriculum (Campbell et al., 2005).

Brokering skills of learning designers enable them to function as intermediaries who facilitate collaboration between managerial and academic roles. Rather than being confined to a specific professional identity, these designers possess the ability to adapt and bridge the gap between different stakeholders—and especially bridge the gap between theory and practice. Because some learning designers are SME's in technology and pedagogy, they are in a position to broker this knowledge with SME's of other content areas during the course design process (Obexer & Giardina, 2016). Specific examples of this have included bringing together academic communities and university departments to form a community of practice (Kepell, 2007), linking tools and systems to university standards and frameworks (Bower et al., 2011), and embedding 21st century skills into subject matter courses (Kickbusch et al., 2020). Most importantly, learning designers who broker do so successfully because they cultivate relationships by emphasizing the significance of soft skills for long-term achievement (Veles & Carter, 2016).

Seeto and Herrington (2006) advocate for learning designers to take on the role of evaluators for course design and the student experience. This responsibility is well-suited for universities with established learning design systems. However, implementing this role can be challenging in situations where the learning designers lack expertise in the content area, lack a doctoral qualification, or have limited relationships with subject matter experts (SMEs) and academics. In such cases, SMEs may question the credibility of the learning designers and be hesitant to trust their judgment. Nevertheless, learning designers are uniquely positioned to provide an objective perspective necessary for evaluating and improving course design. Research has also shown that by receiving appropriate training and adopting systematic approaches or design systems learning designers can enhance their ability to evaluate and refine course designs effectively (Reeves & Hedberg, 2003).

In this section, we have used the literature to define learning designer and discuss their possible skills, competencies, and roles. To date, studies about learning design have not drawn on qualifications and career paths of existing learning designers to understand the profession. In the sections that follow we describe a methodology for doing so, present the findings of applying this methodology, and analyse how this could be used to further professionalise careers in learning design. It is important to clarify that when we refer to professionalization in this context, we draw a parallel to the established professional standards observed in fields such as law, medicine, and accounting.

## Approach

This study used data from LinkedIn profiles to answer the three research questions. LinkedIn was the most appropriate database for this purpose because it is designed in a way that makes researching profiles, networks, and skills easily accessible using data mining tools or small manual data sets (Russel, 2011). For the purpose of answering our research questions we adapted the methodology designed by Ecleo & Galido (2017) which used a convenience sampling to survey100 LinkedIn profiles of data scientist. Figure 1 illustrates our manual process using learning designer profiles.



Figure 1. Flowchart for methodology in this study

The search term "learning designer" and "instructional designer" were used to retrieve 100 profiles during the month of November 2021. The profiles and codes were stored in a spreadsheet accessible to only the two authors. Each profile was coded for 9 attributes which were mapped to the research questions (see Table 1).

Table 1: Coding attributes for Learning Designer's LinkedIN profiles

Research question	Attribut	e from the LinkedIN profile
1. What qualifications do learning	a)	Level of education (e.g. Bachelors, Masters, Phd)
designers have?	b)	Discipline studied
2. What interpersonal skills do others view learning designers have in their role?	a)	Three skills with the most endorsements on the profile (note that endorsements are from the Learning Designer's LinkedIn network)
3.What are the career pathways of	a)	Current role title
learning designers?	b)	Number of years employed in current role
	c)	Name of current employer
	d)	Previous three role titles
	e)	Number of years employed in each role
	f)	Name of each employer

Only profiles that contained data for each code were used for the study, which was a total of 64 profiles. For privacy purposes all other profiles were deleted. The data analysis used both quantitative and visual methods to derive meaningful insights from the dataset. The data set that remained was analysed using word frequencies (<u>http://www.writewords.org.uk/word\_count.asp</u>) and wordle (<u>http://www.wordle.net/</u>). This provided useful visuals which illustrated a concentration of degrees, skills, and employment pathways.

## Findings

Overall, Ecleo & Galido's (2017) approach enabled us to answer our three research questions. We found that learning designers come from a diverse set of disciplines from varying degree levels. The skills for which they are endorsed for by their professional network were related to workplace learning. In addition, three employment pathways emerged which showcased how learning designers progress into the role. Each question is answered in turn followed by a holistic discussion where we propose how the learning design roles might begin to professionalise the role in the context of lifelong learning.

## Questions one: What qualifications do learning designers have?

Among all levels of degrees recorded the most common discipline was education. This was inclusive of the study of teaching at primary and secondary school, adult education, digital learning, and instructional design. Of the 70% (45) of learning designers who did not study education (i.e. an education-related discipline) during their bachelor's degree, 24% (11) went on to study education in a master's degree and 4% (2) went on to study education in a PhD. Notably, 50% (32) of the cohort never formally studied education. This finding, along with the variety in the degrees studied, makes it difficult for the profession to have a shared foundational knowledge present in other professions such as law, medicine or accounting.

Table 1 Education	nualifications and	disciplines of	f learning	decigner	nrofilec
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Level of	Cohort size N=100	Top 3 disciplines	
education			
Bachelor	N=64	Education	30% (19)
		Science	11% (7)
		English	11% (7)

		Other disciplines	48% (31)
Master	N=46	Education	41% (19)
		MBA	13% (6)
		Science	11% (5)
		Other disciplines	35% (16)
PhD	N=9	Education	67% (6)
		Communications	22% (2)
		Sport science	11% (1)

#### What skills have learning designers been endorsed for?

Of the 64 profiles a total of 48 unique skills were endorsed on the profiles. The image below visualises the array of skills that learning designers were endorsed for within their networks.



Figure 2. Wordcloud to visualise skills learning designers were endorsed for

The three most common skills were training, development, and leadership. Training and development are typically skills associated with educational activities (e.g. workshops) designed to upskill people in the workplace. Learning designers were associated, at least within their LinkedIn network, as having these skills.

Table 2.	Top 3	skills	learning	designers	were	endorsed	for
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Top 3 skills listed on 64 profiles (n=48)	Frequency of skill listed
Training	48% (23)
Development	42% (20)
Leadership	33% (16)

This finding supports how a learning designer can be a change agent and broker because implicit in working with academics to design courses some learning designers are training or developing staff in education and various aspects of course design.

#### What are the career pathways of learning designers?

By coding the previous three jobs of each learning designer, three career pathways emerged in the profiles. The pathway, definitions, and cohort sizes are in table 4. The two dominant pathways were a hieratical university pathway and an industry pathway. While the least common was a traditional pathway.

Pathway	Pathway definition	Cohort size (n=64)
Hierarchical university pathway	Learning designers who navigate their way through	42% (27)
	the university/education hierarchy. For example, from	
	tutoring to coordinating to learning design.	
Industry pathway	Learning designers who come from other jobs and	42% (27)
	enter learning design roles from private industries.	
Learning design pathway	Learning designers whose current and previous three	15% (10)
	roles were only in learning design.	

Table 3. Employmen	t pathways of	learning	designers
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It should be noted that within each pathway there were no education trends. In the hierarchical pathway it appeared that a learning design role was a promotion from other roles within the university as seen, for example, in Table 5. We also tested an assumption about retraining to enter the learning design profession, but this was not a trend. For instance, in Table 6 the learning designer's education level was a bachelor's degree in chemical engineering completed prior to the roles listed. While we collected data on years in each role, we did not analyse it because it was outside the scope of our research questions.

Current role	Previous role 1	Employer	Previous role 2	Employer	Previous role 3	Employer
Senior Learning Designer	Educational designer	Monash	e-learning coordinator	Latrobe	Tutor	University of Melbourne
Table 5. Illustration of the industry pathway						

#### Table 4. Illustration of the hierarchical pathway

Current role	Previous role 1	Employer	Previous role 2	Employer	Previous role 3	Employer
Instructional designer	Content designer	Edusys	Information analyst	Informativs	Project assistant	National aerospace laboratory

The entryway into learning design often lacks a clear logical progression. Due to the absence of defined core skills or foundational knowledge, it remains uncertain how individuals find themselves in this role and what commonalities they share with other practitioners. These challenges complicate the process of professionalizing a rapidly expanding industry.

## Discussion

The findings of our study highlight a diverse range of qualifications, skills, and career paths within the learning design profession. We used tables to organize and discuss these findings and identify potential gaps. Each table is discussed by drawing upon the insights gained from our study. We use the tables to analyse three core competencies that emerged in our findings: education, training and development, and leadership. Additionally, we relied on the existing literature to inform the fourth core competency, which is design. We synthesized keywords and evidence from both our research and prior studies to illustrate each competency with keywords, "I" statements, and supporting evidence. We propose that the tables represent a competency-based tool that outlines the skills and evidence relevant to the career progression of learning designers.

#### Core competency one: Education

As illustrated in the review of the literature, previous research in this field neglects to identify specific degrees or courses that would be suitable for a career in learning design. While we recognize that a formal degree in understanding how people learn is not mandatory, it is important to establish a recognised pathway toward expertise, especially when aiming to standardize a profession akin to medicine, law, or accounting. We propose that this pathway should recognise work experience.

#### Table 6 Core competency One: Education (keywords, level, statements, evidence)

Core Competency One: Education			
Keywords	Level	Statement	Evidence
	t E		Micro credential in education

Primary/		I have a general understanding	Work experience in education setting
Secondary		of how people learn	
teaching			Understanding general learners' behaviours and
e			their learning experience (e.g. examples of
<b>D</b> 1			
Pedagogy			learning design solution from an education
			setting)
Learning sciences		I have a specialised	Higher degree in education
8		understanding of how people	
		understanding of now people	Desistand V 12 teacher
Psychology of	Set	learn	Registered K-12 teacher
learning	are		
e	Ÿ		Understanding adult learners' behaviours and
	lid		their learning experience (e.g. examples of I.D.
	Σ		a lost i and i a lost
			solutions in higher education setting)
		I have developed an expertise in	Terminal degree
		how neonle learn	
		now people learn	Presentations in a keyword discipline
	OL		r resentations in a keyword discipline
	eni		Dublications in knyword disainline
	Ň		rubications in keyword discipline
			Awards in teaching, learning, or design
			i i i i i i i i i i i i i i i i i i i

## Core competency two: Design

Design in this context means the knowledge of frameworks to create and optimise a learning experience. Previous research and the keywords in Table 8 refer to this as content development, teaching strategies, learning activities, and assessment creation. While we acknowledge that not every course of study or career pathway can prepare provide a learning designer with design skills, we propose that the evidence to satisfy this competency can be learned on the job. By defining key pieces of evidence needed for design, we are ensuring that learning designers are using similar tools

Table 7 Core	Competency	two: Design	(keywords,	level, statements,	evidence)
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		Core Competency Two:	Design
Keywords	Level	Statement	Evidence
Content development		I can work with a more experienced LD to collect and	Curation of development-ready storyboards
Teaching strategies	Entry	organize content; create and triage a learning experience for students	Conducting stakeholder interviews, collaborating with SMEs, and/or working with LMS developers that result in keyword outputs
			Development and use of learners' personas to
Learning			develop keyword outputs
activities		I can create, troubleshoot, triage,	Course initiation
		and analyse the success of	Creation of pedagogy map
Assessment		experiences for students	Creation of outcome and assessment
creation	÷		alignments
	ree		Enabling keyword outputs by creating industry
	-ca		toolkits, mapping multimedia assets, UI/UX
	Mid		design, proof-of-concepts, AB testing, wireframes
			Reviewing student feedback and suggesting
			improvements or innovations that result in
			better keyword outputs
		I can design and evaluate the design of courses/programs from	Setting up project charter, project plan, course structure, and/or industry engagement plan
	ior	end-to-end	Understanding of high-level design
	ien		dependencies and able to critically consider
	S S		design solutions/innovations to mitigate risk
			associated with the keyword outputs

Establishing internal quality assurance processes including the handover of course/program, project documents, files, and assets and ongoing maintenance (e.g. stakeholders feedback, remediation, maintenance)
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#### Core competency three: Training and development

By training and development, we mean learning from more knowledgeable others (MKOs) such as mentor. It should be noted that ongoing training and development for learning designers was a gap in the research. Yet, facilitating a novice to expert trajectory is common in communities of practice and has been successfully applied to learning design communities in the past (Keppell, 2007). Other professions that depend on mentor type learning trajectories include software development and computer programming. The focus on purposefully creating dependencies to learn from others keeps a profession current. While some professions such as law formalise this through monitored Continuing Legal Education (CLE) requirements, this can initially exist as a social contract between learning designers and examples of this are provided.

	Core Competency Three: Training & Development					
Keywords	Level	Statement	Evidence			
Novice		I am keen and open to learn from LD colleagues to build upon core	Identifying areas to strengthen and asking MKO for support			
More knowledgeable other (MKO)	Entry	competencies 1 and 2	Attending professional training webinars targeted at competencies 1 and 2			
Expert			Participating in formal opportunities to be mentored			
Mentor	areer	I proactively support the growth of less experienced colleagues while also continuing my own development in	Reaching out to offer support to LD colleagues			
Lifelong learning	Mid-c	core competencies 1 and 2	Ongoing participation in formal mentoring			
		I stay current with LD trends, refining my core competencies in 1, 2, and 4.	Mentoring other LD's			
	Senior	while also sharing my expertise in the core competencies with others	Showcasing LD SME expertise			
		core competencies with others	Identifying LD skills and knowledge to strengthen and stretch by			
			participating in workshops or ongoing training or special interest groups			

Table 8.	Core com	petency T	hree: Tr	aining and	Development	t (keywords,	level, statem	ents, evidence)
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## Core competency four: Leadership

We acknowledge that not everyone aspires to leadership roles, and we have addressed this consideration in two ways. Firstly, while recognizing that the profession exists in a dynamic and evolving space, the literature review indicated that certain leadership skills are necessary for effectiveness, as reflected in the keywords listed in Table 10. Lastly, we differentiate between leadership of the discipline itself, such as introducing innovative tools or processes in course/program design, and leadership of people, teams, and projects. By making these distinctions, we ensure that the concept of leadership is comprehensively addressed and tailored to the specific demands and challenges faced by learning designers.

Table 7 Core competency rour, Deducising (Rey words, revel, statements, evidence	Table 9	Core com	petency F	<b>Four: Lea</b>	adership	(keywords,	level.	statements,	evidence
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		Core Competency Four: Leade	rship
Keywords	Level	Statement	Evidence
Influencing	ntr y	I take accountability in line with my role and as it relates with my	Adoption of new/changed frameworks to meet teaching and learning strategies
Relationships	Щ		of the organisation



## Conclusion

This research utilized LinkedIn data to gain insights into the qualifications, skills, and career paths of learning designers. Education emerged as the most common qualification, but not the sole determinant. The most endorsed skills were training, development, and leadership, while learning designers followed hierarchical, industry, and traditional learning design pathways.

Building on these findings, we have contributed to the ongoing discourse surrounding the role of learning designers by proposing a tool that outlines the capabilities and associated evidence across various levels, from entry to senior positions. We encourage further research to explore the effectiveness of adopting this core set of competencies and evidence, with the aim of wider implementation and iteration within the profession.

Ultimately, we envision this resource being utilized by learning design teams in tertiary education institutions or corporations during the recruitment, training, and promotion processes for their learning design staff. By incorporating this tool, organizations can foster the professional growth and development of their learning design workforce.

## References

- Arinto, P. B. (2013). A framework for developing competencies in open and distance learning. *International Review of Research in Open and Distributed Learning*, 14(1), 167-185. https://doi.org/10.19173/irrodl.v14i1.1393
- Bellaby, A., Sankey, M., & Albert, L. (2020). Rising to the occasion: Exploring the changing emphasis on educational design during COVID-19. In *Conference: ASCILITE 2020: ASCILITE's First Virtual Conference. December 2020.* <u>https://doi.org/10.14742/ascilite2020.0137</u>
- Bower, M., Craft, B., Laurillard, D., & Masterman, L. (2011). Using the Learning Designer to develop a conceptual framework for linking learning design tools and systems.
- Bradbury, D. (2011). Data mining with LinkedIn. *Computer Fraud & Security*, 2011(10), 5-8. https://doi.org/10.1016/S1361-3723(11)70039-2 https://doi.org/10.1016/S1361-3723(11)70101-4
- Browne, T., & Beetham, H. (2010). The positioning of educational technologists in enhancing the student experience.
- Campbell, K., Schwier, R. A., & Kenny, R. F. (2005). Agency of the instructional designer: Moral coherence and transformative social practice. *Australasian Journal of Educational Technology*, 21(2). <u>https://doi.org/10.14742/ajet.1337</u>
- Croucher, G., & Locke, W. (2020). A Post-Coronavirus Pandemic World: Some Possible Trends and Their Implications for Australian Higher Education. Discussion Paper. *Melbourne Centre for the Study of Higher Education*.

- Dalziel, J., Conole, G., Wills, S., Walker, S., Bennett, S., Dobozy, E., Cameron, L., BadilescuBuga, E., & Bower, M. (2016). The Larnaca declaration on learning design. Journal of Interactive Media in Education, 1(7), 1–24. <u>https://doi.org/10.5334/jime.407</u>
- Dean, P. J. (1990). Using standards to improve performance. Australasian Journal of Educational Technology, 6(2). <u>https://doi.org/10.14742/ajet.2319</u>
- Ecleo, J. J., & Galido, A. (2017). Surveying LinkedIn profiles of data scientists: The case of the Philippines. *Procedia Computer Science*, 124, 53-60. <u>https://doi.org/10.1016/j.procs.2017.12.129</u>
- Gagne, R. M., & Briggs, L. J. (1974). Principles of instructional design. Holt, Rinehart & Winston.
- Kickbusch, S., Wright, N., Sternberg, J., & Dawes, L. (2020). Rethinking learning design: Reconceptualizing the role of the learning designer in pre-service teacher preparation through a design-led approach. *International Journal of Design Education*, 14(4), 29-45. <u>https://doi.org/10.18848/2325-128X/CGP/v14i04/29-45</u>
- Keppell, M. J. (Ed.). (2007). Instructional Design: Case Studies in Communities of Practice: Case Studies in Communities of Practice. IGI Global. <u>https://doi.org/10.4018/978-1-59904-322-7</u>
- Koszalka, T., Russ-Eft, D., & Reiser, R. (2013). Instructional designer competencies: The standards (4th ed.). Charlotte, NC: Information Age.
- MacLean, P., & Scott, B. (2011). Competencies for learning design: A review of the literature and a proposed framework. *British Journal of Educational Technology*, 42(4), 557-572. <u>https://doi.org/10.1111/j.1467-</u> 8535.2010.01090.x
- Masterman, E. & Manton, M. (2011). Teachers' perspectives on digital tools for pedagogic planning and design. *Technology, Pedagogy and Education*, 20(2): 227-246. <u>https://doi.org/10.1080/1475939X.2011.588414</u>
- Miller, J. L. (2007). The new education professionals: The emerging specialties of instructional designer and learning manager. *International Journal of Public Administration*, 30(5), 483-498. https://doi.org/10.1080/01900690701205970
- Obexer, R., & Giardina, N. (2016). What is a Learning Designer? Support roles and structures for collaborative *E-Learning implementation* (pp. 137-146).
- Park, J. Y., & Luo, H. (2017). Refining a competency model for instructional designers in the context of online higher education. *International Education Studies*, 10(9), 87-98. <u>https://doi.org/10.5539/ies.v10n9p87</u>
- Pechenkina, E., & Branigan, E. (2018). Re-thinking LMS change: Designing authentic learning environments to improve lecturers' digital literacy. *Open Oceans: Learning Without Borders*, 234.
- Peck, D. (2020, Oct 7). *Instructional designer salary report 2020*. Devlin Peck. https://www.devlinpeck.com/posts/instructional-designer-salary-2020
- Pilbeam R. (2020, July 31). The COVID-19 Wake-up call: Instructional designers are key to creating accessible and inclusive learning models. The evolllution. <u>https://evolllution.com/programming/program\_planning/the-covid-19-wake-up-call-instructional-designers-</u> are-key-to-creating-accessible-and-inclusive-learning-models/
- Ragan, T. J., & Smith, P. L. (1999). Instructional design. New York: Macmillan Publishing Company.
- Reeves, T. C., & Hedberg, J. G. (2003). Interactive learning systems evaluation. Englewood Cliffs, NJ: Educational Technology Publications.
- Ritzhaupt, A. D., & Kumar, S. (2015). Knowledge and skills needed by instructional designers in higher education. *Performance Improvement Quarterly*, 28(3), 51-69. <u>https://doi.org/10.1002/piq.21196</u>
- Russell M A 2011 Mining the Social Web. North Sebastopol, CA, O'Reilly Media
- Schmidt, M., & Huang, R. (2022). Defining learning experience design: Voices from the field of learning design & technology. *TechTrends*, 66(2), 141-158. <u>https://doi.org/10.1007/s11528-021-00656-y</u>
- Seeto, D., & Herrington, J. A. (2006). Design-based research and the learning designer. In L. Markauskaite, P. Goodyear, & P. Reimann (Eds.), Annual conference of the Australasian society for computers in learning in tertiary education (pp. 741–745). Sydney, Australia: Sydney University Press.
- Sims, R. C., & Koszalka, T. A. (2008). Competencies for the new-age instructional designer. In *Handbook of research on educational communications and technology* (pp. 569-575). Routledge.
- Slade, C., McGrath, D., & Greenaway, R. (2018). Professionalisation in academic development: Exploring learning designer roles in a changing higher education sector. In Teaching in the spotlight: Learning from global communities Conference Proceedings
- Sun, Y., Hew, K. F., Tang, Y., & Gonda, D. E. (2018, October). Examining the diverse field of "e-learning" and its key competencies through job postings. In *Proceedings of the 10th international conference on education* technology and computers (pp. 80-84). <u>https://doi.org/10.1145/3290511.3290575</u>
- Veles, N., & Carter, M. A. (2016). Imagining a future: changing the landscape for third space professionals in Australian higher education institutions. *Journal of Higher Education Policy and Management*, 38(5), 519-533. <u>https://doi.org/10.1080/1360080X.2016.1196938</u>

Gilmore, D. & Nguyen, C. (2023). Surveying LinkedIn Profiles of Learning Designers: Qualifications, Interpersonal Skills, and Career Pathways to inform career development. In T. Cochrane, V. Narayan, C. Brown, K. MacCallum, E. Bone, C. Deneen, R. Vanderburg, & B. Hurren (Eds.), *People, partnerships and pedagogies*. Proceedings ASCILITE 2023. Christchurch (pp. 106 - 116). <u>https://doi.org/10.14742/apubs.2023.523</u>

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