Title: Formulated Professional Identity of Learning Designers and the Role of Open Education in Maintaining that Identity.

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Abstract

Educators and educational systems, whether they are in the corporate, higher education or school sector, face significant challenges and competition including more cries for accountability, improving results and the ubiquity of technology. Meanwhile, learning designers, despite lack of clarity about the nomenclature, are in demand as organisations of all kinds strive to meet the challenges of the 21st century. This nexus offers opportunities to further define a professional identity of learning designers, as well as challenging the de-professionalisation of teaching. Rather than suggesting learning design and teaching are exclusive, this chapter argues that teachers working in contemporary contexts now need to draw on the skills practiced by learning designers, in the way suggested by Goodyear (2015), who argued that teaching is an act of design itself. Doing so empowers teachers to assert professional standing, and thus become greater advocates for the importance of education and teachers. This chapter presents a framework for this expanded definition of teaching and discusses how it might fit within existing learning design frameworks. This extended definition is closely linked to more attention being paid to open educational resources, infrastructure and other tools, as opposed to proprietary platforms. Teachers, utilising a reinvigorated professional identity, are well placed to act as advocates for such open educational approaches.

Learning Design: A New Name for an Old Field?

While the term 'learning designer' itself has only recently entered the educational lexicon in Australia, that term is merely the latest iteration of a discussion that stretches back at least four decades. During this time, the definition of learning design – and what is meant by someone who practices learning design, howsoever that is defined or named – has been the subject of much conjecture and disagreement, at least in academic circles. Even recently, articles have argued the difference between instructional, educational and learning design (Dalziel et al., 2015; Parchoma et al., 2019). People who work in this field have variously been described as Learning Designers, Educational Designers, Instructional Designers, and even Learning Engineers (Wagner, 2011; Watters, 2019). Rieber (1998) suggested combining the terms into Learning and Instructional Design Technology, something that some tertiary institutions have adapted, employing a number of Learning Design and Technology Specialists (for example, University of Technology Sydney, 2017). This chapter will adopt an inclusive definition of learning design, inspired, in part, by Laurillard's (2012) emphasis on learning design as a method to improve pedagogy and offer high quality student experience. In short, learning design is perceived as a 'methodology for enabling teachers and designers to make more informed decisions' (Conole & Wills, 2013, p. 28). This definition has been adopted because it reflects the diversity of the work of teachers, and they are the main focus of the chapter.

These discussions about the history of the field and what constitutes the work of a learning designer are covered in more detail (for example, see Association of Educational Communications & Technology (AECT) 2018; Reiber 1998; Wagner 2011) in other sources. Nevertheless, these arguments appear to be, for the most part, a concern of academia rather than the professional world, where the terms learning designers and instructional designers are often used

interchangeably, alongside related descriptions like e-learning facilitators and online trainers. Certainly, the definitional difficulty faced by learning designers does not appear to have limited the growth of the field, both within the education sectors and more widely. Deloitte (2018) predicts that there will be an average annual growth of ICT workers of approximately 2.5%. Of this a significant amount will be in fields related to learning and development. One of Australia's largest job searching websites, Seek.com.au predicts that jobs in the fields of digital learning and instructional design will grow by almost 30% over the next five years. Within Australia, growth is expected to be 13.6% (n.d.).

This growth is linked to the increasing and increasingly ubiquitous use of technology, especially digital and mobile technologies, to meet the evolving training and educational needs of a range of institutions. While it is important to be mindful of the sometimes unfounded hype that heralds the arrival of any new technological solution (Watters, 2019; Weller 2018), it is clear that there is great interest in the opportunities afforded by technology enhanced learning in the workplace and educational settings. The changes within the education sector, specifically, are related to the challenges facing higher education institutions related to increased competition, especially from non-traditional providers. A good example of this is Treehouse (teamtreehouse.com), which offers a 'techdegree' program for aspiring computer developers and programmers. There are also challenges with a changing student population, who are increasingly time-poor, requiring them to fit university study around work and family commitments. This has led to the increasing interest in short courses, microcredentials, online and blended course offerings, all of which are, at least in part, delivered by technological implementations and interventions that are intended to support or even replace face to face learning.

More widely within both the corporate and the education sector, in Australia at least, there is an increasing focus on the role that life-long learning plays in our lives. The recently released Alice Springs Mparntwe Declaration (Council of Australian Governments Education Council 2019), which sets out the goals for education in all of Australia's states and territories, emphasised the need for more focus on lifelong learning: this is a significant change from previous iterations which focused more on the school-based experience, and is linked to the increasing emphasis governments and corporate actors are placing on ongoing training and development. This is something which is mirrored globally, by the UNESCO Institute for Lifelong Learning (UIL). Although it has a history from the middle of the 20th century, the UIL has recently sharpened its focus on different forms of ongoing and continuing education. According to their website:

> Taking a holistic and integrated, inter-sectoral and cross-sectoral approach to lifelong learning as the guiding paradigm for 21st century education, UIL promotes and supports lifelong learning with a focus on adult learning, continuing education, literacy and non-formal basic education. (UIL, 2014)

Finally, it is worth recognising that there is something of a redirection of the purpose of the teacher, especially within schools. Increasingly, teachers are being 're-branded' as 'lead learners' or 'learning advisors'; that is, they are no longer seen solely as subject matter experts, but rather as facilitators and 'guides on the side'. This description of teachers is problematic, and there has been a great deal of discussion about the role that expert content knowledge plays in effective teaching and learning practice: a discussion that will continue for some time (Persico et al., 2018).

Conceptions of Learning Design, Not Learning Designers

In this developing space, there have been thrust a number of different models and processes that seek to explain how a learning designer might effectively construct a learning experience. This

interest in the process of instructional design (as it was called then, and in different sectors, still is today), grew out of a post World War II enthusiasm for standardising instruction in the aims of producing more effective training outcomes. Between 1970 and 2005, more than three dozen models of instructional design were developed (for more on this, see Branch and Dousay, 2015). Application of these models helped 'designers simplify the complex reality of instructional design and apply generic components across multiple contexts' (Dousay, 2018, p. 272). Perhaps one of the most well-known of these models is the ADDIE process, which, according to Branch (2009), forms the basic underlying process of learning or instructional design, regardless of which model is actually used. Other academics and practitioners have further added and developed to the field of knowledge about learning and instructional design. For example, Koehler and Mishra (2008) identified the kinds of knowledge required by educators. The TPACK model identified technical, pedagogical and content knowledge, as well and the interstitial spaces between these fields to explore what teachers need to know in order to be able to design effective learning experiences. Another approach was the development of design layers (Gibbons, 2003), which helped designers prioritise concerns encountered during the instructional design process.

These approaches have often focused on adult educational approaches and originally had their roots in behaviourist philosophies of education. As more recent philosophies have developed, including those with an interest in cognition and socio-cultural approaches to learning (Beecham and Sharpe, 2007; Conole, 2013), different theories about and approaches to learning design have been developed in order to effectively translate these theories about learning into practice within classrooms, whether they are physical spaces or online. A good example of such an approach is Universal Design for Learning (UDL) which was developed by Anne Meyer and David Rose in the 1990s, and sought to conceptualise learning design into a series of interconnected networks: affective (why), recognition (what) and strategic (how) (CAST, 2020).

In addition, there has been interest from the formal schooling sector and the higher education sector in learning design, linked to the increasing pressures of accountability and the need to do more with less resources, and the ubiquity of technology within many schools. More recent models have been developed that specifically address the school sector. For example, Understanding by Design (Wiggins & McTighe, 1998) and Instructional Design for Teachers (ID4T, Carr-Chellman, 2015) focus on helping teachers working in schools to design learning experiences that are underpinned by some of these newer ideas and theories about learning and learning design.

A broader consideration has been the discussion about how best to represent learning designs. In this area, Dalziel et al. (2015) developed the Learning Design Concept Map in an effort to describe the field and depict the influences and contexts that are present in the development of a learning design. This was an effort to describe an 'underlying vision of improving teaching and learning through the development of a descriptive framework' (Dalziel et al., 2015, p. 6). Dalziel et al. are quick to point out that there have been many such representations and metaphors used to attempt to explain learning design. Some of these include the play/ act metaphor, the lesson plan, and the idea of Learning Design as being similar to musical notation. All of these have strengths and weaknesses, and Dalziel and Dobozy (2015) conclude by suggesting that any representation of learning design will probably be a combination of a range of different metaphors and representations. This is a crucial point, and in the discussion below suggests a new representation – not to replace any other representations – but in an effort to supplement those already in existence and further develop the notion of learning designer.

Learning Designer as a Professional Identity

One criticism of many of the approaches described above is the focus on the process by which learning is designed, rather than the individual doing the designing. While some models make reference to the kinds of knowledge that a teacher or learning designer might need (TPACK by Mishreh and Kohler, for example), these are limited and incomplete descriptions of the learning designer as a professional individual. A profession is defined by more than what they do; rather there are elements of identity that must also be considered. In this, the work of Trede and Jackson is particularly informative: they describe a deliberate professional as someone who 'makes conscious choices, takes a stance, commits to action, and takes responsibility for the consequences of their actions' (Trede & Jackson, 2019, p. 3).

While the models briefly discussed above might describe the process by which a design is formulated, or the knowledges upon which a learning designer might draw to demonstrate their expertise in the process of learning design, the models do not adequately encapsulate the professional identify of a learning designer, and that is a lacuna worth investigating. This gap in the literature that is particularly important for people considering entering the profession of learning design. While fledgling learning designers need to understand how and why people learn, the kinds of tools that they might make use of to aid in that process, and the patterns and representations that they might construct or use as they engage in learning design, they also need to understand the roles that they – as learning designers – will undertake in the process of developing learning design; in other words, how is their professional identity developed and maintained (Tripp, 1994)? In short, there is a need for greater clarity around learning designer as a description of a profession. Such clarity will be beneficial not only to new learning designers, but also those working in the field who seek to define what it is they actually do (Rowland, 2008). The confusion about what learning designers 'do' is partly the result of the lack of such a definition, and the framework proposed below goes some way to beginning a conversation about such an approach. A fruitful site for examining how this might work is that of school teachers.

As stated previously, the contexts in which learning designers work are diverse. Not all learning designers work in schools, and it would be incorrect to suggest that all teachers are learning designers. Nor is it correct that all teachers are learning designers, in the strictest sense of the definition. Even so, there is significant overlap between the skills required of teachers, especially as related to contemporary educational practices. This is depicted in Figure 1.

Learning Designers

6 'C's Framework
- Consult
- Curate
- Create
- Commission
- Coordinate
- Critique
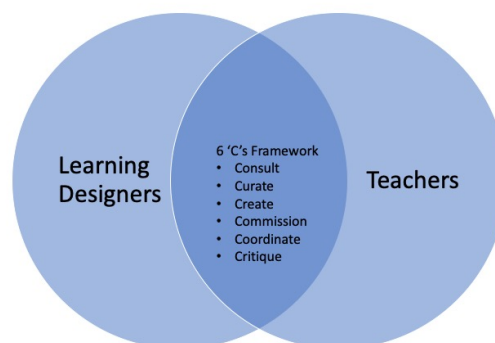
Teachers

Figure 1: Learning Designers and Teachers

However, the profession of teachers is being challenged in many countries around the world (Netolicky, Andrews & Paterson, 2018), with teachers being categorized as lazy, ineffective and inept. Recognising the way that teachers working in schools enact learning design at levels of

significant sophistication in order to design effective educational experiences is a way of resisting the attack on teachers' professionalism; indeed, by making explicit the range of skills that teachers employ when they work as learning designers, it is possible to re-invigorate discussions about the professional skills of teachers, and hence develop a professional identity in which teachers are accorded more respect.

The profession of teaching is under sustained and continuous attack by a range of sources, often described as the Global Education Reform Movement (GERM). GERM seeks to strip the professional judgement away from teachers, repositioning them as mere deliverers of the curriculum (Sahlberg, 2016). This instrumentality limits teachers acting as autonomous or semi-autonomous professionals. Opportunity for professional responsibility and judgement is suppressed, as teachers are required to teach in certain ways, following set lesson plans and using resources dictated and provided by the school or system. In some extreme cases, teachers are told exactly what to say, and how many students to ask precisely-worded questions. In such a case, there is no professional freedom, no openness to creativity, and no opportunity for teachers to enact their professional expertise. Such approaches betray a fundamental misunderstanding of the complex nature of education and learning (Hager & Beckett, 2019), especially in the 21st century and, not surprisingly, are a direct assault on the profession of teachers. After all, who needs a highly trained and educated teacher with a four year degree when all that is required is to follow a script (Adoniou, 2016)?

Recapturing Teacher Identity

What, then, can teachers do in the face of such opposition? The arguments and definitional debates about learning design offer opportunities for those working in schools to recapture their professional identity before it slips away entirely. Such an approach requires a consideration of both the process of designing learning, but also a consideration of the professional identity of the learning designer. To support the latter, a new model of learner designer identity is proposed. By attempting to consider and describe the actions of a learning designer, this model demonstrates the range of expertise that learning designers bring to learning, as well as how they might interact with other experts. This professional identity can also be applied to teachers, and hence strengthen their own professional identity.

The model described below draws from previous models of learning design. Although developed independently, it shares a number of similarities (not least in the name) with Conole's (2015) 7Cs of Learning Design. However, there is a crucial difference in attention that separates this model from other examples extant in the field. As described above, this model seeks to describe what a learning designer (and specifically a teacher) is and does, rather than the process of learning design. This might seem like a semantic difference, but it is an important change of focus that has a number of repercussions, some of which will elaborated on later. Previous models of learning design often seek to set out a process or cycle of learning design. These representations (Dalziel et al., 2016) describe and illuminate what happens when a learning design is created. They usually operate at the level of process, but they don't specifically address the notion of identity. It is this that is important for the proposed framework of learning design. This model is not incompatible with other models of learning design; rather there is great opportunity for complementarity. The difference that this model expresses is that it is trying to describe and encapsulate the identity of a teacher, rather than what a teacher might do when engaging in learning design work.

The purpose behind this activity is an attempt to demonstrate the breadth and width of skills and knowledge employed by teachers on a daily basis. It is also an effort to showcase to initial teacher education students the varieties of ways that teachers act, on a daily, weekly or more long-term

basis. It is also a tool for experienced teachers to use to reflect upon their own practice and how they might continue to deliver learning and teaching. And, perhaps most obviously, it is an attempt to push back against those forces that seek to criticise the teaching profession for a lack of intelligence, dedication, professionalism or ability.

The 6 Cs Framework for the Work of a Learning Designer

The model (Fig. 2) is based on 6 'C's which seek to describe the kinds of things that learning designers (and in this case, teachers) do, as part of their professional identity. Each of the 'C's is described in detail below, with reference to how teachers might embrace parts of this framework in their practice in schools.
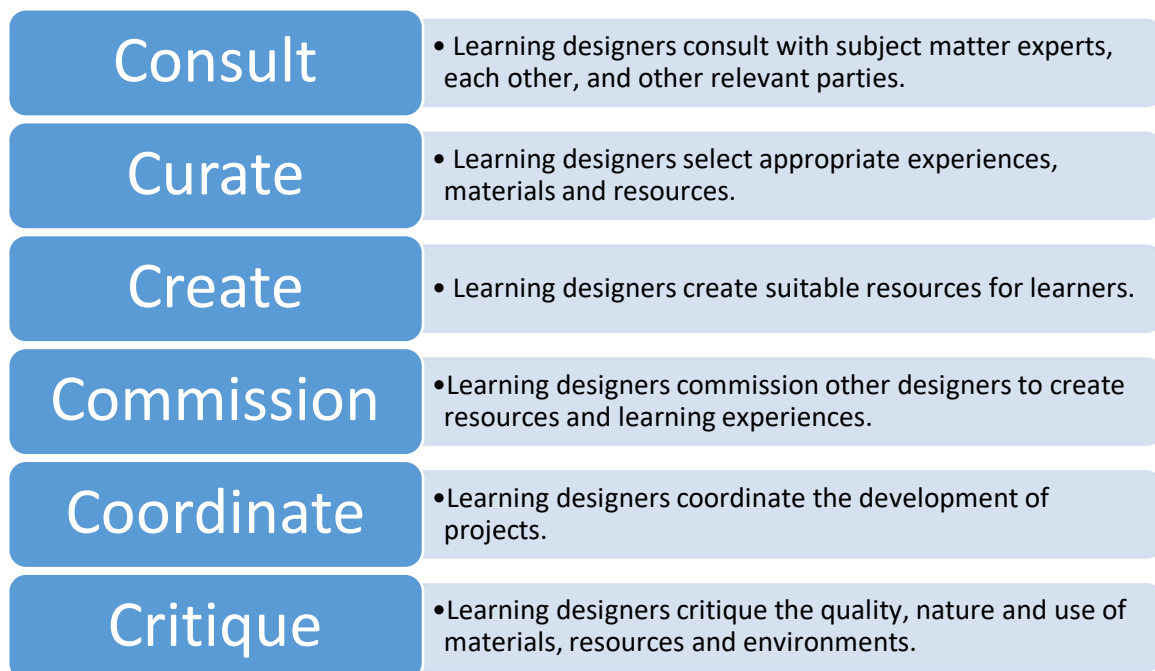
Consult	• Learning designers consult with subject matter experts, each other, and other relevant parties.
Curate	• Learning designers select appropriate experiences, materials and resources.
Create	• Learning designers create suitable resources for learners.
Commission	• Learning designers commission other designers to create resources and learning experiences.
Coordinate	• Learning designers coordinate the development of projects.
Critique	• Learning designers critique the quality, nature and use of materials, resources and environments.

Figure 2: The 6 'C's Framework for Learning Designers

Learning Designers *consult*. Learning designers are not always, or even usually, subject matter experts in the fields they are designing learning. Of course, there are differing levels of expertise, and often teachers are considered to be somewhat expert in their field by virtue of their academic studies, but many learning designers need to – and should - consult with subject matter experts (SMEs) in order to best design learning experiences. The expertise of teachers and learning designers should be in the field of pedagogy, not necessarily subject matter (although such a binary can be problematic in itself). This is a position that is supported by the OECD, who envision

> teachers as designers of learning environments, which focuses on the shift from teachers as technicians who strive to attain the education goals set by the curriculum, to experts in the art and science of teaching. (Paniagua & Istance, 2018, p. 13)

This is interesting because there is a great deal of academic discussion about the importance of teacher content knowledge for good teaching and learning. Certainly, in terms of developing expertise, there are some arguments to be made that skills are content-driven, and hence you ccan't develop generic skills. Regardless of that, learning designers are still required to – and do – consult with a wide range of subject matter experts before they formulate their learning designs. For teachers, this consultation takes place in a range of different ways: they consult with academics (for

example, teachers attending sessions given by archaeologists about Pompeii), they consult different sources (both academic and teaching focused resources) and they consult with other teachers (often about different approaches to teaching and learning with their classes). This consultation is important – both because it improves teachers' practice, but equally because it serves as a way that teachers can demonstrate expertise and support within the profession.

Learning Designers *curate*. All learning designers are required to curate materials and resources in order to determine which materials best fit with the particular learning context for which they are designing. In the past, where the resources available to teachers and schools were much more limited, this might have been a simpler task. Now, however, in the age of digital and mobile technology, students and teachers have access to a wide range of information. But access to that information is not the same as understanding it, and this is where the professional expertise of the learning designer comes into the equation. As a learning designer, a teacher must identify resources that are suitable to meet the needs of a wide range of learners – many of which will be in the same class as each other. This is a task that is by no means easy. In addition to thinking about the particular level of, for example, a text-based article on the internet, learning designers must consider whether it is accessible through a school system. They must also consider whether the web site hosting the article serves the article in a way that is suitable for students with special needs, such as vision impairment. Learning designers must also consider whether the material is sufficiently engaging for students in their class – or perhaps whether it is too engaging, and risks students becoming distracted. Again, learning designers engaging in these decisions are demonstrating a nuanced and professional understanding of the craft of learning design and the students that they are teaching.

Learning designers *create*. Of course, should there be no appropriate material, learning designers can create their own resources. This is an intensely time-consuming process, but that does not mean that learning designers don't do it. Taking the case of teachers, they spend significant amounts of their planning and preparation time devising new resources, such as videos, interactive games and animations. There is a wealth of potential creations, and the considerations described above for curation all apply to creation as well, although there is more fine-grained control over the creation process than there is in curation. Creation is a mediated process; that is, there are a variety of different tools that do some or all of the heavy lifting necessary for the creation of new content, but those resources offer affordances that limit the nature and kind of these resources, and a good learning designer is mindful of these affordances. While there is nothing particularly revolutionary here and many educators have always created their own resources, teachers having the right, and the capability, to create their own resources is central to their expression of their professional identity as a learning designers; that is, it is important for teachers are not restricted to using only previously created materials in their design for learning (for example, a proprietary textbook, or a learning management system) – they need to be able to alter them as they see fit to meet the needs of the learning environment.

Learning designers *commission*. In non school-based roles, learning designers often end up working in a de facto project management role. This means that they are often required to work with other creative professionals in order to develop learning resources that are suitable. This can be everything from film producers to graphic designers to developers - and it's perhaps not surprising that this kind of role is often confused with the role of learning designers themselves. Much of this is taken up in the next 'c' in the framework (*coordinate*), but the part referred to here is the commissioning of new learning resources and experiences. This might seem to have only limited applicability to teachers working in schools, who are the focus of this discussion, but there is some

relevance. In determining how best to meet the educational outcomes, teachers should have the opportunity to determine the kinds of learning experiences – for example, by deciding which subject matter experts might come to the school and do a presentation on life in the Middle Ages for example – or, indeed, even when to decide to commission the involvement of a subject matter expert.

As described above, learning designers *coordinate* projects and activities. Firstly, in industry and often with designing e-learning materials, a learning designer might design a course (fully, through consultation and iteration, see 'cycle' below) and then leave it to operate without the further involvement of the learning designer. For example, a learning designer might design a course, write the content and then leave it to run on an as-needed, asynchronous basis, with no further input from the learning designer. In this case, the learning designer co-ordinated a few working parts, managed a few contributions from key figures and subject matter experts, developed some content, some evaluation materials and an assessment. In this role, the learning designer was like a project manager (admittedly on a very small project). There are, however, other ways of considering learning design. A second example relates to the coordination of synchronous learning experiences. The term facilitation is difficult for some educators, who aren't enthusiastic of the notion of teacher as 'guide on the side', but it is meant here in a much broader sense - as in someone who organises, manages and even directs learning activities. In one sense, all teachers working in schools are coordinators in this fashion.

A final, and often overlooked, facet of learning designers is that they are required to *critique* as part of their work. This is, in the era of GERM and claims about what is and isn't suitable or appropriate educational research, even more important for teachers working in classrooms. Teachers need to be highly critical of new implementations and initiatives, lest they end up drowning under the weight of initiative overload. This aspect is crucially important for teachers working within large organisations; their voices are those of practitioners with an intimate understanding of the way that policy and theory has been translated into practice; as such, they are uniquely placed to voice important questions about practical and ethical issues that have been raised in the course of their work. In many ways, teachers and learning designers need to take on the role of advocates in this respect, speaking out in the interests of students and participants.

The Role of Open Education in this Framework

The above framework to think about the work of teachers (not teaching) is important because it strengthens the responsibility and professionalism of the teaching profession. The framework allows teachers to reflect and affirm the diverse roles that they undertake as educators; more importantly, it is an inclusive approach that doesn't seek to confine or limit them to being solely deliverers of pre-defined and pre-constructed learning materials and hence challenges the de-professionalisation of teaching and encourages a professionalisation of learning design as a whole. Instead, teachers are empowered to be creative and critical creators and curators, capable of making decisions based on what they see as being important for their classes, in their profession judgement.

A brief example might help illustrate why this important. As mentioned earlier, education is becoming increasingly dominated by technology and there are great (and as yet, still controversial) claims about how technology might improve learning. Teachers are increasingly required to make use of technology in a range of different forms in their classrooms via 1:1 iPad or laptop programs. The recent demands for increased Science, Technology Engineering and Mathematics (STEM) education is one such example of this, but it is hardly an isolated case. This is a broadening and developing sphere – technology is no longer is restricted to what is happening in classrooms either.

Now, technology – and corporate actors - influence all aspects of teaching, and are intensely involved in testing, assessment, administrative and student management tools, learning management systems, online textbooks and learning sources and lots more. In addition, technology-supported communication tools and especially forms of social media are being increasingly used to communicate with parents and other stakeholders – which, while it does have benefits, can also cause significant issues in relation to privacy. The best known of these include Facebook and Instagram. While decision making (for example, about LMSs) often takes place at a school or even district level, teachers are still capable of either enforcing or resisting these decisions. At a more granular level, teachers still have some authority in the classroom about the kinds of tools that are used and can resist uncritical deployments.

A key battleground in this area is the use of data and assessment apps. For example, in the Australian state of Victoria, public schools make use of an app called Compass. The purpose of Compass is to consolidate information about a child's ability and performance at school and to communicate that information with parents. However, Compass allows the information stored on it to be distributed to third party vendors:

> You retain all of your ownership rights in your content, but you are required to grant us and other users of our Services a limited licence to use, store and copy that content and to distribute and make it available to third parties.

> (Compass Education, n.d)

This is a relatively minor example – but it does have significant repercussions – and these repercussions are not often considered at the level of those doing the day to day learning design. While governments have indicated that they appear to have little appetite for limiting this 'educational data for sale' approach, I think that teachers can and should resist it in any way they can. However, resisting the pernicious influence of platform capitalism and protecting the privacy of children requires teachers and learning designers to have a clear conception of their professional role within society. The framework described above is one part of that. A second part is teachers becoming advocates of Open Education approaches in their classrooms, schools and systems. Wiley (2014) has been a vocal critic of the failure of Massive Open Online Courses (MOOCs) to live up to the promise of being 'open'. In particular, Wiley cites the locked-down and fee-charging nature of many MOOCs that prevent them being truly open or democratic in nature – and thus these MOOCs are more 'closed' than 'open'.

Instead, Wiley draws on the Hewlett Foundation's proposal that open means

> teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge (Hewlett Foundation, 2014).

According to Wiley, this means that users are free to retain, reuse, revise, remix and redistribute materials. These principles fit neatly with many of the 'c's in the framework described above. In particular, teachers working as *creators, curators and critics* are adjacent to the notion of open education. More importantly, Wiley makes the compelling case that such an approach will increase the quality of teaching and learning by allowing for a more diverse expression of innovation. This is perhaps the most powerful argument for Open Education. Almost every conception of learning design cites the improvement of teaching and learning as being central to their development. Such

an improvement is likely to take some innovation or application of solutions to new needs and that innovation is more likely to come from a professional community of teachers and learning designers committed to Open Education than it is from a de-professionalised and isolated group of teachers trapped within walled ecosystems of technology and resources.

Conclusion

Education is at a critical juncture in many countries. There are significant pressures both external to and within educational systems that are seeking to capitalise on student information and data, as well as the development of learning and assessment resources, tools and infrastructure. In addition, in schools, teachers are increasingly being framed as unprofessional, unaccountable and of poor quality. At the same time, there is increasing corporate and higher education interest in the field of learning design and learning designers, although what is meant by those terms remains unclear.

This juncture provides an opportunity for teachers to use the debate about learning design to reinvigorate a discussion of the importance of their profession. Such a reinvigoration requires a focus not only on the 'what' of learning design, but also the 'who'; that is, the professional identity of learning designers (and teachers). In order to assist this discussion, a model of learner designer professional identity which describes learning designers as consultors, creators, curators, commissioners, critics and coordinators is proposed. Such a framework seeks to add to the already existing definitions of learning design in order to more fully describe the totality of being a learning designer.

This is a necessary first step in reclaiming teacher professional identity, but it is not sufficient in and of itself. Instead, this new professional identity must be bonded with new avenues for those advocating in increasing the spread and strength of teachers' voices. Some of these avenues are currently being explored, by scholars such as Stevenson and Gilliland (2016), who supports the combination of industrial and the professional. Teachers are also putting forward diverse views in favour of new approaches: some interesting ideas are encapsulated in the Flip the System movement (Evers & Kneyber, 2015; Netolicky, Andrews & Paterson, 2018).

Such an approach to reinvigorating discussions about the professionalism of teachers is also a powerful argument in favour of open education resources as opposed to the proprietary systems of educational provision that are present in many schools and systems. Open education requires a commitment to a democratic model of education, with an emphasis in sharing and inclusivity. Such an approach is more likely to encourage innovation, which, in turn, is more likely to lead to improvements in teaching and learning.

Speaking more broadly than just school teachers, the 6 'C's framework takes on more significance in a world that is increasingly taking place online, as a result of the COVID-19 pandemic. Learning designers from all contexts are going to play an important role in designing and delivering educational experiences in these online and blended environments. The 6 'C's framework provides a structure for learning designers to consider their work, but also for subject matter experts and other educators to recognise the breadth and depth of what learning designers do.

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