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Building online degrees quickly: Academic experiences and institutional benefits

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Building online degrees quickly: Academic experiences and institutional benefits

Abstract

Universities everywhere are rushing to upgrade their digital learning capabilities — and, more so now, in response to COVID-19. Long term, large-scale development of online courses requires investment in digital infrastructures and collaborative curriculum design involving educational, technical, and subject-matter experts. However, compared to the resources invested in course development, there is relatively little investment in researching such development processes. Drawing on findings from a study of a strategic initiative to rapidly develop 12 fully online undergraduate degree programs in one Australian university, this paper reports on a study that aimed to capture the experiences of academic course writers. Findings show broad satisfaction with the production processes, courses created, and knowledge acquired - although also demonstrating key differences between senior, junior and casualised staff. This empirical case study contributes to knowledge about capacity building arising from large-scale, in-house development of fully online degree programs.

Keywords

online course development, digital capacity building, collaborative online design

Cover Page Footnote

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Introduction

Enabled by enormous improvements in educational technologies, the desire for flexibility, and competitive advantage — now further exacerbated by the COVID-19 global pandemic — higher education is embracing online learning at an extraordinary rate. In Australia, for example, the number of students enrolled in external higher education courses (that is, "off-campus study, which is primarily online") has more than doubled from 2006 to 2016 (Rogers et al., 2018, p. 11) and, as of 2018, at least six Australian universities have undertaken initiatives to develop large-scale online capacity (Kehrwald & Parker, 2019). The onset of COVID-19 has undoubtedly accelerated this trend with institutions having to transform their teaching practices for the online environment almost overnight (Crawford et al., 2020). These shifts give cause to reconsider the kind of educational provision higher education institutions should be providing while operating in an increasingly competitive and unstable global environment. It begs questions, too, about the nature of curriculum development and pedagogy in massified and economically constrained contexts. How can institutions respond quickly and appropriately to build online courses - and yet retain quality and maintain core principles? How do institutions enact strategic plans to digitise their educational offerings, and in so doing, what are the costs and benefits? What are the impacts and implications for staff involved in online curriculum development and teaching?

Initiatives to roll out online programs can be undertaken by outsourcing, by using existing resources to renovate existing curriculum for the online environment, or by undertaking separately funded in-house online course development 'strategic projects' (Harper & Aitchison, 2018). Both the in-house options imply challenges for quality if development occurs under time constraints and concurrently with the normal business of learning and teaching (Davey et al., 2019). Besides adequate resourcing, efficient, large-scale curriculum development projects require project management oversight and the development of expertise of the existing staff. However, for academic staff in the online environment, there is still sometimes resistance, or poor uptake of the relatively sparse empirical research for informing evidence-based practice (Kehrwald & Parker, 2019).

To date, much of the research has been small-scale case studies where one, or a few academics are supported to change existing courses to an online version for blended delivery (Chao et al., 2010). This literature on blended and online curriculum development widely favours collaborative approaches wherein educational developers play a key role in supporting academic staff (Chao et al., 2010, p. 108; Croxford et al., 2019). In this model, educational developers, such as educational designers and academic developers, work with academic subject-matter experts to create online courses (Voogt et al., 2015, p. 260). However, in a systematic review of the literature, Torrisi-Steele and Drew (2013) noted that many of these studies are student-focused and more concerned with reporting implementation practices such as tools and technologies; there is limited information about the experiences of academics involved in such curriculum work (see also Croxford et al., 2019). They argue that this lack inhibits our ability to adequately support and develop academics in online course and curriculum development.

While there is an undeniable push to online learning as institutions seek to become competitive, by contrast, there is less provision made for the evaluation of the curriculum development processes (Xu & Morris, 2007, p. 36). This is despite the recognised need for effective appraisal and review of practice during the development of online and distance courses (Stevens, 2013) and the need for improved knowledge and skills in online pedagogy among academics (Baran et al., 2013;

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Bernauer & Tomei, 2015; Davey et al., 2019). Is this lack of empirical research inhibiting our ability to realise the potential of online learning to be a catalyst for academic capacity-building (Torrisi & Davis, 2000)? This empirical investigation of academic course-writer's experiences through their involvement in large-scale online curriculum development contributes to the emerging body of knowledge about capacity building arising from institution-wide online course development.

Literature

As with other facets of contemporary life, higher education operates in a highly competitive environment (Connell, 2013) and the push to online learning is one instance of the increasing marketisation of the sector recently further accelerated by the imperative to pivot to online delivery.

As universities seek to expand their online educational provision, they need to simultaneously upskill academic staff: both the online teachers, and (unless out-sourcing course production) the subject matter experts involved in creating online courses. A variety of collaborative processes are described in the literature (Outlaw et al., 2018; Torrisi & Davis, 2000; Xu & Morris, 2007). Much of the literature describes examples where academics who already teach an on-campus subject or course are involved in creating an online version which they personally will teach in a blended mode or fully online. These studies focus on the processes and practices of online curriculum development: two approaches to course development are commonly reviewed, that is, academics working alone using existing resources to build external courses (Stevens, 2013; Torrisi-Steele & Drew, 2013) and small-scale (fewer than 10 academic participants) collaborative projects where academics work with educational developers (Brown et al., 2013; Chao et al., 2010; Stevens, 2013; Torrisi & Davis, 2000; Voogt et al., 2015).

The redesign of existing courses taught in face to face or blended modes, as well as the development of new courses, for the online environment, requires knowledge of online pedagogy, curriculum design and technical expertise. In addition, the dynamic digital environment requires an awareness of rapidly evolving legislation concerning digital copyright, attribution and access guidelines; multimedia skills such as video recording, editing and publishing; as well as digital literacies regarding online educational tools, platforms and integrity issues. Teaching academics, who are generally employed for their subject matter knowledge, do not necessarily have such expertise — nor do they necessarily have time nor interest— particularly when universities continue to reward research over teaching (Lupton et al., 2018).

Given the range of skills and knowledge necessary to produce successful online courses, it is perhaps unsurprising that the literature identifies a strong theme concerning the collaborative nature of online course development projects (Brown et al., 2013; Chao et al., 2010; Stevens, 2013; Torrisi & Davis, 2000; Voogt et al., 2015; Croxford et al., 2019). Team approaches have in common, a shared valuing of collaboration, respect for different team member expertise, and trust. Stevens (2013) refers to five emergent themes for course development: partnership, communication, collaboration, cooperation, and commitment.

On smaller scale course development projects, collaborative teams commonly consist of an academic with subject expertise, and an educational designer who brings online course design expertise and sometimes also an academic developer/project manager with online pedagogy and curriculum expertise (Chao et al., 2010; Xu & Morris, 2007). Larger, better-resourced models will

have expanded teams that may include AV support, graphic designers, specialised online exam and digital curriculum librarian support (see, for example, *JUTLP Special Edition: Implementing online learning: Stories from the field:* Kehrwald & Parker, 2019).

A collaborative approach is often seen as beneficial to academic capacity building because the process can bring together diverse expertise and academic experiences (Bernauer & Tomei, 2015; Brown et al., 2013; Stevens, 2013; Ziegenfuss & Lawler, 2008). Collaborative course development experiences have been identified by academics as producing better courses and contributing towards their professional development regarding online pedagogy and curriculum (Hallett, 2018; Voogt et al., 2015; Xu & Morris, 2007). Even though the collaborative process takes more time and can produce conflict around roles (Stevens, 2013), ultimately, course quality is improved through multiple perspectives and peer feedback — especially when a program-wide approach is taken (Rodrigo & Ramírez, 2017; Torrisi-Steele & Drew, 2013; Xu & Morris, 2007).

Much professional development of academic staff in relation to online learning has centred on blended learning and has been small-scale, ranging from individual training sessions, to mentoring, to communities of practice (Torrisi-Steele & Drew, 2013). As online learning and teaching have become increasingly routine, there is evidence of a greater sharing of practices, and especially in recent years, as institutions undertake more strategic and larger-scale online learning initiatives, there has been a great interest in models for large-scale course development. It is worth noting however that this trend runs parallel to institutions' entrepreneurial endeavours that stake much on the competitive advantage to be gained by rapid, efficient and quality online course development initiatives. Is it possible these counter forces simultaneously confine the open sharing of educational practices?

Context

Turning now to this case study, we begin by acknowledging how historic, geographic, and local differences have given rise to variation in terminology. In this paper, we differentiate between content, course and curriculum development. We refer to the course, or unit of study, as the online learning experience, the "deliverable", that is a combination of content and curriculum. In other words, "content is only one part of the curriculum equation" (Forsey & Page, 2018, p. 113) and it, along with curriculum, educational and pedagogical design are components of creating a course or unit of study. Course content, at its basic, is conceived of as subject matter or syllabus – that is, the knowledge to be acquired as indicated by course learning objectives. Developing courses includes writing (subject matter) content as well as designing the online environment, curriculum, and pedagogy.

In online course development roles and expertise are also often blurred. We use the term "course writers" generically to describe the subject matter expert who may be a teaching academic or sometimes, an industry representative. To emphasise minimal modifications to existing courses, content, and curriculum, we refer to writing course content. On the other hand, for courses where both subject matter content and course curriculum design is required, we seek to differentiate the development tasks by referring to curriculum/course/ content as appropriate.

This paper reports on a strategic institutional initiative to develop twelve three-year credited bachelor degree programs for fully online delivery. The project aimed, initially, to deliver 189 online courses (10-week units of study) within a 31-month period commencing in November 2016. Of these 189 courses, 28.4 percent were to be new, meaning they had no existing curriculum and

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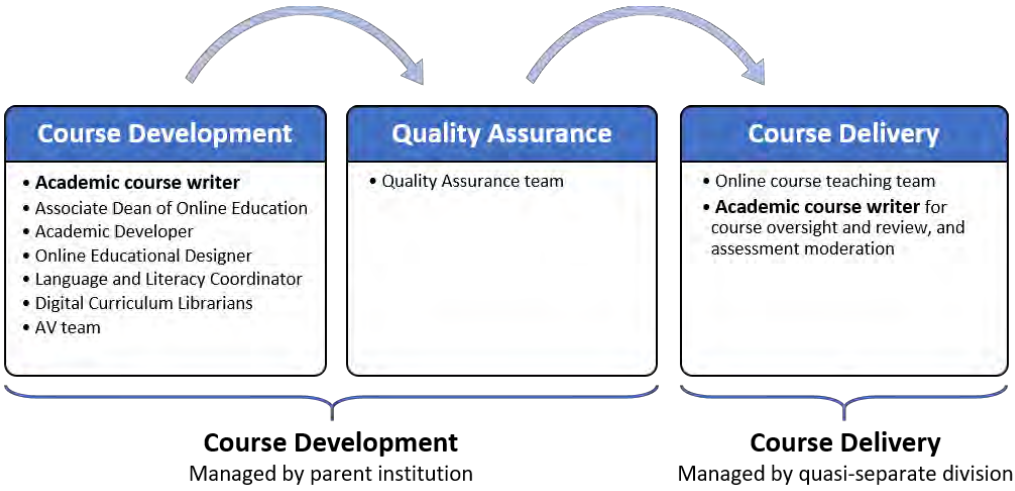
had never been taught at the university; 23.2 percent were amended, meaning they were currently taught on campus in face-to-face or blended modes; and 48.4 percent of courses were existing, that is, they were already taught in a 10-week format and/or externally and were perceived as needing relatively less curriculum renewal.

In addition to course development, the strategy aimed to expose the university to a new nationwide student market, and further develop the online capacities of the whole institution (University of South Australia, 2016). Course development was to be under the auspices of a quasi-separate division combining some existing resources and personnel with specifically funded functions and personnel. The academic delivery model involved a separation between course development and delivery, with teaching being undertaken by staff in coordinating or tutoring roles operating under different conditions from the primary institutional faculty arrangements.

Course development was collaborative with one development team for each of the four institutional disciplinary clusters. Individual course development teams consisted of an Associate Dean of Online Education, typically one Academic Developer, and one or more Online Educational Designers, a Language and Literacy Coordinator, dedicated Audiovisual and Digital Curriculum Librarian support, all of whom came together to co-create each course with at least one subject matter expert content writer. The authors of this paper worked as Academic Developers and Online Educational Designers in one of the disciplinary clusters developing three undergraduate degree programs.

Figure 1.

Model of the course development process



Each course development team collaborated over 12-week production cycles to design and align the curriculum and assessments, source and prepare learning materials, create interactive student activities and multimedia assets, and populate the Learning Management System. Typically, academic course writers were involved for only 10 of the 12 weeks of the production cycle. Course writers were given workload allocations of 75-hours for existing courses and 100-hours for

courses requiring considerable modification. For brand new courses they were allocated 150-hours for curriculum development.

Methods

In early 2018, with ethics approval, a study was undertaken to canvas the experiences of academic course writers involved in this institutional initiative. The aim was to evaluate existing practices to identify which factors affect academic capacity building. The research questions were:

1. What do academic staff learn through engaging in course development?
2. What factors enable and/or inhibit their learning and progress?
3. What elements of the current course development processes should be reviewed in order to enhance the outcomes for academic staff, and the institution?

The development of the survey instrument was informed by the research aim, relevant literature and by consulting peers in order to collect data relating to three key domains; participant demographics, their satisfaction with the development process and outcomes, and their subsequent application of their learning. Initial drafts of the survey instrument were tested for validity and reliability through two cycles of peer review and because the researchers were likely to be known to a small proportion of the participants, extra care was taken to maximise anonymity and protect the identity of respondents.

All academic course writers involved in the project (n = 139) were invited to participate by completing the 15-item online survey, consisting of predominantly multiple choice and Likert scale questions with optional areas to provide expanded free-text responses. Forty-nine completed the survey yielding a response rate of 35.3 percent. Initial invitations, sent in March 2018, collected longitudinal data from course writers involved in development in the 16 months prior (n = 17). The subsequent rounds of invitations (final round in November 2018) captured reflections spanning 3 months since the engagement of these course writers in the development process (n = 32).

Quantitative data was cleaned, sorted, and analysed using external statistical support to increase reliability and objectivity. Likert scale responses were recorded into five-point ordinal values so descriptive statistic techniques could be applied to establish means, sample variance and standard deviation. NVivo was used to thematically and recursively code (Auerbach & Silverstein, 2003; Braun & Clarke, 2006) survey free-text responses. Coding was undertaken by team members, separately and collectively to maximise validity and reliability by identifying patterns individually initially and then in combination. Survey data was correlated with deidentified participant demographics such as prior experience and workload allocations.

Findings

The focus of this paper is guided by a concern to explore the affordances of this model of large-scale intensive online course development for the academic development of the disciplinary staff involved, and, more broadly, for impacts on the institution. We report on four themes from the data: course writer demographics, course writer experiences in large-scale course development, course development and capacity building, and course writer's application and sharing of new knowledge.

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Course writer demographics

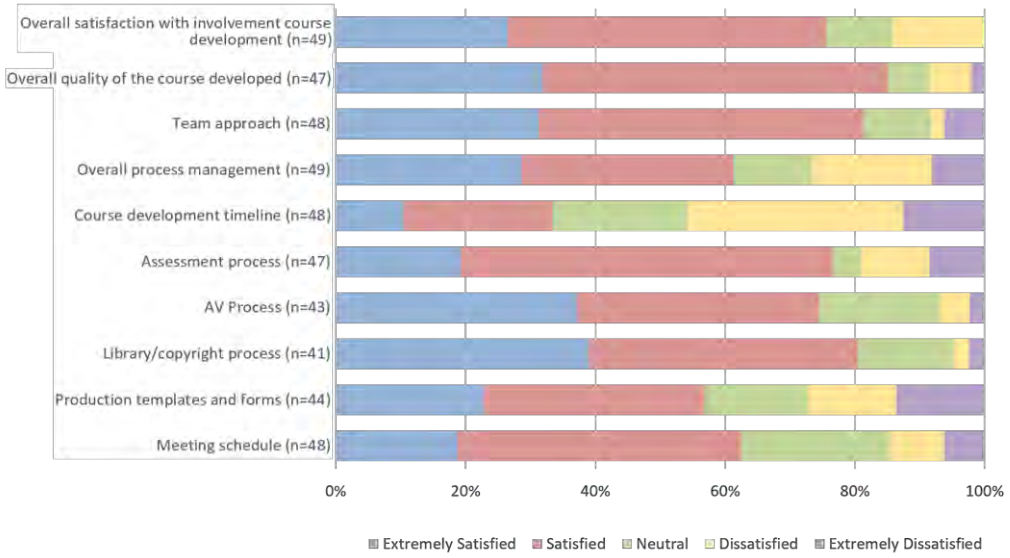
In all but a few cases, course writers were employed by the university. Predominantly, course writers (n = 49) were teaching and research (49%) or teaching academics (33%) with some casual staff (16%) and a minority of research focused academics (2%). Most (70%) were experienced in higher education with greater than five years' experience. Course writers had a varied range of online course development experience with 27 percent never having previously developed or taught an online course with a further 27 percent never having developed an online course but with online teaching experience. Other course writers self-identified as having limited, considerable, and extensive course development experience (14%, 18%, and 20% respectively). There was a relatively even balance between courses writers who undertook course writing alone (53%) and those who elected to share course writing duties with another academic (47%). Most course writers had either taught the course they were (re)writing either on-campus (37%) or on-campus and in an external format (27%) with a minority (6%) never having been involved in the delivery of that particular course. The remaining course writers (31%) were involved in developing new courses never delivered at the university.

Course writer experiences in large-scale course development

Course writers were asked to rate aspects of their experiences in the course development process using a Likert scale (from 'extremely dissatisfied' = 1 to 'extremely satisfied' = 5), results are displayed in Figure 2. On average, course writers were satisfied with their overall involvement in the course development process ($\bar{x}$ = 3.88, SD = 0.97) and, importantly, the overall quality of the course that was developed ($\bar{x}$ = 4.06, SD = 0.92).

Figure 2.

Course writer satisfaction with aspects of the course development process



Responses show that course writers were comparatively more satisfied with the team approach ($\bar{x}$ = 3.98, SD = 1.04), the library ($\bar{x}$ = 4.12, SD = 0.93) and AV support ($\bar{x}$ = 4.02, SD = 0.99); by comparison, they were least satisfied with the timeframes for course development ($\bar{x}$ = 2.85, SD = 1.22). Other aspects that scored comparatively poorly were process management ($\bar{x}$ = 3.55, SD = 1.31), and the production templates ($\bar{x}$ = 3.39, SD = 1.35). The data showed an upward trend in satisfaction over time, with course writers involved in development from January to July 2018 (n = 16, $\bar{x}$ = 3.9, SD = 1.05) being, on average, more satisfied than those involved in 2017 (n = 33, $\bar{x}$ = 3.58, SD = 1.20).

Combining quantitative data with results from the thematic coding of the optional qualitative survey questions highlights three key themes: process management, timelines, and the collaborative team approach. Firstly, course writer satisfaction with the overall management of the course development process polarised some course writers. Some were happy with the way the project had been managed – "*project management was exceptional*", however, there were comments to the contrary; "*Changing requirements and expectations were a significant problem throughout… communication tended to come down a chain to those responsible", "It was not ideal splitting the course development with other people"*. And some questioned the wisdom of separating online course teaching from established faculty divisions – "*the big issue is who is the owner and ultimately responsible for the course*".

Secondly, the aspect of the course development process with the lowest satisfaction rating was timelines. Many respondents felt that the 12-week development model gave insufficient recognition of the time and effort required for writing content - particularly for those who simultaneously carried regular teaching and research workloads, "*Don't underestimate the amount of time it takes to re-shape a course to an online-only environment"*, "*Realise that academics are continuing with their normal job requirements*". One course writer said: *"I felt like on a production line with no consideration for me or for the students".* However, acknowledging that in normal contexts, workload allocation (and financial compensation) for course development was relatively rare, another said: "[it was positive] *to put time aside to think about the course properly*".

Thirdly, most course writers were either satisfied or extremely satisfied with the collaborative team approach. Several valued the expertise of the various team members and the support they provided, "*working with the team was a very good experience, everyone had useful input and followed through*", "*Plenty of support in translating my ideas into course content*" and noted the benefits of discursively working through the course development process – "*It was a good opportunity to speak through the course with a third party and re-structure the course and activities in one go*". A minority of comments (four of 18) pointed to the need for better team communication and coordination of expectations, "*The team needs to have a coordinated approach about the outcomes they are expecting from the academic staff*".

When this data was cross-matched with participant demographics, additional insights were obtained specifically in relation to course writers' prior teaching experiences and their work arrangements for this online course development project. These demographics-related findings of course writer experiences included:

- the more experienced a course writer, the more satisfied they were with the course development timelines and the overall quality of course developed (0-5 years' experience n = 15, $\bar{x}$ = 3.20, SD = 1.21; 6-15 years' experience n = 21, $\bar{x}$ = 3.44, SD = 1.25; over 16 years' experience n = 13, $\bar{x}$ = 3.79, SD = 1.22).

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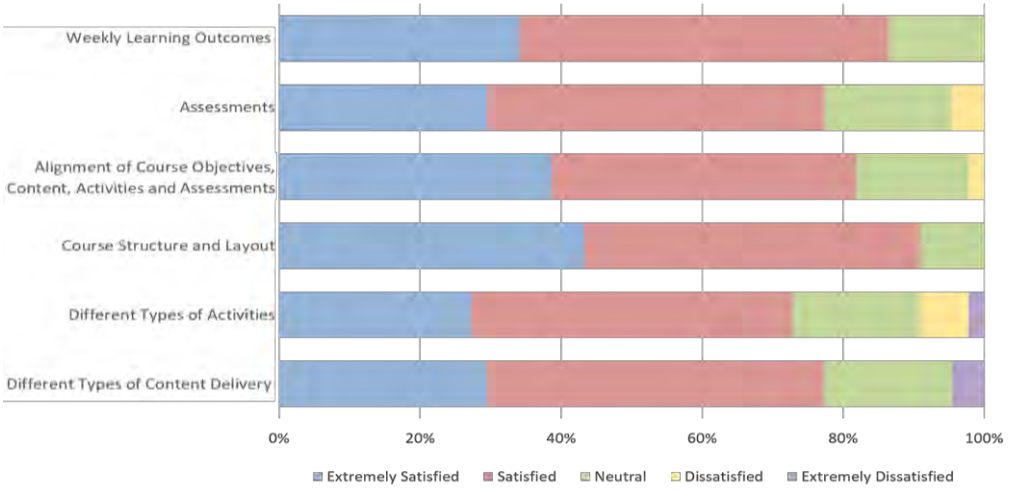
- those writing content for brand new courses recorded greater satisfaction overall (n = 15, $\bar{x}$ = 4.08, SD = 1.05) than those (re)writing existing courses (n = 34, $\bar{x}$ = 3.54, SD = 1.17).
- there was little difference in satisfaction levels regarding course development processes between those who had prior experience developing an online course (n = 26, $\bar{x}$ = 3.64, SD = 1.21), and those who had not (n = 23, $\bar{x}$ = 3.78, SD = 1.09).
- where course writers were solely responsible for content writing, they were more satisfied with their overall involvement in course development (n = 26, $\bar{x}$ = 4.12, SD = 1.03) than those who split content writing with another course writers (n = 23, $\bar{x}$ = 3.61, SD = 0.84).

Course development and capacity building

In order to identify how well the strategic plan met its objective of institutional capacity-building, we analysed self-identified knowledge and skills learnt by course writers, subsequent individual application of this learning, and the degree to which course writers shared these learnings with their colleagues. Of those surveyed, course writers were mostly satisfied with their knowledge arising from their involvement in the course development process (Figure 3), however, a minority (five of 49 participants) indicated that they had not learnt anything from their involvement.

Figure 3.

Course writer (n = 44) satisfaction with knowledge arising from their involvement in the course development process



Associated qualitative comments provided a more nuanced understanding of what academic course writers learnt from their involvement in course development, including, common references to assessment and curriculum planning, such as, "*I have learnt to look at assessments and activities differently by aligning them more closely with course objectives and student learning outcomes.*", and pedagogical knowledge "*Breaking down weekly learning tasks around short lecture videos rather than working in large chunks*". Course writers identified different learnings depending on their experience; including, for example, new revelations "*That delivering online courses requires much more work that* [sic] *simply putting existing materials online.*" and they also built on existing knowledge, "*While I feel that I already had a good understanding of these*

issues, my knowledge has definitely been enhanced". In contrast, some identified how time pressure militated against learning– "*while it would have been nice to have gained some skills, in practice, we were encouraged to just get things done*" and how the team approach had the potential to inhibit an individual's learnings "*I personally would have liked more training in how I can implement some of the online tools into my own courses. I feel like this happened behind the scenes*".

Interestingly, matching survey responses with demographic data enabled us to identify small differences in satisfaction with knowledge gained between course writers who had previous online course development experience, and those who did not (respectively, $n = 22$, $\bar{x} = 3.99$, SD = 0.88; $n = 22$, $\bar{x} = 4.21$, SD = 0.75). In addition, similar to course writer satisfaction with the development process, there was a minor upwards trend in satisfaction over time between those developing courses in 2017 as compared to 2018 (2017 $n = 28$, $\bar{x} = 4.04$, SD = 0.81; 2018 $n = 16$, $\bar{x} = 4.22$, SD = 0.84) and those developing new courses were more satisfied with their knowledge and skills than those (re)writing existing courses (respectively, $n = 15$, $\bar{x} = 4.46$, SD = 0.71; $n = 26$, $\bar{x} = 3.95$, SD = 0.84). Further, senior academics (over 16 years' experience) felt they had benefited more than mid (six to 15 years' experience) and early career (less than five years' experience) academics (respectively, $n = 9$, $\bar{x} = 4.39$, SD = 0.71; $n = 21$, $\bar{x} = 4.06$, SD = 0.82; $n = 14$, $\bar{x} = 3.99$, SD = 0.86).

Application and sharing of new knowledge

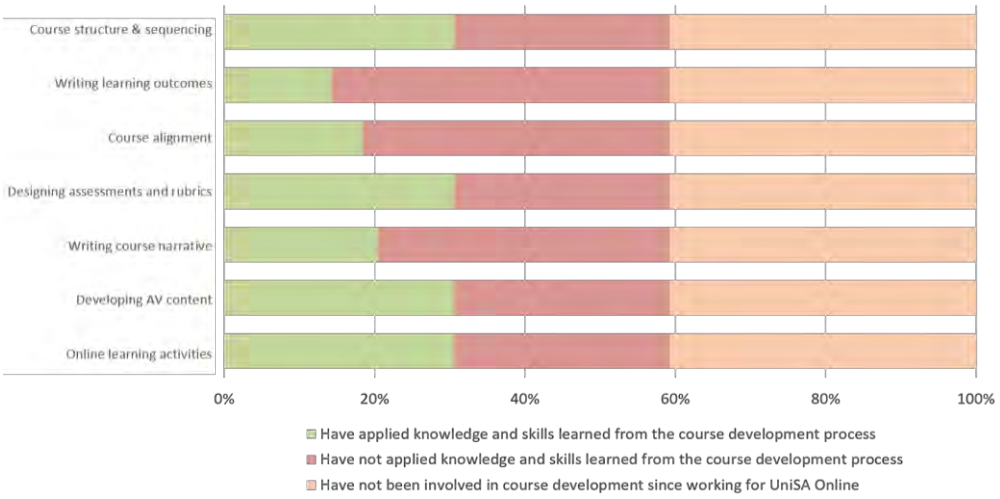
The study also invited respondents to indicate what they had learned and how they had applied that knowledge. The data showed that every course writer who was involved in course development since their involvement in the project ($n = 29$) was able to apply at least one knowledge or skill that they had learnt. However, 41 percent of course writers had not had the chance to apply their acquired knowledge since they had not been involved in any subsequent course development (Figure 4). Regarding sharing knowledge and skills with colleagues, 57 percent of course writers had done so whilst 12 percent had not, and 31 percent had not yet had the chance. This sharing was proactive, "*I have spoken with colleagues… and conducted a couple of show and tell presentations of my new look course*" and serendipitous, "*Only informally in corridor chats*"; "*Academic staff involved in the course development regularly discussed our experiences with the process. These were not positive, but it was valuable to be aware of what others were experiencing*".

Survey results about the application of new knowledge and skills to teaching practice, Figure 4, indicate that course writers are most likely to apply skills relating to course structure and sequencing, developing AV content, designing assessments and rubrics, and developing online activities and least likely to apply skills and knowledge relating to writing learning outcomes, course alignment, and writing course narrative.

Associated qualitative comments detailed specific kinds of new knowledge course writers applied, such as, "*The alignment of course objectives, content, activities and assessments has been very useful to conceptualise and take forward into the teaching environment*". Capacity-building also flowed directly from the re-use of course resources in internal and external (off-campus but not fully online): *"I have integrated a lot of the resources developed for UO into the external offering, so tutors and external students have benefited from these resources too*".

Figure 4.

Course writer's (n = 49) application of knowledge and skills learned from the course development process



Combining the data on personal application and sharing of knowledge with the demographic details revealed the following trends:

- Mid-career academics (six to 15 years' experience) had the highest levels of knowledge and skills application (*n* = 21, 29%), while comparatively, early-career academics (<5 years' experience) had the lowest rates out of any demographic group (*n* = 15, 17%).
- Rates of application of knowledge and skills are higher for academic course writers who did not share workload allocation (*n* = 26, 31%) than those who shared course writing responsibilities (*n* = 23, 19%).
- Course writers who had no previous course development experience were less likely to have the opportunity to share the knowledge and skills (*n* = 23, 39.1%) than those with previous development experience (*n* = 26, 23%).
- Those who did not split the development workload (*n* = 26) were much more likely to share knowledge and skills (65.4%) than those who split the course writing responsibilities (*n* = 23, 47.8%).

Discussion

As reported, findings indicate that despite some reservations and criticisms of the intense large-scale development model, overall, course writers were satisfied with the development process, the online courses that resulted, and personal knowledge gained through participating in the project. Additionally, most participants shared at least some of what they had learnt with colleagues — thus building institutional, as well as personal, capacity. Importantly, we also recognise how these broad findings are context-related and, how they become more nuanced when compared with deidentified participant demographics.

It must be noted that while, broadly speaking, the model for course development had been determined at the commencement of the project, the management and allocation of resources (human and material) were still in their infancy when course writers began working with production teams. At the same time, production teams were also operating in evolving environments, creating systems, processes and team relationships while developing courses. Perhaps this also explains the increased satisfaction over the period of the study.

When this research was initiated, some participants completed evaluation surveys up to 16-months after their involvement as course writers, others commented on more recent experiences. In all cases, however, these responses reflected changing expertise, management, and production processes: this was — and remains — a dynamic, evolving and responsive working environment. This was identified by early engagers when reflecting on their experiences "*As* [the institutional project] *has progressed I know the team's processes and practices have advanced significantly, so in that sense, my experience is no longer relevant*". Nevertheless, despite these circumstances and different disciplinary and team practices, this research has been able to capture key aspects of online course development from the perspective of academic course writers.

Collaboration produces quality

Existing small-scale studies exalt the quality of courses developed using a collaborative approach between academic staff and educational/technological experts (Brown et al., 2013; Chao et al., 2010; Croxford et al., 2019; Stevens, 2013; Torrisi & Davis, 2000; Voogt et al., 2015). This larger scale study confirms that academic course writers consider courses developed as a team are of a higher quality than those developed alone, suggesting that, when sufficiently resourced, the collaborative process can indeed work at an institutional level.

Time as a constraint and an enabler

Echoing findings from prior studies (e.g. Croxford et al., 2019) a number of course writers expressed concern about the short, allocated timelines for preparing course content. The impediment of an intensive and inflexible course development timeline driven by a need to get the product to market was clearly reflected in course writers' dissatisfaction with this aspect of the process. This was particularly the case for course writers for whom the timeline overlapped with on-campus teaching or research commitments. Because of this, some academics indicated that they felt frustrated by the pressure to deliver courses, even if they were unhappy with the quality of their work and considered the 'production line' mentality undermined and devalued their expertise. As Torrisi and Davis (2000) identify, divesting course writers of time to reflect on the process and subsequently apply new practice can limit the potential transformation effects of the developing online learning materials. So, perhaps, as some academics in this study articulate, this focus on delivering output comes at the expense of skill development

On the other hand, the study also showed that some course writers, especially more senior academics, (more than 16 years in higher education) were less critical of production time constraints, even if they had had less experience in online teaching or course development. Perhaps these more senior academics were acclimatised to working under pressure? Perhaps they were also more likely to be more familiar with their subject matter and undergraduate teaching, and thus better positioned to succeed in intensified working environments? Whatever the reason, it seems for this group, working to deadlines was mostly manageable and productive.

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Collaborations and co-creation

Supporting findings from similar small-scale studies into the dynamics of collaborative online course development (Chen & Carliner, 2020) the team approach to course development was universally appreciated — even when there was some criticism of poor coordination and communication. For most participants, the success of the development model depended on close working relationships, at the core of which, was the course writer, an academic developer, and an online educational designer — with other team members such as the Associate Dean of Online Learning, the AV unit, digital curriculum librarians and assessment experts brought in for specific tasks at specific times. The importance of relationship-building and trust was emphasised as several survey respondents named individuals — underlining their recognition of individual team member expertise, personalities, and relationships. Yet, with the complexity of relationship-building and communication with the core development team, it is perhaps not surprising that academic course writers generally preferred not to add additional challenges of sharing the content-writing with an additional academic subject specialist. This recognition of the need for constructive relationship building is present in similar small-scale studies (Stevens, 2013) showing that whether working on small-scale projects or whole of institution initiatives, relationship building is essential in achieving positive outcomes.

Capacity-building

While capacity building was a stated aim of the strategic policy initiative for large-scale production of online courses, in practice, the focus on speedy development made this objective difficult to realise. Nevertheless, whether intentional or circumstantial, it seems for most of those involved in this research, considerable capacity building was achieved. In keeping with the literature (e.g. Voogt et al., 2015), professional development appears to be closely associated with team collaboration. This finding points clearly to the potential for significant individual and institutional gains were capacity-building more systematically planned and instituted within the development model.

Conclusions and implications for practice

This investigation is relatively unique because it canvassed the experiences of teaching academics who participated as course writers in an initiative to develop fully online courses within a model of large-scale and intensive development. Academic course writers reported valuing the team approach, noting and appreciating how the contributions of more expert others combined to develop quality outcomes for the courses and for their personal learning. It also demonstrated that individuals learned key online design principles concerning aligning and structuring content, online activities, and assessments, and using and developing multimedia. Course writers also reported disseminating these learnings to colleagues and applying new skills in future online course design and teaching. These broadly positive experiences have proven subsequently to have additional flow-on effects as we have seen skilled-up academics reporting greater ease and confidence adapting to the abrupt demands arising from COVID-19.

Despite the unique features of scale and production intensity of this model of course production, this study suggested many similarities with other, smaller studies (e.g. Stevens, 2013). For example, overall these participants reported satisfaction with the courses produced and the processes involved, they indicated commitment and mutual respect for the expertise of team members, and they valued good communication and collaborating with others on a common goal.

Appreciation of the collaborative approach echoes the findings of Brown et al. (2013) "a meaningful professional learning … that involved discipline rich, scholarly dialogue with continual idea sharing, and a commitment to consider multiple perspectives and ideas" (p. 449). Also, like other studies, negative experiences mostly clustered around perceived impediments and frustrations arising from time restrictions, unwelcome and/or sudden changes and instances of less than optimal management. These findings point to the importance for management to support development teams through the challenges of a rapidly changing implementation processes so as to build on the positive experiences of collaboration and to build resilience.

Importantly, this study also identified the nature and dissemination of self-reported learnings indicating some measurable success for institutional capacity building. These initial findings surface a range of considerations for practice. It would appear most personal development flowed from academic course writers working and learning in the company of more experienced team members, thus demonstrating the operation of Vygotsky's *Zone of Proximal Development* (1980) within a community of practice (Wenger, 1998). Learning and teaching leaders such as academic developers and online educational designers are well-placed to prioritise this opportunity for transformative learning. Building on the knowledge and the practices developed at the team level, educational developers from some production teams have been offering workshops and online training initiatives for academic course writers developing their existing courses for the online environment. To date, these initiatives have been well received, but ad hoc; the implications are that a more systematic process of curriculum renewal should capitalise on developing communities of practice in future course development led by teaching and learning experts.

The research established two main process critiques of the development model: timelines and management. As detailed above, the data showed that meeting tight timelines impacted differently for course writers — an early response was to match more senior experienced academic staff with junior academics, but feedback on this practice has been inconclusive. While it clear that more research is required, these results should motivate a reappraisal of time allocation in relation both to course-writer expertise/experience and to the nature of the task, with consideration for extended development timeframes for brand new courses where extensive content and curriculum design need to occur. On the other hand, there is no denying that the intensified delivery model did result in courses being delivered at a rapid pace. Deadlines can be powerful motivators.

Regarding satisfaction with the management of the development process, it became clear that survey respondents used this category to indicate dissatisfaction with a range of levels of management from the local team to the whole project. More nuanced data needs to be collected to identify specific concerns, however; especially for early engagers, some dissatisfaction is not surprising since so many systems and processes were evolving resulting in change and uncertainty. As already noted (Connell, 2013), in the competitive higher educational context economic factors risk overriding educational considerations, which could position academic course writers, educational developers and project managers as instruments for achieving institutional priorities for the delivery of 'products' over transformational educational experiences (Aitchison et al., 2020).

A key challenge for any institutional initiative is how to capture and disseminate learnings during and after the development stage. Findings from this evaluation, point to early strengths in the model of online course development that can be harnessed for targeted and evidence-based upskilling of individual teaching academics and learning and teaching more broadly. The research also strongly indicates that educational developers, such as academic developers and online

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educational designers, are key experts for engineering support for teaching academics in higher educational contexts. Further, the study shows that without specific attention and support to junior and casualised teaching staff there is a risk that the positive experiences, skills, and knowledge development will be lost.

These findings underscore the importance of planning for and undertaking systematic capacity-building throughout large-scale online course development projects so that the benefits accrue beyond simply the meeting of deadlines and submission of artefacts. If we are to avoid the potential of de-skilling and disempowering academics in the rush to online learning, then they, and educational developers, need to be empowered to co-create processes and practices that are evidence-based, transformational and sustained. This imperative is even more critical when financial pressures influence institutions to prioritise productivity outputs over personal learning, relationship-building and educational transformation (Lupton et al., 2018; Stensaker, 2018).

Importantly in the context of urgencies such as COVID-19, this study clearly demonstrates there are longer-term intuitional benefits to upskilling teaching academics within their institution by engaging them in online course development. This model delivers both quality courses for others to teach and builds institutional resilience by skilling individuals able to rapidly to pivot to online delivery with skill and confidence. Perhaps these immersive team-based course development experiences can even help mitigate some of the 'afflictions' that have been associated with preparedness and confidence to teach online in the milieu of a global pandemic (Watermeyer et al., 2020)? Conversely, do well-resourced online course development models adequately prepare individuals for the almost instantaneous shift to 'emergency remote teaching' (Hodges et al., 2020)?

Limitations and future research

Despite the insights that this study provides there are limitations. Firstly, this research has a relatively small sample of 49 respondents, although this is larger than many similar studies (Brown et al., 2013; Chao et al., 2010; Croxford et al., 2019; Stevens, 2013; Torrisi & Davis, 2000; Voogt et al., 2015). Secondly, the research collected respondent data over two different sample periods which are not equally comparable. The first survey collected course writer experiences up to 16 months after they had completed the development process. The second data collection point occurred less than three months after those respondents had completed development thus, by comparison, they had significantly less time to apply and share their learnings. Given these limitations, further research should prioritise collecting qualitative data that would provide more nuanced understandings of practices and process of both course writers and production team members in the short and longer-term. Such investigations would assist in providing empirical evidence upon which higher education institutions could enact large-scale course development in response to demands for expanded online provisions.

In terms of future directions for studies in this field and particularly with the COVID driven acceleration towards online learning, research that explores the separation between course production and delivery would make a significant contribution. The courses developed as part of this initiative were to be delivered by a separate group of online specialist teachers. Studies which would help us understand how roles, identities and agency are changing for course writers not subsequently involved in delivering the course and for online facilitators delivering 'ready-to-teach' courses are essential. This paper points to the institutional level of capacity building that occurred through the collaborative development processes, however, questions still remain about

how long this knowledge is retained and the broadness of its application. Within the current COVID-19 online learning crisis, research can play a critical role in informing institutional decision-making about the best model for rapid, sustainable course development that maximises capacity-building benefits.

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References

Aitchison, C., Harper, R., Mirriahi, N., & Guerin, C. (2020). Tensions for educational developers in the digital university: developing the person, developing the product. *Higher Education Research & Development*, *39*(2), 171-184, https://doi.org/10.1080/07294360.2019.1663155

Auerbach, C., & Silverstein, L. (2003). *Qualitative data: An introduction to coding and analysis.* New York, NY: New York University Press.

Baran, E., Correia, A-P., & Thompson, A. (2013). Tracing successful online teaching in higher education: Voices of exemplary online teachers, *Teachers College Record*, 41.

Bernauer, J., & Tomei, L. (2015). *Integrating pedagogy and technology: improving teaching and learning in higher education*. Lanham, Maryland: Rowman & Littlefield.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psycho*logy, *3*(2), 77-101, https://doi.org/10.1191/1478088706qp063oa

Brown, B., Eaton, S., Jacobsen, D., Roy, S., & Friesen, S. (2013). Instructional design collaboration: A professional learning and growth experience, *Journal of Online Learning and Teaching 9*(3), 14.

Chao, I., Saj, T., & Hamilton, D. (2010). Using collaborative course development to achieve online course quality standards. *International Review of Research in Open and Distributed Learning*, *11*(3), 106, https://doi.org/10.19173/irrodl.v11i3.912

Chen, Y., & Carliner, S. (2020). A special SME: An integrative literature review of the relationship between instructional designers and faculty in the design of online courses for higher education, *Performance Improvement Quarterly*. Advanced online publication https://doi.org/10.1002/piq.21339

Connell, R. (2013). The neoliberal cascade and education: an essay on the market agenda and its consequences. *Critical Studies in Education*, *54*(2), 99–112, https://doi.org/10.1080/17508487.2013.776990

Crawford, J., Butler-Henderson, K., Rudolph, J., & Glowatz, M. (2020). COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Applied Teaching and Learning*, 3(1), 9-27, https://doi.org/10.37074/jalt.2020.3.1.7

Croxford, S., Thomas, C., Horvath, D., Buultjens, M. & Stirling, E. (2019). Successful team-based development of an online course with an external partner: An analysis of the perspectives of academics. *Journal of University Teaching and Learning Practice*, *16*(1).

Davey, B., Elliott, K., & Bora, M. (2019). Negotiating pedagogical challenges in the shift from face-to-face to fully online learning: A case study of collaborative design solutions by learning designers and subject matter experts. *Journal of University Teaching & Learning Practice, 16*(1). https://ro.uow.edu.au/jutlp/vol16/iss1/3

Hallett, R. (2018). Intersecting work practices: Design work practices in a large-scale strategic project. In .C Bossu & N. Brown (eds.), *Professional and Support Staff in Higher Education* (pp. 109-126). Singapore: Springer Singapore, https://doi.org/10.1007/978-981-10-6858-4_27

Harper, R., & Aitchison, C. (2018). UniSA Online: An empirical analysis of one institution's online course development experience. Paper presented at the *Tertiary Education Quality and Standards Agency (TEQSA) Conference*, in Melbourne.

Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). *The difference between emergency remote teaching and online learning,* viewed 3 August 2020, <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>

Kehrwald, B., & Parker, B. (2019). Editorial - Implementing online learning: Stories from the field. *Journal of University Teaching & Learning Practice,* 16(1).

Laurillard, D. (2002). *Rethinking university teaching: A conversational framework for the effective use of learning technologies* (2nd edn). Falmer, London: Routledge, https://doi.org/10.4324/9780203304846

Lupton, D., Mewburn, I., & Thomson, P. (2018). Introduction. In D. Lupton, I. Mewburn & P. Thomson, *The Digital Academic: Identities, Contexts and Politics* (pp. 1-19). London: Routledge. https://doi.org/10.4324/9781315473611

Oblinger, D., & Hawkins, B. (2006). The myth about online course development. *Educause Review, 41*(1), 14–15.

Outlaw, V., & Rice, M. (2015). Best practices: Implementing an online course development & delivery model. *Online Journal of Distance Learning Administration*, *18*(3), 1–10.

Rodrigo, R., & Ramírez, C. (2017). Balancing institutional demands with effective practice: A lesson in curricular and professional development. *Technical Communication Quarterly*, *26*(3), 314–328, https://doi.org/10.1080/10572252.2017.1339529

Rogers, C., Smirl, L., Ma, S., & Bright, K. (2018). *Higher education for a changing world: Ensuring the 100-year life is a better life.* Sydney, Australia: Deloitte.

Stensaker, B. (2018). Academic development as cultural work: Responding to the organizational complexity of modern higher education institutions. *International Journal for Academic Development,* 23(4), 274-85, https://doi.org/10.1080/1360144X.2017.1366322

Stevens, K. (2013). Contributing factors to a successful online course development process. *Journal of Continuing Higher Education*, *61*(1), 2–11, https://doi.org/10.1080/07377363.2013.758554

Stone, C. (2017). *Opportunity through online learning: improving student access, participation and success in higher education*. Newcastle, Australia: NCSEHE & The University of Newcastle.

Torrisi, G., & Davis, G. (2000). Online learning as a catalyst for reshaping practice – The experiences of some academics developing online learning materials. *International Journal for Academic Development*, 5(2), 166–176, https://doi.org/10.1080/13601440050200770

Torrisi-Steele, G., & Drew, S. (2013). The literature landscape of blended learning in higher education: the need for better understanding of academic blended practice. *International Journal for Academic Development*, *18*(4), 371–383, https://doi.org/10.1080/1360144X.2013.786720

University of South Australia. (2016). *UniSA online program notification statement memo to ASQC'* [internal document], UniSA.

Voogt, J., Laferrière, T., Breuleux, A., Itow, R., Hickey, D., & McKenney, S. (2015). Collaborative design as a form of professional development, *Instructional Science*, *43*(2), 259–282, https://doi.org/10.1007/s11251-014-9340-7

Vygotsky, L. (1980). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press, https://doi.org/10.2307/j.ctvjf9vz4

Watermeyer, R., Crick, T., Knight, C., & Goodall, J. (2020). COVID-19 and digital disruption in UK universities: afflictions and affordances of emergency online migration. *Higher Education*, Advanced online publication. https://doi.org/10.1007/s10734-020-00561-y

Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge, UK: Cambridge University Press, https://doi.org/10.1017/CBO9780511803932

Xu, H. & Morris, L. (2007). Collaborative course development for online courses. *Innovative Higher Education*, 32(1), 35–47, http://doi.org/10.1007/s10755-006-9033-5

Ziegenfuss, D., & Lawler, P. (2008). Collaborative course design: changing the process, acknowledging the context, and implications for academic development', *International Journal for Academic Development*, 13(3), 151–160, http://doi.org/10.1080/13601440802242309