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An investigation of teaching context factors perceived to affect the enacted practice of online VET teachers

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ABSTRACT

It has long been understood that a teacher's conception of teaching – that is, what they believe and know about teaching – influences their enacted practice. However, it has also been found that enacted practice is affected by teaching context. This small study of online vocational education teachers at a single institution in Australia investigated what factors affect enacted practice in that online teaching context. The study included a quantitative questionnaire of 46 online VET teachers, and qualitative interviews with 11 of those participants. Analysis revealed 13 factors that were indicated as affecting enacted practice in this context. From these findings a conceptual model is advanced whereby two types of teaching context that affect enacted practice are represented. These are (a) the functional teaching context, such as class size and discipline being taught, and (b) the nature and purpose of the education context, such as vocational education. These findings may be of interest to practitioners and to researchers and institutions seeking to support online teachers and leverage the affordances of online teaching contexts.

Introduction

Pedagogy is understood to be 'any conscious activity by one person designed to enhance learning in another' (Watkins and Mortimore 1999, 3). According to Beetham and Sharpe (2013) there are two aspects of pedagogy – preferences and actions. What a teacher would ideally prefer to do in a teaching context is known as their *conception of teaching*. According to Westbrook et al. (2013), conceptions of teaching incorporate beliefs about, and knowledge of, teaching. In contrast, *enacted practice* represents the teaching actions and interactions actually enacted (Gibbons et al. 2018). Alexander (2001) reported that enacted practice includes: the media and presentation methods the teacher uses to represent or construct knowledge; the implementation of learning tasks such as reading, writing, problem

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solving, practising, and experimentation; the facilitation of student engagement and interaction; and feedback, interventions, and assessments.

Conceptions of teaching have long been understood to directly affect enacted practice (Clark and Peterson 1986; Sullivan et al. 2013), and the relationship between these two parts of pedagogy have been an important feature of education research for three decades (Harshman and Stains 2017). Critically however, the enacted practice of an individual teacher has been found to not always align with their conception of teaching (Doyle et al. 2019; Murray and Macdonald 1997; Norton et al. 2005; Owens 2015). One reason for this is that enacted practice can also be affected by the teaching context, and a perceived limitation within the teaching context can constrain teachers 'from acting according to their ideal conception of teaching' (Samuelowicz and Bain 1992, 110). In summary, enacted practice can represent a compromise that results from tensions between conceptions of teaching and the teaching context (Norton et al. 2005).

Importantly, conceptions of teaching can, over time, evolve in response to the results of enacted practices in different teaching contexts (Clark and Peterson 1986; Sullivan et al. 2013). Within a wholly online teaching context, Scott (2016) found that some teachers change their conceptions and then their online practice, whereas others change their practice and then their conceptions.

An example of the relationship between conceptions of teaching and enacted practice within online teaching contexts was advanced by González (2013). In a study of 147 university educators, he found that teachers who align with student-centred conceptions of teaching but who perceive a limitation in their online teaching context will shift their practice to be more teacher-centred, potentially enacted by one-way transmission of content. This is important because student-centred practices are considered best-practice online but teachers in different contexts may lack effective resources to achieve their student-centred objectives (Sun and Chen 2016).

According to Jensen, Price, and Torgny (2019), online education as a teaching context is fundamentally different from face-to-face classrooms and therefore there is a need to develop more understandings about what affects enacted practice online. Responding to that need, this study investigated a fully online teaching team situated in Australia's vocational education and training (VET) sector. As part of a doctoral research project to investigate online VET pedagogy, the purpose of the study being reported here was to develop a conceptualisation of teaching context factors that were perceived by the participating online VET teachers as affecting their enacted practice in that context. The teaching context shared by all participants was a single public VET institution in Queensland, Australia.

Next, as background for this study, some known teaching context influences on enacted online practice are briefly identified from literature. Then, this study and its results are presented, and findings conceptualised.

Teaching context factors that can affect enacted online practice

A key feature of online education is the opportunity for both synchronous and asynchronous teaching strategies facilitated by digital tools such as those found in a learning management system (LMS). These tools are available to support teaching and learning online (Walker et al. 2016). Like other pedagogic decisions, which available LMS tools are selected and utilised by a teacher can be affected by conceptions of teaching, including their beliefs about and knowledge of those tools. Decisions about digital tools are also affected by the teaching context and one variable within all teaching contexts is the student. The flexibility offered by online education has been identified as one of the key drivers of its growth (Capra 2011) and that flexibility is reportedly highly attractive to students who seek to access learning materials when they want, where they want (Platt, Raile, and Nan 2014). Even though collaborative learning is promoted as best-practice in online education (Sun and Chen 2016), not all students value or desire collaborative learning opportunities (Ralston-Berg et al. 2015; Jaggars and Di 2013). This means that, for example, a teacher's conception of teaching may mean a preference towards utilising synchronous tools such as live conferencing for whole-of-class collaborative engagement. However, if this preference is different from student expectations of asynchronous learning, those differences can create a tension whereby the teacher responds to the teaching context by shifting practice away from their conception of what is ideal (Platt, Raile, and Nan 2014).

Class size is a notable teaching context factor that has previously been found to affect enacted practice. Cox et al. (2008) suggested more than a decade ago that class size affects the enactment of desired student-centred practices online because a teacher with 'over a hundred students will by necessity make different choices than one with only twenty students' (380). Since then, class size has repeatedly been found to affect enacted practice online which reportedly becomes more teacher-centred as class size increases (Taft, Perkowski, and Martin 2011). Sorensen (2014) found that small class sizes support teachers to 'use their expertise, knowledge of subject matter, and experience more effectively and consistently than in courses with larger class sizes' (573) where teachers shift their practice to be more teacher-centred. However, Chen et al. (2017) found that student-centred practice can be facilitated for very large online classes ($n = 412$, $n = 450$) when there is alignment between teaching context and conceptions of teaching – particularly beliefs about and knowledge of facilitating

student-centred practice in large online classes. Importantly, Lowenthal et al. (2019) more recently found that it is the teacher's own perception of what number of students represents a small or large class size that can affect enacted practice online. In that study, some teachers perceived a course with more than 30 students as large whereas others identified more than 100 students was required for a class to be considered large, and this illustrates the dynamic relationships between conceptions of teaching, teaching context, and enacted practice.

In this section, teaching context factors that have been previously identified as affecting enacted practice online include student preferences, student behaviours, and class size. Other teaching context influences that have been identified in wholly online teaching contexts include course duration (Akyol, Vaughan, and Randy Garrison 2011), LMS architecture (Gao, Zhang, and Franklin 2013), and the discipline being taught (Arbaugh, Bangert, and Cleveland-Innes 2010).

Notably, much of the research for online education has been undertaken in the context of universities (Glazier 2016). VET is an education sector that is fundamentally different from other forms of post-secondary education in Australia because of its competency-based training (CBT) pedagogical framework (Fowler 2017). Rather than using a grading system to measure and report student knowledge, VET teachers in Australia are generally required to assess students as either *competent* or *not-yet-competent* to complete discipline-specific workplace tasks as defined by a nationwide curriculum for the occupation being learned (Hodge 2016). Even though VET is often associated with trade-based occupations such as carpentry, business service qualifications are amongst those most frequently studied (Korbel and Misko 2016) and include things such as business administration which is increasingly taught online (Griffin and Mihelic 2019). It has been suggested that the competency-based nature of VET means VET may experience additional or unique teaching context tensions when taught wholly online (Griffin and Mihelic 2019). Although VET is Australia's largest education sector (Atkinson and Stanwick 2016) and the percent of online education offerings are growing rapidly (National Centre for Vocational Education Research 2018), online VET has received little research attention (Chang 2016). This means that little is yet known about the nature of, or teaching context factors that affect, enacted online VET practice.

Identified teaching context influences on enacted practice within face-to-face VET teaching contexts include: CBT curriculum (Hodge 2014) enforced through audit (Black and Reich 2010); poorly written, complex curriculum documentation (Hodge 2014); a lack of professional development and training (Harris 2015; Mitchell and Ward 2010); insufficient available resources (Nakar 2016); organisational expectations (Schmidt

2019a); student needs (Nakar 2016); and non-teaching task workload (Schmidt 2019a).

To examine what teaching context factors affect enacted practice in a wholly online VET teaching context, as part of a doctoral research thesis this study drew on findings from a deep review of online education and VET literature which has been only briefly summarised here. Next, methodology and results are presented, followed by key findings and a conceptualisation of the relationship between teaching context and enacted practice.

Methodology

In this section, the research context and its participants are presented and two data collection and analysis stages are described; Stage 1 featured a quantitative digital questionnaire of 46 participants, and from those respondents 11 were selected to participate in Stage 2, qualitative interviews.

Research context and participants

This study was situated within a wholly online teaching context at a public VET institution in Queensland, Australia. That institution hosted the project and facilitated access to their team of 66 online teachers, all of whom had no face-to-face teaching responsibilities. At time of data collection, that team was responsible for more than 40,000 online subject enrolments a year. Following principles of informed, voluntary consent, 46 useable responses were collected during Stage 1, representing a 69% response rate. From those 46 participants, 11 were selected for qualitative interviews. The criteria to select participants for Stage 2 was to represent a range of ages, seniority, experience, qualifications, workload, discipline being taught, and teacher-centred or student-centred conceptions of teaching. Teacher identities were anonymised. The characteristics of participants who completed the questionnaire are presented in Table 1.

All six disciplines taught by the online team at the host institution were represented in both data collection stages. These disciplines were

Table 1. Participant characteristics.

Characteristic	Participants
Gender	75% Female; 24% Male
Age	Range 32–66 years; $\bar{x}$ = 51 years
Employment	89.1% Full-time workers
Number of active classes	Range 2–57 classes; $\bar{x}$ = 12 classes
Number of active students	Range 10–310 students; $\bar{x}$ = 131 students
Years online teaching experience	Range 0.5–15 years; $\bar{x}$ = 4.5 years
Years classroom teaching experience	Range 0–40 years; $\bar{x}$ = 11 years
Years industry work experience	Range 0–40 years; $\bar{x}$ = 15 years
Formal study of online pedagogy	84.8% have not; 15.2% have

accounting, business, early childhood, education support and library, information technology, and justice and government.

Data collection and analysis

For this study, two data collection and analysis stages were completed. Stage 1 featured a wide-ranging digital questionnaire of 46 online VET teachers, and Stage 2 featured qualitative interviews with 11 of those participants. Analysis was completed following each stage.

Questionnaire design and analysis

A digital questionnaire was implemented with an access token used to restrict access to only target participants. The questions were developed from a mix of original questions and previously validated tools that were adapted with consent. The questionnaire had two focuses. The first focus was to identify specific differences between conceptions of teaching and enacted practice, and those results have been previously published (Cox and Prestridge 2020). The second focus, and the subject of this paper, was teaching context factors perceived by participants to affect their enacted practice. Teaching context influences on practice for this questionnaire were identified from literature and developed into Likert-type questions. The teaching context influences on enacted practice that were featured as questions were class size, workload, CBT curriculum, and course duration. Indicators of other influences on practice were intended to be identified from relationships evidenced from data analysis.

Collected data was exported to SPSS version 25 for analysis. Most of the questions in this questionnaire were categorical and ordinal. Numbers were assigned to facilitate analysis and presentation of data. All scale items were equally weighted (Warmbrod 2014) and numerical values for negatively worded questions were reversed prior to analysis (Ary, Jacobs, and Sorensen 2010; Warmbrod 2014). Non-parametric tests were utilised in the analysis because they do not assume the sample is normally distributed (Field 2013) and are therefore ideal for small sample sizes, especially when categorical and ordinal data are present (Pallant 2016). The Kruskal-Wallis H Test is reportedly suitable for comparing differences between more than two groups by using ranks (Field 2013; Pallant 2016) and was utilised here to compare participants by group such as by the discipline being taught.

Interview design and analysis

Interviews are an important procedure for expanding on information gleaned from other sources (Lincoln and Guba 1985) and to enhance understanding of perceptions and experiences within education (Seidman 2013). In this study, an interactive visual tool (Glegg 2019) was utilised

whereby teachers manipulated magnets that had been pre-printed with teaching practices relevant to online VET. While teachers interacted with the magnets, at their own pace they articulated perceived levels of importance of, and reasonings about, the enactment of each practice. This approach elicited what, how, and why understandings about the online VET teacher role. Each 1-hour interview was, with consent, recorded for later transcription.

Analysis was conducted whereby both data-driven and structural codes in the form of phrases (DeCuir-Gunby, Marshall, and McCulloch 2011) were developed and applied. This resulted in structural categorisations to represent the teacher role framework that had guided the interviews, and data-driven categorisations to represent what factors were indicated as influences on enacted practice. These two types of first-cycle codes were decoded *from* analysis of the interview transcripts and then encoded *to* all 11 transcripts (Flick, von Kardorff, and Steinke 2004; Saldana 2016). Using NVivo to record the coding allocated by the researcher, simultaneous coding was implemented allowing for two or more different codes to be applied to a single phrase, sentence, or paragraph (Saldana 2016). The second cycle of analysis completed by the researcher featured pattern coding to identify commonalities. This resulted in some codes merging and others being rephrased to accurately reflect identified themes. For example, the two themes small and large class size were refined to 'class size' as a single theme.

Results

Questionnaire results

In this section, results relevant to this study are summarised. They include perceived teaching context influences on enacted practice that were reported by teachers in response to direct questions, and relationships between variables identified during data analysis.

Influences perceived by teachers

28 (66.7%) responding teachers reported that workload *often* or *always* prevents them from enacting a teaching practice that aligns with their conception of teaching and that they perceive would be beneficial for students. As presented in Figure 1, when reporting their current workload, the highest workload practice reported by teachers was assessing student competency, followed by helping with or reviewing draft assessments, then administration and reporting.

Both small and large classes were investigated in this study; 20 (52.6%) responding teachers reported that small class sizes influenced their practice and that influence was a mix of both positive and negative. This is
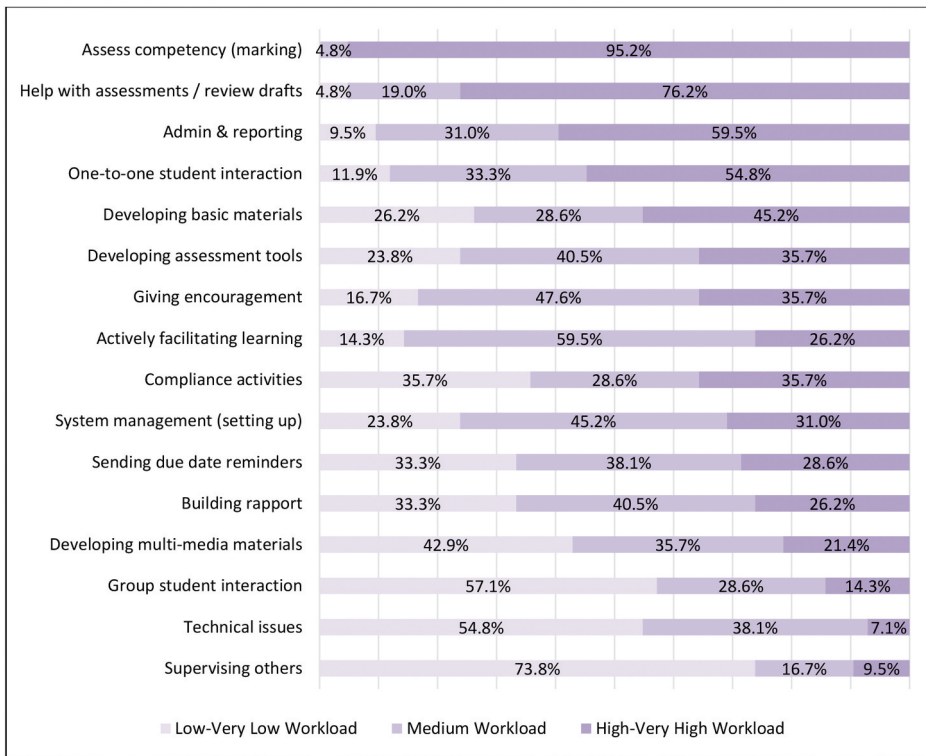
Figure 1. Current workload practices of teachers reported highest to lowest mean.

contrasted with large class sizes where 26 (76.5%) responding teachers reported an influence on practice, and 20 (58.8%) responding teachers reported that influence as negative. This means that in this teaching context, class size was indicated as an influence on enacted practice and the nature of that influence is mixed. Next, the CBT curriculum was reported by teachers to sometimes influence practice in two ways: preventing the enactment of a preferred practice and preventing teaching content deemed important. The final teaching context influence on practice that teachers were asked to respond to was course duration; 19 (51.4%) responding teachers reported that course duration was neither a positive nor a negative influence. Notably, teachers reported that professional development in this teaching context was relevant, readily available, and of high quality.

Influences indicated from analysis

In this section, influences on enacted practice were indicated from relationships between variables. The first of these is the number of students per teacher. For example, teachers with < 75 students were more likely than teachers with higher student numbers to report more frequently enacting the student-centred practice of using technology to engage with

students in real time ($H(2) = 7.55$, $p = .23$). Next, the discipline being taught was found to be related to differences in self-reported enacted practice. One example of this relationship was accounting teachers being more likely to report more frequently enacting the practice of ensuring students are well skilled in unit competencies ($H(5) = 17.16$, $p = .4$). However, with such a small study there were insufficient numbers of teachers in each discipline for the nature of the influence on enacted practice to be asserted.

In summary, teachers perceived that workload, class size, and the CBT curriculum affects their enacted practice. They did not perceive that course duration or the availability/relevance of professional development affects their practice. Through analysis, relationships with enacted practice were found with both the number of students per teacher and the discipline being taught. Separate from teaching context which is the focus of this small study, relationships with enacted practice were also indicated for conceptions of teaching and knowledge of teaching online.

Interview results

Analysis of interview data identified factors within the investigated online VET teaching context that teachers perceived influence their enacted practice. These influences were interpreted by the author into three categories: the pedagogical framework, the education framework, and the functional teaching context.

Firstly, the nature and purpose of online education as a *pedagogical framework* was perceived by teachers to affect their practice, and was perceived as a limitation in that it prevented them from enacting some teaching strategies. One teacher said, 'online we're not able to teach because we're not able to manage the students well enough to be able to engage them or talk to them'. Teachers reported being resigned to those perceived limitations and therefore did not push or experiment with online pedagogies.

Secondly, the nature and purpose of competency-based VET as an *education framework* affected assessment-driven enacted practice. This was exhibited in teachers' focus on teacher-to-student support for completion of assessments. Teachers identified that offering assessment resubmission feedback was their main opportunity to teach students, and many reported offering students unlimited assessment attempts despite that practice being in contravention of organisational directives. One teacher said '[If students] continue getting things really wrong, I'll do five, six, seven [attempts] and just keep doing it because that's the only chance we get to teach'. Teachers in this study perceived that engaging with individual students through

Table 2. Teaching context factors with example teacher comments.

Teaching context factor perceived to affect practice	Exemplar teacher comment captured during interview
Class size	'we would be lucky to have 2 or 3 students per intake [in a subject] so group work is less possible'
Discipline being taught	'it's a bit hard in accounting with collaboration, there's a certain set of figures we want them to produce and we don't want them sharing information'
Overlapping intake model	'I just look at my calendar now and I don't even know … it's very confusing'
Learning materials	'we have little or no say over content, it's been written for classroom delivery'
LMS infrastructure	'I want to get my students to do reflective journals but [LMS] doesn't have the facility for that'
Number of classes per teacher	'I teach 20 [subjects], I can't run 20 web conferences a week … [face-to-face] I knew students by name, now they send me a question and I have to ask who they are, what they're studying'
Number of students per teacher	'I've never had so many students'
Organisational expectations	'it was hard to get used to, coming [online] … marking is the workload and there's little else required'
Student preferences, needs, and behaviour	'a lot of parents, often working full-time … we could rarely say ok, we need you all in the online rooms at 9am this morning'
Regional location	'it's challenging … and isolated … I'm here working with all these students on my own … it's every man for himself'
Teacher workload	'I struggle now with what we fit into the expected workload'

assessment tasks was their primary teaching opportunity, and they did not perceive that online VET afforded whole-of-class learning strategies.

Finally, eleven elements of the functional *teaching context* were perceived by teachers to affect their enacted practice. These elements are presented in Table 2 with exemplar teacher comments captured from interview transcripts.

In summary, analysis of interview data revealed that participant teachers perceived the following range of teaching context factors affect their enacted practice: the nature and purpose of online education, the nature and purpose of VET; class size, the discipline being taught, overlapping intake model, learning materials, LMS infrastructure, number of classes per teacher, number of students per teacher, student preferences/needs/behaviour, regional location, and teacher workload.

Importantly, the nature of this interview data stage was to collect teacher perceptions of their teaching context and enacted practice. Although teachers contended their practice was affected by factors within their teaching context, whether enacted practice would reflect their purported ideal should those perceived barriers to teaching be removed was within the scope of this study.

Findings

As presented previously, influences within a teaching context can cause teachers to enact practice that is more aligned with their teaching context

than with their own conception of teaching (Clark and Peterson 1986; Eley 2006). This study included two data collection and analysis stages intended to develop an understanding of factors within a single online VET teaching context that affect the enacted practice of the investigated online VET teachers. Drawing the results of both data stages together, thirteen teaching context influences were identified, and these are listed in Table 3.

Class size

Class size was identified as affecting enacted practice in this teaching context and this aligns with other studies (e.g. Sorensen 2014). Teachers perceived that practices associated student-centred collaborative learning strategies were 'not worthwhile' for small class sizes. Teachers also perceived that collaborative learning 'cannot be facilitated' within large classes because too many students make collaboration unwieldy to manage regardless of whether synchronous or asynchronous. In this study, teacher conceptions about the merits of collaborative learning, and their knowledge of how to facilitate collaboration across different class sizes was also a contributing factor. So too were teacher perceptions about how many students represent a small or large class.

Competency-based training VET framework

The audit culture of VET and the perceived pressure to demonstrate CBT compliance have been identified in other studies as affecting enacted practice (Black and Reich 2010). In this study, a relationship between the competency-based nature of VET and enacted practice was indicated. Teachers reported prioritising the practice of supporting individual students to complete assessment tasks over the practice of facilitating opportunities for students to engage with learning materials and to develop underpinning knowledge. Teachers further reported their perception that the requirement to demonstrate compliance with curriculum resulted in them spending more time on administration tasks than was their ideal at the expense of time spent teaching. In the words of one teacher, 'we are a marking and

Table 3. Investigated teaching context influences on enacted practice.

Influences found		Influences not found
(1) Class size	(1) Number of students per teacher	(1) Course duration
(2) CBT framework	(2) Organisational expectations	(2) Professional development
(3) Discipline being taught	(3) Pedagogical framework of online education	
(4) Intake model		
(5) Learning materials	(4) Regionally located teacher	
(6) LMS infrastructure	(5) Student preferences, needs, expectations	
(7) Number of classes per teacher	(6) Teacher workload	

compliance factory'. Finally, teachers perceived that complying with the CBT curriculum affected their practice with the result being some preferred teaching practices were not enacted, or perceived important content not taught.

Discipline being taught

In this study, the discipline being taught was indicated as related to enacted practice. Importantly, teacher conceptions about their discipline and knowledge of online pedagogy were contributing influences. Teachers perceived particular topics or disciplines, such as accounting, were best taught through static learning materials whereby students independently read provided information and then complete standalone practice exercises. Business teachers perceived that some topics required realistic written business scenarios and dilemmas for students to independently work through workbook-style. Childcare teachers perceived that real-world practice through work placements complemented the theoretical components learned online. Discipline being taught has been suggested previously as an influence on practice within online education (Arbaugh, Bangert, and Cleveland-Innes. 2010; Hornik et al. 2008). However, given the small size of this study, generalisations about the nature of differences between particular disciplines should not be extrapolated to other contexts.

Intake model

The intake model in this teaching context, whereby a new 12-week course commenced every 5–6 weeks resulting in overlapping intakes, was perceived by teachers to affect enacted practice. The teaching context of inducting new students while moderating final assessments for other students and having up to three separately timed cohorts for multiple subjects running simultaneously was reportedly confusing and challenging for teachers. Teachers reported having at least one assessment task due 50 weeks of the year. They perceived that this resulted in their practice being constrained to prioritise marking assessments because there was no hiatus between due dates in which to focus on teaching or developing supplementary learning materials.

Learning materials

The relationship between learning materials and enacted practice in other VET contexts has previously been suggested; however, in Nakar's (2016) study, the identified influence was a lack of textbooks to support high-need international students which is different from what was found in this study. Teachers in this study reported that the learning materials they were required to implement had been developed by face-to-face teachers for face-to-face teaching contexts, and as such, did not meet the needs of their online student cohorts. Furthermore, teachers perceived that their learning

materials were not scaffolded to support asynchronous online education. Teachers reported the influence of learning materials on enacted practice was exemplified by them directing students away from those materials. Instead of facilitating whole-of-class teaching strategies, teachers reportedly focused on helping individual students to complete assessments, and this practice was described by one teacher as 'reactive not proactive' teaching.

LMS infrastructure

According to Walker et al. (2016), LMS infrastructure and its application affects the nature of enacted practice. That relationship was also indicated in this teaching context. Teachers perceived their LMS menu structure as complicated and it was therefore inconsistently applied by them. Some teachers did not utilise the structure as intended by their organisation, and instead directed students directly to assessment folders, thereby actively steering students away from learning materials. LMS infrastructure as affecting practice was also associated with teacher knowledge. Here, teachers identified lacking knowledge of how to utilise available tools to enact practices aligned with their conceptions of good pedagogy, thereby contributing to their beliefs that some practices 'simply cannot be done online'.

Number of classes per teacher

The number of classes/subjects per teacher in this study ranged from two to 57, with a mean of 12 classes/subjects per teacher at any one moment in time. Teachers reported that the perceived high number of classes per teacher affected their enacted practice. An example of this was the perceived impracticality of offering a live tutorial for every class each week, a practice some teachers purported they would enact were they teaching only a few classes. It was not ascertained if the number of classes per teacher as an influence on practice had been identified in other online or VET teaching contexts.

Number of students per teacher

The number of students per teacher in this study ranged from 10 to 310, with a mean of 131 students. Teachers perceived the number of students per teacher was high. An example of how the perception of high student numbers affected practice was teachers who perceived that it was 'not possible' to build rapport with these numbers of students. Another example was teachers who perceived that high student numbers resulted in 'mass-producing students', affecting enacted practice to mark assessments rather than actively teach. Teachers further reported that perceived high student numbers resulted in unpaid working hours and limited opportunities to take leave entitlements. It was not ascertained if the number of students per

teacher as an influence on practice has been identified in other online or VET teaching contexts. However, workload has been identified in other online teaching contexts and this may, in some cases, be related to the number of students.

Organisational expectations

Organisational expectations as an influence on practice has previously been suggested by Nakar (2016) who found that VET teachers perceived their employing organisation to restrict the amount of support permitted to be offered to students. This is different from what was indicated in this study. The investigated online teachers reported the perception that their institution values marking assessments and administrative tasks associated with curriculum compliance more than it values teaching. Teachers reported that these perceptions were drawn from messages conveyed, overtly or by inference, by performance management processes and documentation, and resulted in marking and administration being prioritised over other practices. Notably, VET teachers in other studies have identified differences between their own beliefs about good pedagogy and those of their managers (Schmidt 2019b).

Pedagogical framework of online education

Online VET teachers in this study perceived that the teaching context of online education itself influenced their practice. That influence was perceived to be that of limiting them from enacting favoured teaching strategies that were previously possible when teaching face-to-face. This perceived limitation of online education is likely also related to teacher knowledge, with some teachers evidencing a lack of knowledge of online pedagogy and how to enact it.

Regional work location

This study found that enacted practice was affected by physical work location for those teachers who are situated regionally away from their online education peers. That influence reportedly included lack of informal peer-to-peer support and exchange of ideas, resulting in what teachers described as more conservative teaching practices including higher awareness of risk when managing potential student complaints. It was not identified if teacher location as an influence on practice has been identified in other online or VET teaching contexts.

Student preferences, needs, and behaviour

Palloff and Pratt (2013) indicated that student expectations regarding flexibility in online education can affect enacted practice. Others have identified that not all students value or desire collaborative learning opportunities

(Annand 2011; Jaggars and Di 2013; Ralston-Berg et al. 2015). In this study, student preferences, needs, and behaviour were perceived by teachers to affect their practice. For example, teachers reported that students with family and work commitments did not want, or were unable, to participate in synchronous learning activities. Responding to those perceived student needs or expectations resulted in enacted practice being more asynchronous than some teachers purported would be their ideal. Separately, teachers reported experiences of inappropriate student behaviour in the online environment, resulting in those teachers now eschewing student-to-student collaboration opportunities.

Teacher workload

Teachers in this study perceived that student-centred practices (such as whole-of-class real-time tutorials or facilitation of discussion forums), result in higher workload than teacher-centred practices (such as static learning materials for independent study) and that this was one reason for their enacting more teacher-centred practices than their perceived ideal. Teachers also reported that a demanding workload constrained them from enacting practices they associated with good pedagogy. That workload was affected by the expectation of administrative non-teaching tasks. Workload as an influence in this context is similar to findings in other online education contexts. For example, Palloff and Pratt (2013) reported that higher work-load associated with online education has been identified as a concern by teachers, and Goldman (2011) also found that student-centred practices, such as facilitating discussion forums, was perceived to increase teacher workloads. Furthermore, Schmidt (2019c) found in VET teaching contexts that non-teaching workload tasks do affect enacted practice through less time being available for teaching.

Conceptualised findings

The purpose of this study was to develop a conceptualisation of teaching context factors that were indicated by these investigated teachers as affecting their enacted practice in a wholly online VET teaching context. In this section, an interpretation of the findings presented above are drawn together to advance a visual conceptualisation (Figure 2), and its elements are now described.

In this investigated teaching context, two different types of teaching context factors were indicated as affecting enacted practice. To represent this, two classifications of teaching context are shown: *functional context* and *education context*. The functional teaching context includes class size, the discipline being taught, the intake model, learning materials, LMS infrastructure, number of classes and students per teacher, organisational
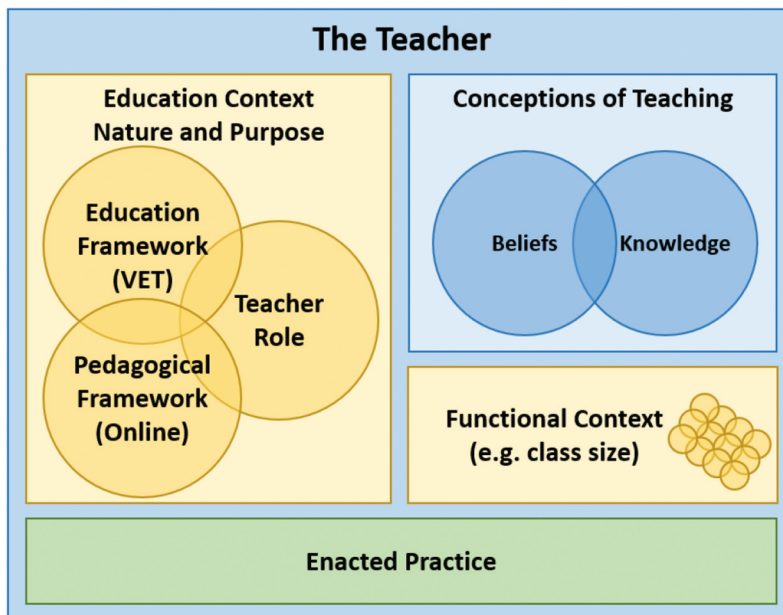
Figure 2. Conceptual model of influences on enacted practice within the investigated online VET teaching context.

expectations, teacher location, student preferences/needs/expectations, and teacher workload. Different from this is the educational context and the teacher's role within it. By this is meant the nature and purpose of the education framework that is VET, along with the nature and purpose of the pedagogical framework that is online education, and the nature and purpose of the teacher role within those two contexts. Therefore, the conceptualisation features three overlapping circles under the heading *education context* to illustrate that enacted practice can be affected by how teachers perceive the nature and purpose of VET and the teacher role in VET, the nature and purpose of online education and the online teacher role, and the nature and purpose of online VET and the role of an online VET teacher.

While investigating conceptions of teaching was not intended as a focus in this part of the study, online VET teacher beliefs and knowledge were repeatedly intertwined with teaching context influences on enacted practice. For example, teacher beliefs about affordances and limitations of online education and teacher knowledge of how to enact different teaching strategies online, also affected enacted practice. To represent the individual and dynamic influences of beliefs and knowledge on enacted practice and on perceptions of the teaching context, conceptions of teaching are represented in the conceptualisation. Importantly, tensions were found to exist between beliefs and knowledge when knowledge was reported by teachers to be

insufficient to support a purportedly preferred practice perceived to represent good pedagogy.

The teacher is illustrated to underpin the entire conceptualisation because it is through them that pedagogy is enacted, that teaching contexts are perceived and experienced, and that any tensions are navigated. The conceptualisation can be entered from any side and navigated in any direction. Colour selection is purposeful in that green represents a mixing of, or compromise between, blue (conceptions) and yellow (context). Importantly, the conceptualisation is intended to represent not only influences underpinning enacted practice, but relationships and tensions among those influences. Arrows are not featured because the direction, strength, and nature of an influence, a combination of influences, or relationships and tensions between influences were interpreted to be different for individual teachers at different moments in time. Importantly, dynamic relationships and tensions were observed to exist within and across influences.

Conclusions and implications

According to Jensen, Price, and Torgny (2019), more understandings are needed about what affects enacted practice in online education. To contribute to those understandings, this small study investigated a wholly online VET teaching team at a single Australian institution. Stage 1 of this study featured a quantitative digital questionnaire completed by 46 teachers, and from those respondents 11 were selected to participate in Stage 2 qualitative interviews. The purpose of the study was to develop a conceptualisation of teaching context factors that affect the enacted practice of the participating online teachers.

Two classifications of online VET teaching context influences were found. These were (a) the functional teaching context, and (b) the education context. Within the *functional teaching context*, factors that were perceived by teachers to affect their practice included class size; the discipline being taught; the intake model; learning materials, LMS infrastructure; number of classes and students per teacher; organisational expectations; work location; student preferences, needs, and behaviour; and teacher workload. Identified factors within *nature and purpose of the education context* included the education framework (VET), the pedagogical framework (online), and the teacher role within those frameworks. Both types of teaching context influences can be perceived by teachers as affordances or limitations, thereby influencing practice to move towards or away from a teacher's purported ideal.

Conceptions of teaching, made up of teachers' beliefs and knowledge, were also indicated as related to enacted practice in this teaching context. These conceptions comprised beliefs and knowledge about the nature and purpose of the education context, including perceived affordances or

limitations of the online pedagogical framework, the VET education framework, and the online VET teacher role.

A visual conceptualisation of relationships affecting enacted practice advanced from this study may offer a guiding framework to investigate pedagogy and influences on practice in other teaching contexts. The separation of the teaching context influences into two classifications is intended to support flexible application in different teaching contexts. The nature and purpose of the educational framework in this context was VET, yet VET can be replaced by other educational frameworks such as higher education. The nature and purpose of the pedagogical framework in this context was online, yet online can remain or be replaced by face-to-face or blended. The nature and purpose of the teacher role stands alone and also overlaps the educational framework and the pedagogical framework. Those relationships remain regardless of how the frameworks are labelled to suit different teaching contexts, and this supports the nature and purpose of an education context to be uniquely drawn out. Future research framed or informed by this conceptualisation would ideally serve to evolve its presentation and interpretation. Insights from such research could yield new teaching context influences and identify which of the factors indicated in this teaching context are present, or not, in other contexts.

Limitations

This study has two acknowledged limitations. First, this study was situated within a single online VET teaching context, and the findings are therefore specific to that teaching team. While it is anticipated that this study will be a useful informant for other studies, readers are encouraged to judiciously consider the relevance of these findings to other contexts.

Second, although teachers in this study reported that they would enact different online teaching practices were it not for perceived limitations within their teaching context, an intervention was not part of this research design. Therefore, it is not known what practices would be enacted by these teachers should perceived teaching barriers or influences on practice be alleviated.

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Notes on contributor

Deniese Cox is a sessional lecturer in online pedagogy at Griffith University and runs a consulting business mentoring educators in their shift to teaching online. Her PhD thesis from which this article stemswas concerned with developing an understanding of online pedagogy within the context of Australia's VET sector. Deniese transitioned to adult education in 2011 when called on to utilise her two decades experience in executive corporate roles to develop and teach management and leadership programmes firstly in China and later online. In 2014, Deniese added a Master of Learning and Development to her 2010 MBA (Hon), and she has been awarded by Griffith University for her work building university-industry relationships.

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