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Ahern, Tracey, and Biedermann, Narelle (2022) *Nursing and midwifery educators teaching postgraduate online courses: a cross-sectional survey*. *Teaching and learning in nursing*, 17 (2) pp. 185-190.

Access to this file is available from:

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Please refer to the original source for the final version of this work:

<https://doi.org/10.1016/j.teln.2021.12.003>

1 **NURSING AND MIDWIFERY EDUCATORS TEACHING POSTGRADUATE ONLINE**
2 **COURSES: A CROSS-SECTIONAL SURVEY**

3
4 **Introduction**

5 Postgraduate nursing and midwifery educators who teach in university settings are now
6 regularly required to teach online. Some are experienced face-to-face (F2F) educators, who
7 have limited experience teaching in online environments, while others have very little
8 formal teaching experience and are recruited because of their clinical knowledge and
9 experience (Schroeder et al., 2021). Online educators have a complex role that combines
10 teaching with several other elements such as building social presence, undertaking
11 organisational roles, and solving technical difficulties (Kebritchi et al., 2017). Compared to
12 F2F teaching, online pedagogy requires a different mindset and different skillset, where the
13 interdependent factors of cognitive presence, social presence and teaching presence all
14 drive a meaningful online learning experience for students (Garrison et al., 2010). The
15 flexibility of online postgraduate nurse/midwifery education enables career focused
16 registered nurses and registered midwives to gain a higher degree including level 8, level 9
17 and level 10 Australian qualifications (Australian Qualifications Framework Council, 2013),
18 while working part-time or full-time. With online education now so readily available in
19 Australia, thousands of registered nurses and registered midwives are taking up the
20 opportunity to study online (Darcy Associates Consulting Services, 2015; Osborne et al.,
21 2018) indicating an increased need for postgraduate nursing and midwifery educators that
22 are skilled and supported in their role as online educators.

26 **Background**

27 Online learning has become increasingly popular in tertiary education, particularly over the
28 last ten years due to wider access to the internet, as well as the increased need for
29 prospective students to complete further study, upskill or re-train (Baran & Correia, 2014;
30 Roddy et al., 2017). In the period pre-2020, the demand for online course offerings
31 increased dramatically in universities enabling postgraduate students to engage in intensive
32 courses and upskill at an accelerated rate (Roddy et al., 2017). As 2020 approached, and
33 COVID-19 lockdowns were initiated in many communities, the sharp shift from F2F
34 education to online education became even more prominent as educational institutions
35 worldwide had to resort to online methods of instruction to continue to offer their students
36 learning opportunities (Australian Government: Tertiary Education Quality and Standards
37 Agency, 2020). Post-COVID-19, online courses continue to expand rapidly in Australia,
38 overcoming geographic barriers to allow more students access to educational opportunities,
39 as well as the flexibility to combine study with their everyday work or family commitments
40 (Roddy et al., 2017; Stott & Mozer, 2016).

41

42 Offering online courses of study involves a wide range of pedagogical considerations and
43 should not simply involve conversion of a F2F course to an online format (Roddy et al.,
44 2017). Many educators in tertiary nursing and midwifery programs are experienced F2F
45 teachers, however the literature reports that these educators often lack online teaching
46 experience and this can result in less than suitable outcomes for educators and students
47 alike (Richter & Idleman, 2017; Stott & Mozer, 2016).

48

49 Online teaching is complex and requires different teaching skills to that of F2F teaching. The
50 skills essential to online teaching include being able to design a pedagogically sound and
51 engaging online learning environment, creating an online social and cognitive presence,
52 communicating and teaching through the fingertips, promoting online peer to peer
53 engagement, effective use of online collaboration tools such as video-conferencing, and
54 thoughtful assessment design (Authement & Dormire, 2020; Garrison et al., 2010). Hence, it
55 is recognised that academics teaching online postgraduate nursing and midwifery courses
56 have a wide range of needs as they prepare for the online classroom, including technological
57 and professional development needs, and require mentoring, targeted training and ongoing
58 support.

59

60 For staff making the shift from F2F teaching to online teaching, mentoring, training, and
61 ongoing support are important factors for increasing staff self-efficacy and satisfaction.

62 Howe et al. (2018) found those who had taught online several times had increased self-
63 efficacy and overall satisfaction. This was thought to be largely due to the lessons learned
64 through experience. A study by Gazza (2017) found that when staff had time to learn about
65 online teaching, this positively influenced satisfaction and the decision to teach online.

66 Howe et al. (2018) also reported that those who received mentoring had significantly higher
67 satisfaction than those who did not. Other studies also indicated that targeted training was
68 essential to achieving self-efficacy and satisfaction of online teaching staff (Richter &
69 Idleman, 2017; Wingo et al., 2016). The suggestion that more research is required to
70 develop effective training models for online teaching faculty was evident in the published
71 literature (Wingo et al., 2016).

72

73 A common notion in the pre-existing literature were that online teaching was more time
74 intensive than F2F teaching. The study by Gazza (2017) identified the back-and-forth nature
75 of interactions between staff and students, and the increased time and expertise required
76 to design the online learning environment, increased workload for teaching staff. Wingo et
77 al. (2016) recognised that preparing online courses was time intensive, suggesting that
78 ample time be allocated to staff workloads to allow for this. As well, class sizes in online
79 learning courses are often much larger, influencing workload of staff teaching online (Gazza,
80 2017). Another factor influencing increased workload of teaching staff was by virtue of staff
81 being available to students outside regular business hours, blurring the usual hours of work
82 required of staff (Mastel-Smith et al., 2015).

83

84 Objective

85 A literature review was conducted to explore the needs of Australian postgraduate nursing
86 and midwifery educators who teach online, exposing a gap in research reporting the
87 experiences and needs of this population. This prompted the design of a mixed-methods
88 descriptive research study to gain an understanding of the learning and professional needs
89 of Australian nursing and midwifery educators teaching postgraduate courses offered
90 exclusively online, to inform strategies for enhancing support in this population.

91

92 The research questions guiding this study were:

- 93 1. What are the experiences and needs of nursing and midwifery educators teaching in
94 postgraduate courses offered entirely in an online mode?
- 95 2. What strategies can be implemented to support nursing and midwifery educators
96 who teach postgraduate courses offered entirely online?

97 **Methods**

98 Participants

99 The participants in this study were nursing and/or midwifery educators who have taught in
100 entirely online postgraduate courses/subjects/units in any university in Australia within the
101 past five years. To be eligible, participants could be employed in a full-time, part-time, or
102 casual/sessional capacity.

103

104 Recruitment

105 Recruitment of participants was conducted from June to August 2019 through two methods.
106 First, recruitment was conducted through social media platforms, including Twitter,
107 Facebook, and Linked In, inviting Australian nursing and midwifery educators who met the
108 selection criteria to follow a link to the online survey. Second, thirty-nine Australian Nursing
109 and Midwifery schools were identified as offering online postgraduate nursing and/or
110 midwifery programs. Heads/Deans of all thirty-nine Nursing and Midwifery schools were
111 contacted, with an invitation for them to disseminate the study information and survey link
112 to eligible staff in their school.

113

114 Instrument

115 An online survey was developed and tested by 9 academics in health and non-health
116 disciplines to assess for face validity and question clarity, and improvements to content and
117 question clarity were implemented based on feedback. The final survey consisted of 56
118 items comprising both quantitative and qualitative questions. The first question asked
119 participants to confirm if in the past five years they were employed as an academic in
120 nursing and/or midwifery at an Australian university, including full-time, part-time or

121 sessional/casual. Those who indicated this was not the case were sent to the end of the
122 survey and excluded from answering any further questions. The second question asked
123 participants to confirm that they had taught a postgraduate nursing and/or midwifery
124 program that was offered entirely online. Again, those who indicated this was not the case
125 were sent to the end of the survey and excluded from answering any further questions.
126 Those who answered 'yes' to the two initial questions were able to answer the remainder of
127 the survey. The remainder of survey items were organised in four distinct sections.

128

129 The first section of the survey included one question to extract numerical data about the
130 length of time the participant had been teaching in higher education, and two questions
131 asking participants to rate their experience in the traditional F2F and online modes of
132 teaching, using a scale based on nursing theorist Patricia Benner's stages of clinical
133 competence (Benner, 1984), ranging from: 1 = *novice*, 2 = *advanced beginner*, 3 =
134 *competent*, 4 = *proficient*, 5 = *expert*. No other demographic data was taken from the
135 survey.

136

137 The second section of the survey extracted quantitative data using thirty-nine items relating
138 the participant's experiences of online teaching. These questions used a 5-point Likert scale
139 for responses: 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, 5 = *strongly agree*.
140 Cronbach's Alpha was used to determine reliability. The Cronbach's Alpha in this section
141 was 0.786.

142

143 The third section of the survey extracted quantitative data using six items relating to
144 participant's experiences receiving faculty, team and technological support. These

145 questions used a 5 point Likert scale for responses: 1 = *never*, 2 = *rarely*, 3 = *sometimes*, 4 =
146 *most of the time*, 5 = *always*. The Cronbach's Alpha in this section was 0.862, indicating high
147 reliability.

148

149 The final section of the survey included six opportunities for participants to provide open
150 ended responses to questions about the type of support and training offered to them prior
151 to teaching online, what types of additional support or training they feel would be useful to
152 them in their role as an online teacher, as well as the favourite aspects and least favourite
153 aspects of their role as an online teacher. The survey was developed using Qualtrics and
154 took approximately 25 minutes for participants to complete. Once recruitment had begun,
155 the survey remained open for two months during the data collection phase.

156

157 Ethical considerations

158 Ethical approval was granted by the James Cook University Human Research Ethics
159 Committee (Identification number H7808). Participant confidentiality was maintained as no
160 identifying information was collected. Potential participants were provided with a link to the
161 study information sheet and after reading the study information, they were invited to
162 indicate their consent by clicking a button to proceed to the survey questions.

163

164 Data analysis

165 Data was collected and stored electronically, with password protection used for security.
166 Responses to the survey were analysed using SPSS to perform descriptive statistical tests.
167 Qualitative data was analysed using thematic analysis, to more deeply understand the
168 experiences and needs of the participants. This paper reports only the quantitative findings

169 of this mixed-methods study, where the qualitative findings intend to be published
170 separately.

171

172 **Results**

173 Demographics

174 The sample consisted of n=49 after data cleaning (Figure 1). Of these, 67.3% had been
175 teaching in higher education between 1 and 10 years, while the remaining 32.7% had been
176 teaching in higher education for more than 10 years. One quarter of respondents had been
177 teaching in higher education for four years or less. When asked about their experience as a
178 F2F teacher, 72.9% indicated they were either 'proficient' or 'expert' in this mode of
179 teaching. However, when asked about their experience as an online teacher, only 52.1%
180 indicated they were either 'proficient' or 'expert' in this role.

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182 Figure 1: Data Cleaning Process

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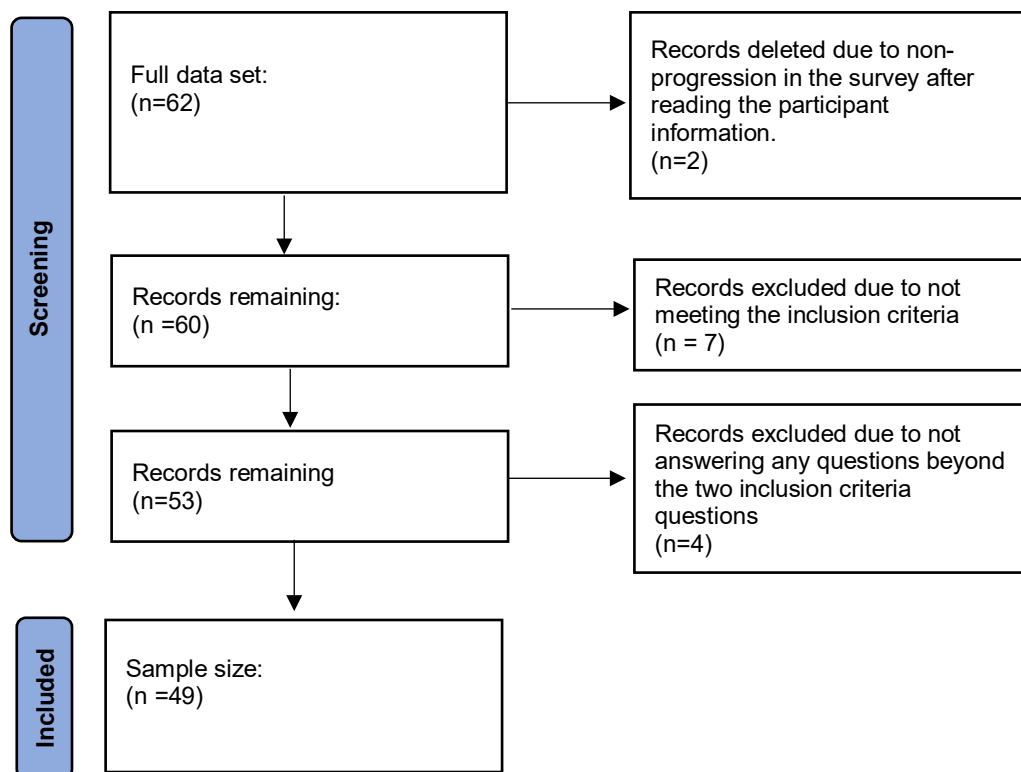
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206 Perceptions about online teaching

207 The survey asked a range of questions about respondent’s perceptions of online teaching.
208 Results revealed more than half of the respondents agreed that online teaching was time
209 consuming (59.4%) and isolating (55.3%). When asked if online teaching takes up less time
210 than teaching F2F, the majority (89.4%) of the sample disagreed. A large percentage of the
211 respondents classified online teaching as challenging (76.6%), but many enjoyed the
212 intellectual challenge that online teaching presents (71.7%). Just over half the sample
213 agreed that teaching online suited their teaching style (54.4%) and allowed for autonomy in
214 their teaching practice (58.7%).

215

216

217 Preparing for online teaching

218 When preparing for online teaching, staff are required to learn to use new technologies,
219 review and or design learning materials, and have time to prepare for teaching and dedicate
220 to marking student work. Results revealed many respondents enjoyed learning new
221 technology for their work (79.6%) and felt comfortable using technology in teaching
222 (73.4%). However, most admitted they learned new technologies in their own time (83.6%),
223 with almost one-third (30.6%) of respondents indicating they had not completed any
224 training courses to learn the technologies they used in teaching. Fifty-seven percent of the
225 sample believed their employer did provide opportunities to learn new technologies.

226

227 Responses revealed some respondents were included in the content writing process (66%),
228 the assessment writing process (64%), and in the process of evaluation and revision of
229 learning materials (75%). Ninety-two percent of respondents indicated they were confident

230 and competent teaching the content they were required to teach. However, when
231 respondents were asked if they have time to prepare for teaching, only 63.2% indicated that
232 this was the case, with 30.6% indicating that they were not provided with learning materials
233 well in advance of beginning to teach. One quarter of respondents indicated they did not
234 have time to dedicate to marking student work and providing adequate feedback.

235

236 Online teaching and student engagement

237 Eighty-three percent of respondents indicated they provided students with a range of
238 effective learning experiences when teaching online. The online teaching strategies
239 commonly used by respondents included online discussions (93.6%), video conferencing
240 sessions (85.1%), and learner-to-learner interaction (91.5%). Of the respondents, 60.8%
241 believed that the online learning environment was produced effectively to enhance learner
242 engagement. Ten percent perceived that high-quality experiences cannot occur without F2F
243 interaction. Some 17% of respondents indicated they do not get to know their students
244 through online teaching.

245

246 Developing as an online teacher

247 The pedagogies guiding online teaching are vastly different to those guiding F2F teaching
248 (Garrison et al., 2010; Gurley, 2018). However, just 66% of respondents agreed that they
249 understood what constitutes best practices in online teaching. As far as professional
250 development was concerned, 63.8% believed that online teaching offered opportunities to
251 improve teaching, while 80.8% felt that online teaching offered opportunities to develop
252 new ideas about teaching. Approximately half (55.3%) agreed that they were provided with
253 opportunities to share their knowledge and ideas with other online teachers.

254

255 Being supported as an online teacher

256 Having training (Gurley, 2018) and feeling supported (Mellieon & Robinson, 2021) are
257 essential to the satisfaction of online teaching staff. Results in this survey have revealed that
258 many respondents did not receive specific training before beginning to teach online (62.2%),
259 nor have they received any specific training in online instruction (36.8%) or specific training
260 about how to use the learning management system (27.7%). Subsequently, 65.9% of
261 respondents said that they felt that they needed additional training to assist in their role as
262 an online teacher. Survey questions asking about being supported as online teachers have
263 revealed that 66.7% perceived they could be better supported. Fifteen percent of
264 respondents 'rarely' felt supported by faculty in their role as an online teacher, while 17%
265 'rarely' or 'never' received adequate technological support. A lack of training and support
266 often results in online teaching staff feeling alone. In this survey, 29.8% of respondents
267 indicated they 'sometimes' felt isolated in their role, 19.1% said they felt isolated 'most of
268 the time' and 6.4% said they 'always' felt isolated in their role as an online teacher.
269 Additionally, 12.8% reported that they 'rarely' felt part of a team when working as an online
270 teacher, while 36.2% 'sometimes' felt part of a team.

271

272 **Discussion**

273 Online teaching brings with it both barriers and opportunities for educators and students
274 alike. Online learning and teaching requires adequate access to reliable technology and
275 internet, and some say that online learning and teaching cannot take the place of F2F
276 engagement due to the lack of human connection (Unnikrishnan et al., 2020). The
277 alternative view is that online learning can broaden opportunities for access to education

278 and enable the use of innovation and contemporary teaching methods to compensate for
279 the lack of physical F2F presence (Tartavulea et al., 2020). Consistent with a wide range of
280 previously conducted international studies (Authement & Dormire, 2020; Gazza, 2017;
281 Hampton et al., 2020; Matthias et al., 2019; Sinacori, 2020; Tartavulea et al., 2020;
282 Unnikrishnan et al., 2020), in this study we learned that many of the participants were
283 experienced F2F teachers, who experienced the shift from F2F teaching to online teaching
284 as challenging; and requiring different teaching skills and approaches to those commonly
285 used previously in their teaching careers. Importantly, the findings of the study highlight a
286 range of areas where institutionalised recognition and support is key to assisting
287 experienced F2F teachers to successfully shift from F2F settings to online settings.

288

289 Consistent with several other studies undertaken in the United States (Gazza, 2017; Richter
290 & Schuessler, 2019; Sinacori, 2020; Wingo et al., 2016), it is not surprising to see the
291 majority of participants in this Australian study reporting that online teaching takes
292 additional time in tasks such as preparing and developing online content, learning to use the
293 technology, teaching through their fingertips, as well as upskilling so as to use sound online
294 pedagogy. In addition, this study revealed online nursing/midwifery educators commonly
295 use their own time to undertake new learning, upskilling, and professional development
296 relevant to their role. Without recognition of the additional time taken to teach in such
297 environments, as well as the often-hidden workload that exists, institutions risk teaching
298 staff feeling undervalued, unsupported, and discontent with their work conditions. Given
299 the increasing casualisation of teaching staff in higher education, this is certainly one area
300 requiring deeper investigation and consideration.

301

302 The finding that half of the sample described their role as an online educator as isolating is
303 problematic. The pre-existing literature clearly highlights the isolation often felt by students
304 in online learning environments (Authement & Dormire, 2020; Dreamson, 2019; Elmore,
305 2021; Erichsen & Bolliger, 2011; Plante & Asselin, 2014; Zou et al., 2021), however very little
306 published literature exists regarding the experience of isolation for online educators. In this
307 study, only half of the sample identified they have opportunities to share their knowledge
308 and collaborate with other online educators, highlighting the fact that many online
309 nursing/midwifery educators work in silos where collaboration with others is not being
310 realised to its potential. This unfortunately points to missed opportunities for these
311 educators to learn from each other and develop further professionally, through
312 collaboration with the broader team.

313

314 The challenges faced in this virtual teaching space can impact satisfaction amongst both
315 staff and students. Online education, with its increased accessibility, flexibility and
316 popularity in our world today often results in larger student cohorts (Sunar et al., 2020).
317 Managing large online cohorts correlates to increased workloads (Lowenthal et al., 2019;
318 Tynan et al., 2015) as well as reduced potential to get to know the students in the same way
319 that is possible in the F2F environment (Almatrafi et al., 2018; Price et al., 2016). With
320 almost one-fifth of participants in this study claiming that they do not get to know their
321 students, the risk is that the depth of teacher-student rapport and relationships will be
322 markedly reduced, impacting on student satisfaction and success. The previously published
323 literature also points to the challenges in building student-teacher relationships in online
324 learning environments, citing how vital it is for online educators to communicate well, and

325 build connectivity; a combination of building social presence and a sense of community
326 within their courses (Garrison et al., 2010; Plante & Asselin, 2014; Schroeder et al., 2021).
327
328 Significantly, only half of the sample in this study agreed that online teaching offered job
329 satisfaction, while a third of participants believed online teaching does not offer job
330 satisfaction. Teacher satisfaction and self-efficacy are directly correlated to student success
331 (Hampton et al., 2020). Previous literature reports important measures to increase
332 satisfaction and efficacy in the role. First emphasising how important it is that online
333 educators are provided with recognition of their crucial role in educational institutions
334 broadly (Reneau et al., 2018). As well, training and support relevant to online educators
335 specific learning needs as they transition to online teaching is vital to their overall
336 satisfaction and self-efficacy (Wingo et al., 2016). Online educators need training that builds
337 confidence to solve information technology issues, use the learning management system
338 efficiently and confidently, use analytics to better understand student engagement, and
339 prepare and deliver effective online teaching sessions. Likewise, it is equally as important to
340 ensure that educators are satisfied in the virtual classroom, as this may have ramifications
341 for the success of programs and intention to remain in the profession.

342

343 Since this study focussed strictly on the experiences of postgraduate nursing educators,
344 further research is indicated to explore whether this is a phenomenon specific to nursing
345 and midwifery postgraduate education, or indeed if this is similar to the experiences and
346 needs of online educators in the growing undergraduate nursing and midwifery online
347 education spaces. Additionally, now that we are in a post-COVID-19 world where online
348 education has become increasingly 'normal', it would be interesting to explore the

349 experiences and needs of educators who teach into fully online courses now, and compare
350 the results to those of this study conducted pre-COVID-19.

351

352 This study found a much larger proportion of the sample perceived themselves to be
353 'proficient' or 'expert' in terms of their ability to teach F2F compared to teaching online.
354 Additionally, more than two-thirds of the sample reported requiring more training and
355 support in their roles as online educators. If the transition of the education of nursing and
356 midwifery is inevitably going to become more omnipresent in the digital classroom, and
357 educators are going to be expected to 'teach through their fingertips' more and more
358 frequently, we must address the needs of our educators with highest priority. Universities
359 must not assume that the digital classroom is merely a form of the F2F classroom, and we
360 must champion the education and professional development of our online educators to
361 ensure that they are fully competent and confident in performing their vital role (Gazza,
362 2017; Wingo et al., 2016). Opportunities exist for organisations to ensure their online
363 teaching staff are adequately trained to teach, appropriately resourced with time and
364 professional development, and conduct future research to better determine how to
365 improve learner engagement, online pedagogies, and educator support in this alternative
366 classroom environment.

367

368 Limitations

369 This study captured the perspective of participants at one point in time via a self-report
370 survey. As well, the small sample presents a limitation, where generalisability should be
371 applied with caution. The study is also descriptive in nature, with the researchers
372 recognising that the cross-sectional nature of the study has produced data from a point in

373 time just prior to the COVID-19 pandemic. However, this also presents a future opportunity
374 to undertake a replication study and compare the findings pre- and post-COVID-19. The
375 study focus was on nursing and midwifery educators teaching in postgraduate online
376 courses only; those teaching in undergraduate online courses were excluded from this
377 study. However, the study could be replicated in future studies to include this population.

378

379 **Conclusions**

380 As a result of this study, it is recognised that the most important thing that can be done for
381 staff who teach into online courses is to give them the education and professional
382 development they crave. This can take the form of information newsletters and tip sheets,
383 regular briefing before and debriefing after each subject, formalised mentor programs for
384 new staff, and inclusion in organisation professional development activities, including a fair
385 allocation of time in workloads to maintain their professional development. Universities
386 must recognise that their staff are important to the success of their programs. If staff are
387 not satisfied, students will not be satisfied, and this will impact on the success of the course
388 or program. This study has helped in our understanding that educators want to provide the
389 best learning opportunities they can for their students in the digital classroom, but they
390 need to feel supported and included, while addressing their ongoing learning and
391 professional needs.

392

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394

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