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# An online course in clinical education

## Experiences of Australian clinicians

### Aims

We aimed to understand clinicians' experience of online training in the area of clinical education.

### Methods

We conducted semistructured in-depth interviews with a purposive sample of 20 clinicians studying clinical education online. Interviews were transcribed verbatim into N-Vivo qualitative analysis software. Data were analysed against a template derived from open coding merged with a priori themes from a program logic model.

### Results

Clinicians in this study found learning online convenient but there was a trade off between this convenience and developing an authentic online community of learners. Optional intensives were important for developing relationships with staff and other students. Clinicians faced significant time pressures when adding study to their busy workloads and lives. Protected study time, assistance with course fees, information technology support, facilitated discussion and a flexible approach to assignment submission dates were cited as useful.

### Conclusion

Clinicians can develop as educators online if given appropriate time and support.

**Keywords:** education, professional; education/distance; internet

Australian health ministers have pledged that the increased numbers of health professional students at Australian universities will receive quality, clinical training places.<sup>1</sup> Increased clinical supervisor capacity will be required, and training courses for clinicians who train and assess learners at multiple levels of medical education will be needed.<sup>2,3</sup>

Upskilling clinicians to be educators is a logistical challenge – a traditional university course requiring attendance at lectures and tutorials is usually incompatible with working as a general practitioner. Teaching effectiveness can be improved through faculty development<sup>4</sup> but few GPs have had formal education in clinical teaching. Distributed models, weekend retreats and videoconferencing can be effective but still require travel, simultaneous study time and/or reliable equipment. Distance to suitable education is a barrier for rural and remote GPs<sup>5</sup> who increasingly take students based on evidence that rural placements promote future rural work.<sup>6</sup> We asked if the flexibility and accessibility of an online education course would provide a practical alternative to professional development for rural GP educators.

We designed the first Australian online course in clinical education, using the principles of adult education,<sup>7</sup> for part or full time study for clinicians to graduate with a certificate, diploma or Master degree ([www.flinders.edu.au/courses/postgrad/ce](http://www.flinders.edu.au/courses/postgrad/ce)). The course aims to enable clinicians to facilitate the learning of health professional students in the clinician's workplace. Optional intensive workshops supplement online study. The course is based on the symbiotic model of clinical education.<sup>8</sup> This includes study of the relationships that impact on clinical education as well as

traditional teaching skills.

Online learning is popular. For example, in 2010 over 40% of physician continuing medical education activities in the United States of America were conducted via the internet, up from 0.25% in 2000.<sup>9</sup> Equivalent statistics were not located for Australia but a similar trend is likely. The challenges of establishing an online clinical education course have been well documented<sup>10–12</sup> as well as ways to improve online learning environments,<sup>13,14</sup> but there is a dearth of understanding of the health professional learner's experience. We conducted qualitative research using thematic analysis to understand how clinicians' experience of online study affected their learning, the barriers they faced and what supports assisted them.

### Methods

#### Research team and interview guide development

The research team consisted of four academics from four different health profession disciplines, one of whom had no prior connection with the course and conducted all the research interviews (CB). We devised our topic guide for semistructured interviews using a program logic model.<sup>15</sup> Interviews of those involved in establishing the course yielded a list of their desired course outcomes, which were then prioritised in a Delphi process.<sup>16</sup> Participants were treated as experiential experts and new areas of inquiry were opened and followed, and incorporated into the topic guide iteratively for subsequent interviews.

#### Sampling and ethics

We used purposive sampling based on the research literature and our experience as

educators on the characteristics of learners likely to give a rich description of clinicians experience of the course. Clinicians who had completed at least two modules of the course were selected from different disciplines, gender, age, experience as teachers and online versus online plus intensive study modes.

Ethics approval was obtained from The Flinders University Behavioural and Social Science Committee.

### Transcription and analysis

Telephone or in-person interviews were recorded and then transcribed verbatim into N-Vivo qualitative analysis software. All researchers read the transcripts. Initial open coding by CB was checked and further refined by the team (who were consciously aware of their potential biases as teachers on the course). Key themes were identified inductively and merged with the a priori<sup>17</sup> themes of the desired course outcomes to form our analytical template.

### Results

Our purposive sample of 20 participants comprised seven nurses (N), six GPs (GP), two hospital doctors (HD), two paramedics (PM), one pharmacist (Ph), one Aboriginal health worker (AHW) and one academic (Ac). The proportion of 16 women (W) to four men (M) reflected the ratio of female:male course enrolments; four participants had studied solely online, one from overseas. Two worked in remote centres, eight in rural practice and nine in metropolitan areas. One person, who was on maternity leave, declined to be interviewed and two people were uncontactable. The median age range was 30–40 years (range 25–55 years).

### Course design – online

#### Convenience

The convenience of online learning meant that clinicians could ‘work at my own pace’ [WN 4] without travelling. ‘That was very attractive (all online) because just travelling to [city] would have been too far.’ [WGP 12]

Online learning was accessible to clinicians in rural and remote areas as ‘people in country areas still need to be educated and we can’t go to the city to uni, it’s not practical’ or overseas ‘[...] University was a good choice. It has excellent online ability. I was in [overseas country] at the time.’ [WGP 15]

### Engaging and affirming

‘I wanted to be there, it seemed relevant, it seemed practical... the instructors and the materials were all accessible and that made it not only easy for me to be engaged, but fun.’ [WGP 1]

Asking clinicians to share and discuss problems in teaching reduced the potential sense of studying in isolation ‘I got a strong sense of not being alone as I watched others contribute to the same problems on the discussion board.’ [WN 3]

### Meaningful learning between disciplines

The opportunity to learn with other disciplines and see their thought processes created meaningful learning experiences for some.

‘There are a number of key people that we’d punch things around with and get their views... they come from a variety of different professions... like nursing and pharmacy and medicine and physios.’ [MAHW 17]

‘I liked the online content because it gave me an opportunity to read other people’s thought processes... I learned a lot from that.’ [WN 9]

Two clinicians who taught other clinicians from different disciplines found the insight into how these disciplines thought invaluable. In contrast others felt that the professions maintained their disciplinary silos ‘the doctors stuck together, the paramedics stuck together, and the nurses stuck together.’ [WPM 6]

### ‘Hit and run’ learning

For many clinicians time pressures meant they adopted a hit and run approach.

‘I pretty much logged on as minimally as I could, and that was simply because I just did not have the space in my life to do more than that.’ [WHD 13]

There seemed to be a trade off between the convenience of studying asynchronously and the development of an online community of learners ‘it’s a bit fake isn’t it and the thing is that not everybody studies at your pace.’ [WPh 8]

### Challenges

Studying online proved more difficult than some had expected because their own information technology (IT) skills were lacking, ‘I found it very hard work... because I wasn’t very internet literate’ [WGP 12] or for technical reasons ‘the connections out where I live didn’t allow me to participate.’ [WN 3]

### Course design – optional intensives

#### Valuable learning experience

The optional intensives were ‘a really powerful learning experience. A lot of value, but expensive in travel and time commitment’ [WAc 2] ‘I remember it more whereas the stuff you do online, you just do and it doesn’t really sink in.’ [MGP 11]

‘It can be a little bit confronting in challenging your own ideas or changing the way you think and practice to make it more effective. But they are all good things.’ [WN 10]

#### Relationships

An unexpected experience for learners was that the lack of face-to-face contact made building relationships difficult.

‘It was interesting having chosen it for distance reasons I actually found that the intensives were very good for developing relationships with other students. I had not expected it to be so difficult on line.’ [WHD 18] ‘I find it a bit hard to relate to people over the internet.’ [WN 20]

#### Capacity to study

Time to study was a major concern. Each clinician described having to juggle competing interests so that they could study despite work.

‘I was the slackest person, well no, not slack at all, it was when you’ve got full time jobs and student responsibilities,’ [WN 16] or family life ‘it was too full on, you couldn’t have a normal job, do that [two subjects] and have kids and a family.’ [WGP 7]

Planned and unplanned life events created challenges ‘we also had a new baby at the time, so it was fun and games trying to do all that’ [MPM 20] and ‘I am a bit rushed. I’m moving house and I’ve changed my job.’ [WN 5]

#### Supports for study

##### Workplace

Clinicians commented that the design of assessments and reflective tasks relevant to the workplace helped as, ‘you are able to use your own workplace as a bit of a platform for the course.’ [MAHW 17]

Institutional support for learners was appreciated ‘the school are supporting me doing

this, it's part of my salary, individuals are supportive and make sure of time/resources and are flexible with work schedule to fit in trips to [capital city] providing access to the library' [WAc 2] and 'my employer paid for two-thirds of the first two modules so I was very lucky.' [WPh 8]

### Family support

Family supports were appreciated 'my poor husband, I must have driven him mad [asking] how do I do this again?' [WGP 12]

One participant who found 'a lot of the initial time was spent learning how to study as an external student' was grateful to the medical students on placement with her who 'helped me a little bit how to get into the library when I couldn't get in to certain areas.' [WGP 7]

### Flexible, supportive faculty

Clinicians appreciated the flexible approach taken to completion of coursework by the faculty in recognition of the challenge of adding study to busy working lives.

'Lots of the doctors got extensions' [WGP 7] and the 'facilitators very understanding in relation to work life balance and study.' [WN 10] 'They had supervisors who were really, really good... you aren't left just to disappear.' [MGP 14]

### Approaches to study

Participants adopted different approaches to coping with study. One person studied regularly. 'You make sure you do a couple of hours a night or something. So that was all right,' [MAHW 17] and another took a long term view 'when people do all those things like work and study and throw themselves in, the risk of burnout is high and then all this knowledge and wisdom gained would be lost. It's important to make sure that one lasts the distance.' [WGP 12]

Others felt that 'it probably would have been more beneficial to have a structured night for study each week' [WN 20] that involved all students.

### Discussion

The internet has transformed the options for distance education creating a trend for those who wish to educate clinicians, particularly in rural and remote areas, to put everything online. Our results confirm the internet's potential to develop clinical educators, but also sound a level of caution that access is not automatic and needs active

facilitation. Despite the range of age, gender, professional background, study mode or geographic region, core themes emerged on what helps and what hinders online study of clinical education for health professionals.

In-depth interviews provided an appropriate window into clinicians' experience of online learning. However, our recruitment of those who had completed two modules is likely to produce positive bias toward the course and online learning; interviews of those who enrolled but did not complete might yield an alternative, valuable perspective. The independence of the interviewer added rigour to our methods. The three researchers (who also teach the course) used a reflexive approach to be mindful of the impact this would have on their reading of the results, and have relied on direct quotes to support suppositions made.

We found a trade off between each learner studying when convenient for them and developing an authentic learning community. Blending online learning with face-to-face contact seems logical. Discussion boards provide an opportunity to understand participants thought processes in ways that are rarely possible in classroom settings. However, the emphasis participants put on the importance of interaction and direct contact to build meaningful learning relationships concurs with theories that learning is a social process.<sup>18</sup> Similarly, USA physicians using tele-education reported missing the informal 'chat' with colleagues,<sup>19</sup> and reviews of what works in faculty development<sup>4</sup> or internet based medical education initiatives<sup>20</sup> highlighted the roles of relationships and interactive dialogue with feedback. The notion of online relationships being 'fake' and inauthentic is changing rapidly and may become less relevant as social media move from being a virtual reality to becoming the new normality.

Doctors express interest in the area of clinical education continuing professional development but getting protected time is difficult.<sup>21,22</sup> Participants valued support from their employers but study work was often done in personal time. We question whether this is a reasonable imposition on family life already eroded by busy clinical workloads. Perhaps study time should be protected in work hours, as advocated by Childs et al.<sup>23</sup> This was shown to develop teaching skills and increase

faculty research output and had other spin-offs within one medical school.<sup>24</sup>

Clinicians appreciated the convenience of online learning but our results concur with that of Sargeant,<sup>25</sup> that even those who had chosen to study via an online course faced practical challenges and that perseverance is needed.<sup>26</sup> The need for flexible, accessible, available academic and IT support is well recognised.<sup>27</sup> Our results add that clinicians benefit from adopting a realistic approach to study, employers giving protected study time and funding course fees, and from family support.

### Summary

Learning to become a clinical educator online offered convenience and accessibility, regardless of location, and gave insight into how different health professionals think. Optional intensive workshops are important for developing relationships with staff and other students. Clinicians in our study faced significant time pressures when adding study to their already busy workloads and lives. The design of the course to build on clinicians' current work and faculty flexibility helped, but most devoted significant personal time to developing their teaching skills. Clinicians can develop as educators online and benefit from active facilitation of learning and multifaceted support.

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