



Educators' Perceptions and Experiences of Online Teacher Professional Development

COLLECTION:
OPEN LEARNING AND
LEARNING AT SCALE:
LEGACY OF THE

MOOCS

ARTICLE

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ABSTRACT

Online teacher professional development (oTPD) provision has seen a rapid increase in recent years, with significant growth during the COVID-19 pandemic. However, concerns persist around equitable access, course retention and completion, the relevance of materials for varied contexts, and the level of engagement that is realistically possible. More research is needed regarding the ways in which learners in these contexts engage in learning and the impact on their practice. Using a phenomenological approach (Creswell 2013), this paper identifies and documents educators' perceptions and real, lived experiences of oTPD during a Massive Open Online Course (MOOC) entitled 'The Fundamentals of Educational Dialogue'. Findings indicate that educators' perceptions of oTPD impact and correlate with their experiences. Participants are responsive to how courses are designed (e.g. course aims, structure, cost, and opportunities to meaningfully connect with other practitioners), which influences their engagement in the course and levels of interaction with peers, and ultimately affects the ways in which the course impacts their personal and professional lives. Implications for future oTPD courses include utilising a framework that recognises learners as reflective, critical professionals who shape their own and others' experiences. This encourages a view of capacity building as not ending with the acquisition of subject knowledge alone but rather results in a greater depth of learning, particularly when dialogue is used as a pedagogical tool to co-create new knowledge. This intentional sharing of perspectives and reflective engagement with the differences therein can ultimately contribute to fostering a sustainable community of practice.

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INTRODUCTION

Teacher professional development (TPD) is a long-term process that occurs throughout an educator's professional life. TPD can refer to formal pre- and in-service learning, as well as informal collaborations with colleagues, all with the aim of continually improving practice. TPD programmes typically review, assess, and build on educators' knowledge of content and pedagogy, their skills, attitudes, and instructional approaches (Luneta 2012).

Online TPD (oTPD) courses have become globally ubiquitous, providing advantages for remote support to educators, particularly those seeking in-service TPD that complements their busy schedules. However, there continues to be a limited understanding of the ways in which participants engage with, experience, and learn from such courses. Further research is urgently needed to ensure that the needs of participants, their experiences, and barriers to participation are identified and mobilised to course providers. In addition, the application to practice and broader experience of participating in oTPD can vary immensely between individuals, and there is significant value in research considering the diversity and particularity of experiences of those engaging with oTPD.

This study was conducted by an international group of educators who came together as participants and facilitators of a Massive Open Online Course (MOOC) entitled 'The Fundamentals of Educational Dialogue' (henceforth referred to as the 'Fundamentals' MOOC). This course was designed, developed, and facilitated by two members of the Cambridge Educational Dialogue Research (CEDiR) group at the Faculty of Education, University of Cambridge. This paper reports on the first 6-week cohort of this free course, which took place from February to April 2022. The course was designed for teachers and teacher educators of any subject in schools and tertiary institutions globally who were interested in learning about the foundational theories behind educational dialogue. The aims of the course were to: (i) introduce educators to the key theorists, methodologies, and debates in the field of educational dialogue across all phases of education; (ii) equip participants to reflect on their own thinking about dialogic pedagogy and practices in their context; and (iii) prepare participants for further courses that support systematic reflective inquiry into their practice. It was advertised via the CEDiR network through an email invitation and social media posts.

208 participants from 40 countries enrolled in the course and completed the pre-course survey. 47 of these participants completed the post-course survey, and 45 participants submitted a reflective report as their final learning artefact and were issued with a Certificate of Completion for the course. Figure 1 offers selected demographics of course participants.

This study is predominantly a phenomenological exploration of the lived experiences of participants conducted within a conceptual framework of self-study and reflective practice. It draws on original data from the 'Fundamentals' MOOC, which is built on through additional detailed reflections of a subgroup of participants. The analysis considers central features for participants in selecting and engaging with an oTPD course, and the resulting impact on their practice. The study concludes with a comparison of existing predictions of oTPD with participants' perceptions, posing implications for course designers and facilitators alongside a direction for future research.

REVIEW OF THE LITERATURE

ONLINE TEACHER PROFESSIONAL DEVELOPMENT

There has been a growing interest among policymakers in providing remote and alternative support to educators (Quota et al. 2022). This, in combination with the necessary move to online learning globally during the COVID-19 pandemic, has led to an explosive growth of oTPD programmes (Hartshorne et al. 2020). oTPD can offer flexibility to learners who are able to dictate the speed at which they work, allowing them to take greater control (Major et al. 2018), and can also (potentially) reach educators in remote locations and accommodate their full schedules (Lay et al. 2020). When used appropriately, technology can be leveraged to enhance access, participation, engagement, and the continued application of new skills in the classroom

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^{1 &#}x27;The Fundamentals of Educational Dialogue' course site can be currently accessed [May 2024] at the following github link, where it was first developed: https://mbrugha.github.io/fundamentals-of-ed-dialogue/.

² More information about the course designers and their respective research that led to the design is available in the 'about us' page of the course: https://mbrugha.github.io/fundamentals-of-ed-dialogue/about/.

(Quota et al. 2022). However, there is also much room for improvement and further research is needed, particularly as it relates to the perspectives of participants in low-resource contexts.

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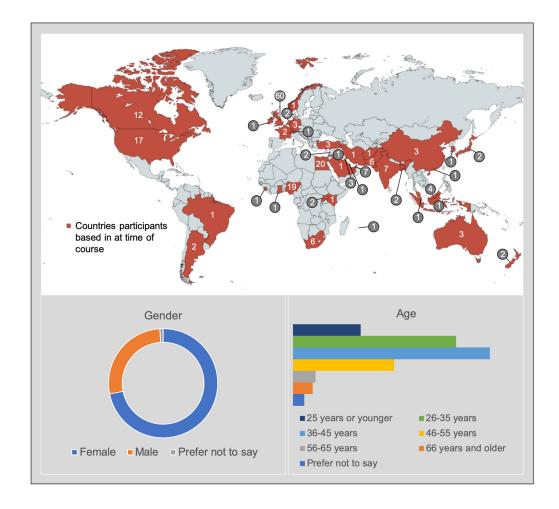


Figure 1 Participant demographics.

The significant growth of oTPD programmes has resulted in a challenging scenario where programmes are outpacing the research and are being developed and launched without a sufficient evidence base to draw on. In this absence, general principles and guidelines relevant for in-person TPD are frequently assumed as applicable to online courses and programmes without considering whether specific research-based practices actually transfer well to online environments (Lay et al. 2020) and to international online environments which have participation from multiple cultures. The global nature of an online international MOOC further highlights the importance of contextual factors that shape what a participant draws from oTPD. Course design and research, therefore, needs to take into account the role of cultural differences (Rienties et al. 2023), external (i.e. governmental or institutional) mandates or expectations regarding professional development, as well as an educator's own beliefs and values about education (Beach, Favret & Minuk 2021). Acknowledgement also needs to be given to the reality that what participants gain from oTPD may not always align with the stated outcomes of the providers (Yurkofsky, Blum-Smith & Brennan 2019).

DIALOGIC AND COMMUNITY-BASED APPROACHES TO oTPD

Approaches to TPD have evolved over the last half century, offering a shift from a 'deficit approach' (i.e. a focus on content knowledge and use of external expertise to deliver it) to a 'technical approach' (i.e. a focus on teaching practice that is school-based with outside help) towards the idea of continuous professional development (Sawyer 2001; Day & Sachs 2004). This has resulted in an increasingly collaborative and situated perspective (Derri, Vasiliadou & Kioumourtzoglou 2015), focusing on the individual teacher's responsibility to direct his or her own professional development process.³ Teacher reflection and agency within TPD can

³ For an account of TPD models most frequently referred to in the literature, see: **Sancar, R, Atal, D and Deryakulu, D.** 2021. A new framework for teachers' professional development. *Teaching and Teacher Education,* 101: 103305.

be especially effective as it focuses on specific learning needs identified by educators and leverages ongoing professional learning communities (Bransford, Brown & Cocking 2000).

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Educational dialogue allows learners to co-create new knowledge in a subject area and to understand that differences between perspectives – in the classroom as well as in global society – can be a source of new insights and meanings (Bakhtin 1981; Shor & Freire 1987; Wegerif et al. 2017). The 'Fundamentals' MOOC both focused on educational dialogue as the subject area of the course and was also framed by a dialogic approach that aimed to provide a structured environment for learners to build on one another's ideas through posing questions, providing reasoning and justification, and critically evaluating their own and others' contributions (Alexander 2008). Major et al. (2018) argue that digital technology can enhance the use of dialogue for learning and can result in increased communication between learners. The same argument can be applied to oTPD. Furthermore, online courses can provide greater opportunities to see alternative perspectives through internet-mediated intercultural dialogue with potentially a wider range of teaching contexts. Mercer, Hennessy and Warwick (2019) caution that "technology must be used with a dialogic intention, in the context of activities which are well designed to promote collective thinking" (2019: 197). This is echoed in most of the literature consulted, which asserts that it is the pedagogy that is paramount, not the technology.

In addition to a dialogic approach, the 'Fundamentals' MOOC sought to leverage the value of a community of practice in providing a supportive environment for educators (e.g. Lieberman & Miller 2008; Ryoo, Goode & Margolis 2015). Communities of practice are formed when individuals (in any sector, not just education) engage in a process of collective learning (Wenger-Trayner & Wenger-Trayner 2015). In education, this could involve teachers sharing their practical experiences and creating opportunities to learn from one another (Sentance 2016). Communities of practice can also cross geographical and cultural boundaries, allowing wider networks to develop and providing ways for individuals to connect who are geographically isolated. However, these opportunities do not arise spontaneously and online spaces must encourage, facilitate, and maintain participation.

There is a limited understanding of the ways in which participants engage with oTPD programmes, and more rigorous research is needed regarding how technology may afford new forms of interaction and dialogue among educators pursuing oTPD. The optimal conditions for oTPD, and the impact on student achievement are still largely unknown (Lay et al. 2020). Research is especially important which considers potential barriers to equitable access and other ways in which participation can be limited. Liyanagunawardena, Williams and Adams (2013) argue that "In reality [online learning] may well be serving only the 'privileged' in developing countries who already have 'access to digital technologies and international language learning". The level of learning that takes place within online learning is also often critiqued in the literature, with particular concern around the low completion rates of MOOCs. In most MOOCs, including the 'Fundamentals' MOOC, a significant number of participants are not visibly active and there is a gap in the literature around understanding the ways in which these participants experience such courses.

This research study is guided by three research questions to address these gaps, drawing on examples from the 'Fundamentals' MOOC:

- **1.** How do educational practitioners perceive and experience the contexts of online learning in reference to their professional development?
- **2.** What are the most significant perceived influences on participation, engagement, dialogue and retention in online teacher professional development?
- **3.** How can future online courses leverage the insights shared by study participants, in order to improve the overall experience for educators pursuing online professional development?

METHODOLOGY

PHENOMENOLOGY AND SELF-STUDY

This study uses phenomenology, which is a philosophy and approach to research that seeks common meaning within participants' lived experiences (Creswell 2013). Husserl (1907)

proposed that to understand the world, one should examine the lens through which they experience it as opposed to attempting to examine the world itself. This is considered an appropriate method for this study as it aims to uncover the essences of the lived experiences of educators pursuing oTPD, and seeks an understanding of how participants make sense of the course structure, content and its application to their everyday world (Creswell 2013; Eddles-Hirsch 2015).

This study is additionally conducted within the framework of reflective practitioner self-inquiry. This refers to educators studying themselves in action within their educational contexts to improve their professional practice, advance their professional understanding and contribute to public debates about improving teacher education for the common good (Pinnegar & Hamilton 2009; Loughran 2004; Samaras & Freese 2009). The authors are directly involved in the course under investigation as either course facilitators or participants, providing a direct understanding of the MOOC experience. Furthermore, the authors participated together dialogically as practitioner-researchers from separate contexts (Argentina, Australia, Canada, England, India, and Switzerland), exchanging situated understandings and perspectives about teaching and learning, and relating these to wider settings.

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RESEARCH DESIGN

Data used for this study were collected and analysed in two phases, as depicted in Figure 2.

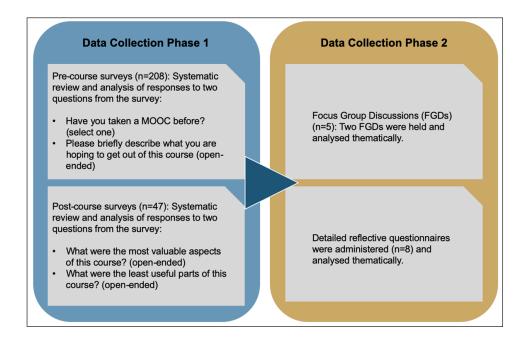


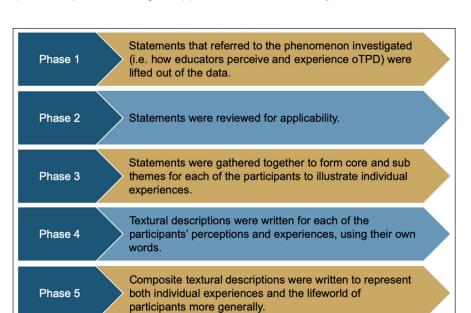
Figure 2 Data collection phases.

In the first phase of data collection, four selected questions from the 'Fundamentals' MOOC pre- and post-course surveys (submitted by 208 and 47 participants respectively) were systematically reviewed using constant comparison methods. These questions explored participants' prior experiences with oTPD, their motivations for taking the course, and their feedback regarding its strengths and weaknesses. Findings informed the design of the second data collection phase and an initial analytical framework.

Data collection during phase 2 included two 90-minute focus group discussions (FGDs) with a total of 5 participants, and a detailed reflective questionnaire with 8 participants. Study participants were purposively selected from a working paper group that was formed by participants of the 'Fundamentals' MOOC following its completion. They had participated in the course (either in part or to completion), were willing to describe their experience in a FGD or detailed questionnaire, and had already undergone the process of articulating their positionality and values in association with the research area and were thus already engaged in a process of self-study and reflection. The group had in-depth knowledge of the objective phenomenon and the ability to reflect on their subjective experience. Additionally, the participants represent

diverse geographies, contexts and working environments, enabling the research questions to be interrogated for themes integral to participants' experiences of oTPD.⁴

Drawing on Moustakas' (1994) and Giorgi's (1985) qualitative adaptation of Husserl's (1907) transcendental phenomenological approach, questions for the second stage of data collection were concerned with the participants' detailed perceptions of and experiences in the specific environment of oTPD, using the 'Fundamentals' MOOC as the central example. The questions devised for this study were framed by the results of the first stage of data collection and analysis but were also intentionally open-ended in order to give participants the opportunity to voice their own thoughts and opinions. FGD data were transcribed from recordings, and coded alongside questionnaire data by three of the authors, in an iterative process of analysis using a qualitative phenomenological approach, as illustrated in Figure 3.



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Figure 3 Phenomenology phases.

This structured approach maximised rigour through referring emerging themes back to the original protocols, explicitly noting and reporting discrepancies in the data, and integrating the results into exhaustive descriptions of the phenomenon under investigation. Participants' descriptions were captured in full.

This research was carried out in accordance with the British Educational Research Association's ethical guidelines (BERA 2018). Informed consent from each participant, in both the wider course and in the smaller subset of participants, was obtained prior to the data being collected. Participants were provided with detailed explanations of how much of their time would be required and how their data would be used. All data were anonymised and stored securely. Institutional approval was provided by the Faculty of Education, University of Cambridge for this research.

This study recognises the potential dilemma of bias (Mercer 2007) given that the researchers share roles as MOOC designers, MOOC participants and practitioners invested in developing dialogic pedagogy. This study could therefore be predisposed towards educational dialogue as well as overrepresenting the positive aspects of findings associated with the 'Fundamentals' MOOC. In order to mitigate for biases, the research began with responses to a questionnaire about the researchers' positionality and values, which allowed the research team to explore prejudices and presumptions in relation to the phenomenon being studied. However, we also embrace our positionality, as it brings us a unique opportunity for deeper analysis and reflection enabling us to think about ideas we might not have considered alone (Dusdal & Powell 2021), afforded by the internet (Wegerif 2013), to critically challenge, justify and build on reflections through dialogic interthinking (Littleton & Mercer 2013), and to analyse data as

⁴ Participants for the second phase of data collection were based in Argentina, Australia, India, Japan, Switzerland, and the UK. They worked in a range of roles and settings including: Higher Education, vocational teacher training, further education college, secondary school, Islamic Madrasas, and museums.

an international community. Through this approach and the overarching research design, this research has the potential to build on current evidence and provide practical guidance for oTPD programmes to leverage.

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FINDINGS

Findings are presented thematically and discussed within the study's overarching research questions. Textural descriptions (i.e. narrations of participants' perceptions of a phenomenon) have been woven throughout the themes to provide further insight into the real, lived experiences of participants, using their own words.

EDUCATORS' PERCEPTIONS OF oTPD

Participants described oTPD, particularly MOOCs, as an opportunity to have more agency and autonomy in the direction of their professional learning. Participant F summarised this as follows: "I think it's a way in which I can take control over my own professional development interests and needs. It gives me agency to choose, rather than being told to participate in allocated in-house CPD sessions at work". Participant H adds that oTPD "means carving out a space for me to grow... when I attend something that I have chosen I am more motivated and feel a greater worth of effort, in terms of possible transfer." This sense of agency extended into their activity and participation within the course itself. Participant D described how being able to step back from an online setting as and when it felt right compares to in-person participation because of the anonymity of a massive online setting: "Rather than the course telling me what I must do, I have the ownership over what I do and what I take forward. That's unique and gives me more autonomy".

The transcendence of time and physical space was described as an additional core feature of oTPD. This refers to the ability of participants to complete the course activities according to their schedules and availability, with both asynchronous and synchronous elements. Participant E reflected on this:

If I had to tell a colleague what it is like to attend an online learning course, I would say that it is a very different training process from others in which there is usually a teacher guiding, more or less strongly regulating the work and teaching and learning time. Physical and temporal barriers also disappear and therefore one can be anywhere and at any time taking a class, watching a video, reading about class material and thus attending a certain part or activities of the course.

The flexibility offered by many oTPD courses means that participants are also able to experiment with the subject matter in their settings in between course sessions. Participant E described the assignments from the 'Fundamentals' MOOC as offering the space and time "to rehearse, to travel an unknown path, and the appropriate frameworks to analyse, reflect and change specific practices. When added together, they make a very interesting snowball effect."

This connects with the perception shared by participants on the importance of reflection within oTPD:

I don't see online courses as courses per se but as well-developed prompts – they are valuable resources for thinking and professional reflection. That reflective function is useful because unlike an accredited or required course, online courses like the 'Fundamentals of Educational Dialogue' allow you space to play with the ideas. (Participant D)

Furthermore, leveraging this type of learning opportunity was considered to be critical for working in the current landscape of technological ubiquity. Participants described how the very nature of their workplaces is changing, particularly following COVID-19, and there was a reported trend of using online platforms to connect with colleagues and other sector peers. This extends beyond gaining subject-related knowledge, and provides an opportunity to exercise and develop their digital (online technical and social) skills to be able to access further resources online to ultimately strengthen their practice. Related to this, participants also viewed oTPD as a tool to access easily navigable and curated quality materials from

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renowned institutions that have the capacity to provide educators with up-to-date research through continuously adding recent studies, materials and tools: "The clarity of the content and how it was curated is helpful for teachers who have significant competing priorities and are perhaps unable to read a large volume of research articles" (Participant B). The iterative nature of technology-enhanced learning lends itself to this perception as does the tendency of MOOC materials to remain online indefinitely, acting as a resource hub of sorts.

Lastly, participants consistently referenced oTPD, and MOOCs specifically, as offering an opportunity to engage with diverse perspectives. When asked about the advantages of oTPD, Participant A responded: "Diversity and people coming from different places. In [my country], there is not much of a chance to meet others and discuss concepts in-person." Participants felt that this was more possible than in face-to-face TPD because of the openness of the courses and the ability to connect with a wide range of educational practitioners from varied contexts: "The chance to access different cultures and theoretical backgrounds in these courses could expand our knowledge… In comparison to face-to-face courses or other traditional courses" (Participant E).

EDUCATORS' EXPERIENCES WITH oTPD

oTPD courses, including the 'Fundamentals' MOOC, were selected by participants for varied reasons and found through different search mechanisms. Some searched for specific courses online and others followed word-of-mouth sources, as was the case for Participant D:

Unless I'm required to complete them, I don't usually go searching for online professional learning opportunities. Of course, if there are some interesting courses recommended on my social networks, then I look into them. This was exactly how I came to participate in the ['Fundamentals'] MOOC.

Once participants found a course of interest, they would evaluate its applicability to their aims and setting, paying particular attention to the subject of focus, the length and structure of the course (including whether and how interaction will take place with course peers), the potential practical impact of the course materials, and accreditation. Accreditation was agreed by those participants who mentioned it as being lower on their list of requirements, if the other elements of the course were present. Participant C remarked that accreditation has "less value in this context in relation to the quality of the course and ability to interact meaningfully with others" (Participant C). However, they also noted that it does serve as reassurance that the course is credible and is willing to formally recognise their effort and contributions.

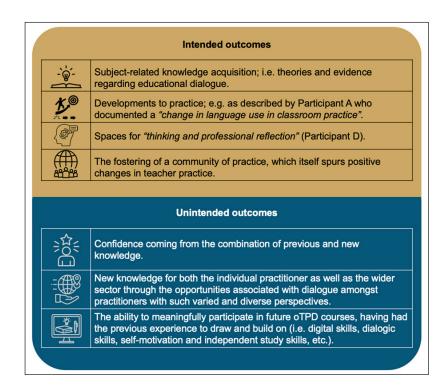
The ways that participants engaged with the structure and content of oTPD courses differed between individuals and differed for those individuals between courses. This was discussed as a key component of oTPD; i.e. the flexibility of being able to engage with the course activities and materials to the extent of one's capacity and interest. This extended into how participants defined meaningful engagement for themselves, and whether that included contributing to others' learning. It typically did with the participants in this study, but they recognised that it was not the case for others in the 'Fundamentals' MOOC or even for themselves in other courses. As articulated by Participant E: "I wonder when I start a course, will I be more active? Will I be a listener and take notes and that's it?" Participant E went on to describe their participation despite not contributing to the interactive elements as much as others in the course: "I tend to be more of a listener than a talker. I write more than I speak for instance. It doesn't mean that I'm not involved in learning." This serves as an interesting area of how participants derive benefits from participating in specific, sometimes isolated, features of oTPD. As articulated by Participant D, "I think it can be isolating, but in some ways a balance between contact and isolation is good - there are opportunities to think and reflect personally and opportunities to connect, network and share".

Course impact on participants' personal and professional lives manifested in varied ways. The discussion of this focused on learner intention and their intended takeaway(s) from the course. If, for example, a learner intends to engage in oTPD to build their network, the resulting impact will likely look different from a learner who comes in with the intention to learn more about a specific theory. Regardless, there was agreement that outcomes of participation in oTPD

were multidimensional. For the 'Fundamentals' MOOC, participants described a combination of intended and unintended outcomes, which are summarised in Figure 4.

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Figure 4 Intended and unintended outcomes, as articulated by participants.



INFLUENCES ON PARTICIPATION, ENGAGEMENT AND RETENTION

Five areas emerged as particularly significant influences on participant engagement and retention in oTPD. First, participants agreed that if the intention of the learner (motivation for taking the course and aims for their participation) matched with the course intentions, there would be a likelier scenario of engagement and retention. This relates to the need for participants to have intrinsic and extrinsic motivations for participation, otherwise they will be unlikely to fully engage in (and complete) the course.

Second, the cost of a course can be prohibitive to practitioners, and often means the difference between enrolment or not. Participants who had funding from their institutions still noted cost as a factor since the application process to prove the alignment of the course with institutional priorities could be tedious. Participants also noted the critical importance of an oTPD course having a very clearly defined and rationalised structure and set of expectations for the learner. This includes clarity around the course's conceptual framework and use of the pedagogy it seeks to impart: "One aspect that would make me drop out of a course would be the development of traditional activities or work assignments that are not in line with the fundamentals and objectives of the course itself" (Participant E). This will help learners to know whether the course is relevant to their working context and needs, and aligns with their individual aims.

Third, participants' capacity for engagement included availability, access to the appropriate infrastructure and connectivity in order to participate to the extent required, and digital literacy. These areas deeply affected participants' capacity to engage with the materials and maintain their participation. Participants described their digital skills as being honed through other oTPD opportunities and the need to adapt to online environments. They agreed that the acquisition of digital skills was both a prerequisite for meaningful participation in the course and an outcome of meaningful participation.

Fourth, participants explained that the course environment has to be conducive to their learning in order to remain engaged. This includes the platform itself being easy to use and navigate without complex technological features, and having support available to participants who require it. Participants noted that courses should be structured logically, with a balance of enough information and resources without being overwhelming. This also includes having an atmosphere that is warm, inviting and inclusive in order for participants to feel comfortable

expressing and sharing their (emerging) thoughts, reflections and opinions. As articulated by Participant E, "I think we need to feel safety and that we're in a place that we feel like we can express ourselves". This discussion included how the atmosphere of the course had to encourage deep reflection in order to impact and develop educators' practice. Participants recognised the role of the course facilitator in creating this atmosphere, and how this can enable the formation of a community of practice that continues following the completion of a course's cohort.

Fifth, participants consistently returned to the theme of connecting with other practitioners, and were driven to engage by having access to a diversity of perspectives in their own learning. Participants defined meaningful interaction as the inclusion of a variety of ways and opportunities to easily connect with others in the course, share practice and co-construct new knowledge. A number of associated statements have been included in Figure 5 to illustrate this point.

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Figure 5 Participant statements regarding dialogue amongst peers.

Participant statements regarding dialogue amongst peers

"The dialogic approach of the course bridges eastern and western traditions and brings multiple sectors and faculties together." (Participant A)

"There's enough similarity there to exchange thoughts but different enough to build new knowledge from exchanging perspectives." (Participant B)

"As an educator, I immediately look to the design, structure and features of the [online professional learning] unit and how interactive they are." They added that building in interactions should extend beyond the use of a discussion forum and incorporate other mechanisms: "I must say that I'm immediately turned off by forum-only interactivity. To me, it's a sign that the creators didn't really invest enough thought into the unit... if I can see that the creators of the course have added additional original multimedia, lots of links/resources and opportunities to connect personally with others outside of a forum, then I usually am willing to give the course my time." (Participant D)

"Having that network that you could feed back into, both forums and zoom calls, was really beneficial for motivating me to take action." (Participant G)

Challenges with engaging in the forum and other interactive features of the 'Fundamentals' MOOC included internet connectivity, time zone conflicts with live events, differing understandings of what peer dialogue means between participants, and language. In a way that speaks to the needs of diverse contexts, language was noted by two participants who cited it as a challenge for engaging in an English medium oTPD. One participant noted the discomfort associated with this, remarking that "sometimes I feel uncomfortable if I cannot think I can interpret everything that is said, since intonation and forms of speech vary between people and countries" (Participant E). While Participant B shared similar misgivings about nuances of language being lost in communication, they also noted the utility of using a digital platform. In their view, "one of the most crucial aspects of [the 'Fundamentals' MOOC] was that my online interactions necessitated technology. Being a non-native English speaker, I relied on English translation tools."

DISCUSSION

Findings suggest learner intention to be a key driving force of motivation that sustained participation in the 'Fundamentals' MOOC. There was a critical intent on the part of the learner to seek specific oTPD that resonated with their own desired outcomes. When learner intent and expectations (e.g. to engage with and learn from other practitioners) were met through the course design and environment, this impacted positively on participants' experiences and engagement. This points to an amalgamation of positive experiences in a loop of interactions with oTPD, which build on previous learning experiences, intentions and expectations.

Outcomes from engaging in oTPD include a range of skills (pedagogical, digital, social online) in addition to subject knowledge. Changes in participants' own thinking, levels of knowledge and confidence, as well as skills development and opportunities for reflection individually and together, all contribute to their self-development. This self-development then contributed to greater engagement in online discussions.

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Participants' experiences of creating intercultural dialogue between themselves, as educators, were largely positive. They recognised the affordances of technology for facilitating dialogue through the strategic use of interactive features. All participants welcomed others' perspectives in their own learning process, and expressed interest and motivation to know and understand how other educators interpret and enact educational dialogue. Many agreed that they would likely not enrol in an online course that did not offer the ability to meaningfully connect with other practitioners. This commitment to connect with and learn from diverse perspectives and settings in a collective learning experience contributes to the formation of a community of practice in educational dialogue. Indeed, the connections formed within the 'Fundamentals' MOOC began the working group that co-authored this research paper.

In light of the emerging phenomena, this research points to a number of implications for oTPD course designers and facilitators to improve learners' experiences. First, the aims of the course should be clearly identified and articulated so that participants can better understand whether and how these align to their own values and intentions for their participation. Such an approach sets participants on a trajectory of increased confidence and capacity for oTPD, as well as increased levels of engagement within and positive perceptions of oTPD programmes more widely.

The findings also indicate that course designers should frame oTPD with the recognition that learners shape their own and others' experiences. There is a clear desire for educators to guide their own professional development as opposed to their institutions deciding this for them. For providers of oTPD, this also means critically considering key stakeholders, where priorities in design and intent are targeted less at educational institutions, and instead are designed with the recognition of learner priorities, their students and contexts. This in turn can encourage participants' capacity building not ending with the acquisition of subject knowledge alone. Drawing on the notable components of the 'Fundamentals' MOOC to enable this, elements (like dialogue) should be included as a tool to shift both the individual and collective consciousness, and recognise the greater depth of learning that can come through taking charge of one's development. Moreover, the desire to be part of a community draws attention to the notion of identity. If, as Buchanan (2015: 714) suggests, agency is "identities in motion", then providers of oTPD need to be attuned to the role that they play in forming and sustaining teacher professional identities.

Lastly, community-building should be integrated in the oTPD course structure alongside aims for collaboration beyond the course which may grow into a community of practice, which is deftly summarised by Participant C: "I think good courses should continue to maintain online community hubs for present and future participants in mind, to sustain learning beyond the virtual classroom and course programme duration". The use of educational dialogue as a pedagogical approach lends itself to this aim, through the intentional use of activities to encourage multicultural dialogue.

STUDY LIMITATIONS

A number of limitations are present within this study, many of which relate to issues regarding equitable access to oTPD. This research acknowledges the undoubted absence of many participants, as it equally acknowledges that the participants who came to the study did so with access to technology, and equipped with the skills needed to participate in the 'Fundamentals' MOOC. Furthermore, all but one of the study participants in the second stage of the data collection and analysis completed the MOOC. This helped participants to understand the barriers to participation such as technological capability and learner self-motivation, however this also provides a collective perspective that largely does not include the voices of individuals who were unable to participate.

It must also be noted that participants in this course were a unique blend of educational professionals, who were motivated to engage with learning about educational dialogue through

Design principles that the 'Fundamentals' MOOC utilised for addressing these areas are summarised in: **Brugha, ME and Hennessy, S.** 2022. Educators as creators: Lessons from a mechanical MOOC on educational dialogue for local facilitators. *Irish Educational Studies*, 41(1): 225–243. DOI: https://doi.org/10.1080/03323315.20

oTPD. They wanted to learn from peers in different contexts, all with a view to developing their own professional practice. This is therefore a unique set of participants, who are a highly educated and motivated group in their own right, engaging with a more philosophical and theoretical MOOC than the vast majority of oTPD courses. This specificity of both the 'Fundamentals' MOOC and its cohort may render findings from this study less generalisable than a standard oTPD course, with a cohort of educators all from the same school or city for example. For such a course, the intended outcomes and objectives of the course providers and the expected and actual outcomes for participants may well be disparate and varied. This paper contributes learning towards the application of insights gained here, to other similar and varying contexts, and also encourages further research in the arena of online or in-person TPD courses.

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CONCLUSIONS

This study sought detailed descriptions of educational practitioners' perceptions and experiences of oTPD, drawing on examples from the 'Fundamentals' MOOC. Research findings indicate that oTPD participants are intentional, reflective, and critical learners who shape their own and others' learning and experiences. Educators perceived oTPD as: (i) an opportunity to enact agency and autonomy in their professional development; (ii) a flexible environment with time and space to be able to connect the learning with their context; (iii) providing resources for deeper thinking and reflection; (iv) an opportunity for developing 21st century skills, as they relate to TPD; and (v) a platform for engaging with diverse perspectives.

While levels of engagement differed significantly between participants and between courses for individual participants, the findings illustrate how participants are responsive to course design (i.e. course aims, subject, structure, cost, time required, and opportunities to meaningfully connect with other practitioners). These areas significantly influenced the participation, engagement and retention in the course, as well as the ultimate impact of the course on their personal and professional lives.

Technology is set to continue to play a large role in professional learning and there is great scope to use oTPD strategically, alongside in-person TPD, to enhance access to effective learning and encourage educator agency in setting the direction for their professional development. However, these programmes should carefully consider the identified challenges and barriers; for example, balancing asynchronous and synchronous components to account for time zone conflicts, accounting for unreliable internet connectivity through offering low-bandwidth features or downloadable options of course materials, clarifying expectations of levels of engagement required, and recognising language constraints for learners to name a few. oTPD courses would also do well to utilise a framework that recognises learners as agentive practitioners who guide their own development. This can encourage capacity building as not ending with the acquisition of subject knowledge alone and can result in a greater depth of learning, particularly when educational dialogue is used as a pedagogical tool to co-create new knowledge between diverse participants. Findings from the 'Fundamentals' MOOC indicate that a dialogic approach can increase collective learning and participation. This intentional sharing of diverse perspectives and reflective engagement with the differences therein can ultimately contribute to fostering a community of practice.

This study has sought to address current gaps in the literature through the documentation of detailed perceptions and experiences of oTPD participants. This research seeks to inform oTPD programmes through a better understanding of the ways in which participants engage with, experience and learn from such courses. Further research should engage with a more significant sample of detailed descriptions of experience from participants undertaking oTPD. It is urged that this includes voices from those with less technological privilege. In addition, it was not possible in this study to consider the outcomes of participants' learning in their varied contexts and environments, especially in terms of assessing the impact on quality of learning for their students, and how they experience their own reflexive practice. Notwithstanding the limitations of the scope of this study, this research seeks to contribute to a growing body of work towards understanding the optimal conditions for oTPD and its ultimate impact on educators and learners.

DATA ACCESSIBILITY STATEMENT

Please email the corresponding author to obtain raw data.

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REFERENCES

Alexander, RJ. 2008. *Towards dialogic teaching: Rethinking classroom talk.* 4th Edition. York: Dialogos. **Bakhtin, MM.** 1981. *The dialogic imagination*. Austin, TX: University of Texas.

Beach, P, Favret, E and **Minuk, A.** 2021. Online teacher professional development in Canada: A review of the research. *Canadian Journal of Learning and Technology*, 47(2). DOI: https://doi.org/10.21432/cjlt27948

Bransford, JD, Brown, AL and **Cocking, RR.** 2000. *How people learn* (Vol. 11). Washington, DC: National Academy Press.

British Educational Research Association [BERA]. 2018. Ethical guidelines for educational research.

4th edition. London: BERA. Available at https://www.bera.ac.uk/publication/ethical-guidelines-for-educational-research-2018 (Last accessed 24 May 2024).

Buchanan, R. 2015. Teacher identity and agency in an era of accountability. *Teachers and Teaching, Theory and Practice*, 21(6): 700–719. DOI: https://doi.org/10.1080/13540602.2015.1044329

Creswell, JW. 2013. *Qualitative inquiry and research design choosing among five approaches* (3rd Ed). Thousand Oaks, CA: Sage Publications.

Day, C and **Sachs, J.** 2004. Professionalism, performativity and empowerment: Discourses in the politics, policies and purposes of continuing professional development. In: Day, C and Sachs, J (eds.),

- International handbook on the continuing professional development of teachers. Glasgow: Open University Press. pp. 3–32.
- **Derri, V, Vasiliadou, O** and **Kioumourtzoglou, E.** 2015. The effects of a short-term professional development program on physical education teachers' behaviour and students' engagement in learning. *European Journal of Teacher Education*, 38(2): 234–262. DOI: https://doi.org/10.1080/02619 768.2014.947024
- **Dusdal, J** and **Powell, JJW.** 2021. Benefits, motivations, and challenges of international collaborative research: A sociology of science case study. *Science and Public Policy*, 48(2): 235–245. DOI: https://doi.org/10.1093/scipol/scab010
- **Eddles-Hirsch, K.** 2015. Phenomenology and educational research. *International Journal of Advanced Research*, 3(8): 251–260.
- **Giorgi, A.** 1985. *Phenomenology and psychological research*. Pittsburgh, PA: Duquesne University Press.
- Hartshorne, R, Baumgartner, E, Kaplan-Rakowski, R, Mouza, C and Ferdig, RE. 2020. Special issue editorial: Preservice and inservice professional development during the COVID-19 pandemic. *Journal of Technology and Teacher Education*, 28: 137–147.
- **Husserl, E.** 1999 [1907]. *The Idea of phenomenology*. Trans. Lee Hardy. Dordrecht: Kluwer. DOI: https://doi.org/10.1007/978-94-015-7386-3
- Lay, CD, Allman, B, Cutri, RM and Kimmons, R. 2020. Examining a decade of research in online teacher professional development. Frontiers in Education, 20. DOI: https://doi.org/10.3389/ feduc.2020.573129
- **Lieberman, A** and **Miller, L.** 2008. Teachers in professional communities: Improving teaching and learning. Teachers College Press.
- **Littleton, K** and **Mercer, N**. 2013. *Interthinking: Putting talk to work*. London: Routledge. DOI: https://doi.org/10.4324/9780203809433
- **Liyanagunawardena, T, Williams, S** and **Adams, A.** 2013. The impact and reach of MOOCs: A developing countries' perspective. *eLearning Papers*, 33. https://centaur.reading.ac.uk/32452/1/In-depth_33_1. pdf. DOI: https://doi.org/10.11114/jets.v1i2.96
- **Loughran, JJ.** 2004. A history and context of self-study of teaching and teacher education practices. In: Loughran, J, Hamilton, ML, LaBoskey, VK and Russell, T (eds.), *International handbook of self-study of teaching and teacher education practices*. Dordrecht: Kluwer Academic Publishers. pp. 7–39. DOI: https://doi.org/10.1007/978-1-4020-6545-3_1
- **Luneta, K.** 2012. Designing continuous professional development programmes for teachers: A literature review. *Africa Education Review*, 9(2): 360–379. DOI: https://doi.org/10.1080/18146627.2012.722395
- Major, L, Warwick, P, Rasmussen, I, Ludvigen, S and Cook, V. 2018. Classroom dialogue and digital technologies: A scoping review. *Education and Information Technologies*, 23(5): 1995–2028. DOI: https://doi.org/10.1007/s10639-018-9701-y
- **Mercer, J.** 2007. The challenges of insider research in educational institutions: Wielding a double-edged sword and resolving delicate dilemmas. *Oxford Review of Education*, 33(1): 1–17. DOI: https://doi.org/10.1080/03054980601094651
- Mercer, N, Hennessy, S and Warwick, P. 2019. Dialogue, thinking together and digital technology in the classroom: Some implications of a continuing line of inquiry for developing dialogic teaching practices. International Journal of Educational Research, 97, 187–199. DOI: https://doi.org/10.1016/j.ijer.2017.08.007
- **Moustakas, C.** 1994. *Phenomenological research methods*. London: Sage Publications. DOI: https://doi.org/10.4135/9781412995658
- **Pinnegar, S** and **Hamilton, M.** 2009. The self, the other, and practice in self-study of teaching and teacher education practices research. In: Hamilton, ML and Pinnegar S (eds.), Self-study of practice as a genre of qualitative research. Self study of teaching and teacher education practices (vol. 8). Dordrecht: Springer. DOI: https://doi.org/10.1007/978-1-4020-9512-2_2
- **Quota, M, Cobo, C, Wilichowski, T** and **Patil, A.** 2022. Effective teacher professional development using technology: Technology-based strategies from across the globe to enhance teaching practices: A guidance note. Washington, DC: World Bank Group. Available at http://documents.worldbank.org/curated/en/099835106172233833/P1742520d4de390610b784047359e0cefc7 (Last accessed 24 May 2024).
- Rienties, B, Divjak, B, Eichhorn, M, Iniesto, F, Saunders-Smits, G, Svetec, B, Tillmann, A and Zizak, M. 2023.

 Online professional development across institutions and borders. *International Journal of Educational Technology in Higher Education*, 20(1): 30. DOI: https://doi.org/10.1186/s41239-023-00399-1
- **Ryoo, J, Goode, J** and **Margolis, J.** 2015. It takes a village: Supporting inquiry- and equity-oriented computer science pedagogy through a professional learning community. *Computer Science Education*, 25(4): 351–370. DOI: https://doi.org/10.1080/08993408.2015.1130952
- **Samaras, A** and **Freese, A.** 2009. Looking back and looking forward: An historical overview of the self-study school. In: Lasonde, CA and Galman, S (eds.), *Self-study research methodologies for teacher educators*. Leiden: Brill. pp. 1–19. DOI: https://doi.org/10.1163/9789087906900_002

Brugha et al. Journal of Interactive Media in Education DOI: 10.5334/jime.902 **Sawyer, RD.** 2001. Teacher decision-making as a fulcrum for teacher development: Exploring structures of growth. *Teacher Development*, 5(1): 39–58. DOI: https://doi.org/10.1080/13664539700200133

Sentance, S. 2016. A holistic approach to teacher professional development in computing. Available at https://suesentance.net/2016/08/12/a-holistic-approach-to-teacher-professional-development-incomputing/ (Last accessed 24 May 2024).

Shor, I and **Freire, P.** 1987. What is the 'dialogical method' of teaching? *Journal of Education*, 169(3): 11–31. DOI: https://doi.org/10.1177/002205748716900303

Wegerif, R. 2013. *Dialogic: Education for the internet age*. London: Routledge. DOI: https://doi.org/10.4324/9780203111222

Wegerif, R, Doney, J, Richards, A, Mansour, N, Larkin, S and Jamison, I. 2017. Exploring the ontological dimension of dialogic education through an evaluation of the impact of internet mediated dialogue across cultural difference. Learning, Culture and Social Interaction, 20: 80–89. DOI: https://doi.org/10.1016/j.lcsi.2017.10.003

Wenger-Trayner, B and Wenger-Trayner, E. 2015. Communities of practice: A brief introduction. Available at https://www.wenger-trayner.com/introduction-to-communities-of-practice/ (Last accessed 24 May 2024).

Yurkofsky, MM, Blum-Smith, S and **Brennan, K.** 2019. Expanding outcomes: Exploring varied conceptions of teacher learning in an online professional development experience. *Teaching and Teacher Education*, 82, 1–13. DOI: https://doi.org/10.1016/j.tate.2019.03.002

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