Abstract

This article reports on the barriers and drivers of online micro-course (oMC) professional development in a Middle East college. Semi-structured interviews with teachers yield a rich description of their learning experiences. The findings demonstrate the significance of identity and agency in online professional development: course accessibility advantages, valuable reflexive opportunities and successful practice shifts act as drivers to engagement and bolster identities. Meanwhile, impediments to oMC acceptance are evidenced in constrained peer collaboration, misaligned faculty and organisational interests and forced compliance which restrict agency and marginalise teacher identities. An original, inductive model to guide future research is also presented.

Keywords: online micro-courses, continuing professional development, agency, identity, higher education

Barriers and Drivers in Online Micro-Course Professional Development: Navigating Issues of

Teacher Identity and Agency

Professional development programmes are increasingly prevalent in international

higher education (HE), and this paper reports on a study exploring the barriers and drivers of

continuing professional development (CPD) online micro-course (oMC) engagement.

Adopting a qualitative, constructivist approach and a theoretical framework of identity-in-

practice and teacher agency, the study yielded rich accounts of oMCs as experienced by a

group of untenured, MA qualified college teachers in the Middle East. This original study

aimed to contribute to the contemporary discourse of online CPD in the educational domain.

CPD discourse often positions educators as impassioned learners continually aiming

to enrich their knowledge (Webster-Wright, 2009). However, in practice, attitudes toward

CPD range from 'naysayers' to the 'enthusiastic' to the 'offended' (Patton, 2012, pp.16-17)

which suggests a disparity between policy rhetoric and teachers' actual learning experiences

(Webster-Wright, 2009). However, there has been a paucity of practitioner-led studies

exploring the effectiveness of online CPD programmes which, rather than attending to mere

course satisfaction, aim to understand learning design, quality and its relevance to practice

(Rienties et al., 2013). Moreover, in emphasizing quantifiable student outcomes, studies have

perhaps occluded *educators'* CPD beliefs as recipients of these interventions (Teräs, 2016).

Meanwhile, there is limited extant research investigating the link between CPD and teacher

professional identity (Merchie et al., 2018), agency has been under-theorised in CPD

frameworks (McChesney & Aldridge, 2019) and the specific domain of online micro-courses

(oMCs) is a relative terra incognita.

The paper begins by locating the study in contemporary CPD literature and defining

oMCs. Next, the theoretical framework, research context and methodological approach are

presented. The findings section includes a discussion of how identity and agency are

intertwined with participatory and design factors which both promote and hinder oMC acceptance. Finally, the conclusion raises implications for how oMCs are designed and implemented, while suggesting avenues for future research.

CPD in Higher Education

Supporters of institutional CPD endorse its potential to establish learning communities, enhance workplace alliances and strengthen academic cultures (Eib & Miller, 2006). Formal institutional CPD initiatives, including workshops and courses, are infused with liberal investment to introduce digital pedagogies and meet the performativity agenda and accountability demands (Bamber & Stefani, 2016). Moreover, professional educators are expected to acquire advanced knowledge and skills to demonstrate 'connection, engagement, status … legitimacy' within their regime of expertise (Wenger-Trayner & Wenger-Trayner, 2015, p. 14). Thus, significant features of educator professional identity may be derived through lifelong learning, achieved partly through formal CPD and informal learning, including peer observation. Armour, & Makopoulou, 2012)[1]. However, in the contemporary 'learnification' climate (Biesta, 2012) teachers have been tasked with a role transformation from *subject expert* to *facilitator* against the backdrop of increasing technological integration (Shamir-Inbal & Blau, 2020). Thus, the pressure to learn and adapt may disrupt existing pedagogical practice and raise significant implications for teacher professional identity (Webster-Wright, 2009). It has even been argued that these emergent challenges may lead to an 'implicit rejection of the worth and value of the rest of a teacher's repertoire' (Hargreaves, 1994, p. 61).

Similarly, CPD programme content which challenges one's existing professional self (Dall'Alba, 2004) may be perceived as overwhelming and hinder teacher's knowledge

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[1] Whilst CPD encompasses both formal and informal learning opportunities (Craft, 2000), this study's scope is delimited to oMCs.

acquisition in the learning process (Webster-Wright, 2009). Teachers may hold suspicions as to the true motivations underlying CPD interventions which are imposed on them as a managerialist directive (Botham, 2018). Moreover, educators are more likely to disengage from courses that recycle content or do not account for differences in participants' needs and proficiencies, resulting in teachers exerting self-determination over the relevance of learning content, regardless of institutional mandates (McChesney & Aldridge, 2019). Additionally, if CPD is perceived as challenging a teacher's ability and educational credentials, this further impede participation (Botham, 2018). Furthermore, time has been reported as a significant obstacle, both in terms of aligning CPD with educators' existing occupational duties, and in the durations required to achieve learning aims (Lydon & King, 2009). Other reported CPD barriers include content which is too cognitively challenging, misalignment between the intervention and the teaching context, and restricted professional agency in the selection of courses (McChesney & Aldridge, 2019). In contrast, proactive engagement in CPD is closely linked to robust levels of teachers' intrinsic motivation to pursue learning opportunities, especially when their progress is extrinsically rewarded (Shamir-Inbal & Blau, 2020). Rewards, such as institutional recognition or enhanced self-efficacy post CPD interventions, increase an educator's agentic capacity to effect change (King, 2014). Meaningful learning is also salient, and CPD activities should concentrate on pedagogical innovation that will lead to improved student learning (Desmione, 2009). This can be achieved through authentic activities that replicate how knowledge is applied in daily practice (Bossu & Fountain, 2015). Effective CPD should also foster collaborative knowledge construction (involving a range of colleagues who provide varied perspectives), encourage self-reflection and offer scaffolding to reinforce learning (Teräs, 2016). Other scholars have cited the importance of institutional support to promote engagement in CPD (e.g. Rientes et al., 2013). However, where top-down support is solely regarded as preparing teachers to implement reforms, this may be

counterproductive and reflect a narrower, transmission model of CPD (Teräs, 2016). Conversely, CPD which is viewed as supporting teachers in contributing to policy and practice aligns itself more naturally with a constructivist, transformative approach and presents greater potential for personal autonomy as a facilitator to engagement (Webster-Wright, 2009).

Accordingly, a recent paradigm shift in CPD provision has recognised the limitations associated with a deficit model based on mere knowledge dissemination. The deficit model offers a process-product causal relationship between practitioner learning and student achievement (Opfer & Pedder, 2011). However, this is somewhat reductionist and downplays inherent complexity of learning environments (Opfer & Pedder, 2011). The new paradigm favours the inclusion of adult instructional theories including andragogy and transformative learning (Mohr & Shelton, 2017) to displace the largely ineffective didactic approaches which have been recounted in CPD literature (Opfer & Pedder, 2011).). Thus, contemporary approaches aim to transmute the 'objectivist epistemology … dualist ontology' (Webster-Wright, 2009, p. 714) towards a constructivist learning framework, with knowledge co-created through social engagement, active participation and authenticity. This aligns well with the relatively recent move to student-centric and digital pedagogies (Olofson & Garnett, 2018) and the increasing emphasis on online CPD delivery.

Accordingly, online CPD (oCPD) programmes are increasingly being offered through a variety of channels including distance learning, blended online/asynchronous courses and fully self-paced modes (Teräs, 2016). oCPD has gained popularity due to the flexibility it permits teachers in harmonising their professional learning with academic and personal responsibilities (Vu et al., 2014) and has gathered further momentum since the start of the COVID-19 pandemic. The reported drivers of oCPD include cultivated spaces to engage in professional discourse with peers, greater reflective practice and opportunities for self-

directed learning (Signer, 2008). Whilst there appears widespread accord regarding the benefits of social interaction and online communities, there is less evidence of effective *design and facilitation* principles that promote such learning (Teräs, 2016). Moreover, the barriers to completing courses include lack of motivation (Kim et al., 2011), uninspired peer collaboration (Teräs, 2016), issues with using technology, lack of institutional support (Shamir-Inbal & Blau, 2020) and unanticipated and excessive course demands (Kim e al., 2011).

oMCs

oMCs, may offer a more granular and unobtrusive alternative to rigid forms of oCPD, potentially negating the difficulties discussed above (Coakley et al., 2017). The 'micro' pertains to reduced scale 'small batch learning' compared to traditional online CPD courses which may last several weeks (Bossu & Fountain, 2015, p. 123). oMCs are completed in short-time periods (Wynants & Dennis, 2018), and at the research site oMCs are typically just two hours in duration. These mini episodes of CPD learning and assessment are sub-components of broader hives (Bossu & Fountain, 2015) or 'specifically curated content paths' (Coakley et al., 2017, p. 241). oMC integrated CPD reflects principles of lifelong learning, which may motivate participants to follow individualised trajectories (Shamir-Inbal & Blau, 2020), such as developing skills in instructional technology or gaining competence in the institutional learning management system (LMS). oMCs may consist of both sequenced mandatory and elective courses, with opportunities to sample topics and activities based on individual needs and interests (Bossu & Fountain, 2015). Additionally, oMCs may optimise learning opportunities by augmenting teacher-as-learner engagement through digestible, retainable micro-course content, (Shamir-Inbal & Blau, 2020) with assignments completed at the teacher's own pace, facilitating autonomy and management of their own progress (Wynants & Dennis, 2018). oMC design largely 'concentrates on structuring and syndication

of information' (Kahnwald & Köhler, 2006, p. 158) through brief video or synchronous taught sessions followed by micro-assignments, which may reduce cognitive overload and prompt focused engagement (Shamir-Inbal & Blau, 2020). Additional drivers associated with oMCs include flexibility, access to resources, clear objectives, structured modules and multimodal presentation styles (Wynants & Denis, 2018). Moreover, oMCs are believed to be most attractive to learners when they encourage self-regulation and invoke professional curiously through meaningful content (Shamir-Inbal & Blau, 2020).

In terms of course design, it is important to offer relevant oMC learning pathways, clearly define learning outcomes and provide ongoing support to participants (Coakley et al., 2017). To achieve oMC learning objectives, online contexts should incorporate instruments that facilitate accessible and continuing communication between specialists (CPD instructors) and faculty members, including critical thinking, collaboration and reflective exercises (Jensen et al., 2015), whilst bolstering self-directed learning habitues (Shamir-Inbal & Blau, 2020). Attending to the principles of andragogy (Knowles, 1980), which recognises that adults learning needs and styles differ from children's, and embedding a theoretically derived framework such as the Community of Inquiry (COI) model may enhance teachers' learning experience in the HE context (Garrison & Arbaugh, 2007).

The COI, a tripartite framework consisting of teaching, cognitive and social presence (Garrison & Arbaugh, 2007), is implemented at the research site and represented in Figure 1. The first element, teaching presence, is facilitated by a trained CPD specialist who leads the course through effective organisation of materials, direct instruction and clearly stated learning outcomes (Garrison, 2011). The second section is devoted to cognitive presence, which means that the course design strategy should foster critical thinking, self-reflection, the integration of new knowledge and opportunities to review material (Wynants & Dennis, 2018). Lastly, social presence is an integral aspect of the framework, established in a

cohesive, collaborative online space in which course participants can actively learn and
discuss content with peers (Garrison, 2011).

Figure 1. COI Model at Research Site adapted from Garrison & Arbaugh (2007, p. 158)

While reflective tasks have been described as the keystone of contemporary CPD,
these activities are most effective when complemented by forms of external feedback from
the oMC specialist (Kwakman, 2003). The specialist should occupy a leading role without
dominating the learning discourse, and at the same time, is instrumental in supporting
participants' self-regulation within the learning community (Shea et al., 2014). Of course, not
all learners experience collaborative and reflective learning homogenously, and it takes time
for adult participants in an online social community to develop a sense of trust and support to
contribute meaningful discourse, so the brief durations of oMCs may serve as a hinderance
(Waltonen-Moore et al., 2006). Moreover, the requirement to experiment and take risks with
colleagues can be confronting (Dobozy, 2012). Additionally, whilst andragogical designs
assume that adult learners are tenacious, self-reflective and motivated, there are of course
varied attitudes and beliefs about learning which cause teachers to experience oMCs in
multiple ways (Teräs, 2016). Even with the requisite motivation and willingness to
participate, merely completing the activities embedded in an oMC does not necessarily lead
to the substantive learning of all concepts, although this may be true of any CPD intervention
(Nikou, 2020). As the oMC paradigm is not designed for the acquisition of complex, abstract
concepts and is more effective for basic objectives and skill development (Díaz Redondo et
al., 2021), some participants may find the lack of challenge and depth frustrating.
Additionally, if courses are selected as standalone units rather than parts of an integrated
pathway, the oMC approach may result in mediocre, fragmented learning experiences (Nikou

2019) which are unlikely to garner engagement nor transform practice (Wynants & Dennis, 2018).

Importantly, from the individual educator's perspective, the perceived success of an oMC intervention is determined by their subjective assessment of its direct value to their practice (McCormick & Marshall, 1994). The realised oMC learning outcomes are thus resultant to the dynamic interplay between contextual factors and teachers' perceived CPD needs, beliefs, agency and professional identities (Muijs et al., 2004).

Identity in Practice

Social-cultural theory holds that during the situated learning process, individuals engage in practices in which they transition from novice to expert, and from peripheral towards complete participation, engaging in exercises with expanding accountability which directly influence their ongoing identity construction (Lave & Wenger, 1991). Unlike cognitive theories of learning, a socio-cultural approach recognises that knowledge, learning and identity are inextricably entwined (Battey & Franke, 2008). Thus, identity formation is 'action-oriented [and] operationalized through concrete practices and tasks' (Trent, 2011, p. 614), and 'exists – not as an object in and of itself – but in the constant work of negotiating the self' (Wenger, 1998, p. 151). Thus, identity influences what and how an educator learns during their exposure to CPD activities, profoundly impacts decision-making (Peressini et al., 2004) and is regarded as a filter during learning activities, exerting considerable influence on an educator's resultant practice (Peressini et al., 2004). Identities are dynamic, continually in flux and mediated by the stances actors take towards certain tasks they engage in, which 'consists of negotiating the meanings of ... membership in social communities' (Wenger, 1998, p. 145), including online learning spaces. There is also a reciprocal relationship in that identity steers how one participates in CPD, and how one participates in CPD affects identity (Battey & Franke, 2008). Thus, CPD presents opportunities not only for knowledge

acquisition, but for the re-negotiation of identities and the challenging of existing

assumptions and beliefs (Battey & Franke, 2008). Wenger (1998) examines identity through

the triadic modes of belonging: engagement, alignment and imagination. Engagement refers

to one's investment in practice, participating in joint enterprises and negotiating meanings,

contributing to a contextualised sense of the self (Trent, 2011). Alignment relates to how

actors merge their understanding of practices into the broader sphere of coordination and

collaboration with others (Wenger, 1998). Finally, imagination refers to the capacity for

'extrapolating beyond our own experience' (Trent, 2011, p. 615) to envision future and past

trajectories and create images of the self, external to the social practices one is engaged in

(Wenger, 1998) . Thus, in the contemporary, evolving educational climate, CPD requirements

may exert pressure on educators, causing salient shifts in the construction of their

professional identities (Webster-Wright, 2009) and the degree to which they can assert

agency.

Agency

Whilst Wenger does not explicitly refer to agency, it is salient during the performance

of identity and constructed at the nexus of interactions between the self and contextual factors

(Howard, 2020). If CPD interventions are to invoke significant shifts in practice, the active

and agentic teacher role in HE professional learning is significant (Imants & Van der Wal,

2020). Agency is associated with the capacity for social actors, interacting in their context, to

act, react and make decisions in order to reach a goal (Imants & Van der Wal, 2020), by

mobilising their self-knowledge, self-esteem and self-regulatory resources (Passeggi &

Cunha, 2013, as cited in Lopes & D'Ambrosio, 2016, p.1088). Thus, in terms of participation

or non-participation in, or acceptance or non-acceptance of CPD, agentic decisions and acts

are performed as part of an occupational identity (Tao & Gao, 2017). Individuals engage in a

balancing act between their capacity for individual agency and their acceptance and rejection

of the opportunities and constraints experienced and embedded in occupational contexts, including mandatory and elective oMCs (Peressini et al., 2004). Opportunities may encompass the variety of oMCs available and the delivery mode, whilst constraints may include course content, issues of power and limited resources (Imants & Van der Wal, 2020). Resultant to the educators' perceptions of potential opportunities and boundaries, they exercise their agency, make choices, and in doing so, enact their occupational environment (Imants & Van der Wal, 2020). Thus, agentic behaviour not only guides educators' decision-making processes and their tendency to accept or reject certain aspects of CPD, but also determines their future orientation towards decisions performed pedagogical and classroom practice (Lopes & D'Ambrosio, 2016). Moreover, research has revealed that educators may summon their existing philosophies and knowledge to assert agency in actively critiquing both elective and institutionally mandated CPD interventions (McChesney & Aldridge, 2019), both of which are offered at the research site.

Research Context

The research site is a Middle East college where CPD participation is an institutional requirement, embedded in the teachers' performance evaluation process. The organization's accredited CPD includes in-house and externally provided courses and conferences to meet the required minimum of 40 credit hours per year. In-house, the college offers numerous mandatory and elective two credit hour oMCs across three hives: Instructional Techniques, Teaching with Technology and the Learning Management System, as shown in Table 1. Mobilising the COI model, the learning content is delivered synchronously for one hour by a specialist. For the remaining credit hour, teachers complete reflective assignments and discussion board posts (assessed by the specialist) to demonstrate understanding of the content and to receive certification.

Table 1

oMC Overview

Hive:	Example courses:
Instructional Techniques	Bloom's taxonomy
	Active learning
Teaching with Technology	The TPACK framework
	Designing online spaces
Learning Management System	Creating a test
	Setting up a grade centre

The institution's existing CPD evaluation requires participants to complete a brief, generic Likert scale questionnaire to release a certificate of course completion. In response to the limited nature of the institutional evaluation process and to facilitate a rich probing of the enactment of oMCs, this study is framed by the following research questions:

1. What are the barriers and drivers to oMC engagement and learning?

2. What is the relationship between oMC participation and lecturer identity and agency?

Methodology

One approach to researching CPD barriers and drivers is using level-model frameworks (e.g. Guskey, 2002). These positivist frameworks may serve to alleviate the central dilemma facing CPD researchers in 'translating the complex … nature of teacher learning … into manageable, measurable phenomena' (Desimone, 2009, p. 183). However, whilst undoubtedly informing the CPD knowledge base, such models are based on the hierarchical assumption that changes in teacher knowledge trigger changes in practice, resulting in enhanced student progress (Yurkofsky et al., 2019). This assumes a discrete, sequential relationship between learning and change (Lydon & King, 2009), and perhaps underplays the significance of *educator* experiences (King, 2014).

Thus, this constructivist study, adopting the lenses of identity-in-practice and agency, sought to capture the barriers and drivers of oMC interventions within a specific institution

from the *teacher* perspective (Freeman & Hall, 2012). Arriving at a rich qualitative understanding entailed reviewing institutional documents to provide context and in-depth interviewing to elicit the participants' subjectivity through their narrative resources (Søreide, 2006).

Participants

Adopting a purposive sampling approach (Bryman 2008), I recruited participants from various faculties to reduce potential bias (Abma, 2006). Email requests were sent to thirty prospective informants and two in-house specialists. This resulted in a cohort of eleven participants; ten teachers, employed in the departments of English, General Education, Mathematics, Environmental Studies, Academic Help Centres, and Vocational Training and one CPD specialist. All are expatriates, hailing from the USA, UK, Australia and Canada, and their average age is 49[2]. The teachers are highly experienced, having taught in HE for an average of 20 years.

Data Collection

Remote, authentic-text elicitation interviews. As I anticipated that recollections would be stronger at the close of the institution's CPD and performance evaluation, the data collection commenced soon after. The semi-structured interviews were combined with an authentic-text visual elicitation technique (Pauwels, 2020) using CPD transcripts and example discussion board assignments that the participants had forwarded in advance. Due to the pandemic, I conducted and recorded the interviews remotely on *Zoom*, screen-sharing the teachers' text submissions. The transcripts were informative in understanding the volume and range of oMCs completed, and the reflective discussion board posts provided a starting point for the interviews (Grant, 2018). I also displayed oMC course lists to aid the informants' recollections. I began by eliciting demographic data and invited the teachers to reflect on

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[2] A substantial proportion of higher education faculty in this nation are expatriates (Author, 2020).

their professional learning trajectories. Further topics included the participant's perceptions of professionalism and CPD, motivations for course selection and views on oMC content and design. As participants narrated their oMC stories they, they described instances where their autonomy was fostered or constrained, how courses aligned with their practices and beliefs and, in doing so, discursively positioned themselves, the institution and others (Howard, 2020; Trent, 2011).

The specialist interview was conducted with only the oMC lists displayed and was conducted to orient the inquiry with an institutional perspective. The data were also used to triangulate the findings, adding credibility to the study. To respect informant privacy, reduce cognitive load and ensure higher quality recordings for transcription, I opted to deploy audio only. Each interview lasted approximately one hour.

Texts. Additionally, I reviewed institutional documents to focus the study and gain contextual knowledge of the overarching oMC policy, design and objectives (Stake, 2004). These documents provide a degree of triangulation as additional sources of background information (Graham et al., 2013).

Table 2

Overview of Data Collected

Type of data	Rationale
Interviews:	
1 PD specialist	Elicit 'policy-in-text' data (Saunders et al., 2015)
10 lecturers/instructors	Elicit in-depth narratives of 'policy-in-action' (Saunders et al., 2015)
Texts:	
Institutional oMC/CPD literature	Review 'policy-in-text' data (Saunders et al., 2015)
Participants' CPD transcripts	Determine number/range of oMCs completed
Samples of discussion board posts	Observe authentic oMC output

Ethical Considerations

Ethical approval was granted from Lancaster University and the research site. All participants received a detailed information sheet and submitted a consent form. I selected Zoom as the research medium since includes the option to store (and subsequently delete) data locally in a secure personal computer, rather than in Zoom's storage cloud, thus reducing the vulnerability of data (Gray et al., 2020). Zoom also includes security features such as user-specific authentication and the real-time encryption of online interview meetings (Archibald et al., 2019). I transcribed the data using Otter Ai (discussed below). Whilst this platform does operate cloud storage, this is managed according to US security standards and fully segregated from other users (Otter, 2020).

Furthermore, respecting confidentiality was a salient deontological consideration and sensitivity to the vulnerability of participants was imperative, especially due to the nation's protective organisational culture (Wilkins, 2001). To anonymise the respondents and respect confidentiality, names, gender, the specific country and institution were withheld in the exposition of findings.

Positioning Myself

I am an insider researcher who teaches at the college and extensively engages with oMCs, which inspired my interest in this area. Since I do not hold a supervisory role in the organisation the issue of power was thought to be minimal, and I chose to invite the participants by email, as this is less intrusive than direct contact (Howard, 2020). Fortunately, as I knew most of the respondents professionally, rapport was easily established, and as a familiar insider, I was well-positioned to elicit extensive responses (Brannick & Coghlan, 2007). Thus, as the teachers were very candid and frank sharing their narratives, this may add credibility to the findings (Howard, 2019). Whilst I have only been employed in the college for two years, perhaps somewhat limiting my 'insiderness', my experience to date enabled

me to craft the interview schedule thoughtfully and interpret the subjective meanings of the participating teachers, which is central to qualitative studies (Brannick & Coghlan, 2007) .

As an enthusiastic oMC learner, with undeniable closeness to the data, it was vital to avoid making biased assumptions about the participants' experience and to allow the salient themes to emerge from their words (Brannick & Coghlan, 2007). However, in demonstrating reflexivity, it is important to note that whilst the analysis reveals the participants' portrayals of identity and agentic behaviour, this constructed knowledge results from the constitutive conversations we engaged in (Howard, 2019). Thus, like most qualitative researchers, my emic positioning and contextual knowledge is, to some degree, embedded in this interpretive account (McChesney & Aldridge, 2019). This is balanced by the presentation of a thick description, which reflects the veracity of the participants' own voices (Bryman, 2008).

Data Analysis

The digital recordings were transcribed using Otter Ai online software, which permits the processing of the complete digital file, rather than listening in real time, and adds helpful time stamps to the transcript (Bokhove & Downey, 2018). While the high-quality audio resulted in reasonable accuracy, it was necessary to check and edit the files several times for any inconsistencies (Bokhove & Downey, 2018). Whilst time consuming, this allowed my immersion in the data from the outset (Bryman 2008; Howard, 2020). To ensure trustworthiness, each participant received a copy of their transcript to confirm the legitimacy of the content (Bryman, 2008). The transcripts were subsequently fully coded using *Atlas.ti 8*, which provided a systematic means of labelling, organising and retrieving the substantial data (Bryman, 2008). *Atlas.ti 8* offers a flat coding structure to support inductive and non-hierarchical analysis, aligning with my aim to holistically capture the participants' beliefs and experiences. (Paulus & Lester, 2016). Furthermore, *Atlas.ti 8* allowed me to directly code

audio files, synchronize files and examine the transcripts in multiple windows (Paulus & Lester, 2016).

I adhered to Braun and Clarke's (2012) thematic analysis approach, which aligns well with advancing rich depictions of beliefs and experiences (Aronson, 1995). In-depth familiarisation commenced as I read and re-read each transcript whilst memoing and considering initial ideas for codes (Wynants & Dennis, 2018). Secondly, I began developing codes in an inductive-deductive approach, using the theoretical framework (Wynants & Dennis, 2018) to note where the teachers portrayed identity positions. This was both explicit, for example when a teacher adopted an 'I' position such as 'I am very comfortable being a learner' or when narrative suggested a tacit identity positioning, for example 'for someone who has a master's degree in education, these courses are not exactly ground-breaking.' Similarly, the analysis required examining reponses which suggested the teachers were endowed with agency (or the reverse); 'You spot an [oMC] being offered about new technology and you think, 'Oh, wow. I can run with that.' This was an iterative procedure with some codes being eliminated, modified or collapsed. The final codes were organised into themes which captured how identity and agency intersected with distinct aspects of oMC participation. Once the initial topics were identified, recursive checking ensured that the finalised themes depicted a coherent representation of the findings (Braun & Clarke, 2012) and these were aligned with the effect they produced: either a barrier or driver to oMC engagement. Table 3 displays the hierarchical relationship between the codes and categories and how these translate into the key themes.

Table 3

Themes, Categories and Final Codes

Theme	Enactment of the intervention's features			Institutional Context		Outcomes
	Accessibility advantages	**Robust reflexivity**	**Constrained collaboration**	**Incongruent interests**	**Compelled Compliance**	**Promising practice shifts**
Effect	**Driver**	**Driver**	**Barrier**	**Barrier**	**Barrier**	**Driver**
Category	*Mode of study*	*Reflexive exercises*	*Working with peers*	*Lack of fit*	*Institution-wide mandate*	*Perceived outcomes*
Codes	Materials	Chance for review	Issues with peer feedback	Generic courses	Not relevant to teaching	Applied learning
	Time needed	Planning for future practice	Not taken seriously	Teachers know this already	Affective filters	Increased student engagement
	Flexibility	Change ingrained habits	Specialist role	Need for self-selection	Ticking the box	Technological/ practical courses
	Greater autonomy		Institution-wide courses			oMCs after pandemic began

Presentation of data. Select quotations are presented as bounded, decluttered excerpts (Riessman, 2008) and utilised to give voice to the participants. Moreover, these illustrative quotations provide evocative evidence of the findings and representative examples of prevailing beliefs and experiences, meaningfully embedded in an interpretive account grounded in the situated literature and theory (Lingard, 2019).

Findings and Discussion

Overview

Through their extensive oCPD engagement, the informants demonstrated their enactment of agency and willingness to harness new skills and improve instructional practice (Tao & Gao, 2017).[3] The teachers universally presented robust orientations towards CPD, and despite their dual membership to practice as both educators and learners, they modulate

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[3] The average annual total CPD was 59 hours, with an average of 29 oMC credit hours.

and manage these identity positions effectively (Kubiak et al., 2015), as exemplified by Participant E:

Imagine if you were a doctor – you attend conferences; you learn new methods, you are practicing and learning. As educators, we absolutely should be on a lifelong learning journey ... it would be irresponsible for an educational institution to forget CPD or not give it the value it deserves; it's essential, we're not omnipotent. We can't just say, "I'm a teacher. I've done my studying, I'm the expert.

This narrative embodies how developing within a regime of pedagogical competence necessitates belonging to hybrid educational and learning communities (Wenger-Trayner & Wenger Trayner, 2015), and that a sole focus on practice, without gaining new knowledge, would be incommensurable with the participants' idealised future professional identities and orientations to lifelong learning.

Alongside these established learner identities, the participants' accounts revealed six significant themes. The themes represent three facilitators to engagement: accessibility advantages, robust reflexivity and promising practice shifts, and three acceptance barriers; constrained collaboration, incongruous interests and compelled compliance, as shown in Table 2. The themes portray concise embodiments of the participants' lived stories (Braun & Clarke, 2012) as they negotiate their professional identities and exercise agency in their oMC trajectories. The themes are mapped to the original inductive framework in Figure 2., which was constructed from the findings, and may help to inform future research in this domain. 'Enactment of the interventions' features' correlates with the oMC design and delivery and how participants engage with these aspects. Significant factors including recommended and mandated courses and the organisational culture are subsumed under the 'institutional context'. Lastly, substantive learning and shifts in practices are represented by 'outcomes.'

Figure 2. Inductive Model for Researching oMC Participation Developed from the Findings

Enactment of the Intervention's Features

Driver: Accessibility advantages. The oMCs' convenient accessibility (Ranieri et al., 2017), andragogical principles of flexibility (Frey & Alman, 2003) and promotion of self-regulated learning (Shamir-Inbal & Blau, 2020) emerged as drivers for active participation. The duration of the OMCs may alleviate one of the widely reported barriers to participating in CPD initiatives – time constraints (Elliott et al., 2015) and as A, states, the design *suits me because it gives me the background into a topic, and it doesn't take too long*. Furthermore, the way in which learners process information adapts well to content delivered in manageable chunks and subsequently enables enhanced retention (Jomah et al., 2016), was reinforced by the findings: *They're short nuggets of knowledge building and certainly more applicable to our busy schedules than long courses … the amount of information is just right and easier to recall later* (F).

The findings reveal how oMCs offer an avenue for alignment and coordination with the teachers' existing practice (Wenger, 1998) without disrupting their occupational responsibilities, including teaching and academic advising. The participants appreciated the agency they could exercise in their autonomous learning engagement (Tao & Gao, 2017), whereby following the mandatory synchronous session, assignments are conveniently completed at any time during the academic year:

I: I am doing one now with access to a PDF which is embedded in the course. When it's online the materials are accessible and, you learn more effectively and at your own pace - there's no hurry to complete them.

This sentiment echoes the professors in Wynants and Dennis (2018) who experienced enhanced personal engagement in micro-learning and favoured their ability to control the

pace and cognitive processing of information. A further benefit of the oMCs was revealed by faculty who identify as self-directed learners and enact agency to modify and take ownership of their learning trajectories (Trent, 2011), as expounded by B: *I'm a much more independent learner so it suits me to do the assignments online by myself, rather than sitting in a classroom listening to people.* Thus, when oMCs cater to individual learning affinities, or dispositions, (Noonan, 2018) this may contribute to the reification of a lifelong learning identity (Coffield et al., 2004).

According to Wenger (1998), learning is not designed in itself, but it is mediated through frameworks which should adequately meet recipient needs, and in doing so, invoke active participation, invite allegiance to that model and the focussing and reification of robust identities. This theme suggests that the micro-course modality can enrich the CPD process as a driver to increase engagement in the online milieu (Shamir-Inbal & Blau, 2020) when supported by an effective short course architecture and asynchronous accessibility to 'facilities that extend mutual access in time and space' (Wenger, 1998, p. 237). However, engagement as participation with the oMCs is just one facet of belonging and ongoing identity negotiation (Wenger, 1998).

Driver: Robust reflexivity. Reflection entails considering learning through 'new eyes' (Wenger, 1998, p. 272) and reinterpreting practice, affording teachers the space to imagine and explore new opportunities, while experiencing identification with their practice, beyond engagement, as their knowledge expands (Wenger-Trayner & Wenger-Trayner, 2015). Similarly, contemporary oCPD approaches which embrace the constructivist learning paradigm present opportunities to ruminate on highly contextualised knowledge through critical thinking processes, as faculty look for new alternatives, integrate concepts and synthesise existing knowledge (Garrison, 2011). In this regard, the oMCs consist of online assignments that consolidate learning and prompt the teachers to connect course content with

practice, prompting curiosity, exploration (Garrison, 2011) and identity negotiation as they are *evolving in the classroom and overcoming our human nature of getting into automatic mode* (E). Moreover, they may rectify perceived flaws, especially for experienced practitioners, such as D: *I've been teaching for 22 years, and I get stuck in a rut … like driving and picking up bad habits along the way. The reflection really helps me to think about that.* Without exception, the participants upheld the value of reflexive practice and pedagogical experimentation, e.g.*: The assignments are good in promoting self-reflection: you've got a prompt, and an objective to help you adjust your teaching and try something new* (G), and continuous improvement: *They're good activities … to examine what I'm doing in the classroom and how I might be able to make it better* (J). This denotes that through the imaginative mode, the educators in this study may be positioned to produce future images of themselves which contribute to the formation of emergent identities as increasingly effective, developing practitioners (Trent, 2011).

This avenue for personalisation of the oMC output enabled the participants to augment their future pedagogical design by pondering their past instructional orientations and reifying their identities (Wenger, 1998) during critical reflection - a key aspect of transformative learning. Such transformative shifts are thought to occur when a learner constructs new meanings and establishes increasing autonomy and agentic choice through their situated experiences (Frey & Alman, 2003), as expounded in this illustrative example: *Sometimes you take things for granted or gloss over them, but then when you go back and reflect you see how your ideas compared to the topic at hand, and you create a detailed plan. Then you consider those aspects when planning your future lessons. It definitely has a knock-on effect, which is great … it forces you to look at what you're currently doing and how you might implement new teaching ideas* (I).

As participant I exemplifies, the meaningful reflection embedded in oMC activities (Wynants & Dennis, 2018) enables these course takers to activate schema, connect this with practice issues and move beyond their ingrained approaches. This suggests that opportunities for faculty to challenge their existing beliefs and assumptions (Rizzuto, 2017) may promote self-exploration and negotiation as the participants align their professional identities with evolving practice (Kelly, 2006).

Cultivating extensive opportunities for these activities positions teachers as reflexive professionals and grants them agency in shaping learning strategies and selecting appropriate pedagogies (Sachs, 2016). Since every oMC consists of these valuable assignments, it may create a significant space for reflection which might otherwise seldom be available due to the complexity, paucity of time (Webster-Wright, 2009), intensification of work and employment insecurity commonplace in contemporary HE contexts. This is perhaps even more critical in the turbulent times of the COVID-19 pandemic.

Barrier: Constrained collaboration. In the COI model, the social presence dimension is typified by a collaborative participant cohort that enacts purposeful and constructive communication freely (Wynants & Dennis, 2018) with the robust sense of community leading participants to perceive and acquire greater knowledge (Rovai, 2002). At the research site, an oMC assessment component requires participants to comment on at least two forum posts. Whilst research suggests this pre-requisite can galvanise extrinsic motivation to become socially present and engage in productive discussions (deNoyelles et al., 2014), the informants' narratives contradicted this view. Peer feedback was frequently cited as perfunctory, vapid and lacking in collegiality, e.g. *It's pointless: no one really makes an effort to be constructive* (J). Whilst most participants acknowledge that collaboration is theoretically productive if all parties engage with intended consideration and effort, realistically the contributions were somewhat superficial: *The [forums] should be valuable*

because you get to see what others are doing and how you might be able to implement some of their ideas. However, most people just don't use them properly (D). Moreover, as the teachers recognised their colleagues' unwillingness to participate, they too used their agency to adopt an ambivalent strategy: '*it's something you have to do to pass the course*' (H). This denotes their 'passive accommodation' (Vähäsantanen, 2015, p. 6) of the collaborative aspect of the oMCs. Additionally, the participants were reticent to review their received commentary, speculating that this was commonplace*: I don't think many actually even read the comments that others leave. The vast majority don't. They just want a pass. I would never go back and look for people's comments, either* (F). These excerpts reveal how the participants' peripherality to the peer feedback process was characterised by limited investment and restrained identity commitment towards the online collaborative domain (Tao & Gao, 2017).

In this context, when social presence is restricted, the participants lack inspiration and lament the dormant online community (Wynants & Dennis, 2018), eschewing the restricted arbitrariness and welcoming a greater degree of authenticity in collaborative practice with which to align the social aspect of their identities as professional learners: *I would like an organic discussion. Sharing is caring and it's nice to see what other people are doing. But it isn't accomplishing the objective; you aren't learning from your peers' comments and that's the critical point* (C). Whilst potential antecedents to successful CPD engagement may include the capacity to experiment, share perspectives and develop ideas within a cohesive group (Desmione, 2009), when peer feedback is deemed superfluous and unhelpful, the findings demonstrate how the participants' limited identity investment might ensue.

The oMCs are departmentally inclusive, aiming to unite a wide range of expertise in constructive discourses. However, just as communities define themselves in contrast to others (Wenger, 1998), the participants' learner identities aligned primarily with their faculties and

were disembodied from the broader HEI population. Surprisingly, the divergent disciplines of oMC attendants actually appeared to *inhibit* the collaborative space, erect boundaries and affirm teacher commitment to their own subject and thus, the grounding of disciplinary identities (Tao & Gao, 2017; Wenger, 1998). Perhaps if the forums were re-structured to direct participants to collaborate with their departmental colleagues it might succeed in nurturing a more robust community with shared repertoires and identities to alleviate interdisciplinary discourse boundaries (Wenger, 1998; Wenger, 2010), *so we can discuss the concepts with your own faculty to see how we can mesh the concepts in our specific work* (K). On the contrary, restrictions on agency to engage their professional interests may cause teachers to become dissatisfied, perceiving tasks as meaningless and disengaging with the forums, as identified by Vähäsantanen (2015) and reflected in this excerpt: *I don't think I need to be assessed on giving feedback to someone I don't know in Applied Media when I teach something so different* (E). Furthermore, the fragility of the collaborative presence was exacerbated by several teachers' habitudes of self-directed learning (Lowry, 1989), who may even find peer feedback, as an externally mandated repertoire, offensive and irreconcilable with their identities (Wenger, 2010): *It's even a bit patronising. I don't need to learn from my peers. I can do it myself* (B). Thus, the participants' accounts of the actual online interaction fail to meet the criteria of effective collaborative spaces as proposed by Kreijns et al. (2014), since it lacks a harmonious atmosphere, shared identities and a mutual commitment to learning objectives.

The interviewees' narratives suggest that merely establishing a digital space to host and inspire a COI no guarantee of substantive investment (Li et al., 2009) and the accounts of peripherality reveal how the participants' identity investment lacks full engagement, alignment and imagination with the prescriptive oMC norms. Thus, in the absence of time, motivation and perseverance to establish comfort and camaraderie (Garrison & Arbaugh,

2007), the 'community' in the framework becomes dormant (Li et al., 2009). Additionally, the lack of collaborative discourse may be attributed to the impersonal, detached asynchronous text-based context, which failed to provoke extensive commentary (Xin, 2012). This may be further constrained by the absence of specialist feedback on the forums, as A affirmed: *I would really value feedback from the person who actually instructed me to do those things*, especially since this contradicted with the general ethos of the teachers' pedagogical philosophies: *We constantly talk about timely feedback to learners. It's fundamental ... not having any feedback from your instructor is a big gap in the design* (D). Thus, the findings suggest that the investment in the oMC context requires negotiation not only with local knowledge, but with the specialists' external reconfigurations of meaning and discourses (Wenger, 19989) by providing empathetic, insightful and persuasive resources for feedback (Kubiak et al., 2015) and a channel of knowledge co-construction.

Institutional Context

Barrier: Incongruous interests. Notwithstanding the participants' disposition towards continuous learning, perceived discord between institutional requirements and practice, existing knowledge and course content can lead to disharmony and tension, failing to accommodate the learning identity (Wenger, 2010). Several courses invoked frustration, due to the perception that teachers were forced to wade through recycled material (McChesney & Aldridge, 2018), especially during the mandatory, theoretical oMCs. Social actors derive their identities, in part, from learning trajectories, and as C explained with this insightful metaphor, C's identity alignment is restricted when histories and scales of prior learning are incompatible with oMC interventions (Wenger, 1998):

[The institution] has created a bus to take all the passengers down the highway. Some people need the bus and other people don't. It's frustrating for the people that don't need it, but

they're forced to take it and there's no way around it. Meanwhile, if the bus is going too fast, it's equally or more frustrating for the people who need it.

This analogy displays how identities can suffer marginalisation when expertise is unacknowledged (Wenger, 1998) – C perceives his/her positioning by the institution as *having* to take an unnecessary course as an affront to his/her professional identity and rejects identifying with those faculty members whom lack the same competence. Similarly, participants reported how some courses did not correspond with their student cohort: *That course is for the upper year students and I only deal with introductory students, so it's really not valid for me* (D) and the irrelevance of the oMCs to the individual practitioner's domain of expertise was a significant sub-theme. Moreover, some courses were viewed as unnecessarily generic, highlighting how learning trajectories relevant to one community can be offensive to another (Kubiak et al., 2015) since they call identity into question and provoke conflict:

If someone has a Mechanical Engineering doctorate and they've never touched education I understand why they need to do it, but I come from a linguistics background and this is all second hand and a waste of time because I know it all. I am just not motivated to do the ones which paint with a broad brush. I should automatically get a pass and spend time learning something new (J).

This perspective demonstrates the significance of the locality of practice and the spatial identities (Farnsworth et al., 2016) adopted by 'career teachers' who distinguish themselves from 'new professors' or those entering HE from industry, located on an inbound trajectory of organisational leaning, distinctive from the 'old-timers' interviewed in this study (Wenger, 1998). Many participants displayed unaligned engagement with some courses, since a key facet of identity, agentic choice, seemed untenable (Kubiak et al., 2015): *I think it's more effective if people are allowed to choose the ones they want to do rather than be*

forced to do them (F). Thus, when teachers sense their professional agency in oMC selection is undermined, it appears to impede personal investment in CPD learning (Ranieri et al., 2017).

Barrier: Compelled compliance. Moreover, mandatory courses may be deemed entirely ineffectual, unproductive and even pointless. As Liu (2012) explains, oMCs which fail to meet *any* authentic CPD learning needs are perceived as extraneous and tedious burdens imposed upon faculty, or disseminated, compliance-led activities, characterised by the 'ticking the box' metaphor (Teräs, 2016). Interestingly, this particular phrase was explicitly used and tacitly implied by most, exhibiting how the informants question the very purpose of some oMCs, for example: *Sometimes it amounts to a lot of box ticking. It doesn't always necessarily feel like it's relevant to the actual learning or teaching process and that's disappointing* (E). The findings suggest that such ambivalence stems from a divide between individual and institutional values. This can perhaps suppress idealised learner identities which are negotiated at the nexus of a balancing act between the capacity to commit to the learning process (King, 2014) and a dependence on the options and the constraints under which faculty operate (Pressini et al., 2004). Moreover, this may be due, in part, to the cultural context, as Karami-Akkary (2019) has highlighted, some CPD activities in the Arab region may be predicated on a deficit model, which fails to appeal to practice-based outcomes, and reflects the 'top-down, prescriptive and politicized nature' (p. 138) of institutional governance.

Thus, compliance based CPD may foster restrictions on one's professional agency and the perceived disregard for authentic learning may trigger affective filters and invoke reluctance to engage with the oMCs: *There will always be resentment. We should focus on the value of the learning, not CPD, just for the sake of it; some of it is box ticking* (B). This sentiment reinforces the view that "the manifestations of professional agency are not always

proactive … agency also includes … resistance towards external norms and reforms"
(Vähäsantanen et al., 2016, p. 518). Extending on McChesney and Aldridge (2018), the
participants enacted agency to reject (rather than engage with) oMCs deemed to be
'unnecessary, irrelevant, inappropriate' (p. 15) when their perceived regime of competence
was not augmented (Wenger, 1998) and their existing identities were marginalised by
onerous institutional requirements. However, perhaps if the participants were positioned to
self-negotiate their beliefs, objectives and institutional CPD requirements, they would be apt
to formulate strong development trajectories (Gurney & Liyanage, 2016), aligning their
professional identities with substantive *learning*.

Outcomes

   Driver: Promising practice shifts. Whilst this study did not attempt to evidence a
causal link between faculty change and student *achievement*, there were various narratives of
positive shifts in practice resultant to oMC learning, particularly related to technological
integration and student engagement. The teachers generally displayed a preference for the
more practical courses, which were viewed as avenues for gaining competence and for
applying imaginative resources to envision the future application of learning gains: *The
[oMCs] I chose to take have very practical applications. So, from that perspective, it's
readily applied and therefore, hopefully has an impact on my teaching. There's a high
likelihood that I apply what I learn from them* (H).

   Similarly, the participants' self-reports indicate that directly applicable oMCs may
engender skill acquisition, evidence of student successes and the creation of identities as
successful practitioners (Trent, 2011), as exemplified by C:

*Afterwards, you immediately start creating and organizing content for your classes and you
carry that on through the semester. It's going to get drilled in and you'll have shortcuts.*

Watching the students work their way seamlessly through [the LMS] was really rewarding after that course; it taught me a lot.

Accordingly, oCPD interventions which offer holistic approaches, rather than simply introducing the functionalities of a technological instrument may be highly effective in furnishing participants with renewed resources for immediate transferability to classroom practice (Signer, 2008). Additionally, when the study's participants were afforded opportunities to reinforce learning through repeated application of their skills (Knapp, 2003), it resulted in a driver to their engagement with future PD, legitimized their positive disposition towards the oMCs and acted as a catalyst for identity negotiation (Trent, 2011). The following excerpt reveals a specific example of the competence gained when one of the participants engaged in the design of his/her own practice (Wenger, 1998), and demonstrates the reinforcement of the participant's identity as a competent, successful educator:

G: I noticed students really didn't know what they were going to be assessed on. For the assignment I focused on creating a student friendly rubric. I sent it to the students in advance and then we had an open discussion. They used the rubric in their group work, and it worked really well. They had an effective understanding of the assessment. So, I implemented something which really worked effectively.

Finally, as the COVID-19 pandemic[4] tested the resilience of education and demanded an swift re-reassessment of educational approaches, the teachers encountered the 'quandary of … the digital delivery of education' (Bensaid & Brahimi, 2020, p. 8) and emergent CPD needs were underpinned by the necessity for competence in digital tools including Blackboard Collaborate and Zoom - exacerbated by the cohort's neophyte online teaching status: *When we switched over to online, so many [oMCs] were truly essential to pull off what we were doing* (E). Thus, the momentum rapidly gathered, evident in higher enrolment

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[4] A salient contextual factor that warrants future research.

in additional elective oMCs which fundamentally enriched the participants' practice, for example: *When it [COVID-19] happened, through the [oMCs], I was able to hit the ground running; I was able to get started efficiently and it was because of the extra ones I took* (C).

Thus, through significant practice shifts resultant to oMCs, and in response to the pandemic, the study's participants generated applied value to their learning which, for them, exhibited transformative value (Wenger-Trayner et al., 2019) shaping and reifying their successful identities through situated experience and the degree to which they demonstrated their newly acquired competence (Wenger, 1998).

Conclusion

Responding to the imperative to interrogate CPD interventions beyond mere course satisfaction (Rientes et al., 2013), and raise awareness of their dynamic nature (Merchie et al., 2018), this exploratory study investigated the under-researched oMC domain and has surfaced a potentially significant relationship between oMC participation and teacher identity and agency that warrants further investigation.

The findings reveal that the teachers in this particular context display robust orientations to CPD, and that the drivers of oMC enactment include accessibility, valuable reflexive opportunities and the successful transference of learning to practice. The oMCs' succinct duration and digital delivery appeal to these autonomous adult-learners who, with the capacity to exercise their agentic choice to participate extensively, are positioned to reify their learner identities. The course design element of extensive reflective practice serves as a tool with which the teachers orient their occupational identities towards ideal selves and transition from cognitive awareness to concrete conceptualisations of how to improve their pedagogy. This is especially reinforced by oMCs which offer enhanced practicality, immediate transference to practice and higher levels of student engagement. However, evidencing a discord between policy rhetoric and the richer, situated participant experience,

the significant barriers to oMC investment arise when opportunities to collaborate are deemed superfluous and ineffective, or at worst, offensive to the existing identity constructions of these experienced practitioners. This appears to be heightened by institutionally mandated oMCs which duplicate prior learning, garner only reluctant compliance, or inhibit growth, triggering the exertion of restrictive agency and marginalising established teacher identities.

To attempt to diminish the barriers revealed in this study, it is recommended that oMC designers and the broader stakeholders in HE be cognizant of end-user voices in future course development beyond brief surveys, by examining the reality of online collaboration and considering the merit of divisional cohorts rather than institution-wide collective participation. It is also suggested that institutions in other oMC integrated contexts embed significant opportunities for reflection to occur, limit the range of mandatory interventions and develop courses which have practical and technological relevance for teaching practice. Acknowledging faculty members' development histories and offering customised learning pathways are salient considerations, as is the need to embed opportunities for educators to exercise increased agency in their course selection. This may serve to propel teachers not only to engage with online learning, but to align their practice with organisational visions and imagine how they can extrapolate new knowledge effectively, in order to promote complete belonging and identity commitment to oMC processes. A further suggestion is for CPD specialists to reflect on their role in facilitating the online collaborative community. Despite their autonomy, it appears that learners desire greater intervention from, and dialogue with, the course leader. With the significant investment required to design and implement multiple oMCs along learning pathways, it is hoped that these recommendations can promote learning and help to harmonise teachers' needs, stakeholder interests and organisational CPD objectives.

This paper has illustrated the appropriateness of a socio-cultural, constructivist lens and a holistic, non-sequential approach to oMC research to yield a rich interpretation of the situated experience derived by a specific cohort. As Yurkofsky et al. (2019) suggest, qualitative research designs which privilege educators' voices can illuminate the facilitators and obstacles which teachers encounter in authentic CPD activities. It is argued that nuanced, rich understandings of educators' experience are profoundly important in understanding the extent of their engagement, improving their participation and fundamentally, facilitating their robust professional identities.

A noteworthy limitation of this study is its scope. Eliciting broader stakeholder voices, including institutional leaders and policy makers, would have added more rigor by recognising the potentially diverse perspectives towards oMCs (Abma, 2006). Additionally, as it was infeasible to interview participants more than once, future research could exploit a longitudinal approach to trace identity shifts and enactments of agency over time to extend on the theoretical considerations advanced herein. Whilst qualitative research is incompatible with a generalised view of learning trajectories, with the expansion of digital CPD delivery, it is conceivable that there may be some *transferability* of the interpretivist findings to similar contexts (McChesney & Aldridge, 2019). The inductive framework derived from the findings, and shown in Figure 2, is proposed as possible starting point for others engaging in oMC CPD research, and it is hoped that it will be refined and extended upon in future studies.

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