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Mentoring faculty online: A literature review and recommendations for web-based programs

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Teaching-focused faculty mentorship programs can expose instructors to new ideas, as well as opportunities for critical self-reflection, professional growth, and network building. In this literature review, we synthesize the research on teaching-focused faculty mentorship programs that have been facilitated at institutions of higher education through online or blended modalities. We identify key trends in the reported outcomes of these programs, as well as aspects of program design and implementation that might enable or impede program success. Finally, we provide eight recommendations to help guide the implementation of online and blended faculty mentorship programs.

Keywords: mentorship, academic development, faculty development, educational development, online, blended

Introduction

At some point in their careers, many faculty members at institutions of higher education engage in mentorship — a collegial activity that leverages interpersonal relationships for professional growth and career development (Sands, Parson, & Duane, 1991). Research suggests that faculty mentorship may help improve self-confidence, career satisfaction, and feelings of perceived support (Eaton, Osgood, Cigrand, & Dunbar, 2015; Sambunjak, Straus, & Marušić, 2006; Wasserstein, Quistberg, & Shea, 2007). Mentorship provides faculty members with the opportunity to expand their professional networks, gain exposure to new ideas, and critically reflect on their beliefs and practices (Ehrich, Hansford, & Tennent, 2004). Faculty mentoring has also been associated with improved productivity, promotion, and retention rates (Sambunjak et al., 2006).

There are many types of mentorship arrangements, which may be used to support diverse professional development goals (see Table 1). Mentoring relationships may develop organically

("informal mentorship"), or they may be established intentionally and structured according to set criteria within a formal program ("formal mentorship"). Although informal mentorship can be valuable, it often suffers from low participation rates, irregular or transitory communication between participants, and disparities in access for minority community members (Boyle & Boice, 1998; Single & Single, 2005). In response, some teaching centres and departmental units have implemented formal faculty mentorship programs — which in some cases have included online or blended programs.

In online or "e-mentoring" programs, participant connections are primarily facilitated through web-based tools. In blended programs, participants connect through a combination of face-to-face and online interactions. Online and blended programs enable participants to connect and collaborate with colleagues who work on different schedules, in different locations, or at different institutions than themselves. As such, these programs have the potential to improve faculty members' access to mentorship and to larger and more diverse pools of mentors (Rowland, 2012), while providing the same types of 'informational, psychosocial, and instrumental benefits' as face-to-face mentoring (Single & Single, 2005, p. 306). Online and blended programs also allow participants to become more familiar with online communication modalities, which is particularly important given the growing number of instructors who are asked to teach online (Allen & Seaman, 2015). Faculty members are more willing to teach online when they have stronger technological skills and confidence, and they value the opportunity to develop their capacities as online teachers through mentorship and other professional development initiatives (Wingo, Ivankova, & Moss, 2017). However, formal mentorship opportunities are lacking for many online teachers; for example, it has been reported that among four-year institutions with teaching and learning development units in the United States, only 33% of Doctoral Universities, 37% of Master's Colleges and Universities, and 31% of Baccalaureate Colleges had formal mentorship programs for online instructors (Herman, 2012).

Past literature reviews have assessed the implementation and outcomes of diverse faculty mentorship programs (Ehrich et al., 2004; Law et al., 2014; Merriam, 1987; Nick et al., 2012; Perna, Lerner, & Yura, 1995; Sambunjak et al., 2006; Schrubbe, 2004; Zellers, Howard, & Barcic, 2008), but none have focused specifically on online or blended approaches. As a result, the state of the research literature on online and blended faculty mentorship is poorly understood. Here we present the findings of a literature review on the design and implementation of teaching-focused faculty mentorship programs that have been implemented through online or blended modalities. These findings may help guide the efforts of faculty developers who are interested in establishing similar programs.

[INSERT TABLE 1 HERE]

Methods

The findings that we present in this article are derived from a larger literature review that we conducted on teaching-focused faculty mentorship and fellowship programs (Hundey, Anstey, Cruickshank, & Watson, 2016). In this article, we present a subanalysis of the findings that focus on online and blended mentorship programs. For the sake of transparency and thoroughness, we took a systematic approach to reviewing the literature. This approach is useful for reviewing understudied topics, such as blended and online faculty mentorship, because it allows investigators to not only locate existing research but to also identify gaps in the literature that may be prioritized in future research (Tight, 2018).

Search strategy and inclusion criteria

In November 2016, we conducted a search of three online databases (ERIC, PsycINFO, CBCA Education) for articles that included the following words or phrases in their titles, abstracts, or keywords:

- a) fellow*, mentor*, or peer support; and

- b) instructional development, instructional training, faculty development, faculty training, educational development, educational training, academic development, academic staff development, academic staff training, teaching development, pedagogical training, or professional development; and
- c) higher education, postsecondary education, tertiary education, college*, or universit*

In November 2018, we conducted a second search to identify newly published articles. To be included in the subanalysis presented here, an article had to be published in a peer-reviewed journal in English between January 1, 1985 and October 31, 2018. The authors had to report the findings of a formal evaluation or critical reflection on a specific mentorship program, for which one of the primary goals was to promote effective teaching, scholarship of teaching and learning (SoTL), or educational scholarship among faculty members at institutions of higher education. The authors had to describe the program and methods used to assess it, using one or more of the following terms: *mentee*, *mentor*, *mentors*, *mentored*, *mentoring*, and/or *mentorship*. Some of the programs also included other components, such as workshops or online tutorials. The program had to be implemented through online or blended modalities.

We excluded purely descriptive articles, as well as evaluations or reflective pieces in which the authors did not clearly describe the mentorship program or methods used to assess it. We also excluded articles that reported on informal mentoring relations, as well as those that reported on programs that: (a) engaged K-12 educators, K-12 teacher candidates, or undergraduate or graduate students who were not employed as faculty members at institutions of higher education; and/or (b) primarily employed people other than faculty members as mentors.

Screening process

Our 2016 search yielded 3,948 results, and our 2018 search yielded 564 results (Figure 1). We exported the bibliographic information for each result into Rayyan (Version 1), a web application designed to support systematic reviews. We removed duplicates, screened the remaining

publications by title and abstract, and excluded those that clearly did not meet our criteria. We tried to retrieve full-text copies of all of the remaining publications; however, we were unable to retrieve 20 of them, most of which were published before 2000 and were unlikely to focus on online or blended programs. We read the remaining publications in full and excluded those that did not meet our criteria. We were left with 17 articles that fit the inclusion criteria for this subanalysis. We reviewed the reference lists of those articles to identify other potentially relevant publications and did not find any additional publications that met our criteria.

[INSERT FIGURE 1 HERE]

Data analysis

We uploaded articles selected for inclusion into NVivo (Version 11.4), a qualitative data analysis software package. Using NVivo, we conducted line-by-line coding and identified key thematic trends related to program outcomes, development, and implementation, which we present in the results and discussion section below. We also conducted a SWOC analysis of the coded data to identify the strengths, weaknesses, opportunities, and challenges reported for each program. We used the results of that analysis to develop eight recommendations for program design and implementation, which we present in the conclusion.

Results and discussion

The 17 peer-reviewed articles included in this subanalysis are cited with numerical codes in square brackets, which correspond to the programs and studies listed in Table 2. These articles presented formal evaluations or critical reflections on 14 teaching-focused faculty mentorship programs. Only two of the programs were delivered exclusively online [2, 10]. The remaining programs were delivered through blended modalities, entailing online and face-to-face interactions [1, 3-9, 11-14]. The programs entailed a variety of mentorship arrangements (e.g., one-to-one mentorship, group mentorship; see Table 2). Some programs also incorporated additional activities to help participants develop teaching- or SoTL-related competencies, such as

workshops [1, 5, 6, 9, 11], webinars [1], online courses [4, 10], classroom observation [2, 4], curricular or research projects (e.g., design an online course, conduct educational research) [3-6, 11, 13], reflective journaling [10], and presentations [6].

[INSERT TABLE 2 HERE]

Key program outcomes

Teaching- and SoTL-related capacities

Thirteen studies used interviews, surveys, or tests to assess changes in participants' teaching- or SoTL-related attitudes, beliefs, knowledge, skills, or practices following participation in a blended or online mentorship program [1-2, 4a-4c, 5, 7, 8b, 9-11, 13-14]. All 13 studies found self-reported or demonstrated improvements in one or more domains. For example, the authors of one study found that an online program helped participants develop strategies to manage student learning online, use social media tools to promote learner engagement, and build interaction into recorded lectures [2]. In another online program, a participant said: 'The challenges and obstacles faced helped me to understand things from the student's perspective, as well as gain insight and understanding on how to handle issues and problems as a tutor in the online environment' [10, p. 37]. Only five of the studies contacted participants after a program was finished to learn if they had made changes to their instructional practices; in all five cases, participants reported applying skills or knowledge gained from the program to their subsequent teaching [1, 4b, 4c, 9, 11].

Networking and interpersonal support

Blended and online mentorship programs granted participants an opportunity to build their professional networks and develop supportive relationships with other instructors [2-3, 4a, 5, 7, 8a, 9, 10-12]. Several studies found that mentoring relationships helped reduce feelings of

isolation or promote community building [3, 5, 7, 9-12]. For example, one mentor wrote: 'because of the collegiality cultivated in both virtual and physical communities of learning, no matter the delivery or communication mode, peer-to-peer sharing of mutual experiences manifested as the primary trigger to dispel sensations of isolation and detachment'[12, p.12]. In some cases, supportive relationships may have reduced feelings of professional anxiety associated with the adoption of new technologies or instructional approaches [4a, 7]. On the other hand, when trusting, respectful, or collaborative relationships were not established, participants held back for fear of looking 'silly' [8a], struggled to achieve group goals [10], or did not perceive much benefit from their participation [7, 4c]. One study found that relationship quality impacted participants' evaluation of program effectiveness: those participants who rated the program as having a positive and collaborative atmosphere were more likely to rate the program as highly effective [4c].

Reciprocal benefits

Although mentees might be conceptualized as the primary beneficiaries of mentorship programs, mentors can also benefit from participating. Some researchers reported that acting as a mentor provided opportunities for: exposure to new ideas and practices [5, 7, 13]; collaboration with colleagues [5]; and the development of leadership, management, and coaching skills [7]. By recognizing mentors' expertise and skills, mentorship programs also helped position mentors as valued members of their university communities [12].

Institutional benefits

Online and blended mentorship programs also benefited participants' institutions. In one study, participants in a distance-education-focused program believed their participation gave their institutions a competitive advantage in a growing market of online education [4b]. In another study, the use of e-learning at the university increased following the implementation of a mentorship program focused on teaching with technology [6; also see 4c and 13]. Some studies

suggested that online or blended mentorship programs helped build institutional capacity by preparing participants to share their knowledge with other faculty members, act as mentors in subsequent programs, or take on new institutional roles [5-7, 11]. For example, one found that a blended mentorship program produced champions of teaching with technology, who could help train and support peers outside the program [6].

Program design and implementation

Institutional support

Several studies suggested that the successful development and implementation of online and blended mentorship programs depended on the provision of dedicated human and material resources, including support from senior administrators [4a, 10] and appointed staff or faculty members [3, 5, 10, 13]. In some cases, researchers reported or recommended that stipends or other incentives be used to promote or reward participation [4a, 7, 12, 13]. Smooth program implementation also required well-functioning technological infrastructure to enable online connectivity [10].

In one study, researchers noted the need for program coordination by a staff member who does not hold a supervisory role over program participants [3]. This recommendation is consistent with research on face-to-face programs, which suggests it is important to maintain an arm's length distance between a mentorship program and processes for academic promotion and tenure outside the program (Diehl & Simpson, 1989; Harnish & Wild, 1994; Wasburn & Lalopa, 2003). The wider literature suggests it is also important to communicate to participants how their activities in faculty mentorship programs will be monitored or assessed and with whom the results will be shared (Cox, 2012; Diehl & Simpson, 1989; Harnish & Wild, 1994). This may help engender trust, enabling participants in mentorship programs to step outside their comfort zones, experiment with new ideas and techniques, and discuss professional anxieties without fear of negative consequences for their career development.

Timing and mode of contact

Studies found that early and frequent contact between participants helped foster effective communication and positive relationships in online and blended mentorship programs [2, 3, 8a, 9, 11]. In some cases, however, participants faced time constraints that limited the frequency of their interactions [5, 7]. Time-zone differences also posed challenges to communication in cross-border programs [2, 10]. One study on a blended program in the United States found it was helpful to grant mentees flexibility in determining the frequency and mode of contact that best suited their needs, with the expectation that check-ins would occur frequently [11].

Studies suggested it was also important for program leaders to consider participants' time constraints and needs when determining the duration of a mentorship program: the longer a program runs, the more time participants have to build relationships, complete assigned projects, and pursue their development goals [1, 5, 6, 8b, 9, 10]; however, longer program durations may pose barriers to some faculty members who have limited time for professional development activities [1]. Some researchers reported that the use of online and blended modalities helped facilitate prolonged participation. Short periods of face-to-face programming combined with one to two years of online support enabled sustained professional development and community-building across multiple campuses or institutions [8b, 9, 11]. A blended mentorship approach also helped to facilitate contact among faculty members working on different schedules at the same institution [11].

Some types of online technologies appeared to be more effective for facilitating communication than others. One study of a blended program found it was helpful to establish initial rapport through a face-to-face meeting; afterwards, mentors were able to provide ongoing 'just-in-time' support by e-mail, but an online forum in the same program was underutilized [3]. Other studies reported high levels of interactive engagement through email listservs, with facilitators prompting discussion [8a, 9]. Hayward and Laursen (2018) suggested that:

'technologies, like email, that deliver messages directly may be more successful than those requiring participants to log in and seek them out' [9, p. 9]. Participants used listservs to share teaching-related ideas and resources and to exchange messages of friendship and emotional support, which promoted bonding and positive rapport [8a, 9]. These findings are consistent with the wider research literature on faculty development, which points to the role that online platforms can play in enabling participants to collaborate and bond beyond the physical constraints of face-to-face programming (Vaughan & Garrison, 2005).

Only two studies in this review assessed programs that were implemented exclusively online [2, 10]. In one of these studies, participants noted the need for a higher sense of social presence, which they suggested might be achieved through the sharing of participant photographs [10]. More research is needed to identify successful strategies for fostering social presence, positive relationships, and effective communication in online mentorship programs. Findings from the wider research literature on online learning may prove useful in this regard. For example, although none of the studies in our review reported on the use of videoconferencing technologies such as Skype or Zoom, such platforms have been used to provide rural secondary school teachers with access to professional development opportunities (Maher & Prescott, 2017). In that context, videoconferencing helped to support social presence among participants by providing opportunities for social engagement and synchronous discussion involving verbal and gestural communication; however, some participants still felt that face-to-face contact provided a greater sense of connectivity (Maher & Prescott, 2017).

Participant matching

Program leaders had to choose among several approaches to matching participants in online and blended mentorship programs (see Table 1 and Table 2). When mentees worked with mentors in the same discipline, those mentors could provide guidance on subject-specific teaching approaches [7]. When participants were matched across disciplinary lines, it promoted a focus on

overall instructional or SoTL design principles, rather than subject-specific ideas [2, 3, 4c, 11]. In a program that paired participants from different institutions, participants appreciated the opportunity to gain fresh perspectives from colleagues 'with no institutional agenda at work' [2, p. 288]. These findings align with research on face-to-face programs, which suggests that intra-departmental mentoring may help faculty navigate disciplinary and departmental issues, while inter-departmental mentoring can provide faculty with outside perspectives that have not been influenced by departmental politics (Lumpkin, 2011).

We found no consensus across studies to suggest that one mentorship arrangement is better than others. Rather, program leaders should consider their program objectives, as well as the availability and needs of participants, when deciding how to match participants. In several studies where program leaders assigned mentors to mentees, they attempted to match participants according to their goals, interests, or other compatibilities [2, 5, 7]. In some cases, participants were dissatisfied with their assigned matches [3, 7]. Even when matches were successful, participants' needs could change over time [3, 5]. To address these issues, some researchers recommended establishing formal processes for mediating conflicts or providing supplemental support when mentorship arrangements do not meet participants' needs [3, 5]. Several programs also incorporated elements — such as networking events, peer discussions, or group projects — that enabled participants to form and leverage relationships with multiple faculty members beyond their primary mentorship arrangements [5, 10-11].

Role clarity and accountability

Several studies suggested it was important to clearly communicate the roles and responsibilities of program participants, in order to ensure that mentors provided essential support and mentees understood and met the expectations set for them [2-3, 4a, 4c, 7, 10, 12]. Researchers identified several promising strategies for helping participants understand and fulfill their responsibilities, including the use of: (a) induction training, orientation sessions, and/or orientation materials for

mentors and/or mentees [2, 3, 5, 7, 10, 12]; (b) formal contracts or agreements to establish clear objectives and shared expectations [2, 3, 4c]; and/or (c) project planning tools to delineate goals and track progress [5]. Research on face-to-face mentorship programs affirms the potential benefits of using these strategies to promote role clarity and accountability (Cox, 2012; Eisner, 2015; Wasburn and Lalopa 2003).

Some studies found that role clarity was also important for limiting 'role creep' and ensuring that mentors played a role that was complementary rather than superfluous to academic support staff outside the program [3, 7, 12]. For example, one study found it was important for program leaders to clearly communicate the scope of the project to campus stakeholders and carefully negotiate the roles and responsibilities of mentors, program leaders, unit coordinators, central service administrators, and other academic support staff [12]. Several studies also reported the benefits of conducting program evaluations to identify areas for improvement and ensure the needs of participants and host institutions are met [4a, 4c, 5].

Conclusion and recommendations

The findings of this systematic review suggest that online and blended mentorship programs have the potential to promote teaching- and SoTL-related confidence, knowledge, and skills among faculty members at institutions of higher education. Based on our findings, we have developed eight recommendations to help guide the development and implementation of such programs:

1. Conduct a programmatic needs assessment and environmental scan to gather information about target participants and existing support services. Use the findings to inform the development of a faculty mentorship program that is responsive to community members' needs and complementary to existing services.

2. Ensure that adequate human and material resources are available to implement the program, including support from academic administrators, program coordination by appointed staff or faculty members, and well-functioning technological infrastructure to facilitate online connectivity.
3. Maintain an arm's length distance between faculty and staff members who are responsible for mentoring, supervising, or evaluating participants within the program and those who are responsible for evaluating, promoting, or hiring participants outside the program.
4. Clearly delineate and communicate the structure, scope, and goals of the program to participants and other stakeholders. Use induction training, formal contracts, and/or project planning tools to promote role clarity and accountability.
5. Encourage early and regular contact among participants to promote the development of supportive relationships, the provision of effective support, and steady progress towards goals. In blended programs, consider scheduling an initial face-to-face meeting between mentors and mentees. Leverage online communication technologies to promote ongoing bonding and collaboration.
6. Establish formalized processes for identifying and responding to conflicts or other problems that might arise in mentorship relationships. Provide opportunities for mentees to develop supportive relationships with multiple faculty members, beyond their primary mentorship arrangements.

7. Leverage the potential of faculty mentorship programs to build institutional capacity by encouraging participants to share the knowledge and skills they've developed with peers and inviting them to act as mentors in future program implementations.
8. Use program evaluations to learn from participants' experiences and adjust the program to maximize its value. Leverage positive evaluation outcomes to communicate the value of the program to decision-makers and funders.

While conducting this review, we also identified several gaps in the research literature. First, only two of the studies that met our inclusion criteria focused on exclusively online programs. This represents an important gap, particularly given the growth in online learning. To assess the potential effectiveness of online faculty mentorship programs, and identify the potential barriers and enablers to implementing them, more research is needed. Among other topics, researchers should explore different strategies to support social presence, including the use of videoconferencing platforms and other technologies.

Second, among the studies we reviewed, few researchers evaluated and reported the effects of faculty mentorship programs on participants' actual teaching behaviours or student outcomes. More research is needed to assess the potential effects that online and blended mentorship programs may have on instructional practices and student outcomes. It is also important for investigators to clearly describe their research methods, as well as the structure and contents of the programs studied. We excluded some articles during the screening process because they provided too few details about the program or methods used to evaluate it.

It is also important to note that there is considerable variability in how mentorship is conceptualized and defined among program leaders, participants, and researchers (Haggard,

Dougherty, Turban, & Wilbanks, 2011). Moreover, the distinctions between mentorship and related concepts, such as coaching or role modeling, are often unclear (Sambunjak, Straus, & Marušić, 2010). By limiting the scope of this review to programs that were explicitly described in terms of mentorship, we likely excluded some studies that assessed similar faculty development initiatives as those included here.

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Table 1. Mentorship arrangements

One-to-one	One mentor works with one mentee
Group	One mentor works with multiple mentees
Team	Multiple mentors work with one mentee
Mentoring community	A group of people provide each other with reciprocal mentorship support
Hierarchical	A senior or more experienced mentor(s) provides guidance to a junior or less experienced mentee(s)
Peer, collaborative, co-	The lines are blurred between mentor and mentee, with participants providing reciprocal support
Informal	The mentor-mentee relationship develops organically outside the confines of a structured mentorship program
Formal	The mentor-mentee relationship is established deliberately within the confines of a structured mentorship program
Self-selected	Each mentee selects their own mentor
Assigned	A third party matches each mentee to an assigned mentor

Table 2. Program overview

Mentorship Program					Study	
Name or descriptor	Target participants	Teaching-related goal	Modality, duration	Mentorship arrangement(s)	[Citation code], First author, year	Evaluation
[1] Cottrell Scholars Collaborative New Faculty Workshop	New tenure-track faculty, chemistry, multiple institutions (US)	Develop familiarity with evidence-based teaching methods	Blended, duration unspecified	One-to-one (hierarchical, inter-institutional); learning community	[1] Baker, 2014	Mixed-method pre/post/delay surveys (n=81)
[2] Cross-institutional peer observation and mentoring program	Online instructors, multiple disciplines, Universities of York and Waikato (UK, New Zealand)	Share strategies for online course design and implementation	Online, two to three months	One-to-one (peer, inter-institutional)	[2] Walker, 2018	Interviews (n=17)
[3] Department of Lifelong Learning e-mentoring program	Part-time academic staff, multiple disciplines, University of Exeter (UK)	Develop an e-learning module	Blended, one year	One-to-one (hierarchical, inter-departmental); learning community	[3] Thompson, 2010	Mixed-method post survey (n=19); interviews (n=17)
[4] Distance Education Mentoring Program	Teaching faculty, multiple disciplines, Purdue University Calumet (US)	Develop skills for designing and teaching online courses	Blended, one year	One-to-one and team (hierarchical, inter-departmental)	[4a] Barczyk, 2011	Quantitative post survey (n=34)
					[4b] Buckenmeyer, 2011	Quantitative post survey (n=47)
					[4c] Hixon, 2011	Quantitative post survey (n=47)

Name or descriptor	Target participants	Teaching-related goal	Modality, duration	Mentorship arrangement(s)	[Citation code], First author, year	Evaluation
[5] Educational Scholars Program	Early-career educators, pediatric medicine, multiple institutions (US)	Develop skills and experience in educational scholarship	Blended, three years	Team (hierarchical, intra- and inter-institutional)	[5] Chandran, 2017	Mixed-method pre/post/delay surveys (n=28); analysis of portfolios and CVs
[6] eLearning Fellowship Program	Academic staff, multiple disciplines, University of Jos (Nigeria)	Promote the adoption of educational technology for teaching	Blended, one year	One-to-one (hierarchical, intra-institutional); learning community	[6] Adewumi, 2011	Pre/delay survey (n=6 faculties)
[7] Faculty mentorship program at the Institute of Technology	Teaching and academic support staff, multiple disciplines, Institutes of Technology (Ireland)	Develop skills and knowledge to design, deliver, and evaluate educational programs	Blended, one years	One-to-one (hierarchical, intra-departmental)	[7] Donnelly, 2011	Qualitative pre/post surveys (n=20); focus group (n=20)
[8] FAIMER Regional Institutes fellowships	Health professions teachers, multiple disciplines and institutions (international)	Develop skills in medical education, educational leadership, and management	Blended, two years	Learning community	[8a] Anshu, 2010	Analysis of listserv emails
					[8b] Singh, 2013	Quantitative pre/mid/post surveys (n=65 fellows, 52 control)
[9] Inquiry-based learning workshop and e-mentoring	College math instructors, multiple institutions (US)	Promote the adoption of inquiry-based learning practices	Blended, one year	Learning community	[9] Hayward, 2018	Mixed-method pre/post/delay surveys (n=35); analysis of listserv emails
[10] Open University of Sri Lanka course	Academics, multiple disciplines and institutions (Sri Lanka, Mauritania, Pakistan, US)	Develop the capacity to design and deliver online courses	Online, six weeks	Group (hierarchical, intra-institutional)	[10] Jayatilleke, 2017	Qualitative pre/mid/post self-reflection instruments (n=13-15); analysis of journal entries and program leaders' records

Name or descriptor	Target participants	Teaching-related goal	Modality, duration	Mentorship arrangement(s)	[Citation code], First author, year	Evaluation
[11] Scholarship of Teaching and Learning Academy	Faculty, multiple disciplines, University of North Georgia (US)	Develop a scholarship of teaching and learning (SoTL) project	Blended, one year	One-to-one (hierarchical, intra-disciplinary); group	[11] Carney, 2016	Pre/post interviews (n=4)
[12] Sessional Academic Success	Sessional academics, multiple disciplines, Queensland University of Technology (Australia)	Provide support and build communities of practice	Blended, duration unspecified	One-to-one (hierarchical, intra-departmental); learning community	[12] Hamilton, 2013	Dialogic reflective practice (n=3, authors)
[13] Technology Integration Project	Full-time faculty, education, Towson University (US)	Develop technology skills and integrate standards-based technology projects into the curriculum	Blended, duration unspecified	One-to-one (hierarchical)	[13] Wizer, 2004	Pre/post assessment of technology skills; analysis of project planning sheets, meeting logs, and post-program reflections
[14] University Teaching Professional Development	Tenured and pretenured faculty, multiple disciplines, La Laguna and Las Palmas de Gran Canaria universities (Spain)	Cultivate core curriculum and teaching capacities	Blended, six weeks	One-to-one (peer, inter-institutional)	[14] Villar Angulo, 2006	Quantitative post survey (n=30); analysis of self-reflective narrative statements and portfolios

Figure 1. Screening process