

Journal of Information Literacy

ISSN 1750-5968

Volume 16 Issue 2

December 2022

Article

Hammons, J. 2022. The faculty-focused model of information literacy: Insights from the faculty development literature. *Journal of Information Literacy*, 16(2), pp. 22–40.

<http://dx.doi.org/10.11645/16.2.3222>



This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/).

Copyright for the article content resides with the authors, and copyright for the publication layout resides with the Chartered Institute of Library and Information Professionals, Information Literacy Group. These Copyright holders have agreed that this article should be available on Open Access and licensed under a Creative Commons Attribution ShareAlike licence.

"By 'open access' to this literature, we mean its free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited."

Chan, L. et al. 2002. Budapest Open Access Initiative. New York: Open Society Institute. Available at: <http://www.soros.org/openaccess/read.shtml> [Accessed: 18 November 2015]

The faculty-focused model of information literacy: Insights from the faculty development literature

Jane Hammons, Assistant Professor, Teaching and Learning Engagement Librarian, The Ohio State University. Email: hammons.73@osu.edu ORCID: [0000-0001-7263-8503](https://orcid.org/0000-0001-7263-8503)

Abstract

In a faculty-focused, or “teach the teachers” (TTT) model of information literacy (IL), librarians would spend a significant portion of their time on faculty development. To support the adoption of this approach, there needs to be evidence that librarians can act effectively as faculty developers and that faculty development (also referred to as academic or educational development) can produce positive changes in teaching practices and student learning. This paper explores the faculty development literature in order to better understand the potential of the faculty-focused model of IL. Two research questions guided the review. What can the literature on the effectiveness of faculty development tell us about the potential of the faculty development approach to IL? Additionally, what insight can the literature on the background, experiences, and identity of faculty developers provide to our understanding of librarians acting as faculty developers?

The analysis provides indications that a model of IL instruction focused on faculty could support increased integration of IL into the curriculum, as well as additional evidence that faculty development should be considered a viable role for librarians. However, the review also surfaced concerns about the identity and status of developers and the challenges of assessing faculty development that are relevant to librarians’ adoption of the faculty-focused model of IL. By exploring the faculty development literature as part of a consideration of the TTT approach to IL, this paper provides a valuable perspective to the ongoing debates about the future of IL.

Keywords

academic libraries; curriculum design; educational development; faculty development; faculty liaison; information literacy; “teach the teachers”; US

1. Introduction

Over the past few decades, academic librarians have engaged in ongoing debates about the best model for achieving the integration of information literacy (IL) into the curriculum. While the one-shot approach remains dominant, significant criticisms about the one-shot model have been raised (Bowles-Terry & Donovan, 2016; Pagowsky, 2021). One alternative that has been proposed is for librarians to focus more on the faculty, using a “teach the teachers” or “train the trainers” (TTT) model, emphasizing faculty development, consultation, and collaboration, while limiting, or perhaps even eliminating, one-shot instruction (Bowles-Terry & Donovan, 2016; Cowan & Eva, 2016; Fister, 2009; Flierl et al., 2020; Hartman et al., 2014; Iannuzzi, 1998; Miller & Bell, 2005; Smith, 1997). Supporters have argued that the faculty-focused approach could be more sustainable and scalable than programs built around the one-shot.

Determining if the faculty-focused approach represents a valid path forward for IL requires confirmation that faculty development does indeed result in positive changes in teaching practices and student learning, and that librarians will be able to effectively act in a faculty development role. There is already evidence that librarians can act as faculty developers (Bowles-Terry & Sobel, 2022; Flierl et al., 2019; Fribley et al., 2021), as well as some limited indications that the TTT approach can support the integration of IL into the curriculum (Hammons, 2020a). However, more evidence is needed.

A companion piece to this paper, currently under review, explores the faculty-focused model of IL through a review of the Library and Information Science literature, focusing specifically on what librarians' experiences as teachers and faculty developers can tell us about the potential of the faculty-focused approach, and what changes would be needed within the profession to make the faculty-focused model more feasible as a primary approach to IL integration (Hammons, in press).

This paper explores literature from the field of faculty development (also referred to as educational development and academic development) in order to provide additional insight into the potential of a faculty-focused approach to IL. The specific questions guiding the paper are:

- What can the literature on the effectiveness and impact of faculty development tell us about the promise of the faculty development approach to IL?
- What insight can the literature on the background, experiences, and identity of faculty developers tell us about the potential for librarians to expand their role in providing faculty development?

2. Definitions

In this paper, *librarian* will indicate those who work in a library, whether or not they also have faculty rank or the librarian title. *Faculty* will refer to individuals outside of the library who participate in teaching development initiatives, whether or not they have the specific status of faculty (this could include lecturers, instructors, and graduate teaching assistants). *Developer* will refer to those outside of the library who lead or design faculty development programs, whether or not they also have faculty status. In addition, developer will be used broadly to stand for educational developers, academic developers, instructional developers, and faculty developers.

While there is no clear consensus on how exactly faculty development should be defined, for the purposes of this paper, faculty development refers to a range of activities intended to improve the knowledge and skills of faculty in order to support more effective teaching practice and increased student learning (Amundsen et al., 2005; Handler & Hays, 2019a; Steinert et al., 2016).

A faculty-focused, or TTT model of IL is one in which librarians would spend a significant amount of time developing, implementing or supporting faculty development activities or initiatives that are intended to teach faculty how to teach IL (Cowan & Eva, 2016; Miller & Bell, 2005; Smith, 1997). Librarians would also engage in ongoing consultation and collaboration with faculty and develop resources that would support faculty efforts to teach IL. In this model, the goal is that IL instruction is not separate from the content of the course, but taught by the instructor as an integrated part of the course.

Like “faculty development,” there does not appear to be a clear consensus within the library profession as to how a “one-shot” should be defined (Pagowsky, 2021). For this paper, a one-shot refers to a librarian-led instruction session connected to a specific course or assignment. In most cases, with one-shots, the librarian has little involvement in the design of the course and has limited contact with the students outside of the session. In a one-shot model of IL, librarians support the integration of IL into the curriculum primarily through one-shots.

The TTT approach differs from the one-shot approach, and from other models of IL instruction, such as credit-bearing courses and embedded librarian programs, in that it places providing instruction to faculty, rather than providing direct instruction to students, at the centre of librarians’ effort to integrate IL into the curriculum. While the faculty-focused model would not necessarily mean that librarians would have to eliminate all direct instruction to students, some proponents of the model have argued that librarians should give up most or all instruction to students in order to concentrate on faculty (Miller & Bell, 2005; Smith, 1997).

While these definitions are provided so that librarians who may be unfamiliar with the faculty-focused model of IL may gain a clearer understanding of what it may entail, it is important to note these definitions may not exactly align with how a specific model, or combination of models, may be enacted within specific institutions.

3. Method

To begin the exploration of the faculty development literature, searches were conducted using EBSCO Discovery and Google Scholar. Once initial articles and books were identified, citation tracing was used to identify additional literature. In addition, recent issues of three faculty development journals, *To Improve the Academy*, the *International Journal for Academic Development*, and the *Journal of Faculty Development*, were reviewed to identify relevant articles.

While there are numerous studies outlining the outcomes of specific faculty development initiatives, this was an initial exploration of the faculty development literature, with the goal of developing a broad understanding of the effectiveness of faculty development. In order to make the scope of the research more manageable, the sources that were selected related to the effectiveness of faculty development were primarily review articles (systematic reviews or literature reviews) that provided an overview and analysis of the existing research in the field, rather than studies of specific faculty development initiatives or programs. In addition, the focus was on studies that could provide insight into the effectiveness of faculty development in general, and not on specific types of faculty development programs, such as course or assignment redesign programs.

4. Overview of faculty development as a field

Faculty development is also known as academic development, educational development, instructor/instructional development, staff development and professional development (Beach et al., 2016; Lee, 2010; McDonald & Stockley, 2008; Ouellett, 2010). The variation in names is partly related to geography, with faculty development being more commonly used in the United States (at least until recently) while educational development is more commonly used in Canada and the United Kingdom (Beach et al., 2016; Lee, 2010). Although sometimes used interchangeably, the variation in names can also indicate changing conceptions of the work. For example, the Professional and Organizational Development (POD) Network, the major professional organisation for developers based primarily in the United States and Canada, now

uses “educational development” because it emphasises how the work of developers takes place across several levels (individuals, programs, or institutions) and multiple audiences (including graduate students, faculty, administrators, and organisations) (Pod Network, n.d.).

The different names used can also be taken as an indication of the “relatively blurred” nature of the concept or field (Sugrue et al., 2018, 2337). It is a “fuzzy field” that can be “shapeless and hard to pin down” (Green & Little, 2017, para. 1). Faculty development can take a number of different forms, depending on the institution and the goals of a particular initiative or program, but common types of faculty development include orientations, teaching observations, consultations, faculty learning communities, and workshops (Lee, 2010). While some institutions have a centralised faculty development centre, or centre for teaching and learning, in other cases, faculty development may be the responsibility of a committee or a specific individual (Lee, 2010). Some departments or units within an institution may also develop their own faculty development programming. Focus areas for faculty development include the integration of technology and teaching, student learning assessment, course or curriculum design, and active or problem-based learning strategies (Beach et al., 2016).

5. Background literature review

5.1 Librarians as faculty developers and the TTT model in the library and information science literature

Librarians have a long history of involvement in faculty development initiatives (Fribley et al., 2021). There are numerous examples within the Library and Information Science (LIS) literature of librarians acting in a faculty developer role. While they may not have always referred to these programs specifically as “teach the teachers” programs, librarians have led or contributed to a number of different types of initiatives to support faculty development related to IL (for a review of multiple examples, see Hammons, 2020a). This has included course or assignment design programs, workshops, or grants (Folk & Hammons, 2021; Miller, 2010; Wishkoski et al., 2019; Xu, 2017), various types of faculty learning communities or faculty fellowship programs (Crowe et al, 2019; Hammons et al., 2019), and online courses for faculty (Hammons, 2020b; Veach, 2009). Librarians have also contributed to faculty development programs not specifically centered around IL, such as Purdue University’s IMPACT program (Flierl et al., 2019; Flierl et al., 2020; Maybee et al., 2013). In this example, librarians joined teams of faculty and instructional developers to redesign courses to be student-centred.

There have also been recent articles in which librarians describe their experiences leading faculty development programs, outline the benefits they gain from this work, and encourage other librarians to consider engaging with faculty development (Bowles-Terry & Sobel, 2022; Handler & Hays, 2019b; Sharun & Smith, 2021). Taken together, these examples provide evidence that librarians are able to act effectively in a faculty developer role. And, while there have been only a few research studies of librarians’ experiences as faculty developers, these studies also provide positive support for librarians’ ability to engage as faculty developers (Flierl et al., 2019; Flierl et al., 2020; Fribley et al., 2021). Taking on this role may also have the potential to improve the perception of librarians at the institutional level. Bowles-Terry and Sobel (2022), for example, consider faculty development to be one way for librarians to move into a more “visible” role and “an avenue for librarians to move into campus leadership” (para. 10).

In addition, there is also some evidence within the LIS literature that the TTT model can support the integration of IL into the curriculum. A previous literature review on multiple library led TTT initiatives focused on IL found signs of the positive impacts of such programs on teaching

practices and student learning (Hammons, 2020a). In one study discussed in the review, faculty at Trinity University (Texas) were awarded grants to revise or develop courses to specifically incorporate IL and received support from librarians for their efforts. A survey conducted after the conclusion of the grant period found that not only did faculty make changes in the courses for which they received the grants, but that a majority made changes to other courses in order to integrate IL (Jumonville, 2014). Overall, however, the literature review found that it was not yet possible to make a clear determination that adopting the TTT model would likely result in long-term changes to faculty teaching practice or improved student learning related to IL, as many of the studies reviewed relied primarily on self-reported data about changes to teaching practices and often did not assess student learning.

Despite encouraging signs, more critical consideration of the faculty-focused model of IL is definitely needed, especially as the adoption of this approach could require a significant change in practice for many librarians who have based their careers around teaching one-shots (Bowles-Terry & Donovan, 2016). One potentially fruitful area of exploration is the faculty development literature. Understanding more about faculty developers' experiences and the effectiveness of faculty development more generally could provide valuable insight into the potential of the faculty-focused approach to IL and librarians expanding their role in providing faculty development.

5.2 Librarians' investigation of the faculty development literature

There are a few examples where librarians have turned to the faculty development literature for insight. Handler and Hays (2019b) highlighted key aspects of the faculty development literature in their short piece, "Keeping Up With...Faculty Development," which was intended to provide librarians with an overview of relevant trends. Fundator and Maybee (2019) explored the faculty development literature in order to identify strategies and models used by developers that librarians could apply to their own work. Their examination led them to conclude that librarians' existing experiences place them in a good position to effectively collaborate with faculty. Bowles-Terry and Sobel (2022) also highlighted the connections between the work of developers and librarians in support of their argument that librarians should engage more with faculty development. In general, however, the faculty development literature does not appear to have been significantly reviewed by librarians as part of a consideration of a faculty-focused approach to IL.

6. The effectiveness of faculty development

A key consideration in librarians' decision-making regarding the potential of the faculty-focused model is, of course, whether or not there is evidence that faculty development is effective. It would make no sense for librarians to adopt, or invest more strongly in, a faculty-focused approach to IL if there is little evidence that faculty development works. Does faculty development lead to positive changes in faculty teaching practice? Are there indications that faculty development supports improved student learning? As already noted, there are some limited indications within the LIS literature that faculty development focused on IL can result in changed teaching practices. The next part of the paper will consider the evidence within the faculty development literature for the effectiveness and impact of faculty development more generally.

6.1 Challenges of assessing faculty development

Instruction librarians are familiar with the struggle to measure the impact of their work on student learning. The literature suggests that this problem is common to developers as well.

Several of the articles reviewed commented on the difficulty developers have had in demonstrating the impact of faculty development (Amundsen and Wilson, 2012; Kucsera and Svinicki, 2010; Sorcinelli, 2020; Stes et al., 2010). In the foreword to *Faculty Development and Student Learning: Assessing the Connections*, Huber (2016) states that “the challenges of documenting connections between faculty learning and student learning are, famously, legion” (p. vii). Sorcinelli (2020) conducted a review on the evaluation of faculty development programs and found that, up until the 2010s, there was “little rigorous research on whether instruction and/or faculty development programs have an impact on students’ learning” (p. 13). Much of the assessment of faculty development programs in general has focused on the experience or satisfaction of the faculty participants and self-reported changes in teaching practices, rather than student learning (Condon et al., 2016).

6.2 Evidence for the impact of faculty development

Despite the difficulties of assessing faculty development, Sorcinelli (2020) states that there is “growing body of evidence that demonstrates the influence of faculty professional learning on pedagogical improvement, student learning and success, and institutional culture change” (p. 14). Sorcinelli argues that, although no single study can comprehensively demonstrate it, “the convergence of evidence” provides support for the impact of faculty development (p. 14). One example to which Sorcinelli points is an independent review of ten studies focused on a specific faculty development intervention, the Course in Effective College Teaching, developed by the Association of College and University Educators (ACUE). According to the authors of this report (Allen et al., 2019), reviewing these studies together provides “compelling” evidence of improvement in faculty learning as a result of the course, as well as indications of improvement in areas such as course grades and course completions rates for students taught by an instructor who was taking or had completed the ACUE program (p. 10). The authors of the ACUE report acknowledge that measures such as grades and course completion rates are not completely satisfactory indicators of learning, but point out that this is the type of data often available for educational researchers.

In one ACUE study, Lawner and Snow (2018), considered the impact on students at Delta State University whose instructors had completed the ACUE course. They found that sections taught by the ACUE faculty members had higher success rates (grades of A, B, or C) and lower rates of students receiving a D, F, or W, than in sections taught by a matched control faculty member who had not completed the course. In another study, Eiselein et al., (2019) described how instructors teaching First Year Experience courses were given the opportunity to complete the ACUE course as part of a broader redesign of a faculty development program. Participants were surveyed during and after taking the course and the responses indicated that faculty were implementing or planned to implement new practices based on the course, and also indicated increased confidence in areas such as course design and assessment.

In *Faculty Development and Student Learning*, Condon et al. (2016) highlight additional evidence in support of faculty development. The book reports the results of a mixed-methods, multi-year study covering two different institutions, Carleton College and Washington State University. The research methods used at each campus varied, but included a combination of interviews with faculty and students, surveys, syllabi and assignment review, classroom observations, and analysis of student writing portfolios. Results were compared for instructors who indicated a high level of participation in faculty development opportunities with those who had more limited participation. Researchers found that not only do faculty make changes to their teaching practices after participating in faculty development but also that there is evidence that these changes persist over time. The faculty in the study were able to point to specific changes

they had made as a result of their participation in faculty development and analysis of their assignments and syllabi provided evidence that they had actually made those changes. And, while often initially revising only a single assignment or course, there were indications that faculty incorporated the new teaching practices into other assignments or courses, even years after the initial participation ended. In addition, analysis of student work across both institutions provided indications that performance improved when faculty made changes to their teaching methods. Summarizing their findings, the authors assert that “broadly speaking, faculty development has measurable impacts on teaching” and that “participants who amass a more extensive faculty development history...show measurably larger changes in their teaching than faculty whose participation is slight, such as a single departmental workshop on the same topic” (p. 114). And, while they do not deny the difficulties of assessing the impact on student learning, the authors go on to state that “when faculty improve their teaching, students learn more and their performance on course work improves” (p. 125).

Other studies also provide additional evidence in support of the effectiveness of faculty development. Chism et al. (2012) reviewed 138 reports of faculty development initiatives including workshops, formal courses, and faculty learning communities, and found that “authors of the overwhelming majority of the studies report specific, effective results” related to the initiative, although some were not able to identify clear outcomes (p. 141). For example, in one of the studies reviewed, Nasmith and Steinert (2001) found evidence that six months after attending a workshop focused on leading interactive lectures, participants both reported, and were observed, using techniques from the workshop. However, Chism et al. also note limitations of the findings of their review, such as the quality of the research and the fact that many of the studies were conducted by individuals in the same unit that had developed the intervention. Steinert et al. (2006; 2016) conducted two studies on the impact of faculty development in the medical field. In both cases, there was support for positive changes in teaching practices as a result of the participation. The second study reviewed more than 100 cases, and found that the research generally “highlighted positive changes in teachers’ attitudes, knowledge, skills and educational practices following participation in a faculty development activity” (Steinert et al., 2016, p. 779). However, the authors noted that many of the studies employed weak research designs, limiting the overall impact of the findings, and also indicated that the impact on learners was still not often explored.

6.3 IL in the faculty development literature

It is important to note here that there appears to have been limited research within the faculty development literature which specifically addresses the impact of faculty development in relation to IL. A search for “information literacy” within three faculty development journals, *The International Journal for Academic Development*, *To Improve the Academy*, and the *Journal of Faculty Development*, from 2018-2022, found a few examples in which IL-related goals were incorporated into a faculty development program, but no examples in which IL appeared to be the singular focus of the program. For example, three articles from the *Journal of Faculty Development* described the design of faculty development programs intended to support instructors teaching first-year experience courses that included IL learning goals or outcomes (McCaughey et al., 2019; O’Neill, 2019; Sperry and Hawkinson, 2019). None of the articles provided research data to demonstrate whether the program resulted in specific changes to teaching practices or improved student learning around IL. O’Neill (2019) did indicate that the revised faculty development program incorporated more specific instruction for faculty related to teaching IL. However, it is not clear whether or not this increased emphasis on IL instruction for the faculty resulted in improved student learning.

As IL is primarily a term used by librarians, it should be acknowledged that there may be examples within the faculty development literature that describe development initiatives with IL-related goals that do not include the specific term “IL” and so may have been missed. More research is needed to understand if and how IL, and librarians more generally, is represented within the faculty development literature.

6.4 Implications for librarians and IL

What do findings such as these indicate for the potential of the faculty-focused approach to IL? It cannot be denied that, like librarians, developers have apparently struggled to demonstrate the long-term impact of their work on student learning. Even in those cases where researchers have found positive indications about the impact of faculty development programs, questions have been raised about the strength of the research designs used. It must be stated, however, that measuring student learning is incredibly challenging, as is measuring changes in teaching practices. As noted by Kucsera and Svinicki (2010), the types of changes that faculty development programs hope to inspire are complex and take a long time to develop, making assessment difficult.

Despite these challenges, however, there does appear to be growing evidence that faculty development does have an impact on faculty teaching practices and student learning. There are indications that faculty do make changes to their teaching practices after participating in professional development programs and that these changes can expand and persist years after the participation. Positive outcomes have been reported for a wide range of programs, including workshops, courses, and learning communities. While measuring a direct impact on student learning is more challenging, there are also signs that students do perform better in courses taught by faculty who have participated in faculty development. Taken together, these findings provide support for the argument that a faculty-focused approach to IL could encourage the increased integration of IL into the curriculum.

Reviewing the literature also provides indications of the types of faculty development programs that are more likely to be successful. Steinert et al. (2006; 2016), for example, highlighted several key features that appeared to contribute to more effective programs, which included relevant content, giving faculty the opportunity to apply their learning and interact with peers, the use of instructional design practices and adult learning principles in the program design, the inclusion of multiple instructional methods, and opportunities for reflection and feedback. They also highlighted longitudinal program design, noting that programs that extended over time appeared to support more sustained changes. Condon et al. (2016) also noted factors they considered important to the success of faculty development, including participant engagement and interaction, the ability to practice and receive feedback, and multiple participations over time. In addition, they indicate that programs need to be backed by sufficient resources.

Overall, there are indications that faculty development programs may be more successful if they are well-designed, well-resourced, and longer-term. In other words, a single workshop for faculty focused on IL will not be enough to produce the types of changes that librarians would like to see, just as a single instruction session is not enough to support students' IL development. This may raise some concerns for librarians about potential for library-led faculty development centred around IL, as many librarians will lack experience designing long-term faculty development programs, and may lack the resources to offer more than occasional faculty workshops. However, there appears to be a growing number of librarians gaining experience in providing faculty development whose work can provide a foundation for other librarians. Librarians may also be able to take advantage of opportunities to incorporate IL into

existing faculty development programs on their campuses. Flierl et al. (2019; 2020), for example, suggest that librarians may be able to support the integration of IL into the curriculum by participating in faculty development programs that are not specifically focused on IL, by connecting IL with specific pedagogical problems that faculty are experiencing.

Finally, as indicated, while there is evidence to support the effectiveness of faculty development in general, there is limited evidence concerning IL-focused programs within the faculty development literature. This could also create concerns for librarians about whether the results from other areas may be applicable when thinking about IL. However, the dearth of research in this area could provide an opening for librarians to make a valuable contribution to the research on the effectiveness of faculty development.

7. Developers' backgrounds, experiences, and identities

This section will consider what an exploration of the literature on developers' backgrounds, experiences, and identities can provide for our understanding of librarians' adoption of the faculty development role. As noted, there is already evidence within the LIS literature that librarians are capable of effectively acting as faculty developers. However, understanding more about developers may give additional insight into what librarians may experience if they continue to expand into this role.

7.1 Developers' backgrounds

Developers tend to have diverse backgrounds and experiences and come from many disciplines, including professional fields such as education, but also humanities, social sciences, and STEM fields, as there is no one specific route into the field, nor a specific degree associated with the work (Beach et al., 2016; Green & Little, 2016; Stockley et al., 2015). As described by Quinn and Vorster (2014), entry into the field is "often ad hoc, haphazard, and informal" (p. 255).

Faculty development tends to be work that is primarily performed by white women, with different surveys finding between 70% and 75% of respondents identifying as female and up to 90% of respondents identifying as white/Caucasian (Beach et al., 2016; Green & Little, 2016; POD Network, 2016). Developers can have faculty/academic or administrative status, depending on the role or the institution, although developers may be less likely to hold faculty/academic status in the United States as compared with Canada or the United Kingdom (Green & Little, 2016; 2017). Although developers sometimes do teach undergraduates, often the teaching done by developers is intended for an audience of faculty or teaching assistants and tends toward informal workshops and consultations (Bath & Smith, 2004; Green & Little, 2016; 2017).

7.2 Developers' experiences and identities

The literature provides indications of the positive feelings that developers can have toward their work. In a study of burnout among developers, Kolomitro et al. (2020), found that, although participants could point out several factors in their work that created anxiety and stress, many also "expressed great satisfaction in the work itself and deeply enjoyed the opportunity to 'make a real, lasting positive difference for colleagues and their students'" (p. 10). Participants' comments indicated that they "strongly believed in the value of educational development as it involved 'meaningful challenges,' 'transformative interactions,' and 'daily opportunities for intellectual stimulation and creative problem solving'" (p. 10). Respondents also indicated their appreciation of the autonomy and flexibility that came with the role. In another article, Plank (2019) describes some of the responses she received when, in her role as president of the POD

Network, she asked developers why their work matters. She states that the responses shared “an idealism about the work we do and a belief that we do stand for something” (p. 93).

A few articles have pointed out professional benefits of the work of faculty developers. For example, Gravett (2017) describes how her work as an educational developer has supported her own development as a teacher, specifically how her teaching has become more reflective, purposeful, well-informed, and student-focused. O’Sullivan and Irby (2014; 2015) conducted two studies focused on “part-time” faculty developers in the medical field, that is, individuals who only occasionally lead faculty development workshops or trainings. They found that for these “occasional” developers, “faculty development clearly elevated their status and supported career advancement and professional opportunities” (2014, p. 1471). Respondents indicated that they were viewed as having “credibility and expertise” as a result of their role leading faculty development (2014, p. 1470). They also found that these “part-time” developers could develop a “merged” identity in which faculty development came to be an integrated part of their professional identity, rather than as something distinct from their existing identities as scientists or clinicians. Respondents indicated that they gained personal and professional enjoyment from acting as faculty developers, and that acting as developers helped them to become better teachers, learn from others, and form new relationships. These findings suggest faculty development can be fulfilling even if it does not become one’s primary role.

Despite these positive indications, it is important to note that developers have also expressed concerns related to their role. The identity, status, and power (or lack thereof) of faculty developers appeared to be a prominent focus area in the literature (Bath & Smith, 2004; Grant, 2007; Green & Little, 2013; Kensington-Miller et al., 2015; Mori et al., 2021; Plank, 2019; Sugrue et al., 2019). As academic support units, development offices, or centres for teaching and learning, are at the mercy of administrators, and can (and have) been cut with little warning (Nilson et al., 2011). Due to the fact that many developers come to the field from another path, there is a strong sense within the literature of uncertainty about where developers fit and who they are collectively. Faculty or academic development, as well as the developers themselves, have been described using such words as “on the margins” (Green and Little, 2013), “precarious” (Sutherland, 2015, p. 209), and even “misfits” (Plank, 2019, p. 86). Mori et al., (2021) indicate that metaphors used to describe developers often “evoke the idea of ambiguous roles and of positions that exist in some form of liminality, which is both difficult to observe and understand” (p. 2). Bernhagen and Gravett (2017) and Green and Little (2017) have argued the devaluation of women’s labour, especially “emotion or care work” which is focused on supporting others, may also contribute to the seemingly marginalised or undervalued position that developers can seem to occupy within the academy.

The descriptions of developers as inhabiting a marginal or liminal space are not always meant to be seen as necessarily negative. Grant (2007), for example, describes how developers might come to value or even embrace their uncertain status, and points out that the lack of a clear identity can be seen as less exclusionary, as those who do not have “academic” (or faculty) status are not automatically excluded. Green and Little (2013) describe the difference between being “marginalized,” a condition which is imposed from the outside, and “marginality,” as the state of being on the border or between groups, and suggest that the “marginal” status of developers could potentially be a position of “strategic importance” (p. 535). For example, developers can translate or clarify pedagogical practices and jargon for those within the disciplines, or act as intermediaries between academics and administrators. However, as Bernhagen and Gravett (2017) state, “as much as scholars may wish to retrieve such terms or reveal the positive potential of marginal positions, this kind of rhetoric also implies a place for

educational developers that is far from central or secure and not always particularly valued” (sec. 6).

There are indications in the literature that the perceived perilous nature of their position can take an emotional and mental toll on developers. In fact, Nilson et al. (2011) have even referred to faculty development as a “hazardous occupation.” As a result of their vulnerable position, developers may frequently feel that they have to justify themselves and demonstrate the value of their work (Nilson et al., 2011; Kensington-Miller et al., 2015). Although Kolomitro et al. (2021) highlighted aspects of the work that developers enjoy, they also identified issues that negatively impacted developers’ well-being, including a lack of resources and support from the administration and the sometimes “precarious” nature of their positions (p. 11). Developers have also expressed concern about their abilities and how they are perceived by faculty. For example, Rudenga and Gravett (2019) found that a significant number of developers reported experiencing imposter syndrome, or a belief that they are underserving of their position or that they will soon be exposed as an imposter. Their survey respondents also expressed worries that they were seen by faculty as being failures for pursuing faculty development instead of becoming “real” academics.

7.3 Connections between developers and librarians

In reviewing the literature on the background and experiences of faculty developers, several similarities between librarians and developers stood out. In both cases, the work is performed primarily by white women. Like librarians, much of the teaching done by developers is done informally. Both faculty development and librarianship in general, and library instruction specifically, have been described as involving “emotional labour” (Julien and Genuis, 2009; Matteson and Miller, 2012; 2013; Pagowsky, 2021). There are indications that librarians, like developers, may experience impostor syndrome and feel concerned about their abilities (Lundstrom et al., 2021; Martinez and Forrey, 2019). Both groups have also shared concerns about their status in relation to faculty, with librarians, for example, expressing feelings of being disrespected or exploited by faculty (Badke, 2005; Julien and Pecoskie, 2009).

Librarians have also been described by Simmons (2005) as being “simultaneously insiders and outsiders of the classroom and of the academic disciplines in which they specialize...” (p. 298). Simmons argues that this puts librarians in a “unique position” that allows them to act as mediators between students and academics. This perspective of librarians is similar to Green and Little’s (2013) argument that the “marginal” status of developers could put them in a position of importance, for example, allowing them to mediate between the concerns of faculty and administrators.

The similarities between the positions have been noted by others. Bowles-Terry and Sobel (2022), for example, highlight many of the shared roles and concerns between the two groups as they describe their experiences as librarians who have moved into full-time faculty development work. Francis and Wingrove (2017) describe their collaboration as an academic developer and a liaison librarian. They point out that both roles can be seen as “outsiders” to those within the disciplines and also how gender influences how the roles are seen, as there is a tendency for both to be seen “as existing to help, support, nurture and assist rather than to collaborate, lead and manage change, educate, partner and contribute to scholarship” (p. 46).

7.4 Implications for librarians and IL

The concerns raised in the faculty development literature about the identity and status of developers might give some librarians pause about the value of taking on a faculty developer role, even on an occasional basis, and about the potential of a faculty development approach to IL. At first glance, is it hard to argue that librarians should increase their efforts to move into a role that has been described by some in the field as “hazardous.”

On the other hand, there is evidence that many developers strongly believe in the value of their work and derive personal satisfaction and professional benefits from it. Not only do many developers feel that they are making an important contribution to their institutions (Kolomitro et al., 2020), by leading development programs, they may also become better teachers themselves and enjoy increased status as experts (Gravett, 2017; O’Sullivan and Irby, 2014; 2015). Even Nilson et al. (2011), who referred to development as a “hazardous occupation,” ended by stating that “in spite of its hazards, the career is worth the risks” (p. 303).

In addition, the relatively open boundaries of faculty development as a field might mean that librarians would be more accepted in the role than if they were to try to move into a more structured discipline. As most people in the field come from other backgrounds, librarians acting as developers may not stand out strongly as outsiders. Librarians’ experiences working with faculty from a wide range of disciplines and acting as both “insiders and outsiders” in the classroom, as Simmons (2015) describes, could help prepare them to effectively navigate the in-between status that many developers appear to have.

The evidence that even “part-time” faculty developers can derive benefits and professional satisfaction from the work also supports the continued engagement of librarians as faculty developers (O’Sullivan and Irby, 2014; 2015). Even if the TTT model of IL does not become the dominant approach to IL, acting as faculty developers could be a way for librarians to increase their status and even improve their own teaching skills. The findings that occasional developers can develop a “merged” identity indicates that librarians do need to give up their identities as librarians to also take on a developer role. Instead, development work could become an integrated part of how they think of their role as librarians, just as many librarians have now incorporated teaching into their conception of the work of librarians, even though the teaching role was not always considered a primary aspect of librarianship (Ariew, 2014; Baer, 2021; Sproles & Detmering, 2016).

Thus, reviewing the faculty development literature provides additional support for the ability of librarians to make the transition into faculty development work and highlights benefits that librarians could gain from taking on this role, even if only occasionally. Combining this evidence with the existing examples of librarians effectively leading or contributing to faculty development within the LIS literature, indicates that the faculty development role should be considered a viable path for librarians. And, if librarians can effectively adopt the role of developer, this suggests that a faculty development approach to IL has the potential to be successful.

8. Limitations

Although this paper attempts to highlight studies of significant importance to the research questions, the faculty development literature is expansive and an exhaustive review was not conducted. This inquiry was an initial, targeted exploration of the faculty development literature in relation to the faculty focus-focused model of IL, but there may be additional relevant topics within the faculty development literature that could further inform the research questions or our

understanding of the potential for librarians to adopt the faculty-focused model. For example, as noted in the Method section, the articles selected for this review primarily focused on faculty development in general, but not on specific types of faculty development programs such as course or assignment design programs, or faculty learning communities. More research into the effectiveness of different types of faculty development programs may provide additional insight for librarians on the most effective path forward for incorporating a faculty-focused model of IL.

In addition, there are, of course, many other factors that need to be explored when thinking about the faculty-focused approach to IL which were not considered as part of this paper, such as how faculty might respond if librarians were to make a significant effort to implement such a model or how librarians who have focused their careers on providing one-shots might react if asked to shift their focus primarily to faculty. While there is evidence that librarians can successfully act as faculty developers, and that many do enjoy providing faculty development, that does not mean that all librarians would be eager to take on this role. In addition, before the faculty-focused model could be adopted as a primary approach to IL, many librarians would likely need additional training and support in areas such as instructional design and learning theory.

9. Conclusion

With these limitations in mind, this review of the faculty development literature has provided positive indicators for potential of the “teach the teachers” approach to IL. The evidence from the faculty development literature that faculty development can have a positive impact on teaching practices and student learning supports the contention that teaching the faculty to teach IL could result in the increased integration of IL into the curriculum. This makes an important addition to the existing, although limited, evidence within the LIS literature that TTT programs can support positive changes in faculty teaching practices and student learning related to IL.

This does not mean that librarians should ignore the concerns that were raised in the literature about the limitations of the evidence for the impact of faculty development or the indicators related to the uncertain status of developers. However, there does appear to be enough support in the faculty development literature related to the positive experience of developers to indicate that librarians could derive professional satisfaction from the work, which is corroborated by the reports from the LIS literature about librarians’ positive experiences leading faculty development. There is also support for the idea that engaging in faculty development work, even on an occasional basis, may provide benefits for librarians, such as improvements in teaching skills and increased professional status. And, although the adoption of a primarily faculty-focused model would necessitate more librarians taking on a faculty development role, as least on part-time basis, this does not mean that librarians would need to give up their identity as librarians or reposition themselves only as developers. Instead, like the “part-time” faculty developers in the medical field described by O’Sullivan and Irby (2014; 2015), who showed evidence of developing a “merged” identity, faculty development work could potentially become just one part of librarians’ accepted roles.

By incorporating the perspective of the faculty development literature, which appears to have not been significantly explored by librarians in relation to discussions of the faculty-development approach to IL, this paper provides a unique contribution to ongoing debates about future directions for how IL should be taught in higher education.

References

- Allen, D., McPherson, M.S., Nilson, L.B., and Sorcinelli, M.D. (2019). [ACUE student, faculty, and institutional impact research: Independent review process and findings](#). *Association of College and University Educators*.
- Amundsen, C., Abrami, P., McAlpine, L., Weston, C., Krbavac, M., Mundy, A., & Wilson, M. (2005, April). The what and why of faculty development in higher education: An in-depth review of the literature. Presentation at the Annual Meeting of the American Educational Research Association (AERA), Montreal, Canada.
- Amundsen, C., & Wilson, M. (2012). [Are we asking the right questions? A conceptual review of the educational development literature in higher education](#). *Review of Educational Research*, 82(1), 90–126.
- Ariew, S. A. (2014). [How we got here: A historical look at the academic teaching library and the role of the teaching librarian](#). *Communications in Information Literacy*, 8(2), 208–224.
- Badke, W. B. (2005). [Can't get no respect: Helping faculty to understand the educational power of information literacy](#). *The Reference Librarian*, 43(89–90), 63–80.
- Baer, A. (2021). [Academic librarians' development as teachers: A survey on changes in pedagogical roles, approaches, and perspectives](#). *Journal of Information Literacy*, 15(1), 26–53.
- Bath, D., & Smith, C. (2004). [Academic developers: An academic tribe claiming their territory in higher education](#). *International Journal for Academic Development*, 9(1), 9–27.
- Beach, A. L., Sorcinelli, M. D., Austin, A. E., & Rivard, J. K. (2016). *Faculty development in the age of evidence: Current practices, future imperatives*. Stylus Publishing, LLC.
- Bernhagen, L., & Gravett, E. (2017). [Educational development as pink collar labor: Implications and recommendations](#). *To Improve the Academy*, 36(1), 9–19.
- Bowles-Terry, M., & Donovan, C. (2016). [Serving notice on the one-shot: Changing roles for instruction librarians](#). *International Information & Library Review*, 48(2), 137–142.
- Bowles-Terry, M., & Sobel, K. (2022). [Librarians as faculty developers: Competencies and recommendations](#). *The Journal of Academic Librarianship*, 48(1), 102474.
- Chism, N. V. N., Holley, M., & Harris, C. J. (2012). [9: Researching the impact of educational development: Basis for informed practice](#). *To Improve the Academy*, 31(1), 129–145.
- Condon, W., Iverson, E. R., Manduca, C. A., Rutz, C., & Willett, G. (2016). *Faculty development and student learning: Assessing the connections*. Indiana University Press.
- Cowan, S., & Eva, N. C. (2016). [Changing our aim: Infiltrating faculty with information literacy](#). *Communications in Information Literacy*, 10(2), 163–177.
- Crowe, S., Pemberton, A., & Yeager, V. (2019). [Information Literacy Faculty Fellows program: Building a faculty-librarian framework community of practice](#). *College & Research Libraries News*, 80(5), 285-288.

Eiselein, G., Saucier, D. A., & Macharaschwili, C. E. (2019). Designing, implementing, and sustaining faculty development: A model for large and diverse FYE programs. *Journal of Faculty Development*, 33(2), 43–48.

Fister, B. (2009). [Fostering information literacy through faculty development](#). *Library Issues: Briefings for Faculty and Administrators*, 29(4), 1–4.

Flierl, M., Maybee, C., & Fundator, R. (2019). [Academic librarians' experiences as faculty developers: A phenomenographic study](#). *Communications in Information Literacy*, 13(2), 184–204.

Flierl, M., Fundator, R., Reed, J. B., McGowan, B., Cai, C., & Maybee, C. (2020). [Training the trainer to embed IL into curricula: Results from an action research project](#). *Journal of Information Literacy*, 14(1), 3–18.

Folk, A. & Hammons, J. (2021). [Expanding our reach: Implementing instructor development programming](#). *International Information & Library Review*, 53(1), 69–78.

Francis, M., & Wingrove, D. (2017). [More than a feeling: Reflecting on identity and the reality of practice through a library and academic development collaboration](#). *Journal of the Australian Library and Information Association*, 66(1), 42–49.

Fribley, K., Vance, J. M., & Gardner, J. G. (2021). [Academic librarians and campus-wide faculty development: A national survey](#). *portal: Libraries and the Academy*, 21(2), 253–274.

Fundator, R., & Maybee, C. (2019). Academic librarians as informed learning developers. In K. L. Ranger (Ed.). *Informed learning applications: Insights from research and practice* (pp. 81–94). Emerald Publishing Limited.

Grant, B. M. (2007). [The mourning after: Academic development in a time of doubt](#). *International Journal for Academic Development*, 12(1), 35–43.

Gravett, E. O. (2017). [Tracing a developer's development: a self-study in teaching](#). *International Journal for Academic Development*, 22(4), 307–318.

Green, D. A., & Little, D. (2013). [Academic development on the margins](#). *Studies in Higher Education*, 38(4), 523–537.

Green, D. A., & Little, D. (2016). Family portrait: [A profile of educational developers around the world](#). *International Journal for Academic Development*, 21(2), 135–150.

Green, D. A., & Little, D. (2017). [On the other side of the wall: The miscategorization of educational developers in the United States?](#) *To Improve the Academy*, 36(2), 77–88.

Hammons, J., Brooks, A., Chesnut, M., & Warner, L. (2019). Beyond the library walls: How a faculty institute transformed information literacy education across campus. *Kentucky Libraries*, 83(1): 7–11.

Hammons, J. (2020a). [Teaching the teachers to teach information literacy: A literature review](#). *The Journal of Academic Librarianship*, 46(5), 102196.

Hammons, J. (2020b). [Teaching information literacy: Developing an online course for faculty](#). *College & Research Libraries News*, 81(7), 337–240; 349.

- Hammons, J. (in press). Academic librarians as teachers and faculty developers: Exploring the potential of the “teach the teachers” model of information literacy. *College & Research Libraries*.
- Handler, K., & Hays, L. (2019a). [Keeping Up With... Faculty Development](#). *Association of College and Research Libraries*.
- Handler, K., & Hays, L. (2019b). [Librarians as faculty developers: Leading educational development initiatives](#). *College & Research Libraries News*, 80(4), 220–222, 235.
- Hartman, P., Newhouse, R., & Perry, V. (2014). [Building a sustainable life science information literacy program using the train-the-trainer model](#). *Issues in Science & Technology Librarianship*.
- Huber, M.T., (2016). Foreword: Pathways from faculty learning to student learning and beyond. In W. Condon et al., *Faculty development and student learning: Assessing the connections* (pp. vii–xi). Indiana University Press.
- Iannuzzi, P. (1998). [Faculty development and information literacy: Establishing campus partnerships](#). *Reference Services Review*, 26(3–4), 97–102, 116.
- Julien, H., & Genuis, S. K. (2009). [Emotional labour in librarians' instructional work](#). *Journal of Documentation*, 65(6), 926–937.
- Julien, H., & Pecoskie, J. J. (2009). [Librarians' experiences of the teaching role: Grounded in campus relationships](#). *Library & Information Science Research*, 31(3), 149–154.
- Jumonville, A. (2014). [The role of faculty autonomy in a course-integrated information literacy program](#). *Reference Services Review*, 42(4), 536–551.
- Kensington-Miller, B., Renc-Roe, J., & Morón-García, S. (2015). [The chameleon on a tartan rug: Adaptations of three academic developers' professional identities](#). *International Journal for Academic Development*, 20(3), 279–290.
- Kolomitro, K., Kenny, N., & Sheffield, S. L. M. (2020). [A call to action: exploring and responding to educational developers' workplace burnout and well-being in higher education](#). *International Journal for Academic Development*, 25(1), 5–18.
- Kucsera, J., & Svinicki, M. (2010). Rigorous evaluations of faculty development programs. *Journal of Faculty Development*, 24(2), 5–18.
- Lawner, E.K., and Snow, M. (2018). [Evaluation of the student impact of ACUE's course in effective teaching practices at Delta State University](#). *Association of College and University Educators*.
- Lee, V. S. (2010). Program types and prototypes. In K. H. Gillespie, D. L. Robertson & W. H. Bergquist (Eds.), *A guide to faculty development* (2nd ed., pp. 21–33). Jossey-Bass.
- Lundstrom, K., Fagerheim, B., & Van Geem, S. (2021). Library teaching anxiety: Understanding and supporting a persistent issue in librarianship. *College & Research Libraries*, 82(3), 389–409. <https://doi.org/10.5860/crl.82.3.389>
- Matteson, M. L., & Miller, S. S. (2012). [Emotional labor in librarianship: A research agenda](#). *Library & Information Science Research*, 34(3), 176–183.
- Hammons. 2022. *Journal of Information Literacy*, 16(2).
<http://dx.doi.org/10.11645/16.2.3222>

- Matteson, M. L., & Miller, S. S. (2013). [A study of emotional labor in librarianship](#). *Library & Information Science Research*, 35(1), 54–62.
- Martinez, J., & Forrey, M. (2019). [Overcoming imposter syndrome: The adventures of two new instruction librarians](#). *Reference Services Review*, 47(3), 331–342.
- Maybee, C., Doan, T., & Riehle, C. (2013). [Making an IMPACT: Campus-wide collaboration for course and learning space transformation](#). *College & Research Libraries News*, 74(1), 32–35.
- McCaughey, M., Nave, L., Smith, T. W., & Rhodes, K. C. (2019). Align and refine: Using the taxonomy of significant learning to plan for FYS faculty development. *Journal of Faculty Development*, 33(3), 13–18.
- McDonald, J., & Stockley, D. (2008). [Pathways to the profession of educational development: An international perspective](#). *International Journal for Academic Development*, 13(3), 213–218.
- Miller, I. R. (2010). [Turning the tables: A faculty-centered approach to integrating information literacy](#). *Reference Services Review*, 38(4), pp. 647–662.
- Miller, W., & Bell, S. (2005). [A new strategy for enhancing library use: Faculty-led information literacy instruction](#). *Library Issues: Briefings for Faculty and Administrators* 25(5), 1–4.
- Mori, Y., Harland, T., & Wald, N. (2021). [Academic developers' professional identity: A thematic review of the literature](#). *International Journal for Academic Development*, 1–14.
- Nilson, L. B., Nuhfer, E. B., & Mullinix, B. B. (2011). [21: faculty development as a hazardous occupation: A reflective review](#). *To Improve the Academy*, 30(1), 290–305.
- Nasmith, L., & Steinert, Y. (2001). [The evaluation of a workshop to promote interactive lecturing](#). *Teaching and Learning in Medicine*, 13(1), 43–48.
- O'Neill, M. (2019). Data driven development: Using First Year Experience program assessment to guide faculty development initiatives. *Journal of Faculty Development*, 33(3), 45–52.
- Ouellett, M. L. (2010). Overview of faculty development: history and choices. In K. H. Gillespie, D. L. Robertson & W. H. Bergquist (Eds.), *A guide to faculty development* (2nd ed., pp. 3–20). Jossey-Bass.
- O'Sullivan, P. S., & Irby, D. M. (2014). [Identity formation of occasional faculty developers in medical education: A qualitative study](#). *Academic Medicine*, 89(11), 1467–1473.
- O'Sullivan, P. S., & Irby, D. M. (2015). [What motivates occasional faculty developers to lead faculty development workshops? A qualitative study](#). *Academic Medicine*, 90(11), 1536–1540.
- Pagowsky, N. (2021). [The contested one-shot: Deconstructing power structures to imagine new futures](#). *College & Research Libraries*, 82(3), 300–309.
- Plank, K. M. (2019). [Intersections of identity and power in educational development](#). *New Directions for Teaching and Learning*, 159, 85–96.
- POD Network. (2016). [The 2016 POD Network membership survey: Past, present, and future](#).
- POD Network. (n.d.). [What is educational development](#).

- Quinn, L., & Vorster, J. A. (2014). [Isn't it time to start thinking about 'developing' academic developers in a more systematic way?](#) *International Journal for Academic Development*, 19(3), 255–258.
- Rudenga, K. J., & Gravett, E. O. (2019). [Impostor phenomenon in educational developers](#). *To Improve the Academy*, 38(1), 1–17.
- Sharun, S., & Smith, E. E. (2020). [Educational development partnerships and practices: Helping librarians move beyond the one-shot](#). *College & Research Libraries News*, 81(9), 445–449.
- Simmons, M. H. (2005). [Librarians as disciplinary discourse mediators: Using genre theory to move toward critical information literacy](#). *portal: Libraries and the Academy*, 5(3), 297–311.
- Sorcinelli, M. D. (2020). [The evaluation of faculty development programs in the United States: A fifty-year retrospective \(1970s-2020\)](#). *Excellence and Innovation in Learning and Teaching-Open Access*, 5(2), 5–17.
- Sperry, R., & Hawkinson, C. (2019). Faculty development for FYS courses in learning communities. *Journal of Faculty Development*, 33(2), 57–62.
- Sproles, C., & Detmering, R. (2016). [Working information literacy: The instruction librarian specialty in job advertisements 1973-2013](#). *Codex: Journal of the Louisiana Chapter of the ACRL*, 3(4), 10–32.
- Stes, A., Min-Leliveld, M., Gijbels, D., & Van Petegem, P. (2010). [The impact of instructional development in higher education: The state-of-the-art of the research](#). *Educational Research Review*, 5(1), 25–49.
- Steinert, Y., Mann, K., Centeno, A., Dolmans, D., Spencer, J., Gelula, M., & Prideaux, D. (2006). [A systematic review of faculty development initiatives designed to improve teaching effectiveness in medical education: BEME Guide No. 8](#). *Medical Teacher*, 28(6), 497–526.
- Steinert, Y., Mann, K., Anderson, B., Barnett, B. M., Centeno, A., Naismith, L., ... & Dolmans, D. (2016). [A systematic review of faculty development initiatives designed to enhance teaching effectiveness: A 10-year update: BEME Guide No. 40](#). *Medical Teacher*, 38(8), 769–786.
- Smith, R. L. (1997). [Philosophical shift: Teach the faculty to teach information literacy](#). *8th National Conference of the Association of College and Research Libraries*.
- Stockley, D., McDonald, J., & Hoessler, C. (2015). Nudges, pulls, and serendipity: Multiple pathways to faculty development. *Journal of Faculty Development*, 29(3), 61–68.
- Sugrue, C., Englund, T., Solbrekke, T. D., & Fosslund, T. (2018). [Trends in the practices of academic developers: Trajectories of higher education?](#) *Studies in Higher Education*, 43(12), 2336–2353.
- Sutherland, K. A. (2015). [Precarious but connected: the roles and identities of academic developers](#). *International Journal for Academic Development*, 20(3), 209–211.
- Veach, G. L. (2009). Teaching information literacy to faculty: An experiment. *College & Undergraduate Libraries*, 16(1), 58–70. <https://doi.org/10.1080/10691310902753983>

Wishkoski, R., Lundstrom, K., & Davis, E. (2019). [Faculty teaching and librarian-facilitated assignment design](#). *portal: Libraries and the Academy*, 19(1), 95–126.

Xu, L. (2017). [Establishing a vibrant information literacy program in the absence of curriculum mandate: A case study](#). *International Journal of Librarianship*, 2(2), 84–91.