The State and Future of WAC Faculty Development Scholarship: A Citation Analysis of Publications, 2012–2022

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In this article, I aim to establish a scholarly agenda for writing across the curriculum (WAC) scholar-administrators that can reinforce our efforts to sustain faculty development in the face of the contraction of higher education. I do so via a citation analysis of WAC faculty development scholarship published between 2012-2022. I demonstrate that these publications rarely reference one another, which casts doubt on the extent to which our field is engaged in a deliberate conversation about faculty development as a subject of inquiry. However, through citation mapping, I also identify several thematic clusters characterizing the field. The faculty development and student success cluster is especially ripe for renewed attention in the next decade because the relationship between the two is mostly inferential. Via replicable, aggregable, and data-support (RAD) research on WAC faculty development and student success, we can create a more integrated, and more definitive, picture our programs' effects on pedagogy and curriculum, as well as students' learning, growth, and success.

Peter Felten et al. (2007) define faculty development as "a profession dedicated to helping colleges and universities function effectively as teaching and learning communities" (p. 93; qtd. in Artze-Vega et al., 2013, p. 164). This community-oriented understanding of faculty development also rests at the heart of writing across the curriculum (WAC) (McLeod & Maimon, 2000, p. 580; Condon, 2001, p. 32; McLeod & Miraglia, 2001, p. 10; Thaiss & Porter, 2010, p. 554). Via faculty development activities as diverse as a week-long summer workshop, a writing fellows program, or writing enriched curriculum (WEC) departmental consultations, we seek intentional conversations with faculty about theories, practices, and obstacles to integrating writing into courses and curricula. However, as we consider the future of WAC, we must be clear-eyed about our prospects for engaging in meaningful faculty development—and thus to accomplish downstream goals like

pedagogical transformation, curricular reform, or institutional change—in the face of shrinking budgets and an overall contraction of higher education (Basgier, 2023).

While responses to these threats will necessarily be local, requiring systems thinking (Cox, Galin, & Melzer, 2017) and vision, mission, and strategy (Maimon, 2018; Basgier, 2023), a concerted scholarly agenda for WAC scholar-administrators can also reinforce our efforts to sustain faculty development over the coming decade, and thus to build the kinds of teaching and learning communities we envision. In this article, I aim to establish this agenda. I do so via a citation analysis of recent WAC faculty development scholarship published between 2012-2022. I demonstrate that these publications rarely reference one another, which casts doubt on the extent to which our field is engaged in a deliberate conversation that builds knowledge about the purposes, practices, and potential effects of WAC faculty development as a subject of inquiry. However, through citation mapping, I also identify several thematic clusters characterizing the field, including responses to faculty needs, faculty conceptions of writing and writing pedagogy, WEC, building relationships across areas of expertise, STEM faculty development, and faculty development and student success. This last cluster, I argue, is especially ripe for concerted, and renewed, attention in the next decade because the relationship between faculty development and student success is mostly inferential—and yet, the link between the two is likely to preoccupy academic leaders who are trying to decide where to devote resources. Via replicable, aggregable, and data-support (RAD) research on the link between WAC faculty development and student success, we can redefine, and refine, our understanding of both. We can create a more integrated, and more definitive, picture or our programs' effects on pedagogy and curriculum, as well as students' learning, growth, and success.

Study Design and Methods

I designed this study using a RAD research methodology, which is united in its commitment to "inquiry that is explicitly enough systematized in sampling, execution, and analysis to be replicated; exactly enough circumscribed to be extended; and factually enough supported to be verified" (Haswell, 2005, p. 201). Driscoll and Perdue (2014) argue that RAD research "may help writing center administrators to build a base of evidence-supported best practices to establish a tradition of research to both build knowledge and to further legitimize the field" (p. 107)—a goal that can reasonably apply to WAC faculty development scholarship as well.

In RAD research, replicability does not mean that every aspect of a study must be repeatable in its entirety. The contexts in which we conduct research are too locally variable to do so. Rather, the methods used to identify texts or participants, the instruments used to collect data, and the organization and analysis of data can be taken up and used to answer the same or similar research questions. The differences

in context or focus can contribute to aggregability, assuming they are described in enough detail, by allowing scholars to explain how findings repeat or change in different circumstances. The data supporting RAD research may be quantitative, qualitative, or textual, so long as the kind of data collected is appropriate to the research question and theoretical paradigm driving the study.

I framed the current study with the following questions:

- To what extent are WAC experts engaged in a concerted scholarly conversation about faculty development?
- How many publications can be identified as WAC faculty development scholarship, in what genres?
- How frequently do these publications cite one another?
- What prominent themes emerge through patterns of citation?
- What unexplored or under-explored avenues of research are suggested by citation patterns?

I limited my study to 2012-22 so I could capture the most contemporary conversations about faculty engaged in curricular and pedagogical work. For the purposes of this study, I excluded publications about graduate student professional development (see, e.g., LaFrance & Russell, 2018) and faculty as writers (see, e.g., Tarabochia, 2020). Because this is a RAD study, its methods could be extended to include a fuller body of earlier work, perhaps as far back as Fulwiler's (1981) landmark essay, "Showing, Not Telling, at a Writing Workshop," and a wider range of professional development activities and participants.

I began by searching databases (CompPile, Google Scholar, and EBSCO) for publications using search terms "WAC" and "faculty development." I examined titles, abstracts (when available), and, in some cases, entire publications to identify the extent to which each piece engaged substantively with faculty development in WAC. Many titles included terms like *faculty development* or *preparing faculty*, or they simply mentioned *faculty*. When such terms were not readily apparent, I examined abstracts and entire publications for descriptions and examinations of faculty-focused workshops, programs, interactions, or collaborations that were a focused area of scholarly inquiry. Using these techniques, I also examined publications' reference lists for promising leads on WAC faculty development scholarship that did not appear in my initial database searches. I also elected to include research conducted with faculty participants, even if the research was not about a specific faculty development initiative, so long as it focused on their conceptions or actions regarding the teaching of writing in the disciplines. My reasoning for doing so was methodological: because we conduct research *with* participants, their engagement in the research process will affect the ways they think, talk, and write about the phenomenon under

investigation. Therefore, their participation in research about their pedagogy, conceptions of writing, or experiences with teaching and learning constitutes a kind of faculty development.

Once I identified a body of WAC faculty development scholarship during my period of interest, I categorized the genre (book, chapter, or article), and I counted the total number of citations, as well as the subtotal number of citations of other publications within the body of scholarship (i.e., *cross-references*). Then, I added each publication to NodeXL Basic, a free package for Microsoft Excel that enables researchers to build network maps. I entered each item in the body of scholarship as a vertex, with connecting lines, called "edges," representing citations; I then used the "directed" function to add arrows indicating the direction of citation. I used circles to represent items that neither cited other scholarship in the corpus nor were cited in the corpus. I adjusted the size of each vertex to represent the number of times the publication was cited within the corpus. I used edge length to improve readability, not to communicate information about the network. To identify groups of closely related publications, I ran the Clauset-Newman-Moore (2004) algorithm (built into NodeXL), which "discovers clear communities within [networks] that correspond to specific topics" (p. 5). I used NodeXL's Harel-Koren Fast Multiscale layout for the visualization, which is designed to "convey[] the meaning of the diagram quickly and clearly" (Harel & Koren, 2002, p. 179). I then interpreted the thematic connection among each cluster, and I used visual proximity to associate "standalone" publications (those not otherwise connected to the network) with thematically similar groups. In what follows, I also note one instance in which these algorithms produced an imperfect grouping, and I suggest an alternative placement for one publication.

Results

I identified 46 unique WAC faculty development publications between 2012 and 2022. Twenty-eight were articles, fourteen were chapters, and four were books. The publications included a total of 2224 citations, and they cited one another 76 times, meaning WAC faculty development cross-references accounted for 3.41% of all references within the corpus. Table 1 represents the total, average, standard deviation, and median number of citations for both the entire corpus and cross-references. Because the number of citations in books resulted in a large standard deviation, I also represent these statistics, excluding books, in parentheses.

Table 1: Characteristics of WAC faculty development scholarship

	All Citations	Cross-References
Total (Total excluding books)	2224 (1408)	76 (62)
Average per publication (Average excluding books)	48.35 (33.52)	1.65 (1.48)
Standard deviation (Standard deviation excluding books)	59.59 (18.39)	2.07 (1.92)
Median (Median excluding books)	35 (31.5)	1 (1)

Figure 1 represents the citation network among these 46 publications, which I generated using the parameters described above. The Clauset-Newman-Moore algorithm produced six main clusters of four or more publications (represented with a navy ring, blue filled diamond, light green square, dark green sphere, orange diamond, and red filled square nodes), one pair of publications (represented in yellow triangles), and five individual publications (each a gray circle) not otherwise linked to the network through citation. What follows is a brief description of each cluster, including my logic for locating standalone publications with larger groupings.
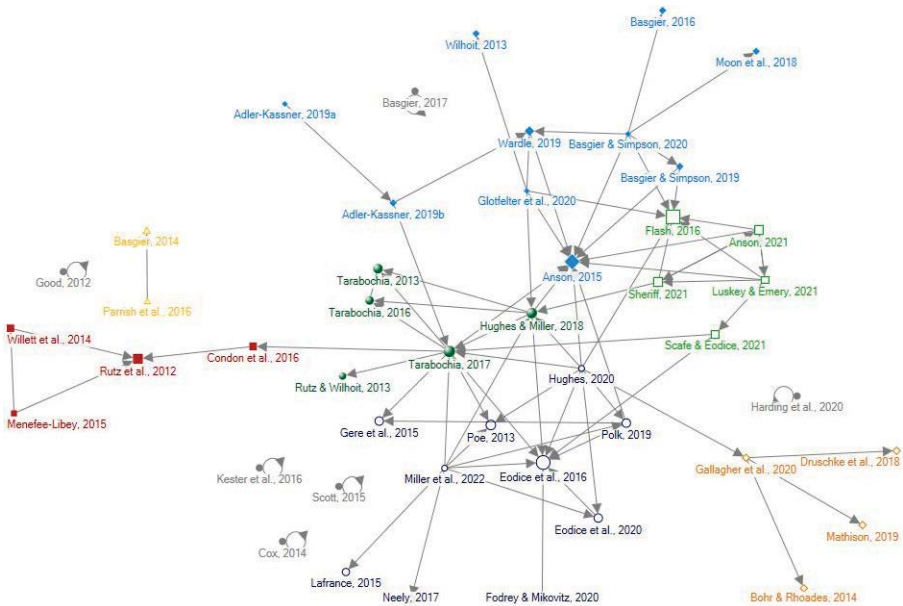

Figure 1: NodeXL network graph of WAC faculty development scholarship cross-references, 2012-22.
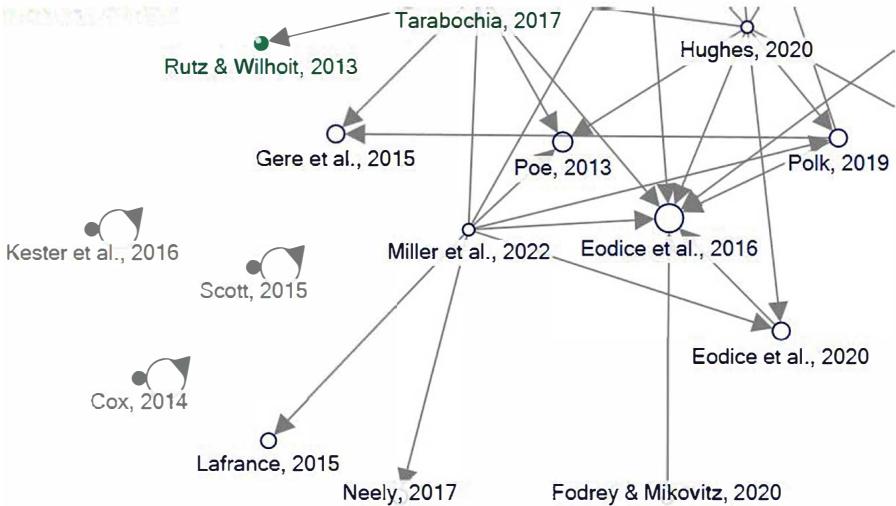
Figure 2: Detail of cluster 1, Responding to Faculty Needs. Publications include: Poe, 2013; LaFrance, 2015; Eodice et al., 2016; Polk, 2019; Eodice et al., 2020; Fodrey & Mikovitz, 2020; Hughes, 2020; Miller et al., 2022. Also thematically associated are Cox, 2014; Scott, 2015; and Kester et al., 2016.

The thematic essence of cluster 1 (figure 2) is represented by Hughes's (2020) study of faculty's self-reported needs regarding WAC faculty development. The need he identifies that has been explored most thoroughly in recent scholarship is assignment design. In *The Meaningful Writing Project*, the most-cited piece in this cluster, Eodice et al. (2016) devote an entire chapter to faculty members' perspectives on their most effective assignments. They extend this analysis in their 2020 publication, which elaborates on the role of faculty's personal connections in meaningful assignment design. Several other publications in this cluster address faculty experiences with assignment design, including programmatic efforts to engage faculty at open access institutions in creating high-impact assignments (Kester et al., 2016), the material contexts influencing their designs (Polk, 2019), multimodal assignment design (Fodrey & Mikovitz, 2020), and the role of personal experience in designing assignments (Miller et al., 2022). Taken together, these publications suggest that principles of effective assignment design can be taught, and that faculty will adapt them to suit their disciplinary contexts and pedagogical commitments, especially dependent upon their personal experiences and connections to content or contexts of study.

Other areas of need identified by Hughes (2020) include responding to writing, represented in this cluster by Scott (2015); "teaching heterogeneous groups of learners" (Hughes, 2020, p. 40), here represented by Poe's (2013) scholarship on race in WAC and Cox's (2014) chapter on WAC faculty development that addresses the needs of L2 learners; and faculty as learners, represented here by LaFrance's (2015) call to attend to the labor conditions of WAC faculty across disciplines, which may impact their access to faculty development and their ability to integrate key WAC principles and practices into their pedagogy. Neely (2017) is connected to this cluster via citation, but thematically appears to be a better fit with cluster 2, faculty conceptions, which I discuss in more detail in the next section. Overall, this cluster suggests that faculty have commonplace development needs across many institutional and programmatic types.

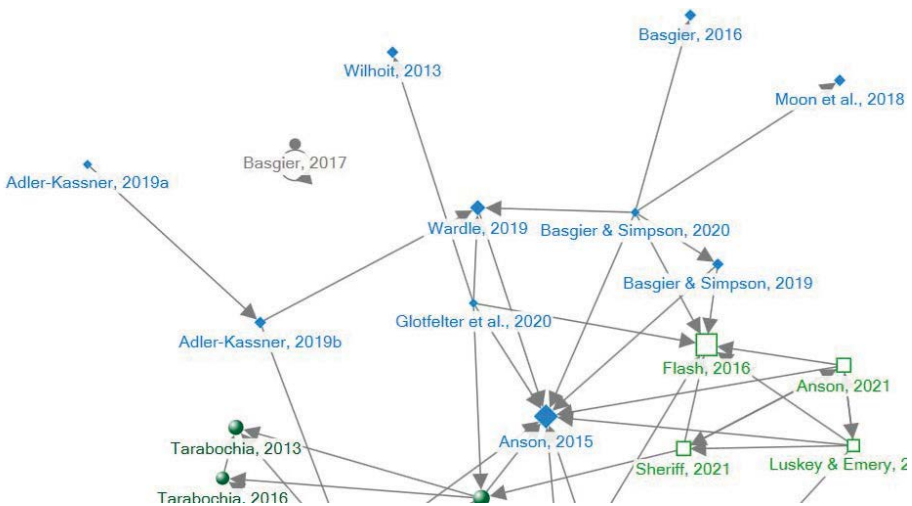*Cluster 2 (Blue Diamond, Filled): Faculty Conceptions*

Figure 3: Detail of cluster 2, Faculty Conceptions. Publications include: Wilhoit, 2013; Anson, 2015; Basgier, 2016; Neely, 2017; Moon et al., 2018; Adler-Kassner, 2019a and 2019b; Basgier & Simpson, 2019; Wardle, 2019; Basgier & Simpson, 2020. Also thematically associated is Basgier, 2017.

Although Neely (2017) linked with the previous cluster via her citation in Miller et al. (2022), her research discusses faculty's beliefs and practices regarding writing and the teaching of writing, which fits more closely with the publications in cluster 2 (Figure 3). These publications hinge on the principle that faculty will not change their teaching practices substantially without changing the underlying ways they

think about writing—that is, their conceptions of writing and writing pedagogy. Except for Wilhoit (2013), Basgier (2017), and Moon et al., (2018), most items in this cluster utilize threshold concepts as a framework for describing, studying, and ultimately changing faculty thinking in faculty development contexts. Anson's (2015) chapter in *Naming What We Know* is the most-cited publication, not only in this cluster but in the entire corpus. His six threshold concepts for WAC amount to "both a domain of inquiry and a domain of praxis" for the field (p. 205), hence their broad application across WAC scholarship. In the domain of inquiry, my own research with Amber Simpson (Basgier & Simpson 2019; Basgier & Simpson, 2020) considers faculty members' own threshold concepts for teaching writing in the disciplines. In the domain of praxis, Adler-Kassner (2019a; 2019b), Wardle (2019), and Glotfelter et al. (2020) offer theoretical grounding and empirical evidence of the ways faculty development influenced by threshold concepts can change what faculty think, and thus, how they teach writing in their disciplines.

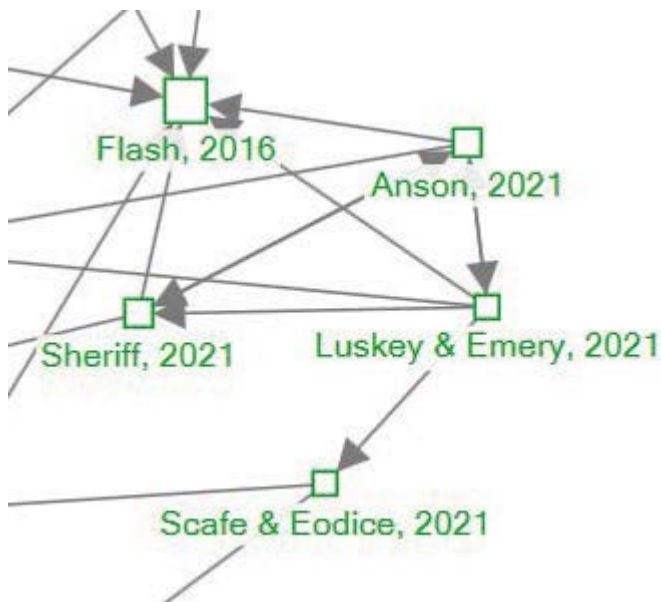*Cluster 3 (Light Green Square): Writing Enriched Curriculum*

Figure 4: Detail of cluster 3, Writing Enriched Curriculum. Publications include: Flash, 2016; Anson, 2021; Luskey & Emery, 2021; Scafe & Eodice, 2021; Sheriff, 2021.

Items in cluster 3 study the impact WEC programs have on faculty, with all the 2021 publications coming from the same edited collection (Anson & Flash, 2021).

Although this cluster nominally focuses on a specific type of program, it is closely related to cluster 2, both visually and thematically, not only because Anson's work is represented in both, but also because WEC aims to surface faculty conceptions of writing. Flash (2016) describes how she uses nondirective, dialogic questioning to guide faculty in naming their assumptions about writing; according to Luskey and Emery (2021), this process invites faculty into a liminal conceptual state through which they can acquire (or create) new or refined threshold concepts for writing and the teaching of writing in the disciplines.

Taken together, clusters 2 and 3 suggest that rhetoric, composition, and writing studies' persistent, constructivist theory of knowledge continues to dominate WAC faculty development scholarship. When WAC experts guide disciplinary or interdisciplinary groups of colleagues to name what they know about writing and teaching, faculty often change their conceptions, and, ultimately, their teaching practices, especially when they do so in collaboration with disciplinary and interdisciplinary colleagues.

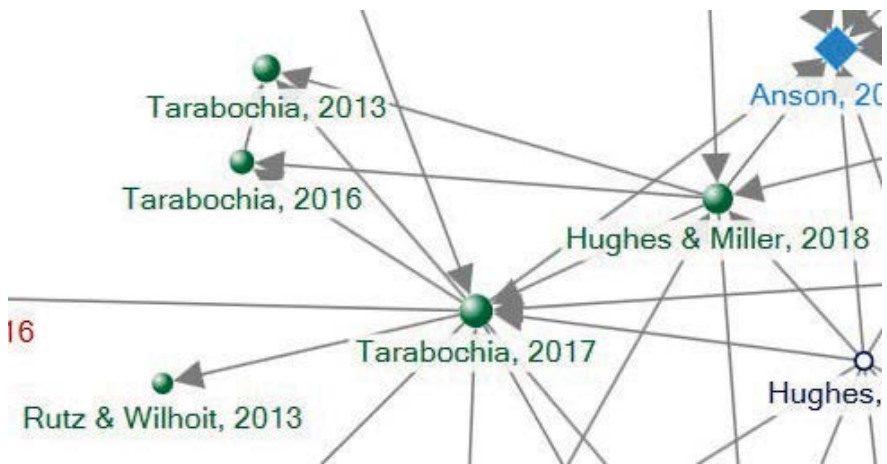*Cluster 4 (Dark Green Sphere): Building Relationships across Areas of Expertise*

Figure 5: Detail of cluster 4, Building Relationships across Areas of Expertise. Publications include: Rutz & Whilhoit, 2013; Tarabochia, 2013; Tarabochia, 2016; Tarabochia, 2017; Hughes & Miller, 2018.

Like clusters 2 and 3, the publications in cluster 4 can be seen as correcting the misconception that faculty development is principally about delivering knowledge to faculty colleagues about the "one right way" to teach with writing. Instead, faculty development entails concerted, and often challenging, relationship-building across

areas of expertise. Rutz and Wilhoit (2013) maintain that WAC WPAs often find themselves "learning to see [their] field of study anew through the eyes of instructors learning it for the first time" (p. 187). Indeed, Tarabochia (2013) argues that cross-curricular literacy (CCL) work, which includes WAC faculty development, entails "the negotiation of expertise among writing specialists and disciplinary-content experts" (p. 118). Disciplinary content experts, too, engage in productive negotiation of expertise: Hughes and Miller (2018) demonstrate that peer-to-peer faculty relationships can result in a richer "understanding of key WAC concepts and [. . .] commitment to teaching with writing" (p. 8). Such negotiations are affected by institutional, departmental, and cultural dynamics, such as gendered assumptions about disciplines (Tarabochia, 2016). To aid WAC faculty developers and others engaged in CCL work to navigate such complexities, Tarabochia (2017) articulates a pedagogical ethic characterized by negotiated expertise, attention to change, and play as key themes.

Cluster 5 (Orange Diamond, Not Filled): STEM Faculty Development
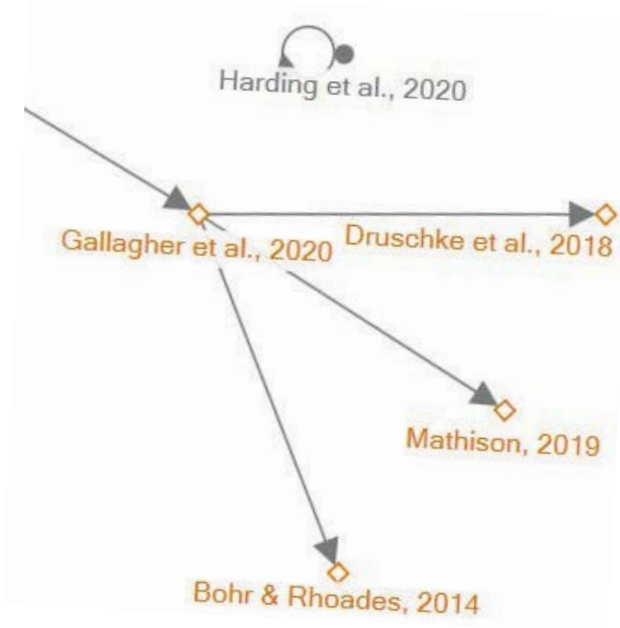

Figure 6: Detail of cluster 5, STEM Faculty Development. Publications include: Bohr & Rhoades, 2014; Druschke et al., 2018; Mathison, 2019; Gallagher et al., 2020; Harding et al., 2020, also thematically associated.

Clusters 5 and 6 are visibly less integrated than the first four clusters. Publications in cluster 5 focus on collaborations with STEM faculty working on assignment design and curricular development. Two publications (Druschke et al., 2018; Gallagher et al., 2020) prioritize programmatic descriptions, the former a National Science Foundation grant to support graduate STEM writers, the latter a faculty development program based on a needs analysis of student writing in engineering. Bohr and Rhodes (2014), although not specifically about STEM faculty development, do discuss the challenges involved when collaborating with disciplinary faculty to create a common vocabulary for describing writing across the curriculum. WAC specialists, often trained in humanistic and social scientific inquiry, may face challenges when partnering with STEM colleagues, hence Mathison (2019)[1] and her colleagues' introduction of the term *sojourning* and Harding et al.'s (2020) use of *wayfinding* to frame cross-disciplinary STEM faculty development. These two concepts are ethical and relational frames for WAC work, suggesting a potential thematic connection to cluster 4. Mathison (2019) and her colleagues use *sojourning* as a metaphor for addressing the experiences of writing specialists working in a STEM discipline with its own "base-cultural perspective" (p. 34); rather than "construct difference as a lack of knowing," they aim for "an awareness and respect for difference" that can facilitate "collaboration and power equity" across disciplinary-cultural difference (pp. 34-35). Harding et al. (2020) use *wayfinding* to describe the "messiness" involved in interdisciplinary collaborations and the dialogic processes through which "multiple experts from different fields" can "collaborate with each other" fruitfully by "bridg[ing] various considerations and possible tensions" (p. 339). Alongside cluster 4 and, to an extent, cluster 2, these two publications suggest an emerging ethos for WAC faculty developers that is open to relationship, contingency, and mutual learning, which is especially important in STEM disciplines where ways of knowing, doing, and writing (Carter, 2007) may be markedly different from those of writing studies.

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1. Although Mathison's (2019) publication is an edited collection, it contains a single reference list for the entire book. Therefore, I include it in this study as a single publication, rather than separating multiple publications within the collection.

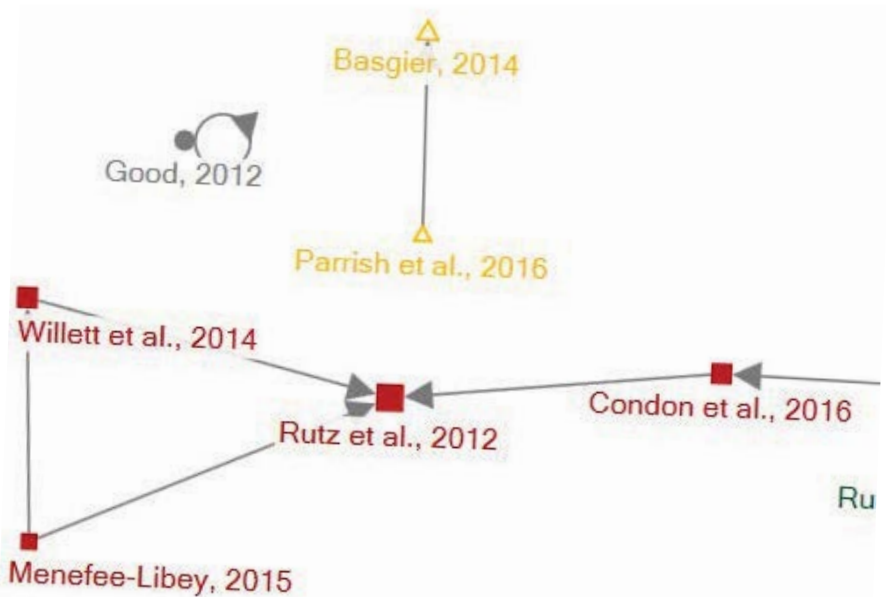*Cluster 6 (Red): Faculty Development and Student Success*

Figure 7: Detail of cluster 6: Faculty Development and Student Success. Publications include: Publications: Rutz et al., 2012; Willett et al., 2014; Menefee-Libey, 2015; Condon et al., 2016; Good, 2012 and Parrish et al., 2016, also thematically associated; Basgier, 2014, linked via citation.

Like cluster 5, cluster 6 stands somewhat apart from the central clusters in the network visualization. The publications in cluster 6 largely center on, or cite, the Spencer-Foundation-funded Tracer Project at Washington State University and Carleton College. Articulated most fully by Condon et al. (2016), the Tracer Project sought to identify a direct connection between faculty development and student success, using the two institutions' WAC programs as test sites. I will discuss the Tracer Project and its implications for the future of WAC faculty development scholarship in the conclusion.

Much of the data from the Tracer Project centers on portfolio assessments at both institutions, hence why I include the otherwise disconnected Good (2012) and Parrish et al., (2016), both of which identify WAC assessment as a form of faculty development. However, the question of the connection between WAC faculty development and student success seems to be mostly assumed in the larger body of scholarship. I will offer more nuanced consideration of how WAC scholar-administrators might define and study student success in the following section.

Discussion and Conclusion

These results offer a mixed answer to the question of whether WAC experts are engaged in a concerted scholarly conversation about faculty development. On the one hand, these 46 publications averaged just 1.65 cross-references (1.48, excluding books), with a median of one, representing less than four percent of the entire set of citations. These numbers suggest that faculty development per se is not a central area of inquiry in the field. How do we define faculty development? Is it even a term we ought to use (CCL, for example, being another option)? What pedagogies do we bring to faculty development, and how do those pedagogies intersect with, and differ from, the ones we encourage our colleagues to use with their students? Rather than address such questions, other topics appear to intervene and take precedence. On the other hand, the vertices in Figure 1 appear to be generally well connected to one another, especially the first four clusters, suggesting an active, integrated conversation. As we consider the future of WAC, it is worth considering which clusters, and which themes, warrant a more centralized place in our scholarship.

As it stands, the last decade has witnessed ample scholarship on WAC specialists' own ethical and relational practices when working with colleagues across disciplines. Such relationships should involve mutual respect, appreciation for epistemological and pedagogical differences, and collective, negotiated learning in response to faculty needs. They should also mobilize the intellectual work of teaching, inviting faculty to (re)conceptualize their pedagogies in the context of their disciplinary and professional epistemologies. Likewise, we have substantial evidence that effective assignments prioritize meaning-making tasks arising out of authentic or realistic rhetorical situations that encourage students to make choices (of topic, method, genre, or mode) and engage substantively in inquiry, argument, or action. I do not want to suggest that we should abandon these scholarly areas altogether in the face of the contraction of higher education. WAC specialists will certainly need to learn how to leverage respect, difference, and negotiation when working not only with faculty, but also with university administrators for whom nuanced understanding of our programs, practices, and principles might be a luxury. Likewise, research on effective assignment design will no doubt continue to bear fruit as our collective communicative contexts continue to evolve. At the same time, WAC specialists should consider where to direct our scholarly faculty development efforts.

University administrators with a bottom-line mentality are likely to ask the question framing cluster 6: does WAC faculty development focused on curriculum and pedagogy lead to student success? Why else invest resources in it? The Tracer Project's answer was that "the connection is elusive but detectible," dependent upon a complex interplay among faculty development program structures, research methods, and assessment tools (Willet et al., 2014, p. 20). This complexity may be one reason WAC

scholars have not elaborated on the Tracer Project's research: their study required substantial data collection and resources unavailable to many WAC programs. University of Washington and Carelton College both had long-standing, well-resourced WAC programs with healthy reputations on their respective campuses. They had a wealth of data readily at hand, such as faculty artifacts (syllabi and assignment sheets), WAC workshop satisfaction surveys, and the results of portfolio assessments that served as institutionally recognized measures of student success (Willet et al., 2014, p. 35). Taken together, this available data allowed the Tracer Project research team to secure a Spencer Foundation grant, and thus to extend their inquiry. Most WAC scholar-administrators do not have such extensive resources ready at hand. Furthermore, faculty who participate in WAC initiatives integrate their learning over many years, even a career (see Walvoord et al., 1997), complicating our ability to identify a direct connection between faculty development and student success.

Still, we ignore the question at our peril. We can seek new avenues of inquiry into the question faculty development's impact on student success via the other thematic clusters in the recent WAC faculty development literature. For example, bearing in mind the long-term integration of faculty development learning cited above, researchers might examine the extent to which students acquire threshold concepts for writing in the disciplines after faculty have (re)articulated their own. Such an inquiry would integrate cluster 6 more intimately with clusters 2 and 3. Conversely, recent scholarship on diversity, equity, inclusion, and justice may invite us to reconsider altogether our definition of student success, which could integrate this cluster more with cluster 1. As Poe (2013) suggests, meaningful writing assignments that address race must be grounded in local contexts and responsive to specific students' backgrounds and experiences. In other words, our definitions of "student success" should account for students' racialized identities—and I would add other salient identities prevalent in local institutional contexts. Following Cox (2014), we might also redefine student success in terms of students' ability "to draw on their multiple languages, cultures, literacy experiences, and areas of rhetorical knowledge as resources" (p. 316)—an asset-based understanding of success that expands beyond narrow (and often oppressive) definitions of effective writing.

Other areas of recent inquiry in WAC scholarship might also be reframed or extended through the faculty development and student success lens, such as Scott's (2015) scholarship on faculty's commenting practices, which appears to be an under-studied area in this body of scholarship. Taking a cue from Cox (2014), WAC scholars might investigate the extent to which faculty practice asset-based commenting after WAC workshops, and the resulting revisions L2 writers make to their drafts. Also under-studied is the labor of WAC faculty development, despite LaFrance's (2015) call; in addition to considering "standards of compensation for faculty development" (p. A15), WAC scholars might ask whether, and how, more equitable labor

conditions for faculty may lead to greater student success. Likewise, as Kester et al. (2016) suggest, WAC faculty development at diverse institution types appears to be under-studied. Potential comparative research of WAC initiatives across two-year colleges, historically Black colleges and universities, and other minority-serving institutions may help us better understand the role race and socioeconomic class play as contextual factors informing faculty development and defining student success. And because STEM education and research are likely to continue as priorities for many institutions, WAC scholars might investigate how our disciplinary sojourns lead to more effective writing pedagogy, and, ultimately, more successful students—with definitions of student success negotiated relationally with STEM experts.

We can infer answers to some questions about faculty development and student success from scholarship that already exists. For example, if we teach principles of effective assignment design to faculty, and faculty implement them, then students ought to find the assignment meaningful. Via such assignments, students ought to develop their rhetorical acumen and integrate newfound knowledge, skills, and abilities with their emergent professional identities. They ought to succeed in securing the kinds of jobs they want, enrolling in the graduate programs they want, or leading the kinds of community organizations they want—post-graduation placement being one of many potential definitions of student success. But without a concerted scholarly enterprise, such answers are likely to remain inferential, so many "oughts" instead of an "is." The Tracer Project has shown that a holy grail study is unlikely to describe the link between faculty development and student success clearly and definitively. Therefore, WAC scholars need to build an integrated body of RAD research that elaborates, extends, and refines our knowledge of the link over time, leading to a clearer understand of how, exactly, our faculty development efforts lead to better teaching, better learning, and, ultimately, more successful students.

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