

Professionalization and the forgotten system: Observed practices and perceptions at the intersection of informal and formal faculty development

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Abstract

The professionalization of disciplines often leads to formalization of disciplinary training. As professionalization occurs, informal training roles are typically supplanted as the normative method of training but can continue to exist in parallel with formal methods. As in other fields, the ongoing professionalization of faculty development has created significant formalization of training. While the positive impact of formalization is clear in many areas of faculty development, little is known about how formalization affected the informal roles, activities, and perceptions that served to train faculty. This exploratory study reports on data gathered at a workshop designed to document and share stories of ongoing informal faculty development by engineering faculty. The results show that participants struggle to articulate their role in faculty development independent of the systems, programs, and individuals that make up the formalized training systems. Participants were unsure what to do, what they were allowed to do, and whether to label such work *faculty development*. They saw importance in informal faculty development work but seemed to feel a lack of agency to name such work as faculty development because it exists

outside of the professionalized and formalized sphere of modern faculty development. The results suggest a paradox: faculty without a formal role in faculty development are still interested in aiding their peers' growth informally but are unclear on their role without guidance from the formal system, which inherently reinforces the role of the formal system as the arbiters of faculty development.

Keywords: professionalization, externalities, agency, structure, faculty development

Over several decades, efforts at faculty development have undergone a heavy shift, primarily due to concerns about teaching effectiveness (Gaff & Simpson, 1994; Ouellett, 2010; Steinert, 2011). This shift is characterized by increasingly structured work performed by those trained for and engaged with the discipline of faculty development (Lewis, 1996; Ouellett, 2010). Histories of faculty development often begin with efforts to structure and centralize traditionally informal and relational faculty development work (Gaff & Simpson, 1994; Ouellett, 2010). On many campuses, such work is now the responsibility of specific individuals (e.g., vice provosts) and units (e.g., centers for teaching and learning [CTLs]) who ensure that faculty development needs and goals are appropriately served. As the shift toward structure has continued, there has been little reflection on the previous methods of faculty development and little exploration of how the shift has affected individual faculty members' perceptions of their role in it (Buhl, 1982; Steinert, 2011).

We refer to faculty development as shifting from an *informal* system, in which centralized structure or control was atypical, to a *formal* system, in which centralized control and organization are characteristic features. Formalization does not necessarily mean faculty are excluded from the organization of training; typically, their voices continue to be

heard through faculty oversight boards and/or training run by faculty members themselves. However, it is also important to understand how increased formalization affects faculty's perception of their role in faculty development. To set up our study, we review the literature on the relationship between professionalization, training, and formalization both inside and outside of faculty development. We then review the uses of both formal and informal mentoring as a tool in faculty development work. This literature will contextualize our study of workshop participants' actions, needs, and perceptions toward performing informal faculty development work.

Background

Professionalization, Training, and Formalization

The formalization and professionalization of faculty development have followed a process that is far from unique. A defining characteristic of professional disciplines is the organized training of both new members and those responsible for that training (Brereton, 1961; Harrison, 1994). Prior to professionalization, disciplines' dominant methods of sharing knowledge, skills, and heuristics were informal, relational, and unstructured. Informal systems of training are functional but susceptible to significant inequities, systematic variability, and inefficiencies (Gerber, 2010; Lee, 1995). Addressing those concerns frequently resulted in a transition to a formal and transactional approach to training. Such a transition is typically identifiable through new structures, especially assessment and documentation. From medicine to management consulting, studies of professionalization show the positive effects of formalizing training, especially in disciplines that support other professions, such as nursing (Teran & Webb, 2016) or human resources (Madison et al., 2018). Formalization of professional training allows individuals to grow while also fulfilling desires for oversight, accountability, uniformity, and efficiency.

However, formalization also inherently changes, and centralizes, jurisdiction over training in a discipline and commonly causes informal training to be discounted or ignored. One characteristic is that research on training focuses heavily on formal systems and structures because researchers, research, and the formalization process are intertwined (Steinert, 2010a). The resulting work struggles to make informal systems of training visible, which has the effect of delegitimizing them (Scott, 1998). Furthermore, the process of formalization implicitly guides a slow shift in how informal practices are used, changed, and even forgotten (Madison et al., 2018). The result is that informal practices are rarely studied, and when they are, such study typically seeks to identify opportunities for further formalization (Scott, 1998; Steinert, 2010a).

As mentioned, formalization and professionalization often create positive outcomes, but they inherently create externalities. Externalities are unforeseen effects that result from changing systems (Buchanan & Stubblebine, 1962). They are not inherently bad, but they can result in unintended consequences. For example, corporate research and development (R&D) pursued to increase profit creates a positive externality of the creation of new knowledge for society. However, externalities can also be negative; for example, the proliferation of electric vehicles can overtax electrical grids built on prior assumptions of gas-powered cars.

Externalities are inherently created when any system is changed. By identifying the externalities created through the professionalization and formalization of training, the field can address unexpected consequences and improve overall structures and methods for the training.

Informal and Formal Mentoring in Faculty Development

Informal faculty mentoring predates efforts to formalize faculty development and is the basis for much of the modern, programmatic mentoring work (Ouellett, 2010; Sorcinelli et al., 2006; Steinert, 2010a). Before formalized efforts emerged, ad hoc groups often formed based

on shared interests without the need for resources or centralized support (Whitcomb, 1986). Often taking the form of one-on-one conversations, such mentoring could be situated within the broader labels of collegiality and belonging, as opposed to specific training (Sorcinelli, 1985; Turner & Boice, 1987). Spontaneous mentoring relationships were often helpful to new faculty (Turner & Boice, 1987), with results showing that those who found mentors were more successful on average. However, researchers also noted that measurable differences in success were predicated on sustained mentorship (Boice, 1991, 1992). Furthermore, reliance on informal mentoring has a high potential to entrench existing issues of inequity, sexism, and racism (Chesney-Lind et al., 2006; Davis et al., 2011–2012; Griffin & Reddick, 2011; Stockdill & Danico, 2012). Seeking to address issues with informal mentoring, efforts to formalize mentoring practices are now a common part of many faculty development programs.

These formalized mentoring programs not only pair mentors and mentees but also often include an assessment of mentoring efficacy. Structure and assessment are two key characteristics of formalized training (Steinert, 2010a). Early studies of the assessment data began with defenses of formalization. Morzinski et al. (1994) noted that “unlike traditional mentoring, formal mentoring is managed and sanctioned by an organization [and] . . . studies of formal mentoring have shown benefits comparable to those found from informal mentoring” (pp. 267–268). In the present day, modern mentoring literature does not ask whether mentoring should develop formally or informally; instead, it assumes a switch to structured and formalized mentoring and looks at how such programs should be managed (e.g., Beane-Katner, 2014; Boice, 1992; Cordie et al., 2020; Cox, 1997). In short, insights that advanced mentoring practices tended to result from and lead to more structure, more training, and more oversight.

Some research in the early days of formalized mentoring highlighted how the change from informal to formal can introduce new challenges (e.g., Sorcinelli, 1985). As far back as 1994, Harnish and

Wild identified documentation of participation, a characteristic of formalization, as a source of resistance to participation in formalized mentoring. The researchers identified the role of administration and the relationship between mentoring and evaluation as key considerations when formalizing “naturally occurring” (Harnish & Wild, 1994, p. 198) mentoring efforts. In the 1990s, mentoring was the most documented faculty development practice in a survey of CTLs’ documentation practices, alongside a discussion of the pros, cons, and uses of documentation (Chism & Szabó, 1996). In contrast, much of the modern-day record presumes the creation, existence, and role of documentation in faculty development as normative practice (e.g., Lovett & Hershock, 2020; Moore & Ward, 2008). The shift toward documentation as an expected norm is characteristic of the formalization of training structures that accompany professionalization (Scott, 1998; Steinert, 2010a).

Purpose of This Study

In this article, we look for externalities created by the formalization of faculty development as a field, broadening the concerns discussed in the shift from informal to formal mentoring. Specifically, we focus on how the increasingly formalized nature of faculty development as an independent field may have affected individual faculty members’ perceptions of their agency and role in taking any action (e.g., mentoring, resource sharing, advocating) to support their peers’ professional growth. As informal mentoring has been subsumed into the formal system, understanding faculty members’ perceptions of their roles in modern faculty development can enable new forms of engagement and participation. The following research question guides our study:

Given the formalized nature of modern faculty development, what externalities shape the roles of faculty who are not formal faculty developers in helping their peers’ professional development?

Study

To address our research question, we carried out a qualitative analysis of a workshop on informal faculty development methods. The workshop was designed to explore types of informal faculty development work but instead surfaced externalities of professionalization and the relationship between the informal and formal systems. Based on this unexpected outcome, we saw significant value in asking questions about the influence of professionalization on the field. This section describes the workshop, the data collected, and our analysis process.

Workshop

We developed and facilitated a 1.5-hour workshop at the 2019 American Society for Engineering Education (ASEE) Annual Conference & Exposition that was concurrent with other conference programming. The workshop, formally titled “Guerilla Faculty Development: Roles, Methods, Skills and Needs for Informal Faculty Development in Engineering Departments,” was listed as a special session in the Faculty Development Division. The goal of the workshop was to identify ways participants (faculty, administrators, graduate students, and others interested in engineering education) individually contribute to faculty development and to discuss the role and potential directions of informal faculty development work. Details of the workshop appear in Appendix A.

Twenty-eight people attended all or parts of the workshop. Participants identified their professional positions, from a list of options, as administrator (8), non-tenure-track faculty (5), tenure-track faculty (7), staff (5), and other (3), with some participants selecting two options. The percentage of participants’ roles that they classified as faculty development work ranged from 5% to 100% and was effectively bimodal (eight participants > 90%, 10 participants < 20%). Finally, three participants identified themselves as graduate students, three as early career, 14 as midcareer, and three as late career.

Data Collected

Two sources of data resulting from the workshop were used for this study. The first was sticky notes from five prompts created and organized by participants during the third part of the workshop, the *gallery walk*. The second source was a post-workshop survey completed by 24 of 28 participants, with Questions 4, 5, and 6 being used in analysis. The details of the prompts from both data sources are described in Appendix B. Two other sources of information, the facilitators' observations and the workshop materials, were also used to triangulate the participant-created data. The institutional review board determined that the study did not meet the definition of human subjects research and that review was not necessary.

Analytic Process

We (the three authors, who were also the workshop facilitators) analyzed each data source using a thematic analysis methodology (Braun & Clarke, 2006). We selected thematic analysis over other methodologies for several reasons. The decision to study the data, which we originally intended only to curate and share with participants, occurred post hoc. That restricted our ability to achieve the data saturation necessary for techniques like grounded theory or phenomenology (Charmaz, 2008). Similarly, simultaneous data collection and analysis, a fundamental characteristic of grounded theory, was not possible in our study. Instead, we sought to use our analysis to identify initial themes and opportunities for later studies that could provide a more rigorous explanation of perceptions of roles in faculty development, which can frame future theory building and adoption.

The two data sources were analyzed separately using an identical process. Analysis resulted in a set of named themes and subthemes (which we call *groups*), their descriptions, and representative quotes. The findings were assessed for internal consistency and external coherence throughout the analysis process, as suggested in the literature

(Aronson, 1995). Two authors individually coded each data source, identifying potential groups, a draft group description, and representative quotations for that single data source. After independent coding, the authors compared and discussed their results until a jointly acceptable understanding was reached. Finally, they presented their results to the third author, who had not been actively engaged in the analysis of that data source, to further assess and refine the groupings until all authors were satisfied with the accuracy and structure (Aronson, 1995; Braun & Clarke, 2006). As part of the refinement process, the authors compared their results not only against one another but also against other sources, including literature and their observations from workshop facilitation, to ensure coherence and fidelity.

Because we take on both the roles of researcher and facilitator, it is useful to expand on our research paradigm and our positionality with respect to the data and analysis. All three of the authors are academic faculty members in engineering programs. Todd Fernandez is a lecturer in biomedical engineering at a large, public R1 university whose background is in engineering education research and mechanical engineering. He is part of a departmental team responsible for faculty teaching and learning development. The team provides both formal programming (e.g., learning lunches and book clubs) as well as informal interactions (e.g., hallway and email conversations) to the more than 70 faculty. Janie Brennan is a senior lecturer in chemical engineering at a medium-sized, private R1 university. She is the director of the department's undergraduate programs and leads informal and small formal interactions within the department to encourage faculty development with regard to teaching. Joe Tranquillo is a full professor in biomedical engineering and the Associate Provost for Transformative Teaching and Learning (previously Director of Teaching and Learning) at a small, private, teaching-focused university. The three authors' varying levels of formal and informal responsibilities for faculty development in their universities and departments present plausible sources of bias as well as provide unique perspectives and prior experiences that may equally enable deeper insight.

Results

We describe the results of the two data sources independently, starting with the gallery walk. The ordering is meant to align to the participants' experience—the survey data was collected after participants participated in the gallery walk activity.

Responses From Gallery Walk Activity

This section describes the groups from each prompt and a set of overarching themes found across the prompts. Each set of groups is based on participant responses to a single prompt from the gallery walk activity. As part of the activity, participants organized their responses into groups.¹ In the results, we focused on interpreting the organized groups of sticky notes as representative of the meaning of individual sticky notes. The reference to groups rather than themes is meant to separate our analysis of the gallery walk prompts from themes across multiple prompts (i.e., the overarching themes) as well as denote the role the participants played in establishing those groups.

Groups Found in Prompt Responses

The first prompt was "What types of guerilla faculty development have you performed for others?" Participants listed 24 unique activities, with several participants indicating they had performed similar work (e.g., "X2" or "me too"). We categorized those 24 unique activities into four groups, listed in Table 1.

¹ For example, for the second prompt (about resources used), participants created approximately 30 sticky notes. Then, as a later part of the gallery walk, several participants organized four sticky notes—(1) stipends, (2) food, (3) food, and (4) informal lunches with no set agenda—together and made a label "incentives" for the group. We treated participants' group labels as descriptive and the underlying notes as representative.

Table 1. Gallery Walk Groups: Types of Informal Faculty Development Performed

Groups (description)	Examples
Advocating Amplification of the voices, needs, and actions of other faculty members—including promoting recognition of others	<ul style="list-style-type: none"> • Nominating faculty for teaching awards • Advocating for the creation of a center for teaching and learning
Building a network Building personal connections among like-minded (or dislike-minded) faculty members toward a goal of collaborative, peer-driven, faculty development	<ul style="list-style-type: none"> • Have lunch together • Start talking about classroom things with other instructors even if they don't like it
Sharing concrete resources Identifying, filtering, transmitting, and giving credence to informational resources for other faculty members	<ul style="list-style-type: none"> • Sharing assignments or course materials • Sharing book recommendations
Value through participation and leadership Role-modeling participation in programs and activities from formal systems	<ul style="list-style-type: none"> • Lead communities of practice • Coaching/class observation sessions

Notable in Table 1 are the diverse roles and actions that participants placed under the umbrella of faculty development. The roles and actions ranged from socially focused ways of building community to activities focused on specific skill-building. In some activities, the participants described *active* roles: as an organizer, a facilitator, a mentor, or an advocate in addition to the role of knowledge-provider. In other activities, they described *passive* roles in which they lent credibility or provided direction to formal resources. Aligned with those roles, the actions were bidirectional—giving information to others as well as taking information from them. Relational aspects of informal faculty development were consistent throughout, especially in the *building a network* group.

The second prompt asked “What resources/tools do you currently use when you have done guerilla faculty development?” In total, participants identified 30 unique resources in four groups (Table 2). We see a notable focus in the responses on the interaction between resources they use and formal faculty development systems. Several participants indicated much of their informal role in faculty development work was directing individuals toward formal systems and their

Table 2. Gallery Walk Groups: Types of Resources Used in Informal Faculty Development

Groups (description)	Examples
Best practices Information or activities that participants know and can share with other faculty members to drive change or targeted development	<ul style="list-style-type: none"> • SoTL or DBER articles • Websites—especially other CTLs
Formal opportunities Identification of formal faculty development opportunities and directing other faculty members to those opportunities	<ul style="list-style-type: none"> • Teaching and learning workshops • Formal faculty development programs
Incentives Resources participants use to support time, change, or participation in faculty development activities	<ul style="list-style-type: none"> • Stipends • Food
Networks & connections Ways to leverage others involved in faculty development	<ul style="list-style-type: none"> • ASEE student chapter • Vocal support of CTL to colleagues and administrators

Note. Scholarship of Teaching and Learning (SoTL), Discipline Based Education Research (DBER), American Society for Engineering Education (ASEE), Center for Teaching & Learning (CTL).

resources. Echoing the groups from the first prompt, we again see that network-building and relationships are a critical informal faculty development activity.

The third prompt asked “What concrete resources do you need that would help improve your guerilla faculty development work?” This prompt was intended to be in parallel with the previous prompt by focusing on what resources participants *need* in addition to those they *use*. The sticky notes created by participants identified 21 unique resources, with several appearing repeatedly (e.g., “time”). The four groups resulting from our analysis (shown in Table 3) are notable because they echo the resources participants used (Table 2). Although we are not able to identify who wrote which sticky note, we take the range of responses to indicate that knowledge about informal faculty development is not universally known, especially given the references to formal systems. Furthermore, requests for formal recognition and other forms of validation of informal work by formal systems appeared in this prompt. We see this as a key finding that we return to in the discussion.

Table 3. Gallery Walk Groups: Types of Resources Needed in Informal Faculty Development

Groups (description)	Examples
Formality Direction, encouragement, or acknowledgment from leaders that gives credibility to informal work	<ul style="list-style-type: none"> • Included in one's job description • A clear incentive structure
Knowledge New information participants can use, including items that they could convey to others, information about those others, and best practices for doing so	<ul style="list-style-type: none"> • Discipline-specific teaching resources • Expert advice/faculty "roadmap"
Personal guidance Training and best practices participants used to develop their skills in informal faculty development	<ul style="list-style-type: none"> • Mentoring • Informal what are you doing moments
Tangible resources General resources that can be used to either initiate, support, or solidify changes (<i>i.e.</i> , money, space, time)	<ul style="list-style-type: none"> • Time • Better-arranged classroom space

The final prompt asked about ways that formal faculty development channels could aid informal faculty development work. Participants created 15 unique responses and 18 responses overall, the lowest of any prompt. Again, there were four general groups, which are summarized in Table 4.

We found the responses and groups to the last prompt particularly interesting for two reasons. The first reason was the form of the responses. This prompt received the fewest responses despite all participants contributing to all prompts. However, the responses were on average longer in form, often taking the form of sentences as opposed to the single word responses that typified the responses to other prompts (e.g., "Better timing for offering faculty development programs (not during busy semesters)" and "Names of faculty interested in helping with [blank]"). The second observation was that the responses to this prompt were broader; it was the only prompt without repeats or notations of agreement from multiple participants. The responses' diversity included both top-down and bottom-up approaches to interaction between formal and informal faculty development systems.

Table 4. Gallery Walk Groups: Ways That Formal Faculty Development Can Help Informal Faculty Development

Groups (description)	Examples
Coordinate & foster community Formal systems could use their networks to foster a sense of community among all faculty to foster informal interaction and development.	<ul style="list-style-type: none"> • Advisory boards or liaisons in academic departments connecting with CTL • Foster “looser” & more emergent programs
Leadership & strategic credibility Formal systems could highlight faculty development work done by informal peers, adding credibility to their activities and fostering further action.	<ul style="list-style-type: none"> • Advocacy • Provide credibility
Provide concrete resources Formal faculty development systems could use the resources that individuals do not have access to.	<ul style="list-style-type: none"> • Funding from department or provost • Formal programs and communities with CTL
Share & curate knowledge Formal systems could work to share information specifically with informal faculty developers that they can then employ and further disseminate.	<ul style="list-style-type: none"> • Getting continual and contemporary education research to faculty • Change the approach for using tech in classes

Overarching Themes

Reflecting across all gallery walk prompts, we saw four overarching themes in the groups: resources, formal-informal system interaction, information, and interaction with peers and community (Figure 1). In general, the groups from each prompt distributed across multiple broader themes.

In particular, ideas that fell under the formal/informal interactions theme highlight the role of credibility-building. Informal faculty developers often took on a role of advocating to or for formal systems—using their voices as a source of legitimacy. In contrast, participants saw the role of formal systems as creating opportunities for participation or providing credibility and structure—that is, extending their legitimacy to the activities of others. In fairness, the prompts we created may have drawn out specific answers; two of the prompts addressed connections between formal and informal systems directly—one asked about resources needed (without mentioning formal systems),

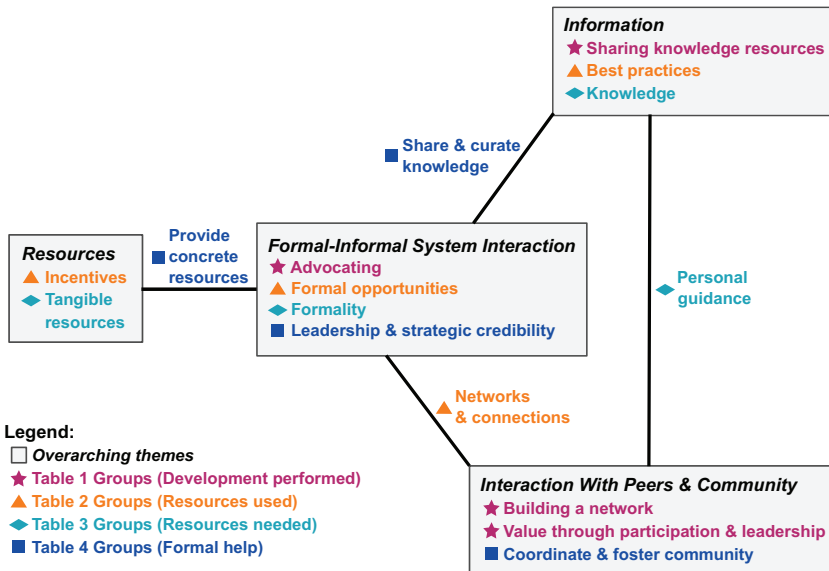


Figure 1. Map of overarching themes from the gallery walk responses (indicated by gray boxes). The map organizes and connects groups from the gallery walk prompts (Tables 1–4). The groups previously related to each prompt are identified by color and symbol.

and one asked about how formal structures could support them. However, the connection through legitimacy was apparent not only in this data set but also in the second data set (described below) and through conversations we engaged in as facilitators.

We made several other observations from how groups distributed across the overarching themes. First, the distribution of the groups suggests that participants may believe that enabling resources must be provided by formal systems, as mentions of resources are localized to connections to formal systems. Finally, only one theme (interaction with peers and community) contained two groups from the same prompt (types of informal development work performed). These two groups, “building and network” and “value through participation and leadership,” seem to indicate that peer interactions are critical to informal faculty development but also that participants’ current efforts

toward their peers' development have limited interaction with formal systems.

Survey Responses

Through the analysis of the post-workshop survey responses, three major groups of comments were found. Counts of occurrences of each group, along with sample quotations, appear in Table 5.

Table 5. Thematic Analysis Results From Post-Workshop Survey Responses ($N_{total} = 23$)

Group (count)	Sample quotations
Recognition of informal faculty development work as faculty development work (6)	<p>What did you find valuable about this session?</p> <ul style="list-style-type: none"> • That other people see value and reward in doing things under the radar <p>What do you see as the next steps from this session?</p> <ul style="list-style-type: none"> • For me, just being more conscious of this type of work • Find a way for administrators to see, value, reward faculty improving their faculties in non-formal ways
Finding value from engaging in informal faculty development work (14)	<p>What did you find valuable about this session?</p> <ul style="list-style-type: none"> • Group interaction, feedback & advice • The idea sharing/wisdom from all participants <p>Is there anything or useful that you could imagine this group working on?</p> <ul style="list-style-type: none"> • Something like @Ph.D.ession or @TheSocScientist. Connect us together to share ideas & stories • Opportunities to communicate/share with group in the future
Top-down training for a bottom-up process (17)	<p>What do you see as the next steps from this session?</p> <ul style="list-style-type: none"> • More sessions like this and attention to this type of issues in future ASEE local and national meetings • Start to put together a "Guerillas Starter Pack," info, ways to bring this to department heads, info gleaned from these discussions <p>Is there anything or useful that you could imagine this group working on?</p> <ul style="list-style-type: none"> • Resources page! • Virtual community and resources • Idea bank for people hosting teaching communities of practice

Note. For each group, instances of that group, as well as sample quotations (shown as responses to the survey questions), are reported.

The first group was about increased participant awareness of the existence and value of informal faculty development through participation in the workshop. Six quotations (across four participants) reflected this idea. The quotations showed that some participants had not previously considered some of their actions to be faculty development and that they wished such labor and actions would be valued more by administration.

The second group showed that workshop participants saw informal development activities as valuable, which may be linked to their self-selection into the workshop. However, many noted in the post-workshop survey that they had never considered this type of work as faculty development and had attended to learn more about what informal faculty development work was. Over half of survey participants (12) wrote something related to this theme, resulting in 14 total quotations. The quotations revealed participants' appreciation for the storytelling and idea sharing done as part of the workshop, as well as suggestions for other future interactions around informal faculty development. From the authors' perspective, such unstructured interactions are hallmarks of informal faculty development, so this group seems to indicate that informal faculty development activities are valuable.

The final group that emerged from the analysis was clearly discernible but somewhat more difficult to describe. In essence, many of the participant responses centered on requests for resources to help develop their capacity to perform informal faculty development (e.g., offer *formal* workshops, resource pages, and idea banks on *informal* faculty development). Out of 23 survey respondents, 13 had a survey response related to this group, resulting in 17 total related quotations (many of which included exclamation points or other indications of excitement). Out of those 17 quotations, nine specifically cited a virtual community or resources page, although it should be noted that both of those were offered as suggestions in the final survey question.

We see the results from the survey as particularly interesting because they presented an opportunity for participants to reflect on what occurred during the gallery walk. The key thread connecting all

three groups can be summarized as follows: Individual faculty can identify peer-to-peer bottom-up interactions that aid development as a form of faculty development, but the perception of those interactions as a form of faculty development did not occur without prompting. When prompted, individual faculty did see value in such informal faculty development work. However, participants felt a need for (potentially formalized) training on how to do this type of development.

Discussion

We use the discussion to reflect on the paradox our results present for the field and suggest hypotheses to guide future work. To reiterate, our research question emerged from our experience facilitating our workshop, and it focused on identifying externalities of the formalization of faculty development. The discussion of how the results fit into a larger perspective on faculty development is difficult to separate from the planned goals for the workshop and our experiences as facilitators. Furthermore, because of the inherent paradox of participants looking for formal training and validation to do informal work, we see suggestions for the field as potentially premature.

In the discussion we address three key points. First, participants often did not label efforts they undertook informally (i.e., outside of direction of the formal system) as a form of faculty development labor, scholarly work, or even service. Second, the lack of self-labeling may stem from their perception of increasing formalization as disrupting a sense of individual faculty's role in faculty development. Third, as a result, there may be a risk that some motivated faculty no longer feel empowered to act toward their peers' development unless explicitly sanctioned and trained by formal systems. We hypothesize that our findings are an externality of the professionalization of faculty development described in the introduction. That externality is that the emergence of formal systems for training faculty and professionalized faculty developers can implicitly bound who is perceived as "allowed"

to do faculty development work. Our data cannot prove causal links between those points, but it can support a hypothesis that we develop, situated in literature, and linked to future work.

What Is Informal Faculty Development?

During the workshop, we observed that many participants saw work they did to support colleagues' growth as separate from faculty development. Instead of faculty development, such work was just something to be done. This conception was clear in participants' reactions, comments, and questions even before participating in the gallery walk. That participants saw novelty and importance in naming informal efforts as faculty development work was apparent throughout the data and in the authors' interactions with participants.

Participants sought validity for their activities from direction and acknowledgment of faculty development leaders (Tables 2 and 4). In the latter, the formal system could provide credibility and encouragement. For example, two sticky notes suggested that formal systems could help by "leveraging communities supported by CTLs" and by "foster[ing] 'looser' and more emergent programs." The perception was also apparent in the post-workshop survey (Table 5). There, participants saw a need to change their perspective to be "more conscious of this type of work" and "see value and reward [of] doing things under the radar." Our observations during the workshop suggest that perspective is likely shared by a larger percentage of attendees. We were not surprised to see the centrality of naming informal work as faculty development emerge after our experience conducting the workshop, but it was not our intent when designing it.

While it should be supported with further work, hesitancy in naming work to support peers' growth as faculty development represents an example of a negative externality of efforts to improve faculty development because it removes one source of labor. The externality's impact is one part of a paradox: Participants could identify actions taken in support of another faculty's growth but did not always feel

empowered to label it as faculty development. That reaction seems to parallel participants' consistent identification of legitimizing actions by formal systems as important.

Efforts to create official, trackable, and comparable evidence for purposes that require documentation (e.g., tenure reviews) are inseparable from faculty development's formalization and professionalization (Gaff & Simpson, 1994; Ouellett, 2010; Sorcinelli et al., 2006). Some of the informal activities participants described seem difficult to quantify or systematically track, possibly making them difficult to reward or acknowledge within existing paradigms (Lewis, 1996). A lack of tracking also creates a tension with efforts toward more rigorous evaluation (Bergquist & Phillips, 1975; Steinert, 2010b). If informal work does not create such documentation, it seems unsurprising that faculty would be unsure of their role and seek to validate actions via formal systems of faculty development. That is because such documentation gives legibility and, by extension, the legitimacy of faculty development work (Scott, 1998). While documentation is not present in our data directly, the importance of formality and the officialdom that accompanies it is clear (Tables 2 and 3). If faculty feel the formal system has a monopoly on documentation that is necessary for work to be legitimate "faculty development work," than hesitancy to act without a clear mandate or permission—that is, documentation—seems rational and reasonable.

Informal-Formal Connection

Participants' need for connections to formal systems to validate informal work is the second part of the paradox. Participants seemed to perceive value in informal development but to struggle with the idea of acting independently of formal systems. That is, participants struggled with how to validate and define their role without the support, guidance, or approval of formal faculty development systems.

When asked during the gallery walk about the informal work they had performed, participants repeatedly listed activities sponsored by, performed by, or emergent from formal systems (Table 1). Within those

responses, participation was often listed as one aspect of performing faculty development for others. With facilitator prompting, the activities mentioned expanded to include those performed directly by participants with faculty peers (e.g., sharing materials; Table 1). However, many of those *still* suggest a hierarchical relationship with formal systems (e.g., pointing people toward formal opportunities; Table 2). We suggest that participants' surprise in naming informal activities as faculty development work fits well with their perception of their role as user-advocates rather than as independent actors. Both data sources and our observations suggest that participants perceive connections between their work and formal systems as necessary, a perception that could be limiting.

While the way faculty frame their role may prove critical, connections between faculty and professional faculty developers have already shown real and potential value (Lovett & Hershock, 2020; Smith et al., 2020; Steinert, 2010a). Participants identified several ways that formal systems could help, including providing space, money, training, and other resources from institutional sources (Tables 3 and 4). However, participants also identified needed resources that are difficult to separate from formal efforts (e.g., credibility and formal documentation that are critical to the valuing of informal faculty development work; Table 4). We perceived a strong enthusiasm for faculty taking on active roles in their peers' development. However, that enthusiasm exists in tension with a need to validate informal work with the recognition, support, and credibility of the formal system. Sorcinelli et al. (2006) raise the question of who should "own" faculty development work—faculty or administration. We suggest that questions about what makes faculty development work valid should parallel questions about ownership.

One theme in the reflections (Table 5) is that motivation and perceived authority are affected when such work is difficult to recognize or document. In parallel, formal systems increasingly focus on documentation and evidence collection through portfolios, awards, certificates of participation, or letters of recognition to deans and department

heads (Beach et al., 2016; Lovett & Hershock, 2020; Moore & Ward, 2008; Zipp & Simpkins, 2010). The contrast is similar to comments about *scholarship of engagement* work, for which faculty buy-in has been difficult “because of a concern for ‘how it counts’ . . . [and a] need to be clear about how to present and document their community-based work in ways that are recognized and validated” (Moore & Ward, 2008, p. 6). We hypothesize that difficulty in recognizing and documenting labor is another potential externality of formalization: Informal work becomes unintelligible if it does not meet the same level of documentation as work connected to or performed within the formal system.

Perception and Impact of Faculty Development as a Professionalized Field

For our purposes in the workshop and this article, we have made a distinction between formal and informal faculty development. As we noted in the introduction, the formal-informal distinction is not novel to this study but is often implicit in research designs (Steinert, 2010a). Rather than researching work performed or originated by faculty developers, we sought out work originating outside of the structured systems characteristic of modern faculty development.

Participants seem to perceive formal work as characteristic of faculty development and of a professional discipline that performs such work at universities. Furthermore, a primary way of performing faculty development work is by engaging with formal systems (Table 1). That perspective may create barriers to actions beyond participation. Such a perception aligns with the increased formality of the role and structure apparent in histories of faculty development (Gaff & Simpson, 1994; Sorcinelli et al., 2006). However, independent of the value of the formal systems, a perceived barrier can become a negative externality if motivated and capable individual faculty do not perceive a role for themselves independent of the formal system and the professionals who operate it.

Professionalization is a social process, one by which a core set of competencies, knowledge bases, organizations, and markers of competence coalesce (Abbott, 1988; Brereton, 1961; Harrison, 1994). One outcome of that process is the creation of social barriers of what work can be done by whom. Observations about how roles, responsibilities, and boundaries develop between volunteer and professional caregivers show that efforts to professionalize a knowledge base can also emphasize boundaries in authority between professionals and non-professionals (van Bochove et al., 2018). Similarly, barriers and boundaries can be seen through demarcation of practitioners and pseudo-practitioners as a field becomes more empirical or theoretical (Gieryn, 1983). This so-called *boundary work* is compounded when multiple overlapping professions are engaged in actions that change, reassert, and broaden intersectional domains of practice—for example, faculty and faculty developers (Bucher et al., 2016). In our study, we see suggestions that emergent boundaries in faculty development may foster unintended dependence.

Discussion of professionalization within faculty development is hardly novel (c.f. Haras et al., 2017), but identifying its externalities is. Faculty development has many hallmarks of a professionalized field: dedicated societies (e.g., POD Network), peer-reviewed journals (c.f. this journal), and certifications (e.g., the LERN network's Certified Faculty Developer program). In institutions, faculty development is embedded in job descriptions, operating budgets, centers, programming, and accountability from upper administration (Haras et al., 2017). Professionalization is not bad; among other outcomes, research shows that faculty development programming contributes valuably to growth, success, and equity of marginalized groups in the professoriate (Bach et al., 2006; Lewis, 1996; Wingard et al., 2019). However, changes to existing social systems inherently create new externalities. We see the complex perceptions of faculty development by faculty outside this new profession as a key externality of professionalized faculty development. Collectively, externalities in our data speak to demarcation (i.e., naming of work), validity (i.e., informal-formal connections), and agency (i.e., role and structure)—all characteristic of professionalization discussions.

Our data are limited and therefore most properly suggest questions in need of further exploration. Primary is a deeper understanding of if, how, and why faculty feel a need for permission to aid the professional development of their peers. We planned the workshop presuming that such work is valuable, even (or especially) given the benefits of increased scope and scale of formal faculty development systems. If faculty view the professionals of the formal faculty development system as the sole valid source of faculty development, then engagement may change in unanticipated ways that the field should understand. A key question for the field is this: Do faculty see their role in faculty development as purely a participant rather than as a participant in change?

Conclusion and Future Work

Our primary finding is that workshop participants struggled to identify ways they could contribute to their peers' development without some engagement with formal systems of faculty development. When asked to identify ways to contribute, participants consistently deferred to actions moderated or controlled by formal systems. Such deference was explicit and found throughout both direct and reflective data. To us, that deference suggests the potential that faculty feel a lack of agency to act independent of formal systems due to a lack of credibility, documentation, or reward in the academy. Ironically, when asked about next steps beyond the workshop, some participants requested a formalized approach or instruction in informal faculty development methods. Overall, the findings suggest that exploring faculty views of their role in faculty development and their perceptions of professionalization of faculty development on that role are important for the field.

Based on our limited data, we cannot show a causal connection between formalization of faculty development and faculty having hesitancy about their authority or ability to independently support their peers. However, our data showed that at least some participants saw

the idea of taking on a self-directed role in their peers' growth as novel and exciting—because they perceive permission and guidance of formal systems as mediating such roles. That finding is sufficient to suggest that such an issue may exist and supports further exploration of faculty members' perceptions of their role in the world of formalized faculty development.

While formal faculty development has inarguably benefited universities, students, and faculty, our findings suggest formalization has also created externalities that require further exploration. We are not implying that the cure (i.e., formalized faculty development systems) is worse than the disease (i.e., faculty not having the support they need), only that most interventions come with the potential for paradoxical and unintended side effects.

Future research could be designed directly to identify and explore externalities of formalization and professionalization like those apparent in our workshop. Research could use existing frameworks (e.g., Bucher et al., 2016) for studying professional boundaries to explore assumptions and norms about roles that are held by faculty. An instructive example to study may be the rise of the position of teaching faculty fellows. These fellows are often rewarded and recognized for their informal work in faculty development (e.g., their own). Such programs can foster the idea that individual faculty, the non-professionals, have a role in faculty development. However, the nature of our paradox should again be noted—the formalization of informal mentorship and their presence on campus may in fact inhibit others' informal work if they misperceive the reward and recognition as implying permission or legitimacy. Understanding faculty members' perception of their role in faculty development and how formalization has shifted that role could help craft strategies to support a culture, rather than a system, of faculty development—which is already discussed in the field (e.g., Lovett & Hershock, 2020; Wingard et al., 2019).

In practice, a rich opportunity may be the creation of bridges between the formal and informal, whereby formal structures create

the environment in which informal interactions can take place, such as faculty fellows programs. At one of our institutions, an example is a Thinking Partners program. Faculty are given coupons, to be used at any of the on-campus dining facilities, to invite a colleague to an informal conversation. Conversations begin as one-off interactions about a particular topic or area of professional development, but the pair can declare their interest in being assigned through the formal mentoring program. In contrast to formal mentoring programs predicated on a stage of career or a closed set of needs, the Thinking Partners program emerges more organically from self-identified needs and peer-to-peer engagement. While more informal, such programs might paradoxically create a feeling (an externality) that these informal actions require organization by or permission from the formal and professionalized system. Paradoxes such as these are rarely fixed, but an increase in support for less-structured programs may negate the impact.

Overall, we see our findings as important but preliminary. They need replication, further exploration, and expansion to understand the unexpected externalities that faculty experience as systems for their development evolve. Such work may lead to more recognition and encouragement for informal development alongside formal programs and a further understanding of how faculty fully experience faculty development.

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Appendices

Appendix A: Expanded Summary of Workshop

The workshop had three intended outcomes for participants:

After this session, participants will be able to . . .

1. *identify and name informal faculty development activities in which they or others are participating;*
2. *utilize existing tools and develop new competencies to aid their informal faculty development work; and*
3. *plan ways for formal faculty development structures to support informal faculty development work.*

Table A1. Summary of the Workshop Components Through Which Study Data Were Collected

Component	Description
(1) Introduction	Introduced the concept of the workshop, the types of labor we define as faculty development, and a framework for identifying informal faculty development built on guerilla organizing tactics. Also presented an argument for the value of acknowledging and studying informal faculty development work within the faculty development ecosystem.
(2) Stories of informal faculty development	The three facilitators shared their stories of their work as faculty developers and how that worked ranged from formal to informal in both role and practices.
(3) Roles, skills, and methods	Organized as a "gallery walk," participants' wrote and shared sticky notes in response to a series of prompts. Smaller groups of participants then worked to organize and/or categorize the notes.
(4) Informal faculty development case studies	Working in groups, participants discussed how they would respond to one of several case studies.
(5) Summary and feedback	Participants gave final discussion and comments on the subject and were then asked to complete a short feedback survey.

Note. Workshop materials (slides, gallery walk images, and the case studies used) are available upon request.

Appendix B: Prompts for Data Collection

Prompts From Gallery Walk Activity

Five prompts from the gallery walk activity (Component 3 in Appendix A) served as the first data source for our study. In the gallery walk, participants circulated while writing on sticky notes in response to a series of prompts about roles, occurrences, methods, and skills that are valuable to informal faculty development. Participants then worked in groups to organize the notes into themes that the groups labeled. The prompts that participants responded to were:

- What types of guerilla² faculty development have you performed for others?
- What resources/tools do you currently use when you have done guerilla faculty development?
- What concrete resources do you need that would help improve your guerilla faculty development work?
- How could existing faculty development structures (i.e., ASEE, CTLs, departments) support informal faculty development?
- What advice do you have for others doing informal faculty development?

Workshop Feedback Form

The workshop feedback form consisted of seven questions. The first three focused on demographics. The final four questions, inspired by the Critical Incident Questionnaire (Brookfield, 1995), were used to collect feedback:

2. To encourage engagement in discussion, we used the more provocative term *guerilla* in the workshop. That terminology derives from Zvacek (2001) and was described to participants.

- Q1: What is your position?
- Q2: At what point in your career would you say you are?
- Q3: About what percentage of your role involves work that could be defined as faculty development?
- Q4: What did you find valuable about this session?
- Q5: What do you have questions about/find least valuable?
- Q6: What do you see as the next steps from this session?
- Q7: Is there anything interesting or useful that you could imagine this group working on?