

Building a Culture of Mentoring via a Faculty Mentoring Portal

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Although academic institutions vary widely in how they approach faculty mentoring, the literature clearly emphasizes the critical importance of mentoring for the career success, satisfaction, and productivity of faculty members (Sambunjak, Straus, and Marusic 2006, 2010).¹ An institution's approach to faculty mentoring depends upon numerous factors—most importantly, the academic culture and commitment to mentoring. Additional factors may include size of the institution, the structure and interconnectedness of the departments or units, administrative infrastructure, resource allocation, and faculty composition. All of these factors influenced our approach and decision-making in the creation of a comprehensive mentoring website at the Indiana University School of Medicine (IUSM).

IUSM is the second largest medical school in the U.S., with a total student body of over 2,000, more than 1,100 fellows and resident physicians, and more than 2,000 full- and part-time faculty members across nine campuses. Due to the size, heterogeneity, and geographical spread of our faculty, a centralized faculty mentoring program and oversight is not feasible. According to the IUSM State of the Faculty Report (Dankoski et al. 2012), 92% of the 2,068 faculty members are full time, 36.5% are women, and 7% are underrepresented minorities. While the absolute number of tenure-track faculty members has remained flat over the past ten years, the number of clinical- (non-tenure-) track members continues to increase. For example, in 2001–02, tenure-track faculty comprised 61% of the total IUSM faculty community, while clinical-track faculty comprised 29%. In 2011–12, the percentages equalized, with clinical-track and tenure-track faculty each comprising 45% of the total faculty community; the remaining 10% comprised lecturers and non-tenure-track researchers.

Faculty members are distributed across nine campuses and 26 departments, which vary considerably in size and may be subdivided into divisions, sections, or research centers. In addition, the research, educational, and clinical activities of faculty members are individualized even within departments. The complex organizational structure and vast heterogeneity of our faculty underscore the importance of tailored mentoring for specific faculty groups. As such, faculty mentoring at IUSM has traditionally been rooted within departments, divisions, or research centers. At this level, mentoring practices vary widely, from structured formal mentoring programs to informal or ad hoc mentoring relationships. Despite this diversity, many components of effective mentoring and professional development represent needs common to most academic faculty members.

The need to address faculty mentoring at IUSM was identified through efforts of the Office of Faculty Affairs and Professional Development (OFAPD). In 2006, the OFAPD developed the Faculty Vitality Survey[®] to assess faculty satisfaction, productivity, engagement, career and life management, and perceptions of the institutional climate and leadership. Results from the 2009 survey revealed a high need for faculty mentoring. While 40% of faculty strongly agreed that mentoring is highly important to their academic vitality, nearly one quarter reported a lack of mentorship. In response, the OFAPD convened a mentoring task force composed of key faculty members with decades of professional experience and commitment to the mission of the School of Medicine. Their charge was to offer recommendations for improving the current state of academic mentoring within the school. The task force concluded, “IUSM could better serve the needs of mentors and mentored-faculty [sic] through Institutional (centralized) initiatives that would complement Departmental (local) efforts” (IUSM 2009, 4). Recommendations included the public endorsement of the value of mentoring by institutional leaders, central investment to support mentoring leadership roles, public recognition for mentoring excellence, and the creation of a repository for mentoring material and resources (IUSM 2009; Buchanan and Callahan 2011). Specifically, the task force recommended allocating resources to “develop a menu or tool-kit of mentoring materials and resources that could be adopted at a program level based on needs and interests of individual programs” (IUSM 2009, 21). In response, the OFAPD strategized to fund a Faculty Fellowship in Mentoring. This position (held by author Julie Welch) was charged with reviewing and implementing selected recommendations from the task force reports, including the creation of a website of faculty mentoring resources.

Why a Web Portal?

Choosing web-based platforms to deliver information and instruction can beneficially supplement traditional education and faculty mentoring efforts. The use of web-based instruction is widely established in U.S. higher education institutions (Brooks 2011; Robin et al. 2011) and can overcome

“barriers to learning such as time and distance, individualize instruction, and manage information” (Robin et al. 2011, 437). Additionally, web-based platforms meet the expectations of today’s tech-savvy generation by offering the ease of asynchronous learning and individualized adaptability of resources.

As our mentoring task force emphasized, successful implementation of new technology depends not only upon the vision and content expertise of the project leader, but upon a shared vision, recognition, and support from the institutional leadership. In 2010, an international working group of medical educators put forth recommendations for supporting faculty in the use of new technology in education (Robin et al. 2011). Among their recommendations was that institutions consider allocating resources to (1) provide teams of technology specialists to support faculty, (2) train faculty to learn and use new technologies, (3) recognize new forms of academic scholarship, and (4) foster an online community that would collaborate to develop and share tools (Robin et al. 2011). While it takes time, money, personnel, and recognition to implement new technologies, these resources are imperative for faculty members’ success.

In this chapter we describe the development, implementation, and evaluation of the IUSM Faculty Mentoring Portal, a centralized mentoring website designed to provide toolkits and resources to support local mentoring efforts at IUSM. Additionally, we outline in detail the design and content of the resource at the time of this volume’s publication, recognizing that all online content is fluid and adaptable.

Mentoring Portal Development Process

The entire project was, and continues to be, an iterative process, which gains increased clarity after each cycle of information integration. The project was guided by the purpose of offering tangible, accessible resources to enhance both individual and departmental mentoring practices and programs.

Figure 9.1 offers a depiction of the Mentoring Portal’s expert-guided development and evaluation cycles. The Faculty Fellow in Mentoring led the project through these iterative cycles in collaboration with the mentoring task force, the OFAPD, and the Faculty Development and Coordinating Committee (FDCC), a standing committee within IUSM comprised of broad faculty representation. In 2011, a Mentoring Task Force report reviewed the websites of 51 academic mentoring programs (Buchanan and Callahan 2011). In 2012, a team of faculty from the FDCC revisited selected websites and extracted key design elements and content that pertained to mentees, mentors, and academic mentoring in general. The Faculty Fellow synthesized all of these data into categories and augmented the content with relevant updates from the current mentoring literature. Periodic reports to the OFAPD and FDCC were presented; subsequent feedback and editing was used to further clarify and guide development of the mentoring

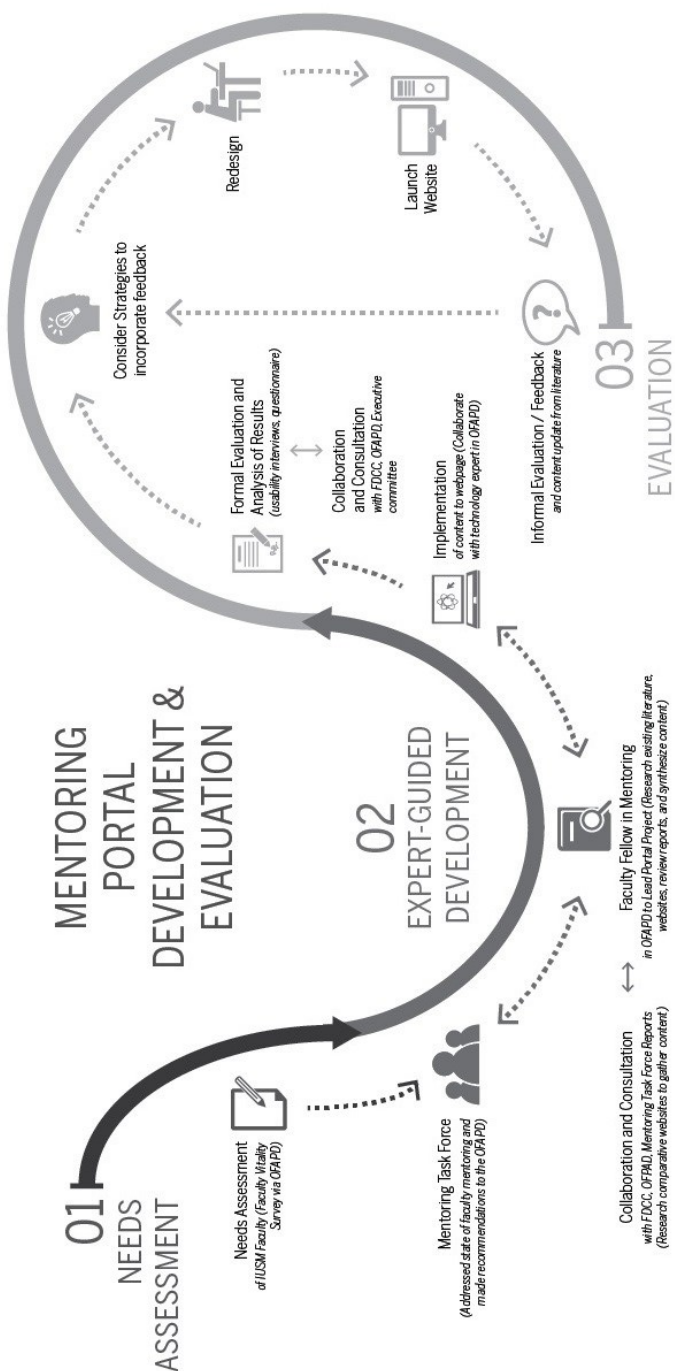


FIGURE 9.1. Mentoring portal development and evaluation cycle. Source: Lauren Hernandez, IUASM OFAPD

portal content. The implementation from paper to portal was a collaborative effort between the Faculty Fellow and members of the OFAPD, including a web designer. By soliciting faculty feedback throughout the process, we ensured that the portal was meeting the needs of faculty at large, while creating broad buy-in for the resource.

Mentoring Portal Content

The IUSM Faculty Mentoring Portal is housed on the IUSM OFAPD home page under the Faculty Development tab; the direct address is <http://faculty.medicine.iu.edu/mentoring>. Each page and resource of the mentoring portal offers quotes, diagrams, and/or photos to enhance the user's experience. The design of the portal follows the standard requirements of our institution in terms of layout, navigation bar placement, and color selection. Primary navigation of the site occurs along the right-hand side of the page and includes tabs for the five major sections of the site: (1) Home, (2) Welcome from the Dean, (3) Mentoring Matters, (4) Mentoring Toolkit, and (5) Mentoring Awards. Each section includes subsections and additional resources as detailed in Figure 9.2.

Home Page

The portal's home page highlights the institutional commitment to mentoring, the purpose of the site, and links to the IUSM Mentoring Task Force reports. Photos of leaders from the office are included, with quotes about their mentoring philosophies. The home page also includes a purpose statement:

The goal of this centralized mentoring resource is to create an online portal to support local and departmental faculty mentoring programs. The mentoring menu and toolkit of resources are intended to facilitate individual and departmental mentoring practices and programs. Through this effort the OFAPD endorses the value of mentoring for sustaining a vital faculty and enhancing the academic enterprise of the institution.

Welcome from the Dean

In response to a recommendation of the Mentoring Task Force, a dean's welcome page was included to provide an institutional endorsement of faculty mentoring. The dean's message focuses on the role of mentoring in faculty satisfaction and productivity, as well as the intrinsic benefits of mentoring relationships among faculty.

Mentoring Matters

The "Mentoring Matters" section provides contextual background for those who are new to mentoring concepts, reviewing and defining (1) Models

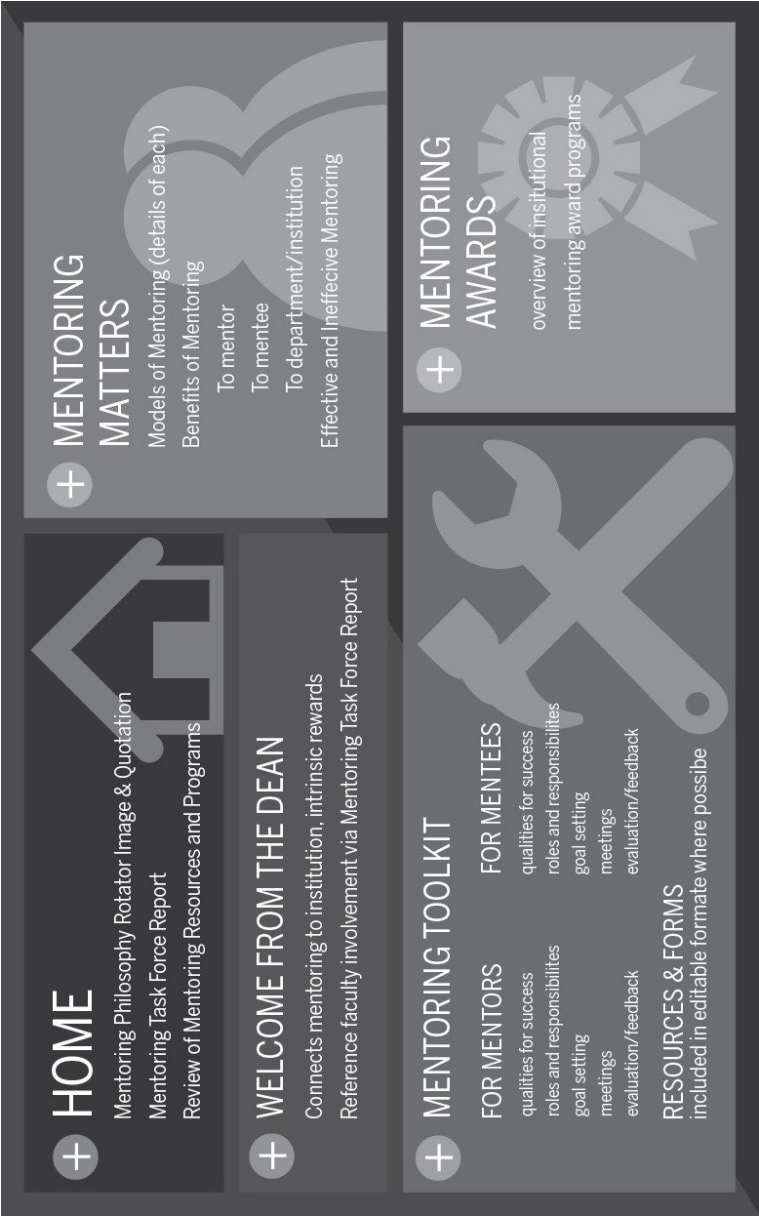


FIGURE 9. 2. Mentoring portal structure and content. Source: Lauren Hernandez, IUSM OFAPD

of Mentoring, (2) Benefits of Mentoring, and (3) Effective and Ineffective Mentoring practices. After reviewing the two dimensions of mentoring, career-advancement interventions and social-psychological support, the user can click on the links enumerated above for a self-tutorial. On each subsequent page, source material references are included (with links, if available) to give the reader more detailed information if desired. The “Models of Mentoring” page offers descriptions of various forms of mentoring including traditional one-on-one mentoring, mentoring panel or committee, functional mentoring, peer mentoring, group mentoring, and mosaic mentoring.

Next, the “Benefits of Mentoring” are outlined in detail, with specific emphasis on the benefits to the mentee, the mentor, and the department/institution. Our research on comparable websites and the current literature underscores the necessity in getting buy-in from all three parties in order to sustain successful mentoring practices and programs.

The third subsection, “Effective and Ineffective Mentoring,” offers contrasting explanations for the successes and failures of mentoring relationships. One tab summarizes key habits and traits that serve to promote effective mentoring. The other tab itemizes potential pitfalls that can lead to “toxic” mentoring experiences.

Mentoring Toolkit

The heart of the website is found under the “Mentoring Toolkit” link, with the vast majority of our content research and usability testing focused in this section. The stated purpose of the Mentoring Toolkit is “to assist mentors and mentees as they establish and maintain a productive mentoring relationship.” Parallel toolkits were thoughtfully designed for the mentee and the mentor. The central navigation bar for each toolkit contains the same five tabs: Qualities for Success, Roles & Responsibilities, Goal Setting, Meetings, and Evaluation/Feedback. Each tab corresponds to one of five critical expectations for the mentoring relationship: (1) *Understand the qualities that lead to success* (What makes a great mentor and mentee? What are my skills and needs?); (2) *Clarify roles and responsibilities* (What does my mentor or mentee expect of me? Are the roles clear and responsibilities reasonable?); (3) *Set realistic goals and develop a plan* (Have we created an achievable plan and timeline?); (4) *Develop a schedule for meetings and have an agenda* (Is communication in person, by email, or by phone? Does each meeting have an agenda?) (5) *Establish evaluation and feedback plans*. The content and resources within each of these five tabs is similar, yet tailored to either the mentee or the mentor, as explained below (IUSM 2013).

Mentee’s Toolkit. The Qualities for Success tab provides answers to the question, “What qualities should I look for in choosing a mentor?” Next, the mentee must turn an introspective eye and ask, “What qualities do I need as a mentee?” After a list of recommended qualities, a link to a

comprehensive Mentee's Self-Assessment form is provided. This self-assessment has been left in an editable format (Microsoft Word) in order to allow the mentee or mentor to tailor the questions. Just as the activities of faculty members are diverse, so are their professional development and mentoring needs.

The Roles and Responsibilities tab opens with a statement: "A mentee who wants to get the most out of the mentoring relationship will actively employ 'MANAGING UP.' This concept means that the mentee takes ownership of and directs the relationship by being motivated to manage the work of the relationship in many of the following ways." The page then systematically describes a four-step process: (1) prepare for the mentoring relationship, (2) initiate and cultivate the mentoring relationship, (3) assist your mentor in giving relevant advice and counsel, and (4) follow through on assigned tasks and opportunities provided by the mentor. Included in this section are links to resources for establishing roles and responsibilities, including the Mentee's Self-Assessment form and an "Opportunity Is Knocking" planning worksheet designed to help the mentee prepare for and seize new opportunities as they arise (also provided in an editable format).

The next tab pertains to Goal Setting, and states, "[o]ne of the critical responsibilities for a mentoring relationship is to aid the mentee in setting and achieving career goals for short and long term aspirations, as well as, periodically evaluating new opportunities that arise. In addition, framing these career goals with respect to personal life ambitions and commitments is often necessary." Critical resources are provided to assist in goal setting, including an Individual Development Plan (IDP), the "Opportunity Is Knocking" planning worksheet, and a link to a tool for assessing the viability of the IDP, entitled, "Is it SMART?" Clicking on this link opens an interactive pop-out diagram that works through the questions involved in the SMART goal assessment, designed to ensure that goals are Specific, Measurable, Attainable, Results-oriented, and Time-limited.

The fourth tab, "Meetings," offers a printable version of a meeting checklist, which deals with how to prepare for the first meeting with your mentor, how to run the meeting, and what to do after the meeting. A "partnership agreement" form is recommended in order to set the expectations of confidentiality and no-fault termination. In addition, a "meeting agenda" resource is provided to structure the meeting flow, prioritize items, and record action plans for follow-up.

Finally, the Mentee Toolkit offers an "Evaluation/Feedback" tab, emphasizing that "[m]entees require honest, candid, time sensitive feedback from their mentor. Reciprocal and on-going feedback between the mentor and mentee is vital to the mentoring partnership." Clicking on the associated feedback diagram offers a schematic representation of the reciprocal nature of the mentoring relationship and highlights the key responsibilities of both the mentee and mentor in giving and receiving feedback. To assist in the evaluation process, forms are provided for the mentee and the mentor

to evaluate one another.

Mentor's Toolkit. As noted, the central navigation toolbar parallels that of the Mentee's Toolkit. Although the content is similar, items are tailored specifically to mentors' potential needs. The "Qualities for Success" tab describes the characteristics of outstanding mentors as reported by Cho, Ramanan, and Feldman (2011) in a study analyzing nomination letters of esteemed mentors for a lifetime mentoring award. In addition, mentors are encouraged to assess whether they possess the skill set of successful mentors by taking a Mentor's Self-Assessment as provided in "*Nature's Guide for Mentors*" (Lee, Dennis, and Campbell 2007). The "Roles and Responsibilities" section begins with the premise that "mentoring relationships are often tailored to the mentoring needs [of the mentee] in terms of providing career advancement interventions and psychosocial support. Mentors are encouraged to establish early on the expected roles and responsibilities of the relationship with their mentee." Following this, a systematic, three-step process is described: (1) prepare for the mentoring relationship, (2) cultivate the mentoring relationship, and (3) assist the mentee with career guidance and provide career advancement interventions. Accompanying resources include the Mentor's Self-Assessment form, an IDP, and the promotion and tenure criteria website for our institution. Additional citations offer further guidance on mentoring specific faculty groups (Baucher 2002; Detsky and Baerlocher 2007; Lee, Dennis, and Campbell 2007). The mentor's "Goal Setting" section provides resources that parallel the Mentee's Toolkit. A fourth tab addresses "Meetings" from the perspective of the mentor, with a printable checklist and agenda to ensure effective preparation, communication, and meeting pace. Finally, the "Evaluation/Feedback" tab is a mirror of that for mentees, as feedback is a reciprocal process (IUSM 2013).

Resources/Forms. The main navigation bar on the right-hand side of the web pages includes a wealth of information under the Resources/Forms link. This portion of the site consolidates in one place the resources found elsewhere on the IUSM Faculty Mentoring Portal. Additional examples of key resources from notable mentoring institutions augment these forms. Finally, a reference list of over 85 mentoring articles is provided for inquisitive readers.

Mentoring Awards

The final section describes the purpose, criteria, and nomination process for the "Excellence in Faculty Mentoring Award," to be implemented in 2013–14. Although only IUSM faculty mentors are eligible for the awards, this page offers an example for other institutions to follow. The purpose of the award is

to recognize the outstanding mentoring efforts of *one clinician and one basic scientist each year* who actively mentor other faculty members and learners. These prestigious awards acknowledge the time

sacrifice and dedication faculty mentors devote to foster the career development and academic success of colleagues and learners in the areas of research, education, service and clinical practice.

From an institutional perspective, these awards demonstrate the leadership's commitment to mentoring and "allow the school of medicine to honor and celebrate the valuable efforts of faculty mentors who embody the spirit of mentoring."

Portal Evaluation

We employed a modified usability test (Nielsen 2012) to evaluate the IUSM Faculty Mentoring Portal. The goal of usability testing is to understand how users interact with the portal and to enhance the functionality and content of the site. Guidelines for usability testing hold that five to ten participants are necessary to ensure the reliability of responses (Faulkner 2003). Faculty volunteers for the testing were recruited from the IUSM Faculty Development and Coordinating Committee (FDCC) and the Academy of Teaching Scholars (ATS), a program to enhance the development of faculty as educators. A member of the OFAPD team conducted usability interviews to assess the portal's content, design, and efficiency. Per traditional usability testing guidelines (Nielsen 2012), a series of tasks were generated for participants to complete. The protocol for creating tasks was based on content identified as important by the IUSM Mentoring Task Force report (Buchanan and Callahan 2009). By closely following the movements of each tester and asking them to "talk through" their thought process in the portal, we sought to ensure that both the content and design felt appropriate and seamless for each faculty member. Sample tasks included accessing the Mentor's Self-Assessment form, finding a suggested agenda guide for meeting with a mentee, and locating information about why senior faculty should become mentors. The interviewer observed and videotaped each user's comments and ability to navigate through the website. Participants were asked to discuss their response to the overall design and layout of the portal in terms of accessibility and clarity of information presented. Additional questions assessed participants' perceptions of the purpose, relevance, and objectivity of the content. After each question, participants provided open-ended feedback about the portal. Results were compiled and coded by type and theme. Based on the results of the usability testing, strategies were considered to incorporate faculty members' content and design recommendations into the redesign of the portal.

The usability testing interviews were conducted with 11 faculty members recruited voluntarily from the IUSM FDCC and ATS. The faculty ranged from 4 to 32 years of service at IUSM, with a median of 14. Four of the participants (36%) were on the tenure track, while seven (64%) were on the clinical track. By rank, the faculty included two full professors (18%),

five associate professors (45%) and four assistant professors (36%). The mean age was 48.5 years.

The results of the usability interviews were generally positive, but identified several needed changes for the IUSM Faculty Mentoring Portal. In terms of navigating the site, the participants were able to locate specific resources with relative ease. However, a few dead links to resources required correction. The perceptions of the participants regarding the overall design were mostly positive, and suggestions for improvement included clarification of headings, adding resources to the toolkits, linking back to the home page, and hyperlinking to mentoring articles. Several specific suggestions to improve the content have already been adopted: (1) to make the purpose clearer, (2) to add the welcome letter from the dean, and (3) to update the description of the mentoring awards.

Additional recommendations from the usability testing to improve the design and content of the website include (1) creating a “Mentoring Spotlight” page to highlight outstanding mentors, with photos and narrative comments from mentees; (2) adding a “how to use this site” page; (3) reformatting the resources page; (4) modifying content so as to address specific faculty groups; and (5) offering mentoring consultations for career and/or promotion and tenure advice. The final interview question asked the participants how they foresee faculty using the website. Four themes emerged: (1) faculty will go straight to the toolkits and resources; (2) mentors may use the toolkits with their mentees to have a more coordinated approach to the mentoring relationship; (3) departments could incorporate the toolkits and resources to enhance their own programs; (4) OFAPD should advertise the site at faculty orientations, as a resource for departments and mentoring panels, and as a recruitment tool for IUSM.

Discussion and Challenges to Consider

Mentoring among faculty in institutions of higher learning is a crucial element in sustaining a vital faculty community, promoting faculty development, and increasing faculty engagement and productivity (Felten, et al. 2013; Sambunjak, Straus, and Marusic 2006). Targeting mentoring initiatives to the needs of faculty, as well as considering the organizational culture, is critical if the goal is to create intergenerational collegiality among all members of the institution.

At IUSM, the goal of the Faculty Mentoring Portal is to offer centralized mentoring resources, while acknowledging the institutional reality of a heterogeneous faculty and localized programs. Each section of the portal is designed to adapt to the user. By focusing the sections of the site around user roles and needs, we offer our academic units flexibility. Departments without mentoring programs can begin with the end in mind, focusing on the goals of faculty success and implementing the tools broadly. Alternatively, for units with robust mentoring programs already in place, the

content of the site offers much-needed tools for making mentoring a part of everyday work.

In developing and testing the project, we sought to shape the IUSM culture and build a collective commitment to the mentoring portal by using focused, deliberate language in our marketing efforts. Creating persuasive messages for multiple audiences can be challenging. Writing web content for large-scale use by a heterogeneous faculty meant the faculty fellow had to synthesize and convey maximum information in a concise manner. Strategic communication planning to the faculty about the mentoring portal effort became an active, iterative process, similar to the development of the mentoring portal itself. Messages to the faculty (including emails, newsletter stories, closed-circuit TV messages, and web banners) about this new mentoring portal were designed to reflect a purpose and provide a map to achieve a specific outcome. The goals of initial advertising messages were to underscore the institution's commitment to faculty mentoring, increase awareness of the importance of faculty mentoring, and announce the rollout of the mentoring portal. We launched this communication effort through multiple media channels, including a broadly circulated article in the IUSM weekly email newsletter, announcements in the biweekly OFAPD newsletter, the closed-circuit TV system used for broadcasting announcements at various locations on the medical school campus, and targeted email blasts to faculty and unit leaders. The website was also demonstrated at a meeting of the IUSM Faculty Steering Committee (similar to a faculty senate). Additionally, the faculty fellow and OFAPD sponsored educational sessions on mentoring at IUSM and IUPUI campuses, highlighting the mentoring portal resources and framework for developing a positive mentoring relationship. Our goal was to create a communication plan that targeted each faculty group engaged in the mentoring process. As others plan for a portal such as this, it is important to consider what motivates each segment of the faculty audience and craft messages around those motivations. For example, senior faculty might respond to a message about helping the next generation or leaving a legacy, while pre-tenure faculty might be motivated by messages about the promotion process.

Continuous research, measurement, and incorporation of findings are necessary to build a successful product and enhance a mentoring culture. While maintaining a focus on the theme of mentorship, we carefully framed our messages and further demonstrated the value of mentoring and the commitment to this endeavor by the institution's leaders. This process of building a comprehensive communication plan is both an asset and a limitation. It provides direction to achieve the goal of promoting mentoring, but at the same time requires constant attention and upkeep.

One of the key strengths of this approach is "basing strategic decisions on careful listening to the wants that are expressed by representative members of potential adopters" (Dearing, Maibach, and Buller 2006, 20). For this project the "potential adopters" are our faculty members.

Although reaching our target audience within IUSM is challenging, primarily due to the size of the school, we have attempted to improve our range by planning carefully and engaging a diverse pool of faculty. Incorporating faculty members into every step of the process is essential. From answering the recommendations of the faculty Mentoring Task Force, to developing the framework and content of the portal, to testing and incorporating feedback, faculty members were purposefully engaged. Effective engagement of faculty not only improves the product, but potentially increases buy-in, creates a shared vision, and enhances faculty development.

Soliciting faculty involvement throughout the process has presented both opportunities and drawbacks. For example, the inclusion of faculty throughout the process meant that a traditional “pilot test” approach was unnecessary. Instead, soliciting ongoing faculty feedback via the FDCC and conducting usability testing created an iterative cycle in which testing and revisions occurred almost simultaneously. The limitations to usability testing in this context include faculty unfamiliarity with the portal development and variations in how the tester might interact with the site in the presence of an interviewer.

There are two important factors institutions must consider before implementing a project of this scale: time and money. Realistically, OFAPD faculty and staff spent approximately 600 hours gathering the content, designing the structure of the portal, conducting usability testing and focus groups, and developing and implementing the communication plan. That estimate does not include the time faculty members volunteered to participate in testing and focus groups. Hiring a dedicated Faculty Fellow in Mentoring and paying for the OFAPD faculty and staff’s time on this project were considerable expenses for the office. Expenses were kept manageable by using existing staff and student resources where appropriate. Specific personnel expenses included: 10% of a faculty member’s time to write and manage the content of the portal; approximately 120 hours’ labor by a graduate student in Communication to manage and implement the usability testing and marketing plan; 120 hours by an instructional technology specialist to develop the site; and 40 hours by a program manager to supervise the project.

Ongoing attention and expenses will be required to keep the portal updated and relevant. Although an endeavor of this size should not be taken lightly, the return on our investment could be significant. Our portal has the potential to serve 1,400 full-time and 800 part-time and volunteer faculty. Our reach could expand to learners as well; both our medical student affairs office and graduate programs have expressed interest in using the mentoring tools for their trainees. Further, the site is not limited to members of the IUSM community, and thus is available for use by other members on the campus, other institutions, and the general public.

While the Faculty Mentoring Portal answered an institutional need, measuring its impact on our faculty is a less straightforward process.

Anecdotal evidence about the use of the portal indicates that it is perceived as a useful, practical resource and is fulfilling a need. The website and its tools are highlighted every year in the IUSM New Faculty Welcome event and are enthusiastically received. Additionally, OFAPD offers a year-long professional development program for junior faculty that includes a session on finding a mentor and maximize mentoring relationships. This session has been augmented and improved by use of the tools on the Faculty Mentoring Portal. Further, several departments and divisions have used the tools in local mentoring programs and events, including Emergency Medicine, Family Medicine, Psychiatry, Anatomy, Neonatology, and Pulmonary/Critical Care. Additionally, offices that serve the campus at large have used resources from the portal in their programs and events, including the campus academic affairs and research affairs offices, as well as the campus office for women and the Clinical and Translational and Sciences Institute (CTSI).

There are additional indicators of a more positive culture of mentoring across the institution. These indicators include IUSM's newly revised standardized CV format for promotion and tenure, which includes for the first time a heading for mentoring, and a similar space to report mentoring in the annual faculty effort report. While we do not claim that these changes were a direct result of the development of the Faculty Mentoring Portal, they were adopted in the same time frame. The fact that faculty could report on their mentoring activity in the annual report and CV sent another message that the institution values mentoring as a critical aspect of faculty life.

Future research is needed to determine the most appropriate and practical methods by which to measure the effectiveness of technology in supporting and influencing transformative mentorship. Tracking the number of site users and resource downloads gives a quantitative measure. The site has had over 5,500 hits in its first 24 months, with the Mentoring Toolkits and Resources/Forms pages receiving the highest number of views. One can infer that if the number of hits on the site is sustained over time, it is providing a needed resource. A mechanism to track how site use breaks down by trainee, faculty, departments, mentoring programs, and/or training programs could guide future iterations of the portal, improving the content and tailoring it to specific needs. In addition, studying the difference between faculty relationships where mentoring resources are in place, and where they are not, would be valuable in understanding their impact on the mentoring relationship.

The pressures facing faculty in higher education today are unprecedented, and the support and guidance of a good mentor can greatly influence a faculty member's career satisfaction, productivity, and academic advancement. Indeed, mentoring can be considered part of the "lifeblood" of the faculty experience. The give-and-take of mentoring requires commitment, time, and preparation. However, as senior faculty face pressure to be ever

more productive, mentoring can unfortunately become a low-priority activity. Institutions must find cost-effective and practical, yet high-impact ways to communicate the value of mentoring and the expectation that mentoring is everyone's job. Further, institutions must find ways to make mentoring easier and more successful. Creating a centralized Faculty Mentoring Portal as described in this chapter can provide concrete tools both to support mentoring and to communicate an institutional commitment to a culture of mentoring.

Note

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