

# The Essential Value of Projects in Faculty Development

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## Abstract

Projects—planned activities with specific goals and outcomes—have been used in faculty development programs to enhance participant learning and development. Projects have been employed most extensively in programs designed to develop faculty as educators. The authors review the literature and report the results of their 2008 study of the impact of projects within the Pennsylvania State University College of Medicine Junior Faculty Development Program, a comprehensive faculty development program. Using a mixed-methods approach, the products of

project work, the academic productivity of program graduates, and the impact of projects on career development were analyzed. Faculty who achieved the most progress on their projects reported the highest number of academic products related to their project and the highest number of overall academic achievements. Faculty perceived that their project had three major effects on their professional development: production of a tangible outcome, development of a career focus, and development of relationships with mentors and peers. On the basis of these

findings and a review of the literature, the authors conclude that projects are an essential element of a faculty development program. Projects provide a foundation for future academic success by enabling junior faculty to develop and hone knowledge and skills, identify a career focus and gain recognition within their community, generate scholarship, allocate time to academic work, and establish supportive relationships and collaborative networks. A list of best practices to successfully incorporate projects within faculty development programs is provided.

**T**here are both narrow and broad conceptions of faculty development in the literature and the academic medical

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community, but it is generally agreed that developing faculty is both positive and necessary. Faculty development has been defined as “any planned activity designed to improve an individual’s knowledge and skills in areas considered essential to the performance of a faculty member.”<sup>1</sup> Faculty development is also a strategy to promote faculty vitality and institutional renewal.<sup>2</sup> Much information about the effectiveness of faculty development has been obtained from programs designed to develop faculty as educators.<sup>3–8</sup> And although Bland<sup>9</sup> advanced a blueprint to prepare faculty for their various role responsibilities (practitioner, researcher, administrator, teacher), there is little published information on the structure and outcomes of *comprehensive* faculty development programs that are responsive to the needs of faculty across all missions of an institution.<sup>10,11</sup>

A feature of several existing faculty development programs is the use of formal projects—planned activities with specific goals and outcomes—as a strategy to enhance participant learning and development.<sup>3,7,8,11–13</sup> Within these programs (Table 1), projects have ranged from application exercises<sup>12</sup> and opportunities for active learning and experimentation<sup>8,13</sup> within courses to creation of educational products and scholarship.<sup>3,4</sup> A review of nine

educational fellowship programs found that “all of the programs require that fellows develop a project that would enable them to apply the principles learned in the program to a real-world problem relevant to the fellow and to the school.”<sup>6</sup> Projects also generate tangible outcomes that provide benefit for the individual and the institution.<sup>5</sup> The value of projects was cited in a recently published guide for educational faculty development:

Project- or task-oriented faculty development (Simpson et al. 2006; Rust et al. 2006), which draws on adult learning principles (e.g., Knowles 1980), offers a number of benefits: immediacy of application and ease of identifying measurable outcomes. . . . Projects or tasks may also facilitate the alignment of faculty development with institutional needs.<sup>4</sup>

The accomplishments of participants and the products of project work have been used as measures of the success of faculty development programs.<sup>7,8,12,14–16</sup> A longitudinal evaluation of faculty development programs at one institution that employed project work demonstrated increased publications, presentations, and advancement to leadership positions for participants.<sup>7,15,17</sup> Over time, as the program evolved to focus on the development of educational skills, projects centered on the creation of

Table 1

## Faculty Development Programs Employing Projects\*

| Program and institution   | Description and use of projects  |
|---|--|
| Educational Scholars Fellowship Program, Baylor College of Medicine, The University of Texas Medical School at Houston, and The University of Texas Dental Branch | Graduation requirements included "completing an education-related project (including a written, structured abstract outlining purpose, methods, results, and applicability)." <sup>27</sup>  |
| Center of Excellence in Geriatrics, Boston University School of Medicine  | "Faculty scholars are also required to develop a clinical, educational, administrative, or research project during the year."<br>"Scholars' projects included geriatrics curriculum development for students and residents, health services research in geriatrics-related topics, and clinical services and interventions." <sup>28</sup>   |
| Executive Leadership in Academic Medicine (ELAM) Program, Drexel University College of Medicine   | Participants undertake "team-building skills development through small group projects." <sup>29</sup> The ELAM program currently utilizes individual "institutional improvement projects." <sup>30</sup>   |
| Woodruff Leadership Academy, Emory University School of Medicine  | "Each fellow ... worked as a member of a project team of five to six fellows to address a pertinent health sciences topic." <sup>31</sup>  |
| Internal Medicine Research Group at Emory (IMeRGE), Emory University School of Medicine   | A peer mentoring program: "An integral goal in the formation of IMeRGE was to further our research skills through hands-on projects that would lead to tangible end products." <sup>32</sup>   |
| Harvard Macy Program for Physician Educators, Harvard Medical School  | Participants are required "to identify and pursue a medical education project, approved by the department chair or dean, to be implemented at his or her own institution." <sup>33</sup>   |
| Rabkin Fellowship in Medical Education, Harvard Medical System  | Participants identify a "question or project to be undertaken during the fellowship." <sup>11,34</sup>   |
| Teaching Scholars Program, McGill University Faculty of Medicine  | Participants are required to participate in "an educational project, which typically consists of curriculum design and evaluation or a research study."<br>"The overriding goals of the educational projects are to encourage the scholars to focus on a departmental need, to buttress the principles discussed in the university courses, and to promote scholarly activity in education." <sup>35</sup> |
| An Advanced Faculty Development Program for Clinician-Educators (1994-2002), Medical College of Wisconsin   | Participants were required to "complete a capstone project suitable for publication in a peer reviewed journal." <sup>10</sup>   |
| Comprehensive Faculty Development Program (1991-2001), Medical College of Wisconsin   | Participants were required to "complete one project focused on medical education and one focused on research." <sup>10</sup>   |
| Excellence in Clinical Education and Leadership, Medical College of Wisconsin   | Participants are required to "complete capstone projects tightly linked to the department's mission, vision, and priorities." <sup>10</sup>  |
| Faculty Development Fellowship Program, Michigan State University College of Human Medicine   | Participants complete "a scholarly research, curriculum, or leadership project with guidance from a faculty mentor." <sup>14</sup>   |
| Morehouse Faculty Development Program, Morehouse School of Medicine   | Required projects at the end of each teaching module. <sup>12</sup>  |
| Junior Faculty Development Program, Pennsylvania State University College of Medicine   | "Each faculty member identifies an individual project to complete during the JFDP." <sup>5</sup>   |
| Faculty Development Fellowship, Curriculum Workshop Series, Harbor-UCLA Family Medicine   | Participants completed "individual projects with feedback from colleagues and the instructor." <sup>36</sup>   |
| Medical Education Fellowship, University of California, Los Angeles, David Geffen School of Medicine  | Participants are required to undertake "the development and presentation of a curriculum project" and "the design of a research project, which is ... carried out during the second year." <sup>37</sup>   |
| National Center of Leadership in Academic Medicine, University of California, San Diego   | Participants are required to complete "a finished professional development project." <sup>38</sup>   |
| Teaching Scholars Program, University of California, San Francisco, School of Medicine  | "A major goal of the TSP is the completion, presentation, and possible publication of a scholarly project." <sup>39</sup>  |
| Administrative Colloquium, University of Nebraska Medical Center  | "Completion of the course required ... completing a project with a project report (oral or poster presentation)." <sup>40</sup>  |
| University of Wisconsin   | "Each fellow worked with faculty mentors to integrate program content into an applied project (educational, research, clinical, or QI)." <sup>41</sup>   |
| Teaching Scholars Program, University of Iowa Carver College of Medicine  | "A major part of the program is planning and implementing a faculty development project that focuses on the enhancement of faculty teaching and related skills relevant to the needs of the teaching scholar's respective departments." <sup>42</sup>  |

(Continues)

Table 1

(Continued)

| Program and institution   | Description and use of projects  |
|---|--|
| Medical Education Scholars Program, University of Michigan Medical School                             | Participants are required to undertake "an educational research and development project." "Many projects focus on curriculum development and evaluation ... while others have focused on the use of educational technology." <sup>43</sup> |
| Teaching Scholars Program, University of Washington School of Medicine                                | "To graduate, scholars must complete a scholarly project in curriculum development, faculty development, or educational research." <sup>44</sup>   |
| Teaching Scholars Program, West Virginia University School of Medicine                                | "During the second year, scholars collaborated to implement and continue research projects which they designed during their first year of courses." <sup>45</sup>  |
| Faculty Development for General Internal Medicine: Generalist Faculty Teaching in Ambulatory Settings | "A national program to train leaders to create local faculty development projects." <sup>46</sup>  |

\* Programs were identified by a bibliographic search using the terms "faculty development" and "project," followed by review of individual articles. Additional publications were identified by review of the database of faculty development programs compiled by the Association of American Medical Colleges.<sup>4</sup>

"durable educational products" and led to peer-reviewed publications.<sup>7</sup> Specifically, the project-oriented curriculum provided an effective methodology for "rapid cycle project completion" designed to facilitate educational scholarship.<sup>7</sup> Other programs that require project work have had inconsistent results in terms of publication and/or continued work on projects after completion of the program.<sup>12,14</sup>

Given the use of projects within faculty development programs, the challenge is to identify best practices for effective incorporation of project work into such programs. What are the effects of project work on individuals? What are the key features of projects that benefit development of faculty? We address these questions by drawing from the literature and our experience with the Pennsylvania State University College of Medicine Junior Faculty Development Program (JFDP).<sup>11,18</sup> This exploration allows us to draw conclusions and present recommendations for the effective use of projects within faculty development programs.

### Evaluation of Projects in Penn State's JFDP

The JFDP was created in 2003 to promote the development and advancement of junior faculty.<sup>11</sup> Project work complements a comprehensive curriculum in research, education, clinical practice, and academic professional development. Participants identify an individual project to work on during the program. The selection of a project reflects the faculty member's

academic interests and may involve basic and clinical research studies, grant preparation, creation of new clinical service lines, or development of educational programs. The project is expected to be a new venture for the participant, and it must be approved by the participant's departmental chair. The goals of the project must be realistic, feasible, and significant. The project should have the potential for scholarship and align with the faculty member's assignment of effort within her or his department. Faculty identify explicit outcomes that can be accomplished by the end of the program, recognizing that most projects will require continued work after the program has ended. A senior faculty mentor is selected for each participant to guide and support project work. Using the principles of *functional mentoring*,<sup>18</sup> the mentoring relationship is centered around the project and driven by the expected outcomes and timelines of the project and the JFDP program.

To understand the value of projects within this comprehensive faculty development program, we investigated how work on projects in the JFDP benefits faculty in their academic careers. Using a mixed-method approach, we analyzed the products of project work, the academic productivity of graduates of the program, and the impact of project work on career development. In the first four years of the JFDP (2003–2007), 97 junior faculty graduated from the program; an additional 9 faculty did not complete the program. In the winter of 2008, we invited the 97 graduates to complete a Web-based survey that solicited both quantitative and qualitative information about their projects. We

collected data about the status of each project, academic products resulting from the project (articles published, funding obtained, courses taught, etc.), and, through responses to open-ended questions, the participant's perceptions of the impact of the project on his or her academic career. A total of 41 participants responded to the survey (42% response rate). To obtain additional information for analysis, we invited respondents to the survey to submit their curriculum vitae for review and to participate in 45-minute, semistructured interviews. Thirty-four respondents submitted curricula vitae. These respondents were representative of all project types and stages. The academic products reported on the survey and on curricula vitae were analyzed using a framework adapted from Morzinski and Schubot.<sup>17</sup> Semistructured interviews were conducted with six volunteer respondents, representative of all project types and stages. We then analyzed the transcripts of the semistructured interviews and the responses to the open-ended survey questions using a grounded theory approach<sup>19</sup> to categorize the information and identify common themes. Codes were assigned and discrepancies resolved through discussion among the investigators. We sought approval from the Pennsylvania State University College of Medicine institutional review board, and the project was deemed exempt (Protocol #26930EM).

### Progress on projects

To classify the status of projects, we used Glassick's<sup>20</sup> approach to scholarship as a guide to identify three stages of progress

Table 2

**Classification of Faculty Development Project Status by Stage and Type, From the Junior Faculty Development Program, Pennsylvania State University College of Medicine, 2008\***

| Project type     | Project stage  |   |  |
|------------------|--|---|--|
|                  | Planning: 22/5 <sup>†</sup>  | Implementation: 16/24 <sup>†</sup>                                | Evaluation: 3/12 <sup>†</sup>                                |
| Education        | Project being planned or planning complete, ready for implementation | Course, curriculum, or educational method in progress             | Course, curriculum, or educational method is being evaluated |
| Research grant   | Proposal being written but not submitted                             | Proposal submitted or resubmitted or rejected and not resubmitted | Proposal funded  |
| Research project | Project being planned or planning complete, ready for implementation | Research being conducted  | Data analysis in progress or completed                       |
| Clinical         | Project being planned or planning complete, ready for implementation | Clinical service or program is operational, patients being seen   | Clinical service or program is being evaluated               |

\* A total of 41 faculty completed the survey (42% response rate). Respondents were representative of the total population of those who completed the Junior Faculty Development Program in the first four years of the program, both by year and by project type (data not shown).

<sup>†</sup> Number of respondents at this stage by end of program/number of respondents at this stage by time of survey.

on a project: planning, implementation, and evaluation. We defined criteria for each stage for different project types (Table 2). Participants identified the stage of their project at completion of the JFDP and again at the time of the 2008 survey. The time interval between completion of the program and the survey ranged from nine months to three and a half years (average 2.2 years after program completion). Respondents to the survey (41/97) were representative of the total population of JFDP participants by both year of participation and project type. There were examples of projects in each of the stages (planning, implementation, evaluation) and for each of the categories of project type (research grant, research project, education, clinical project). About half of the respondents (22/41; 54%) reported that their projects were still in the planning stage when they completed the JFDP. By the time of the survey, only five individuals (12%) reported that their projects had not moved beyond the planning stage. In this group, the average time from completion of the program and time of the survey was 1.5 years. Only three (7%) had achieved the evaluation stage by the end of the program (Table 2). However, by the time of the survey, a majority of respondents (36/41; 88%) reported that their projects had advanced to implementation or evaluation.

### Academic progress of program participants

On the survey, participants listed academic achievements that resulted from work on their projects (publications, presentations, awards, grants, and leadership positions). Respondents who had advanced their projects to the evaluation stage reported a greater number of publications, presentations, and grants related to their projects than those whose projects remained in the planning or implementation stages (Figure 1). The total number of academic achievements per individual was more than two times greater for those who achieved the evaluation stage than for their peers in the program whose projects were at earlier stages.

The analysis of participants' curricula vitae ( $n = 34$ ) revealed a similar pattern to the project-related academic products reported in the survey. Faculty who had advanced their projects to the evaluation stage had greater total numbers of publications, presentations, and grants than those whose projects were in the planning and implementation stages (Figure 2). Faculty who had achieved the evaluation stage had approximately twice the total number of academic products per individual than other respondents. There were no differences among the

participants in awards and leadership positions. Thus, faculty who moved their projects to the evaluation stage showed higher overall academic productivity in addition to that specifically related to their projects.

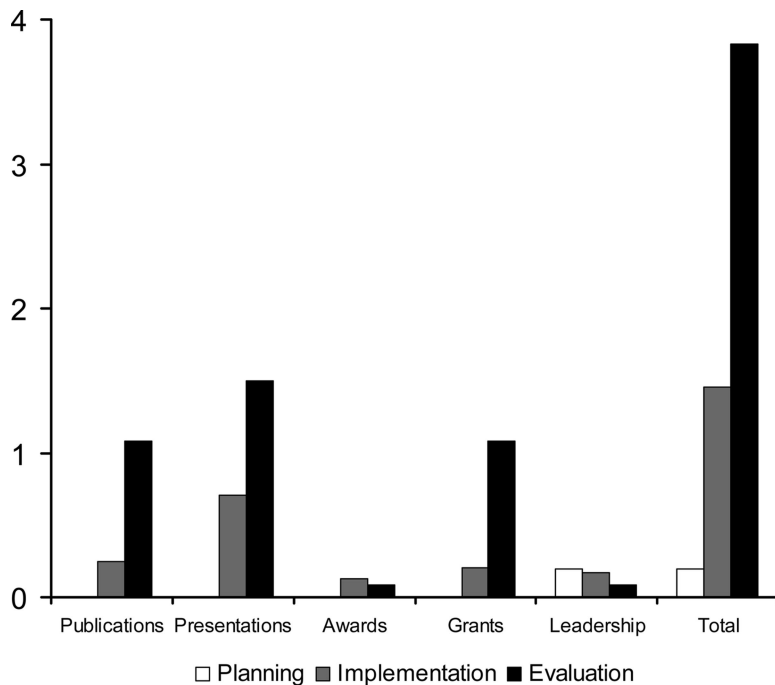
### Participants' perceptions of project impact

To gain further insight into the value of work on a project, the survey asked participants, "What has been the most important effect of the project on your professional development, and why?" In the interviews, participants were asked to comment further about the impact of their JFDP project on their career and professional development. Three themes emerged regarding the participants' perceptions of the impact of their projects: producing tangible outcomes, developing a career focus, and developing relationships.

**Producing tangible outcomes.** An important benefit of the project identified by participants in the JFDP is that it helped them to obtain new skills and knowledge and to organize their efforts to achieve tangible academic products. Examples of their growth in skills and knowledge are revealed in responses to the open-ended questions, including comments such as "became familiar with literature search and preparation for project" and "became familiar with survey design." Participating faculty identified the acquisition of new skills and knowledge, completed grants and manuscripts, and leadership positions and publications as products of their participation. Written comments such as "We have published three papers based on the model we established for this project" and "potential opportunities to get more funding" are further indicators of some of these outcomes.

Additional outcomes included career advancement, such as appointments to leadership and administrative positions. For instance, a participant whose project involved a new clinical service explained in an interview,

For me professionally ... it really opened doors ... and it has been a wonderful thing for my career. I started lecturing a lot. I gave a national [presentation] ... it's one of the highly regarded national conferences.



**Figure 1** Academic achievements related to projects in the Junior Faculty Development Program (JFDP) at the Pennsylvania State University College of Medicine, as of 2008. In the questionnaire, participants were asked to report academic products related to their JFDP project. These products were counted using the coding system developed for CV analysis (see Figure 2). The respondents were divided into three groups by the status of their project (planning, implementation, evaluation) at the time of the survey; the average number of products per individual faculty member is shown for each group.

In the survey data, many respondents highlighted leadership outcomes related to their career progression, such as “became surgery director,” “new associate residency director,” and “led to promotion to associate professor.”

**Developing a career focus.** Participants viewed the project as an important tool to help them concentrate their efforts and develop an academic focus. One interviewee noted, “The project . . . is a really useful way to help people focus for the year.” The importance of the project on developing a career focus was revealed in survey responses such as “The project has opened a new door for my research” as well as in comments made during the interviews:

I am aiming for an academic career with a focus on research and patient care. As such, this project equipped me with experience in putting together an NIH proposal, which is very much needed to succeed in the current scientific community.

Participants perceived value in working on a project even if it did not come to fruition during the program, because the project provided a focus for their

academic career. One interviewee explained,

My project was to write a research grant and it didn’t get funded during the program but it got funded in the year following the program, and that was a very important thing because that allowed me to have the time and the resources to do the research that I’m doing now.

The project helped some participants develop a focus for work that continued after completion of the program and that has had important subsequent effects on their careers. One interviewee whose project was securing an NIH grant noted, “From this program, I grew it [the project] to become a bigger research program!” That research program has now become the career focus for this individual.

**Developing relationships.** Central to the value of the project was the opportunity for junior faculty to develop productive relationships with senior faculty and their peers. The mentoring relationship with senior faculty provided needed expertise and guidance. For example, one participant, whose project was to develop

a new medical course, described his mentor:

He is the internal medicine acting internship director and has a lot of experience in developing courses, especially at the fourth-year level.

Projects provided the opportunity for faculty to develop connections across disciplines and to become more effective working in collaborative situations. One participant noted such a benefit:

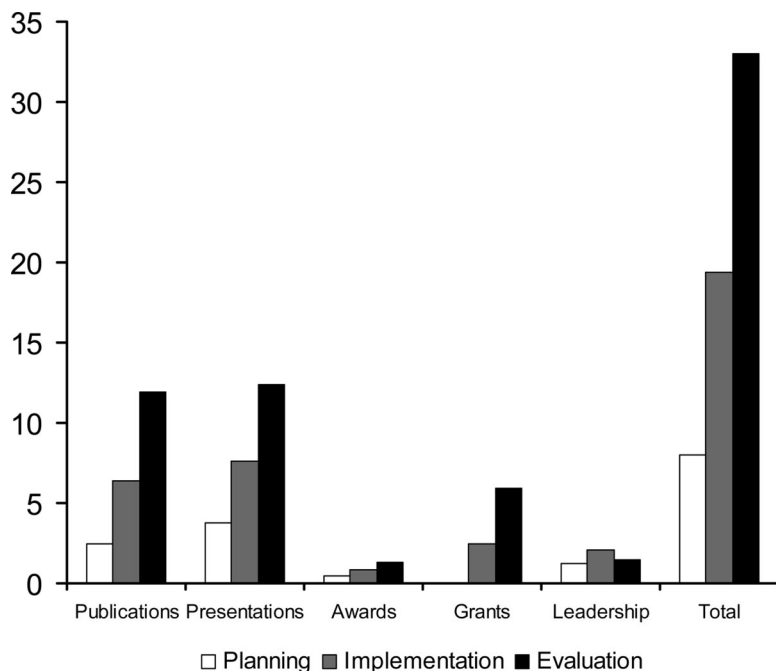
A chance immediately to meet people across disciplines and the organization, both people that were starting and energetic and interested in coming along and people who were very well established here.

Relationship development was pivotal to helping participants learn the ropes of the organization. One commented, “I think the most important aspect of participating in JFDP is networking throughout the college.”

### Key Features of Projects in Faculty Development Programs

Our findings indicate that work on projects within a comprehensive faculty development program leads to individual academic achievements. Further, faculty may continue to work on projects past the completion of the program and develop a focus for their academic career. Faculty who achieved the most progress on their projects during and after the JFDP reported the highest number of academic products related to their project and displayed the highest number of overall academic achievements, as determined by analysis of curricula vitae. In addition, project work allowed faculty to develop key relationships with peers and senior faculty. These findings expand the work of others who have demonstrated the utility of projects in educational faculty development programs.<sup>3,4,7,8</sup> Given the impact of projects on academic development, what are the key features of projects in faculty development programs that lead to academic achievement?

To advance in academia, faculty must continue to develop and hone knowledge and skills, identify a career focus and gain recognition within their community, generate scholarship, allocate time to academic work, and establish supportive relationships and collaborative



**Figure 2** Academic achievements since participation in the Junior Faculty Development Program (JFDP) at the Pennsylvania State University College of Medicine, as of 2008. Respondents to the online questionnaire were asked to submit a current CV. The contents of each CV were analyzed using a coding system modified from that described by Morzinski and Schubot.<sup>17</sup> The system was refined using an iterative process and tested on sample CVs obtained from faculty who had not participated in the JFDP. Each CV was analyzed: Entries were marked with the appropriate code, and the codes were counted by type and year; decisions on ambiguous items were resolved by consensus of all coders. The respondents were divided into three groups by the status of their project (planning, implementation, evaluation) at the time of the survey; the average number of products per individual faculty member is shown for each group.

networks.<sup>21,22</sup> In our experience, most junior faculty need structure and guidance to accomplish these goals. Project work within a faculty development program contributes to each of these areas and thus provides a foundation for future academic success. The benefits of project work can be summed up as follows:

- Knowledge and skill development through application
- Identification of a career focus
- Recognition within the department, institution, and profession
- Scholarly achievement and academic productivity
- Facilitation of career advancement (promotion, leadership position)
- Justification of protected time for academic work
- Development of mentoring relationships
- Formation of collaborative networks

Although junior faculty are well trained in their disciplines, they may not possess the advanced skills to be successful, even within their mission responsibilities. For example, a physician may have specialty training but lack the ability to integrate different specialties within a multidisciplinary clinic. A basic scientist may have strong technical skills but lack the grant-writing expertise to obtain research funding. Faculty development programs can provide knowledge and allow practice of skills. Project work enables learners to transfer the knowledge and skills gleaned from the curriculum and apply these in the context of their projects. The outcomes of their projects demonstrate the application of their learning.

Career advancement depends on faculty becoming recognized for their expertise, often filling a niche in the institution. Faculty begin their academic careers relatively undifferentiated in terms of an academic or scholarly focus and may be uncertain as to the balance of mission responsibilities that they wish to assume.

Project work provides the opportunity to “test drive” a potential new area of focus. For example, a clinician may be interested in expanding her or his educational responsibilities but not know how to navigate the transition. Successful completion of a project enables faculty to be recognized for a specific area of expertise. Thus, concentrated effort results in a product (a new curriculum) that benefits the institution (a new course) and leads to recognition of expertise (appointment as course director). Positive reinforcement stimulates continued effort in that area, resulting in further scholarship and achievement. Our experience in the JFDP demonstrates this relationship between project work, academic focus, recognition for expertise, and career advancement, including promotion and appointment to leadership positions.

Scholarship is expected of all faculty and is essential for an academic career. However, junior faculty may not know how to generate scholarly work effectively or how to extract scholarship from their assigned responsibilities. For faculty engaged in discovery research,<sup>23</sup> the pathway to scholarship is straightforward—but manuscripts must be published in a timely fashion in order to gain funding and achieve promotion. On the other hand, physicians may not appreciate the opportunities to generate scholarship from their clinical practice through quality improvement or health outcomes research. Educators have opportunities to produce scholarship, but educational programs must be evaluated and disseminated to be considered scholarly.

A faculty development program that requires projects enables faculty to translate their work into scholarship. However, it is essential to establish a structure for project work with the explicit expectation that scholarship will result. Glassick<sup>20</sup> defined a scholarly approach as having six components: clear goals, adequate preparation, appropriate methods, significant results, effective communication, and reflective critique. Glassick’s principles are embedded in the JFDP. A formal session on scholarship provides participants with the tools and strategies to generate scholarly work from their projects. Participants describe their plans for scholarship in meetings with their mentors, project reports, and

presentations. For projects to generate scholarship, the work must progress to collection and analysis of results (the evaluation stage) to allow subsequent communication (publication and presentation). Our survey and interview revealed that participants who progressed to the evaluation stage reported the highest number of scholarly products related to their projects and had a greater number of scholarly products overall. Thus, the project focused participants' academic efforts to yield scholarship.

Faculty face competing demands on their time and may not be able to devote effort to scholarly work.<sup>14</sup> For example, a clinician on a "90/10" appointment may use the 10% academic time for purposes such as completing charts, committee assignments, or catching up on e-mail. Although fully engaged in work, the faculty member may not be academically productive. Participation in a faculty development program that requires protected time to work on a project facilitates scholarly work. The JFDP requires a formal commitment of time and effort (at least four hours per week) and agreement to this release time by the participant's chair or division chief. Protected time is allowed with the expectation that faculty will commit to the program and achieve progress on their project. Project work provides an incentive for participants to sustain intense engagement, including commitment of additional time if necessary to achieve the intended outcome. In the program, faculty are provided with dedicated time for academic work; those who exploit this opportunity receive the greatest benefit for their effort.

Successful faculty depend on the advice and assistance of more experienced colleagues.<sup>24,25</sup> However, they may have mixed experiences in securing mentoring and obtaining the support they need.<sup>26</sup> Using the concept of functional mentoring,<sup>18</sup> the project in the JFDP is the focal point for identifying a mentor and establishing a mentoring relationship. Project work provides the focus for mentoring. The experience of working on a project under the guidance of a new mentor provides junior faculty with the skills to negotiate future mentoring relationships.<sup>11</sup> Participants in the JFDP also reported that the projects enabled collaboration among peers and

across the institution. A similar result was found in a national survey of faculty development programs in which team-based projects enhanced faculty socialization.<sup>16</sup> Although these benefits of project work may not be evident on a curriculum vitae or dossier, these skills are critical for the professional development of successful academic faculty.

Despite the opportunity to undertake a project under the idealized circumstances of a formal professional development program, not all participants generated products from their efforts. A small number of participants did not pursue their projects beyond the planning stage. These faculty also had fewer academic products (Figure 2). Some of these individuals reported that the obstacles to progress were competing pressures or lack of time. This finding has been described in other programs.<sup>14</sup> Is the ability to advance a project as part of a faculty development program a reflection of the academic abilities or capabilities of the individual faculty member? Can the performance of a junior faculty member on a mentored project be a marker of future academic success? These questions, as well as the long-term impact of projects on individuals and institutions, suggest areas for continued study.

### Best Practices

To achieve the benefits of project work for faculty, we recommend the following framework for incorporation of projects within faculty development programs:

- Provide protected time for project work
- Ensure projects are aligned with faculty effort assignments
- Establish a framework for a scholarly approach to projects
- Provide a formal expectation for scholarship as a project outcome
- Focus mentoring on participants' needs for their projects
- Monitor the mentoring relationships; provide support for mentors
- Provide support during the program to ensure progress
  - Require participants to define explicit outcomes
  - Establish timelines and milestones during the program to monitor progress

- Provide opportunities for presentation and review of progress
- Recognize success (formal presentation, certificate, celebration event)
- Evaluate project outcomes

### Final Words

Based on a review of the literature, this study, and our experience with the JFDP,<sup>11,18</sup> we conclude that project work should be an essential component of faculty development programs. Projects enable faculty to learn and practice critical skills that are part of academic life and necessary for career advancement. Faculty members who recognize and exploit these opportunities complete the faculty development program with a strong foundation for academic success. By incorporating projects in faculty development programs, faculty will experience greater productivity and institutions will benefit from the projects themselves, thus promoting faculty and institutional vitality.<sup>11</sup>

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