



# Need faculty development? Use the structured, tiered, educational program model

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**Received:** July 17, 2015

**Accepted:** October 11, 2015

**Published:** November 03, 2015

## ABSTRACT

The structured, tiered, educational program (STEP) Model was developed in an effort to create a sustainable, centralized, faculty development program at our institution in a timely fashion with limited resources. The STEP Model is a three-tiered model which provides a framework for building faculty development programs. This article describes the beginning of what has evolved into an ongoing plan to improve and sustain a pathway for our faculty to enhance their teaching. The process of developing our STEP Model included: (1) Investigating existing faculty development programs; (2) designing/conducting a needs assessment; (3) developing a structured, tiered educational program (Tier I-Basic; Tier II-Intermediate; Tier III-Advanced); (4) enlisting presenters and creating modules on identified topics (Tier I); (5) constructing programs for Tier II and Tier III; (6) Implementing to implementing so that capitalization is consistent (Tier II); and (7) inducting the Charter class of our Academy of Distinguished Medical Educators (Tier III); admitting our first cohort of Interdisciplinary Certificate (Tier II), and Master of Science (Tier III) participants for the Education for Healthcare Professionals program. Based on participation at all levels, in multiple types of offerings and feedback received from participants, the model appears to be effective, universal, and applicable to a variety of settings.

**KEY WORDS:** Faculty development, medical education, program development

## INTRODUCTION

Faculty development, “an essential element in medical education,” may be defined as a program which provides education and training to help prepare faculty for their various roles [1]. It refers to the range of activities that institutions use to assist faculty in their roles as teachers, educators, administrators, leaders, and/or researchers [2]. Since many faculty development topics are universal, our office was tasked with coordinating efforts to create a sustainable, structured Faculty Development Program for the College of Medicine.

The plan included providing online support, face-to-face offerings, self-directed and active learning opportunities to benefit all and facilitate cultural change as needed [1]. After reviewing the literature and best practices, it was evident that a strong Faculty Development Program required that adoption of a framework that incorporated research from other related fields [3]. Creating a program that could “extend beyond health professions disciplines, education specializations, and individual needs” [4] was the focus, so we developed and implemented the Structured, Tiered, Educational Program (STEP) Model for Faculty Development at our institution.

## METHODS

### Development of the Model

The steps utilized to create the STEP Model included: (1) Investigating existing faculty development programs; (2) examining best practices derived from our research; (3) designing/conducting a faculty needs assessment; (4) interviewing campus leadership, (5) creating an outline/framework for the STEP model including: Tier I-Basic; Tier II-Intermediate; Tier III-Advanced; (6) enlisting presenters/creating modules for Tier I; (7) constructing and implementing programs for Tiers II and III.

The initial step consisted of an extensive review of programs in medical schools who are members of the American Association of Medical Colleges. As we systematically reviewed the school websites commonalities and differences were noted and categorized [Table 1]. This information was used to develop a faculty needs assessment which consisted of 13 items with two questions asking for multiple responses. For example, faculty were asked to rate their perceived knowledge and skill level (basic, proficient, or advanced) and their interest and applicability of topics and items (low, medium, and high) [5].

Then, we utilized the needs assessment feedback and best practices data to design our STEP program. Tier I consist of online modules, a clinical teaching series, Educational Grand Rounds presentations and requested presentations/workshops. Tier II includes the Modeling Excellence in Teaching (MET) Program and the Education for Healthcare Professionals (EDHP) certificate program. MET is a year-long, voluntary program where faculty commits to attending faculty development sessions and to observe teaching or choose to have their teaching observed. Those who complete the requirements are eligible for a \$250 professional development award. The EDHP Certificate Program is an interprofessional educational opportunity consisting of 14 hours of core education courses. Tier III consists of the Academy of Distinguished Medical Educators (ADME) and the EDHP Master's program. The ADME is a working group of individuals who have been recognized for their teaching. They are committed to the educational process and have piloted a group mentoring program built on Faculty Learning Communities [6] and have incorporated journal clubs. The EDHP Master's program is a 36 hours interdisciplinary program consisting of core education and healthcare courses and electives.

### Construction of the Programs

Enlistment of presenters for our Tier I program was crucial and focused on presenters with expertise who provided take-away information for faculty implementation. In-house stakeholders also offered faculty development, and our office presented a significant number of presentations/workshops to build rapport. Self-study modules focused on the topics receiving the most interest during the needs assessment.

The programs for Tiers II and III were designed simultaneously, were more intensive, and required a greater degree of faculty

commitment. Two Tier III programs, the ADME and Masters were created first. An ADME planning committee was selected, criteria, and tasks were gathered from other institutions and reviewed, and the vision and purpose of the ADME were developed. The EDHP Master's program was developed collaboratively with our Health Science Center and is housed in the College of Medicine. The Tier II programs, the EDHP Certificate, and the MET program were developed in a similar fashion. Since the EDHP Certificate was created in conjunction with the Master's program; it was a collaborative, interdisciplinary planning process. The MET program was created to fill a gap which involved a need for targeting teaching, learning, and assessment skills [7]. All presentations are focused on these educational elements. The associated observation component was essential since our faculty did not previously have access to this type of opportunity.

### Implementation of the Programs

Implementing the MET Program was easier than expected, and our attendance expectations were exceeded. Interested participants applied for the program electronically, and committed to attending at least three presentations and also an observational component. The ADME induction took place after nominees' applications were peer-reviewed. The members consists of the planning committee and applicants who met the designated criteria. Each Health Science Center component (dentistry, dental hygiene, medicine and nursing) reviewed their EDHP applicants and brought recommendations to the committee for acceptance into the program.

## RESULTS

The investigation of faculty development offerings and programs yielded helpful information. The categories are presented in Table 1, and feedback, clinical teaching, and evaluation were common topics. We also noticed that some schools had academies that recognized faculty committed to education while others offered structured teacher training.

The needs assessment, completed by 286 faculty, yielded topics of interest used to build the STEP Model. The topics included: Developing educational goals and objectives (51%); teaching and clinical/research productivity (44.1%); developing evaluations (43.8%); interactive teaching strategies (43.8%); and collaborative mentoring (43.6%). Program interest for Tier II and III programs included: Certificate/Master's program (49.6%), and ADME (47.3%). We focused our efforts on enlisting individuals who had expertise in developing faculty development opportunities on the following topics yielding interest ratings above 40%: Incorporating active learning/self-directed learning, effective feedback, preserving clinical productivity, educational research, and career development.

The 1<sup>st</sup> year, approximately 741 participants attended offered events, seven online modules were developed, 11 presentations/workshops were offered by our office, and additional workshops were enlisted by our office and presented by others. Tier I program attendance more than doubled from the 1<sup>st</sup> to 2<sup>nd</sup> year.

**Table 1: Faculty development programs and offerings analysis**

Programs/Offerings	Region A (%)	Region B (%)	Region C (%)	Region D (%)	Total (%)
Faculty development programs					
Orientation	56.7	40.5	43.8	50.0	46.6
Mentoring	60.7	42.6	50.0	62.1	52.0
Academy	20.0	21.3	27.1	21.9	22.9
Certificate/masters	16.7	21.3	12.0	16.7	16.6
Workshops/presentations					
Teaching skills/best educational practices	24.1	73.2	60.5	86.7	61.1
Assessment/evaluation/grading	20.7	19.5	23.7	26.7	22.7
Course preparation/curriculum design	6.9	12.2	21.1	20.0	15.1
Academic technology	13.8	14.6	18.4	20.0	16.7
Career development/promotion and tenure	20.7	29.3	21.1	40.0	27.8
Writing/research/grants	34.5	29.3	50.0	36.7	37.6
Leadership/management	44.8	44.0	21.0	40.0	37.5

Voluntary registration for the Tier II MET program enlisted 38 participants. Our Tier III program inducted 9 ADME Charter Members, and 12 EDHP students were in our first cohort.

## CONCLUSIONS

Based on the increase in faculty participation, utilizing needs assessment data to construct the STEP Model of faculty development was a success. The needs assessment was an integral component for sustaining the momentum of our faculty development program and ensuring that offerings continue to be relevant and applicable. The STEP Model is effective; it provides a structure which enables participants to tailor their professional growth and level of involvement. This is evidenced by the participation at all tiers. One area of concern has been the limited participation with online modules. We have discovered that in person presentations are preferred, but to better reach our geographically dispersed faculty, we have incorporated a learning management system with shorter, more interactive, user-friendly modules. Due to these changes, our online participation is increasing.

The STEP Model appears to be universal. We worked in conjunction with our Health Science Center to replicate the model as a part of the faculty development section of their quality enhancement plan proposal. It mirrored the first implemented in our College of Medicine. The structure of the model and applicability in a variety of settings made its' adaptation almost seamless.

At our institution, we focused primarily on teaching since it is one of our college's pillars. Now that the teaching programs are established, we are expanding faculty development efforts to include leadership [8,9] and research [3]. The key component of any faculty development program is utilizing faculty feedback to constantly update and revise. The STEP Model is foundational and may be used as a template. However, it is flexible enough to modify based on institutional needs and can be used to help others build and sustain robust faculty development programs.

## Essentials

- The STEP Model is a three-tiered model which provides a framework for building faculty development programs

- The structure enables participants to tailor their professional growth
- The needs assessment and best practices research were integral components in sustaining the momentum of our faculty development program
- The STEP Model appears to be universal and applicable in interprofessional settings.

## ACKNOWLEDGMENTS

Ethical approval: Institutional Review Board approval was received through Texas A&M University.

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Source of Support: Nil, Conflict of Interest: None declared.