A Faculty Development Model for Academic Leadership Education Across A Health Care Organization

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ABSTRACT: Academic leadership in undergraduate and graduate medical education requires a specific set of leadership and managerial skills that are unique to academic leadership positions. While leadership development training programs exist for traditional leadership roles such as department chairs, executives, and deans, there are fewer models of leadership training specifically geared for academic leadership positions such as program and clerkship directors, and designated institutional officials. There are academic programs at the national level, but there is sparse literature on the specific decisions required to create such programs locally. With growing regulatory and accreditation requirements as well as the challenges of balancing the clinical and educational missions, effective leadership is needed across the spectrum of academic medicine. To meet this need for the military health care system in the United States, we used Kern’s six-step framework for curriculum development to create a 1-week academic leadership course. This paper describes the process of development, implementation, outcomes, and lessons learned following the initial 3 years of courses. Specific discussions regarding who to train, which faculty to use, content, and other elements of course design are reviewed. The course and process outlined in the paper offer a model for other organizations desiring to establish an academic leadership course.

KEYWORDS: Leadership, Academic Medicine, Curriculum development

The health care system is a constantly changing system with dynamic relationships between patients, healthcare professionals, and business/system leaders. Healthcare leaders must adapt to evolving demands. In medicine, leaders are typically thought of as the administrative positions such as CEO, finance officer (CFO), President, Chair Board of Trustees, or a myriad of department chair roles. While urging physicians into these roles is crucial, many underestimate the challenges, skills, and influence required of academic leaders to be successful. Just as traditional leaders are concerned with hospital accreditation, academic leaders must ensure programs meet educational accreditation requirements [eg, Joint Commission vs Accreditation Council for Graduate Medical Education (ACGME)]. Being an academic leader is challenging and requires not only leadership skills, but those of an effective manager.¹ One study identifies 5 activities “educational leaders” perform including taking a student-centered perspective, considering the needs of students and faculty to improve, being a visionary, emphasizing organizational learning and creating networks.²

There are many ongoing dialogs regarding leadership in medicine including the distinction between leadership and management. Many agree with Kotter that leadership is about “coping with change,” where management is about “coping with complexity.”³ Those in leadership roles must demonstrate both leadership and management skills. Although many academic leaders serve in developmental preparatory roles (key clinical faculty, associate program directors, programs directors) prior to assuming higher leadership roles, there is often much more they need to learn to be successful in new roles. A great deal has been written about developing leadership skills of “traditional leaders” less has been written about developing the leadership skills of academic leaders. Moreover, the literature is not clear about what positions are considered “academic leaders.” Consequently, many formalized courses are preferentially created for those in senior positions. Given the growing complexity and requirement of academic leaders and the need for innovative solutions driven from the bottom up, it is imperative to train academic leaders at all levels.

Academic leaders not only need the typical health care leadership competencies, but also specific knowledge and skills related to the educational position.⁴,⁵ For example, clerkship and program directors must understand the Liaison Committee on Medical Education (LCME) and ACGME requirements, respectively. Publications have suggested competencies for these leaders, and others have developed potential evaluation tools.⁶,⁷ This article will discuss the development of a week-long Academic Leadership Course for academic leaders within a nationally dispersed organization designed using Kern’s framework for curriculum development.⁸ The description of the development and implementation of the course provides a practical approach for training academic leaders within an organization.
Table 1. Content areas* obtained from literature review.10,14-23

| EDUCATIONAL TOPICS          | LEADERSHIP TOPICS                                      |
|-----------------------------|--------------------------------------------------------|
| Assessment                  | Balance (resilience)                                   |
| Curriculum design           | Budgeting                                              |
| Curriculum governance       | Building communities of practice                       |
| Educational research        | Career development and succession planning             |
| Learning theory             | Change management                                      |
| Mentoring                   | Communication                                          |
| Peer observation            | Negotiation                                            |
| Program evaluation          | Conflict management                                    |
| Small group teaching        | Emotional Intelligence                                 |
|                            | Ethics                                                 |
|                            | Health Care Quality                                    |
|                            | Leadership opportunities                               |
|                            | Leadership style                                       |
|                            | Management                                             |
|                            | Mission and vision                                     |
|                            | Project management                                     |
|                            | Strategic thinking                                     |
|                            | Team Building                                          |

*Bolded items were included in our course.

General needs assessment and problem identification

Faculty development focused leadership courses, fellowships, and other certificate programs (will be termed “courses” for remainder of manuscript) have been increasing since the initial paper by Alui in 1985.9 A Best Evidence Medical Education (BEME) review summarizes 14 available programs whose focus was leadership.10 Attendees of those courses had high satisfaction with time to focus on personal leadership development. A 9-month fellowship developed by the Association of Family Practice Residency Directors (AFPRD) for program directors, not included in the review by Steinert et al., aimed at leadership and management skills involved in person training as well as a mentored project completed by participants at their home institution. The fellowship was rated as very valuable by 85% of participants and 76% reported that it lowered the stress level.11 Program directors who participated also had higher board pass rates for graduates in their programs.12 Most recently, a 12-year experience of a leadership program at the University of California, San Francisco articulated the impact on participants at the individual, interpersonal and organizational levels.13

Several themes emerged from existing literature that were used in our course development. First, faculty development courses with a leadership focus are most effective when multiple educational strategies are employed especially those using experiences and reflection. Second, there are several overlapping content areas potentially demonstrating agreement in their importance (Table 1). Most of the content areas are in the “leadership” category are universal to all leadership positions (emotional intelligence, communication, conflict resolution, succession planning as examples), with a few (curriculum governance as an example) being specific skills for academic leaders. Third, trying to maximize the crucial, hard to measure, value of peer interaction and understanding the organization more fully.13 Lastly, these courses suggest the importance of projects and reflection to make the material immediately tangible to the participants’ daily work.

Despite the fact that leadership courses have a positive impact on participants and some “best practices” are delineated, there are few programs in existence where academic faculty (versus physicians at large) are the aim.5,10,24 In a national survey of North American allopathic medical schools, 65% of respondents (equally 37.9% of the 161 queried schools) reported having an institutional leadership development program.25 Many offered single workshops and would send faculty to outside leadership programs citing limited resources as a barrier for developing local courses. Interestingly, outside formal courses can be more costly in regards to money and time away from work, as well as potentially not taking advantage of the opportunity to specifically teach broader organizational understanding (contextual leadership) and fostering crucial working relationships.

Performing the targeted needs assessment

The Military Health System (MHS) is a large organization spanning 6000 miles in the United States with 1 medical school, 25 hospitals with Graduate Medical Education (GME) programs, 246 medical education residences and fellowships, 31 advanced dental programs, dozens of advanced nursing programs and other health professions training programs at the time the course was initiated. For the purposes of this paper, an academic leader was defined as “someone who assumes a role with accountability for the education of other health care professionals.” Examples could include being a university-based course director, module director, clerkship director, department chair or Dean’s staff, or a residency program director, associate program director, or designated institutional official. Using this definition of “academic leader” the organization had approximately 600 people in these roles. The MHS culture is complex as there are subcultures of the specific Services (Army, Navy, and Air Force) and the hierarchical military rank structure; however, the day to day activities and requirements of running medical education programs is similar to civilian organizations.

Prior to the course, the university created the position, Associate Dean for Faculty Development, who interfaced with more than a thousand faculty within the system to gain perspective of these roles. Given the large amount of turnover of our organization’s academic leaders,26 we perceived a need existed for this type of course on a continual basis.

We began an iterative cycle of searching the literature and gathering data from our faculty. Collating themes on content of other academic leadership curricula,9,10,14-22 and from the physician leadership courses,5 a few workshops were piloted 10 months prior to the first course with a group of residency program directors and designated institutional officials (DIOs) representing 20 of the teaching hospitals. These workshops were facilitated by faculty with specific training and experience
in management, team building, and emotional intelligence. The pilot group was deliberately chosen for diversity in specialty and location to gain insights and hoping this group would serve as advocates for the program at their institutions. After the 3 days, the group discussed the need for an academic leadership course and the content experienced. Participants in the pilot agreed the content presented was important and applicable to their academic roles. The discussion provoked other questions about current leaders’ experiences which led to a more focused survey.

We conducted a survey of our graduate medical education (GME) residency and fellowship program directors and associate program directors to get quantitative data for the need of such a program. The electronic survey asked about individual faculty member’s experience and training (as an academic leader). Out of 426 people, 176 replied (41.3% response rate). Even though the response rate was less than other physician surveys,27 it was the initial data regarding training and experience of program directors in our organization. At the time, 86.8% of the respondents had been in their position for less than 5 years. Three-fourths had little or no training in educational and academic leadership.28

After our local needs assessment, a more detailed literature search was performed using both terms “physician leadership” and “academic leadership.” Overlapping content areas fell into 2 categories, leadership topics and educational administrative topics, shown in Table 1. Budgeting was not included since budgeting is tasked by others positions in our organization.

Creation of goals and objectives
Overarching goals were developed before determining the final content. These included increasing the individual’s awareness of and improving their own emotional intelligence, being familiar with management of personnel and change within the organization, fostering interdepartmental and interhospital networking and problem solving, and enhancing the use of core principles and frameworks for managing and leading educational programs. The entire course was meant to promote deliberate reflection.

Teaching theory and strategy
Knowles’ adult learning theory and Kolb’s experiential learning framework guided the teaching methods.28,29 A constructivist approach was used purposefully building on a participant’s prior experience and current position and making the course applicable to the next workday. Andragogy hypothesizes these principles are used in adult learning in order to be transformative. Kolb required us to consider certain aspects of concrete experience, abstract conceptualization and reflection throughout the course. The goal was that each participant would have active experimentation upon return to their workplace further enhancing the knowledge and skills taught in the course. Since our faculty are widely dispersed and part of the goal was to create community, a combination of pre-work with face-to-face workshops was chosen. Most sessions used small presentations with facilitated discussion, guided practice of the skills, reflection, panels, and low-fidelity simulation through paper cases. Table 2 outlines the strategies utilized linked to the sessions.

Implementation
Implementation in curriculum development requires purposeful decision making often not discussed candidly. Specifically in academic leadership development programs (and faculty development seminars), implementation decisions tend to represent the largest barriers, and ironically are the least frankly discussed potentially adding to the reasons many schools choose to send leaders elsewhere for training.25 Decision making is a balance of ideals and realities that align curricular objectives and teaching strategies with tactical logistics and available resources. The Associate Dean for Faculty Development was responsible for the design and implementation of the course. A group of 8 leaders in the healthcare organization, including 5 designated institutional officials, 1 associate dean, and 2 university associate professors with additional training in faculty development, participated in an hour-long teleconference. Decisions about attendees, length of course, location, and inclusion of projects was debated.

The benefits and limitations of the selection process and number of attendees was examined. Review of the literature demonstrated courses where participants were nominated,21,30 recruited,9 and had open applications.14,15,17-19 All of these processes seemed to depend upon participant desire to attend or someone else suggesting attendance. We decided to invite participants and specifically target people in leadership positions. Hoping to make the biggest impact on the organization and learners, program directors of large graduate medical education programs such as internal medicine, family medicine, surgery, pediatrics and a few others were invited first. Unlike some courses located in 1 location with more static faculty where training 10 to 15 faculty per year may have been helpful, we opted to train a larger number due to our notable increased turnover and junior faculty. Balancing the theoretical decisions to be experiential and reflective per Kolb, and the large number or people who could benefit from the course, we set the desired number between 25 and 40.

The course length and inclusion of projects were decisions made with similar logistical considerations. Academic leadership courses have ranged from hours to 2-years.10 Furthermore, longer projects are cited as beneficial in many leadership courses.5,10 At the time of course creation and implementation, there was no specific medical education department at our university, and the only designated faculty to teach and manage the course was the Associate Dean for Faculty Development. Considering lost revenue in patient care, need for educational coverage, cost of travel to the university, lack of dedicated teachers for the course, and the breadth of training and practice desired, the group agreed on a week-long offering twice a year with pre-work as opposed to a longitudinal project.
Faculty teachers for the course were secured choosing faculty who held prior academic leadership positions. Many faculty teaching the course had multiple prior academic leadership positions meaning they not only had knowledge, but could give practical advice and mentoring. Choosing faculty meant ensuring the faculty were competent in the teaching strategies of facilitated discussion, incorporating work in the midst of the workshop, and enhancing reflection and community building. All faculty agreed to share all post-course comments after the course for iterative improvements.

**Program evaluation**
The first course occurred in October 2016 and was repeated 5 more times each Fall and Spring with the last being in March 2019. Table 3 lists the professional variety of attendees. A survey, not formally validated, was designed by the author (JS) to assess the program and gain formative information for subsequent iterations of the course. The survey consisted of 4 Likert style questions (3 for the last 3 courses) and a free text question asking for suggestions for improvement. It was administered on paper to participants at the end of the courses.

The survey response rate was 94% (125/133). Ninety-five percent of respondents (104/109) rated the course as excellent. Eighty-five percent (52/61) and 11% that responded said they would “definitely” or “mostly likely” attend that course again, respectively. The course was considered “very organized” by 88% (106/120) of responders and “mostly organized” by 13% (11%). Participants reported they would use the materials from the course either “daily” (64%, 79/124) or “often” (35%, 44/124). Free text comments were overwhelmingly positive (Table 4).

| CONTENT                                | DIDACTICS WITH DISCUSSION | CASE DISCUSSION | LOW FIDELITY SIMULATIONS | SELF-ASSESSMENT | PEER FEEDBACK | PRE-WORK                              |
|----------------------------------------|---------------------------|-----------------|--------------------------|-----------------|--------------|---------------------------------------|
| Assessment                             | X                         |                 |                          | X               |              | Current assessment chosen to discuss and revise |
| Curriculum development                 | X                         |                 |                          |                 | X            | Reflection on a curriculum to be created or revised |
| Remediation of learners                | X                         |                 | Pre-work used as cases   |                 | X            | Description of a troubled learner and the context of remediation |
| Due process in education               | X                         |                 |                          |                 | X            |                                                      |
| Educational crises                     | X                         | X               |                          |                 |              |                                                      |
| Program evaluation                     | X                         |                 |                          |                 |              | Pre-reading                                      |
| Change management                      | X                         | Pre-work used as cases |                 |                 |              | Reflection and discussion of a change in progress |
| Communication                          | X                         |                 |                          |                 |              | Reflection of a communication struggle and actions taken to improve |
| Negotiation                            | X                         |                 |                          |                 | X            |                                                      |
| Conflict management                    | X                         | Pre-work used as cases |                 |                 | X            | Reflection of current conflict including context and participants |
| Emotional Intelligence                  | X                         |                 |                          |                 | X            | Self-assessment performed prior, pre-reading |
| Management skills                      | X                         |                 |                          |                 | X            | Pre-reading                                      |
| Mission and vision                     | X                         |                 |                          |                 |              |                                                      |
| Team building                          | X                         |                 |                          |                 | X            |                                                      |
| Creating a mentoring program           | X                         |                 |                          |                 |              |                                                      |
| Appreciative inquiry                   | X                         |                 |                          |                 | X            |                                                      |
| Running effective meetings             | X                         |                 |                          |                 | X            |                                                      |

**Table 2. Content areas with associated teaching strategies.**
After each course, the faculty met to review all raw comments from attendees. From these meetings, the order of sessions was reorganized and deliberate pre-work and readings for the attendees was aligned. Faculty teaching the course used the pre-work as examples during individual workshops for enhanced practical problem solving. As attendees became more knowledgeable from other faculty development the session content was adjusted. Additionally, attendees became more diverse by including basic scientists, dentists, and varied medical subspecialties were represented.

Lessons learned (strengths, weaknesses, future opportunities)

To our knowledge, this is the first manuscript to deliberately discuss the practical curriculum development and implementation decisions of a leadership development program located at an Academic Health Center specifically for local attendees. Over the past 6 courses several lessons have emerged as both strengths and weaknesses, allowing the course to be refined on a continual basis.

In a time of budget constraints, 1 strength was developing an organizational program that was fiscally beneficial. The course was completely funded centrally by the University including paying the travel costs of participants removing barriers from individual hospitals. Since the course was ran by the University, there were no registration costs, which are tremendous in professional society or open university programs. The funding plan increased support to all 25 hospitals as those individual departments had no cost, aside from loss of clinical productivity while the faculty member attended the course.

Another strength was the connections made and the sense that a community of practice was being fostered. This benefit extends beyond just networking. Since people worked in the same overall organization, leaders from different hospitals often found themselves working on similar issues and could collaborate during the program. There was also significant acknowledgment, empathy and valid suggestions from peers.

Table 3. Attendee characteristics.

| Attendee total | 133 |
| Dentists | 25 |
| PhD | 1 |
| Physician and Dental specialties/ subspecialties | 62 |

**Positions**

| Graduate Medical and Dental Program Directors | 126 |
| Designated Institutional Officials | 1 |
| Clerkship Directors | 3 |
| Course/Module Directors | 1 |
| Intern Coordinator | 1 |
| Assistant Chief, GME | 1 |

| Locations | 20 (19 hospitals and 1 university) |

Table 4. Examples of free text comments.

"One of the best parts of the week was being able to get away and just think and work on things that get kicked down the road too often."

"I was initially skeptical as to how much I would garner from the course, due to being junior in my teaching career. In reality, it was just the opposite. Not only was the content informative about teaching, leadership, and myself, but the surprise value-added has been networking and learning from the senior faculty in the group. I have heard members of the group say ‘I wish someone told me these things when I was in your position’ My recommendation moving forward is to continue including a small number of junior faculty/APDs to maintain this group dynamic. I have built relationships that will carry beyond this course."

"This was a fantastic seminar, definitely a ‘201-301’ level for PDs. I left with multiple tools that I can readily apply on Monday morning. . . Most appropriate for PDs in the first 1 to 3 years."

"Coming with a focus on one product that my program needed allowed me to focus on one thing throughout the week. Thus, the pre-brief was very valuable to give me important knowledge to bring an important result back to my department. Ideal mix, This is essential knowledge for being a PD."

"Recommend considering ‘structured’—unstructured time to learn about challenges and solutions ongoing among other GME peers and maybe assign 2 to 4 members a day to discuss a ‘best practice’."

"The time for self-reflection was valuable as we are unlikely to have time to complete this back at home institutions."

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"All sessions were very useful and informative to me. I liked that several exercises were carried out in such a way that we could use our current and real situation/problem/deficiency."

"I liked all of the time for discussion. Practical examples and real-world examples were extremely valuable. Having all of those real-world examples coming from the participants made me feel like I have the same problems other people do and we can work together."

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who were experiencing, or had experienced, similar struggles. Our current evaluation did not assess the long-term nature of these relationships. This could be a crucial outcome to organizations as they assess talent development over a longer period.

One deliberate implementation decision that resulted in a strength was the manner we gathered attendees. No other published leadership program for academic centers and faculty describe inviting participants. Through our local needs assessment and discussion with stakeholders, we invited those people in certain positions already with suggestions from local DIOs as to who may benefit most. This technique aligned with our goal to effect organizational change by creating space for relationships and a shared educational/leadership language. Unique to our program, we specifically defined “academic leader” for clarity of the organizational leadership and the invitees, and to focus on organizational planning. This decision was 1 of the “right” decisions. Comments from attendees across survey responses consistently stated this course is best attended by an associate program director or program director who had been in the job for less than 2 years but at least 6 months, and that being a program director was better to maximize on experiential learning. Both Knowles’ and Kolb’s theory align with these comments. The course is relevant to these types of attendees and has more meaning since the principles being learned can immediately be implemented when they return home from the course.

The decision to make the program 1 week has both strengths and weaknesses. It allows participants to be immersed in the content and discussion with minimal distractions from routine work to be more focused on strategic thinking, personal reflection, and relationship building. Many commented on wanting follow-up interactions with faculty, which many courses do. However, we do not have those resources and acknowledged this as a limitation. Other programs may opt to train fewer people to have those longer interactions. The decision to limit attendees for longer interaction with individuals versus training more needs to be made based on institutional needs for leadership training. A more fruitful way to decide may be by defining academic leadership positions such as we did, and deciding a possible percent goal to be trained in order to effect overall organizational change.

In order to generate reflection and tangible products for the attendees, we opted to require pre-work as an “admission ticket” into the program, which became an opportunity to discuss real problems with peers. These assignments required personal reflection to describe: challenges and conflicts, troubled learners, new curricula ideas and assessment, and an emotional quotient reflection to describe: challenges and conflicts, troubled learners, and weaknesses. It allows participants to be immersed in the complex role as an academic or educational leader. Despite this, few leadership development programs exist specifically for these roles, and even fewer considering the overall strategic needs of the organization in its development. This article describes in practical terms the development and implementation of an academic leadership course at 1 University with 25 outlying teaching hospitals that could serve as a model for other institutions.

Conclusions
There is a tremendous need to groom faculty for the challenges of the complex role as an academic or educational leader. Despite this, few leadership development programs exist specifically for these roles, and even fewer considering the overall strategic needs of the organization in its development. This article describes in practical terms the development and implementation of an academic leadership course at 1 University with 25 outlying teaching hospitals that could serve as a model for other institutions.

Disclaimer
The views expressed in this paper are those of the authors and do not reflect the official policy of the Uniformed Services University of the Health Sciences, the Department of the Army, Navy, Air Force, Department of Defense or the U.S. Government.

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