CREATING AN INFRASTRUCTURE FOR PROFESSIONAL DEVELOPMENT AND MENTORING IN THE SCHOOL OF HEALTH AND REHABILITATION SCIENCES

Proposal
Cover sheet: 0 of 12 (1 page)
Proposal: 1 of 12 through 10 of 12 (10 pages)
References: 11 of 12 (one page)

Table of Contents

Abstract
Section 1: Purpose and Goals................................................................. 1
  A. The current situation................................................................. 2
Section II. Methodology/Intervention.................................................... 3
  A. Stakeholders............................................................ 3
  B. Professional Development Prong................................................. 5
  C. Mentoring Prong................................................................. 5
    C.1. Filling positions of Knowledge Brokers and Faculty Mentors..  5
    C.2. Assure a successful mentoring experience......................... 6
    C.3 Incentivizing the program.............................................. 6
    C.4. Issues of a small school............................................. 7
  D. Recruiting young faculty to seek a mentor............................... 7
  E. Project Timeline.............................................................. 7
  F. Spreading the word to mentees............................................. 8
  G. How are we going to do it................................................ 8
Section III. Budget................................................................................ 9
Section IV. Assessment Plan.............................................................. 9
Section V. Plan for Sustainability of Initiative..................................... 10

References......................................................................................... 11
Figure 1. Organizational structure of the Mentoring Network.............. 4
CREATING AN INFRASTRUCTURE FOR PROFESSIONAL DEVELOPMENT AND MENTORING IN THE SCHOOL OF HEALTH AND REHABILITATION SCIENCES

Abstract

The School of Health and Rehabilitation Sciences, was established as a School in 2003. It is small with 33 faculty in 5 Departments. With more than 50% of non-administrative faculty in tenure earning, clinical without long term contract, and lecture and senior lectures, the school is in great need of an infrastructure to support mentoring. The proposed approached is two-pronged; to have quarterly professional development workshops, with material always available on the oncourse site, and an area of excellence mentoring network. This network will be facilitated by Knowledge Brokers who are individuals or collections of individuals who are known for their reputation in their area of excellence. In addition to the three established areas of excellence; Teaching and Learning, Research and Scholarly Activity, and Service, the SHRS has also included InterProfessional Education as it cuts across all three.

The program is based on the philosophy that the mentorship relation is mutually beneficial and holds many positive benefits for both parties. Sustainability is through institutionalizing the celebration of the mentoring process, a solution endorsed by SHRS Dean Agho. Assessment is organized as an ongoing process of accountability for the quality, adequacy and effectiveness of the Mentoring Infrastructure.

Section 1: Purpose and Goals

The School of Health and Rehabilitation Sciences (SHRS) is a relatively new School that was restructured into its current form in 2003. While some of the programs within SHRS have a rich history dating back to the 1940s, SHRS is a small school overall (33 faculty) with several new programs. Today, SHRS is comprised of 5 departments; Physical Therapy, Occupational Therapy, Health Sciences, Nutrition and Dietetics, and Physician Assistant, with faculty spanning all tracks and ranks from lecturer to clinical long-term contract to tenured full professor. From these departments, 8-degree programs are offered, including Bachelor, Master, and Doctoral (both post-professional and PhD) level degrees. With SHRS in its infancy compared to other schools on campus combined with the diversity of faculty across departments, there exists a large number of faculty (16 non-tenured faculty out of 30 total) who are new to academia and aspire to advance in rank or switch tracks to obtain a higher faculty rank. However, there is a lack of a formal mentoring infrastructure within SHRS to help facilitate such faculty development. Furthermore, the mentoring literature addresses the special needs of women and minorities (Collins, 1990). The SHRS has a pattern of women and minorities in the ‘lower’ ranks of the School. Of the faculty in clinical tracks, 5/6 are women, and all 4 faculty in Lecturer and Senior Lecturer tracks are females. Six of 10 assistant professors are women and 2 are minorities. Of the tenured faculty, 7/12 are male and of those males, 4 are Department Chairs or Administrators.
A. The current situation

Currently, SHRS does have a set of mentoring guidelines, but does not have a formal mentoring infrastructure. While some mentoring of faculty does occur, it is primarily at the department chair level, and there is one specific research group. SHRS has had success with faculty achieving promotion and tenure or long-term contract, yet there has not always been agreement at the various review levels. Through consultation with the School’s Administration and the Promotion, Tenure, and Long-Term Contract committee, it is believed that these circumstances can be significantly reduced with a formal mentoring system in place. Therefore, the purpose and goals of our mentoring proposal for SHRS are two-prong. The first purpose is to create a formalized professional development mentoring infrastructure, with the second being a subsequent creation of a networked mentoring system for the area of excellence.

Goal 1: Professional Development Mentoring. We aim to create a formalized, sustainable mentoring infrastructure for the professional development of junior faculty into the role of academicians. While this particular effort is largely directed towards one third of junior faculty aspiring to advance in rank and achieve tenure or long-term contract, it also includes those 18% of faculty who may aspire to switch tracks to obtain a higher faculty rank, such as a lecturer who desires to move into a tenure or clinical track. Through this initiative, junior faculty will be better socialized into the academy and better prepared to progress through the probationary period.

Goal 2: Area of Excellence Mentoring. Our second purpose operationalizes the first purpose. With the establishment of a more formal mentoring infrastructure comes the inherent need for more focused mentorship in the area of excellence. This involves formal mentoring and collaboration that is solely focused on a junior candidate’s area of excellence; i.e. research, teaching, or service. This type of focused mentoring might also include interprofessional education, which can cross all areas of excellence. Our expected outcome is to increase the total number of SHRS faculty who have obtained tenure or tenure equivalent (e.g. long-term contract). Once we establish a formal mentoring infrastructure, we can focus on a long-term goal: to address mentoring of tenured associate rank faculty to the advancement of full professor rank.

Our vision of how the mentoring program will change the SHRS from the present to the future is described in the following case.

Assistant Professor Farah Bulgur (not a real person), was hired as a tenure track assistant professor one year ago. Prior to accepting this position, she was a successful clinician at an academic health center and has some experience collecting data on studies, which gained her authorship on several publications. She is interested in research, yet in her professional doctorate, the curriculum focused on clinical excellence. Dr. Bulgur has no formal research training.

Current scenario: Dr. Bulgur spent the first year overwhelmed with the process of learning how to design a syllabus, how to use oncourse, and the new role of a classroom teacher. This was all new to her. At the annual school retreat, she heard reports of how faculty were rewarded for obtaining federal grants that generated indirect costs, she
overheard discussions between faculty about research publications needed for tenure. Dr. Bulgur was overwhelmed. She did not even know what indirect costs were! She went back to her office, and thought about it. She made a decision to start by analyzing some clinical data she collected before she accepted the position and submit an article to a professional journal. Not knowing how to analyze the data, she asked about resources to help her. She was informed the biostatistics department could help her, she contacted them and their cost was $90/hr. Dejected she sat back at her desk wondering what to do next.

**Future Scenario:** Upon hire, Dr. Bulgur met with her department chair who discussed with her the strengths she brought to the position and the skills she needed to develop to be successful in the academic environment, with tenure and promotion. Given her clinical strengths, Dr. Bulgar was assigned to a course with 1-hour lecture and three 2-hour lab sections. An experienced faculty member taught the lecture and mentored her in the teaching-learning process. She took the lead in the laboratory section and within weeks was comfortable leading labs independently. She attended every lecture, in the latter part of the semester was given responsibility for preparing lecture materials, and under supervision started to give the lectures.

Her department chair informed her about the Mentoring Initiative Professional Development series and strongly encouraged her to attend. At the first one, she learned how her new position as an academic was going to be worlds different from her previous life as a clinician. She also learned about IUPUI resources, specifically the Center for Teaching and Learning, where she took advantage of the opportunity to learn some teaching skills as well as technical skills such as managing on course and putting her course on Canvas.

Though the mentoring process, Dr. Bulgur realized several things, first, that her skill set best-fit teaching as an area of excellence and that her extensive clinical experience working with teams drew her to the area of Interprofessional Education. She followed the recommendations of the Knowledge Broker for InterProfessional Education and Practice who connected her to the IU Student Outreach clinic. Here she became part of a collaborative team. At the annual school retreat when she heard the school provided incentives for faculty who wrote grants with indirect cost return, she urged her colleagues to start looking for sources of funding.

**Section II. Methodology/Intervention: How and When**

**A. Stakeholders:**

In coordination with the Dean of the SHRS, implementation is the responsibility of the Mentoring Program Director, and Assistant Director (either the director or the assistant director needs to be on the Promotion, Tenure and Long term Contract Committee, or have recent experience with the committee). Although we have a small group of faculty, the two-prong approach of professional development mentoring and area of excellence mentoring is designed to capitalize on the strengths of the many levels of stakeholders and their existing expertise. These
Stakeholder groups start with the Knowledge Brokers, who will be able to access a network of successful and connected faculty, also known as the Resources, to serve the prospective Mentees (Figure 1).

**SHRS Mentoring Program Staff:** The Director, appointed by the Dean (Scott), and the Assistant Director (Dierks) who is currently the Chair of Promotion and Tenure committee, coordinate with Dr. Austin Agho, Dean of the SHRS, and the 4 areas of Knowledge Brokers (described below) constitute the members of the project operations. The primary function of this group is to assure the mentoring system is available, accountable, and responsive to faculty needs. Administratively, the Dean of SHRS is responsible to assure the Mentoring Program has the support of school administration to carry out its mission. The Dean has agreed to provide the program with the resources, administrative support and funds to sustain the program assuming it receives initial support.

**Knowledge brokers:** The decision to have four Knowledge Brokers in the areas of Interprofessional Education, Research, Service and Teaching comes from the analysis of the configuration and needs of the prospective mentees. Knowledge brokers must be familiar with faculty resources within the SHRS as well as those within the IUPUI system. They are recruited by the Director and Assistant Director based on their area excellence reputation.

**Resource Mentors:** The resource mentors have an established area of expertise. They are tenured or long-term contract faculty, housed within or outside the SHRS, who have agreed to engage themselves in a mentoring relationship. The process of obtaining buy-in from faculty is in Section C.1. of this proposal.

**Prospective Mentees:** In the SHRS, there are 30 non-administrative faculty. Of the non-tenured, or clinical faculty not on long-term contract, 16 (> 50%) are on tenure-track, clinical assistant, senior lecturer, or lecturers. These non-tenured, non-long-term contract, faculty are seeking excellence in any or all of the areas of Interprofessional Education, Research, Service, and Teaching.
B. Professional Development Prong:

The professional development series will consist of 4 independent modules. The presentations will be didactic and interactive, presented by a combination of knowledge brokers, and people outside the School. The modules will be presented 1 each quarter and will be accessible at any time on Oncourse through the SHRS Mentoring Site.

Topics include:

Overview of the Academy: The Academy is a specialized work environment. This module will orient first time faculty (and welcome faculty at all stages of their career), to the process of promotion and tenure, to the tripartite mission of the University: Service, Teaching and Research/Scholarship. Faculty will learn about the SHRS mentorship program and the benefits of entering into a mentor relationship.

Teaching Knowledge and Skills: We will be connecting faculty to the Center for Teaching and Learning for basic teaching pedagogy and technical skills needed to use the online teaching system. Here efforts will connect faculty who teach similar courses for example, theory, history of the profession, pathology, neuroscience and evidence based practice. As well as courses of similar structure, such as clinical experiences, didactic and experiential learning.

Professional/Scholarship Knowledge and Skills: A tutorial on skills (as needed by the learners) including making posters, writing an abstract, finding funding sources, protocols, course and guideline development, evaluation and assessment plans, endnote, and how to review a manuscript.

Research Knowledge and Skills: Subjects in this series will again be tailored to the needs of the audience but include, statistics, writing a literature review, research design, qualitative, quantitative, translational, IRB submission, statistical design and analysis, and dissemination. IUPUI and SHRS internal funding sources and CTSI.

C. Mentoring Prong:

The mentoring initiative highly depends on filling names in the resource faculty blanks in Figure 1. The SHRS has a potential of 14 faculty in tenured and long-term contract clinical tracks eligible to be knowledge brokers and resource people. To achieve this aim we need to explore the following issues:

- Filling positions of Knowledge Brokers and Faculty Mentors
- Assure a successful mentoring experience
- C.3 Incentivizing the program
- C.4. Issues of a small

C.1. How do we get faculty to agree to be Knowledge Brokers and / or Faculty Mentors?

The literature tells us that mentors are more satisfied with their jobs, accomplish more in terms of scholarly and research productivity, enjoy more respect within their institutions and tend to stay at one place for longer periods. These positive factors associated with being a mentor, are, achieved however, after one has been a mentor. Consistent with the Mentoring Initiative
presentation by Dr. Eby and recent literature (Eby, Durley, Evans, & Ragins, 2006), we are focusing on mentoring as a mutually beneficial relationship. The plan is to create awareness of the benefits of mentoring through a series of case illustrations: Ideally, we will base these cases on current mentoring relationships within our faculty. If we cannot identify any, we will ask more senior faculty to identify how they benefited from a mentor early in their career. While interviewing faculty in development of these cases we will ask about features reported in the literature such as; personal satisfaction, organizational recognition, and the impact on support within the organization (Allen, Eby, O’Brien, & Lentz, 2008; Collins, 1990; Eby, Butts, Durley, & Ragins, 2010)

We have found institutional recognition is associated with successful mentoring programs. To promote awareness of the benefits of mentoring relationships, the first presentation of these cases will be at a reception for all faculty following the end of year meeting on May 22, 2015 (See C.3 for details).

C.2. Once identified, how do we assure a successful mentoring experience?
Not surprisingly, the literature reports that not all faculty are suited to be mentors (Zachary, 2011) Without oversight of the mentor/mentee relationship, it is possible to have a bad match between mentor and mentee. Guidelines for the mentoring committee will specifically include a mechanism for oversight. The mentor/mentee relationship can be challenging and this oversight will include but not be limited to assuring the mentor/mentee relationship is working. Some of these challenges include providing inadequate direction, dealing with conflicting demands, and lack of commitment, crossing boundaries and breaching confidentiality.

A mentor must have gone through the promotion and tenure process in an academic institution. Traditionally, the primary mentor has been the department chair; however, in the SHRS we currently have 2 of 5 Chairs in tenure-track earning positions. We recognize another situation occurs where faculty are hired with tenure, never having gone through the process at a prior institution. Faculty who have a Chair who has never been through the tenure process need special provisions for mentoring. Every faculty deserves an experienced mentor. This is one reason for the need for careful screening and oversight.

Assuring adherence to ethical behavior is an important responsibility of oversight. The professional development workshops will cover this material and the SHRS Oncourse mentoring website will contain written materials alerting them to appropriate ethical behavior of academic professionals. Ethical behaviors include, but are not limited to:
- Agreeing on and abiding by rules of authorship.
- Supporting and appreciating accomplishments.
- Avoiding abuse of power (including exploitation and assuming credit for another’s work).
- Being alert to ethical issues and challenges.
- Avoiding conflicts of interest (avoiding political and personal biases).
- Avoiding paternalism or maternalism.

C.3 How do we incentivize the program?
Money as an incentive is not typically seen to be as effective as other benefits and awards, such as travel and recognition (Tansey & Enyeart, 2009), Eby, Oral Presentation to IUPUI Mentoring
Initiative). Recognition is one of the strongest rewards. Benefits can include celebrations of successful mentoring partnerships, and travel funds paid by the school for mentors and mentees to present their research together. A Mentor Program Inaugural Reception will present the program as important—this first reception will be for all faculty and follow the May 22, 2015 all faculty meeting. At this reception, we will celebrate the cases we develop as illustrations. The Mentoring Program Celebration Reception will follow the May 2016 all faculty meeting. This celebration reception is for Knowledge Brokers, Resources Faculty and existing mentor/mentee dyads. At the reception, we will highlight achievements of these dyads including: grant submissions, professional publications and presentations.

C. 4. How do we deal with such a small school?

The need for mentors exceeding the availability is a real problem in a school such as ours. We are fortunate to have an existing model in the department of physical therapy where 1 tenured faculty has collaborated with junior faculty, hired a former post-doc to a faculty position, and recruited an additional collaborator to join his team. This existing model is one we seek to replicate. Additionally, we are fortunate to have the larger Schools of Nursing and Medicine adjacent to us and the social and behavioral science schools just down the street. Our newest program, the MS in physician assistant, not only has the majority of the junior faculty and an untenured interim chair; it is located 1.5 miles in a separate structure. The mentoring program will make special efforts to include this faculty in the mentoring initiative.

D. Recruiting young faculty to seek a mentor:

SHRS policy will be that all faculty in the first 2 years of the program attend regularly scheduled professional development sessions. It will be up to the chairs, or their designees, to refer junior faculty for area of excellence mentoring. This should not be difficult, as we will disseminate research that indicates that people with mentors:

- Earn more at a younger age
- Are more likely to follow a career plan
- Are more satisfied with their work
- Get more challenging job assignments
- Gain a larger perspective of the organization
- Achieve more visibility
- Have more options for job mobility
- Have more productive research careers
- Are better able to network for career advancement
- Are better able to handle stress
  - (Falzarano & Zipp, 2012; Pagliarulo, 2004; Van Emmerik, 2004)

E. PROJECT TIMELINE

April- May 21 – Scott and Dierks will:

- develop two cases to highlight the benefits of mentoring
- prepare promotional materials highlighting the benefits of mentoring
May 22 - End of year faculty meeting. Faculty will receive an invitation to attend a 5:00-7:00 Dinner/Reception to follow meeting. At that dinner/reception we will distribute promotional materials and highlight the two cases of successful mentoring.

- Summer 2015- Scott and Dierks will:
  - Develop materials for the Professional Development Series.
  - Recruit Knowledge Brokers.
  - Invite Knowledge Brokers to review Professional Development Series program materials
  - Develop the website.

August 2015 Annual Faculty retreat – Present website and schedule of the professional development series for the 2015-2016 AY. Distribute surveys to all faculty to identify both potential mentors and mentees.

Fall and Spring: Follow-through on the surveys from the faculty retreat in August to identify existing mentor-mentee relationships, and contact faculty interested in participating in the program. Establish and maintain a database to track involvement in the program and establish the mechanism for oversight. Identify qualified mentors.

August 28, 2015- Professional development series I- Overview of the Academy
November 6, 2015- Professional development series II- Teaching Knowledge and Skills
January 29, 2016- Professional development series III- Professional/ Scholarship Knowledge and Skills
March 26, 2016- Professional development series IV- Research Knowledge and Skills
May 2016: Celebration of Mentoring Program Success in association with the End of year faculty meeting.

F. How do we spread the word and get mentees?

Program promotional materials and the May 22, 2015 kick-off celebration will inform existing faculty of the program. The surveys at the August 2015 will serve to identify presently employed persons seeking mentors. For new hires a member of the Mentoring Program Team will meet with that new faculty and introduce them to the program.

G. Now that we have identified all the issues how are we going to do it!

Scott and Dierks will be tasked with preparing the program materials and implementing the program as specified in II.E.

The Professional Development series will be set at an early morning time and held in the Physician Assistant Building, which is located on Capitol, across from Methodist Hospital. The reason for this location is the easy availability of parking, and access from the people mover. It also facilitates involvement of the PA faculty, over represented in the new young faculty – a group with an expressed desire for mentoring.
Section III. Budget:

<table>
<thead>
<tr>
<th>TASK</th>
<th>PERSON (S) RESPONSIBLE</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implement and operate program over the first operational year including:</td>
<td>Scott and Dierks Stipend $3000 ea.</td>
<td>$6000</td>
</tr>
<tr>
<td>Development of Cases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of Professional Development Series</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create and maintain Oncourse site mentoring resource</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recruit, screen and support mentors.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work study student</td>
<td>45 weeks @ $12.50/hr. (our cost $3.12/hr.) X 5 hours per week</td>
<td>$702</td>
</tr>
<tr>
<td>Reception to kick off the Mentoring Program.</td>
<td>Hospitality: 33 faculty @ $25 each</td>
<td>$825</td>
</tr>
<tr>
<td>Faculty with specific expertise in the 4 areas of the Professional Development Series to contribute their expertise to review these modules.</td>
<td>4 faculty @ $250 each</td>
<td>$1000</td>
</tr>
<tr>
<td>Celebrate the accomplishments of the first year of the program</td>
<td>Hospitality: anticipated 20 faculty @ $25 each</td>
<td>$500</td>
</tr>
<tr>
<td>Recognition</td>
<td>Gift certificates and or plaques</td>
<td>$250</td>
</tr>
<tr>
<td>Printing and production costs</td>
<td>Promotional materials, materials for professional development series</td>
<td>$200</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>$9577</td>
</tr>
</tbody>
</table>

Section IV. Assessment Plan:
To assess our mentoring initiative, we will need to examine both the formal mentoring infrastructure and the mentoring relationships. However, there is little to no research available relating to the assessment of a mentoring infrastructure (Berk et al, 2005). As such, we will largely focus on the breadth and depth of the infrastructure itself. As indicated in Figure 1, the infrastructure is dependent on the SHRS mentoring coordinators, the 4 classifications of knowledge brokers, and the numerous faculty resources (i.e. the mentors). To this end, one of our primary assessments will be participation among knowledge brokers and faculty resources. Administrative support will create and maintain a database of all eligible brokers and mentors. They will then track the number of participating knowledge brokers and faculty resources, which will include those who have offered commitments to serve in such roles, as well as those that have active or completed mentoring roles. Participation will be based on the number of active mentors relative to the total eligible. A global outcome will be the total number of successful promotion and tenure dossiers (both tenure track and clinical long-term contract).
The Professional Development series will also be assessed to gauge the success of the mentoring infrastructure. Administrative support will track participation at each event. First, participants will be asked to RSVP with their name and department information (i.e. department, rank) prior to the event, which will assist us in gauging interest in the event and by whom. We will also have a sign-in form at the event for those participants that did not RSVP. At the conclusion of each event, a questionnaire will be collected to assess the presenter, as well as the topic in general. All of this information will be compiled to examine who is attending the series, the quality of the speakers, and the importance of the topics. Outcomes will also be used to update the series as needed.

The quantity and quality of the mentoring relationships will also be assessed. To initially assess the match between a mentor and mentee, the identified mentor will complete the Strategies for Effective Mentoring: Getting Started checklist (Zachary, 2011). This is a 12-item questionnaire design to determine if the potential mentor is able and willing to serve. If there are no negative responses, a formal mentoring relationship is suggested and The Mentorship Profile Questionnaire (Berk, Berg, Mortimer, Walton-Moss, & Yeo, 2005) can then be administered. This allows both participants to jointly describe the exact nature of the mentoring relationship as well as to specify the outcome measures produced. Administrative support will track the number of formal relationships facilitated through the mentoring infrastructure. This will include the status of each relationship (i.e. timeline, active/completed/terminated) and its success.

A successful formal mentoring relationship will be examined in a number of ways. First is the overall result, which includes: ongoing; ongoing with collaboration in area of excellence; completed due to advance in rank; terminated prior to advance in rank. We will also use assessment tools reported in the literature to examine effectiveness. The Mentorship Effectiveness Scale (Berk et al., 2005) is a 12-item Likert scale (0-6) questionnaire to be completed by the mentee for rating the mentorship experience and effectiveness of the mentor. The questionnaire can be administered at periodic points throughout the relationship. We will also administer a modified Mentoring Evaluation: Self-Assessment from the IU Department of Emergency Medicine (Welch). This questionnaire is to be completed by the mentee and contains Likert scale (1-5) responses in 6 categories, which will be modified to fit SHRS. For the mentor, we will use Emergency Medicine’s Mentoring Evaluation: Mentor Evaluation of Program (Welch). This questionnaire is to be completed by the mentor and contains both Likert scale responses and open-ended questions. We have been in contact with Julie Welch from the IU School of Medicine and discussed collaborating to establish reliability and validity for these instruments. These 2 forms will be administered at baseline, annually, and at the conclusion of the relationship. All data will be compiled and used to examine the effectiveness of relationships across mentors and within each mentor.

Section V. Plan for Sustainability of Initiative

Dean Austin Agho has agreed to support this program on an ongoing basis.
References


Welch, J. EM Mentoring Evaluation Self-Assessment: Indiana University School of Medicine, Department of Emergency Medicine.

Welch, J. EM Mentoring Evaluation Mentor Evaluation of Program: Indiana University School of Medicine, Department of Emergency Medicine.