

Framework to Guide Health Professions Faculty Towards Increased Scholarship

Recommendations from the ASAHP Research, Discovery & Innovation Committee

David A. Brown, PT, PhD

Fevzi Akinci, PhD, MHA

Susan Gordon-Hickey, AuD, PhD

Fang-Ling Lu, PhD, CCC-SLP

Abiodun Akinwuntan, PhD, MPH

The Research, Discovery, and Innovation Publications (RDI-P) Task Force met from October 2020 to March 2022 to discuss ways in which the Association of Schools Advancing Health Professions (ASAHP) can help to guide institutional leaders to assign faculty effort and resources to enable success with the scholarship mission. The purpose of this White Paper is to propose a guiding framework for institutional leaders to determine their faculty's individual or team scholarly goals, assign appropriate percent efforts (funded/unfunded), and guide an overall faculty mix that balances required teaching loads with scholarly activities. The Task Force identified seven modifiable factors that can influence workload allocation for scholarship: 1. Limited range of the spectrum for effort distribution; 2. Matching expectations with reality; 3. Clinical training undervalued as adequate prep for translational or implementation research; 4. Limited support for mentorship availability; 5. Richer collaborations needed; 6. Finding resources and matching them to individual faculty needs; and 7. Further time for training needed. We then provide a set of recommendations to address the seven issues described. Finally, we describe four foci of scholarly activity (evidence-based educator; evidence-based clinical application; evidence-based collaborator; and evidence-based principal leader) with which a leader can develop strategies to align faculty interests and growth opportunities towards advancing scholarship. *J Allied Health* 2023; 52(1):3-8.

From the ¹University of Texas Medical Branch, Galveston, TX; ²Duquesne University, Pittsburgh, PA; ³University of South Alabama; ⁴University of Texas Health San Antonio, San Antonio, TX; and ⁵Kansas University Medical Center, Kansas City, KS.

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Address correspondence to: Dr. David A. Brown, School of Health Professions, University of Texas Medical Branch, 301 University Blvd., Galveston, TX 77555, USA. Tel 409-772-3001. davibrow@utmb.edu

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IN 1992, Poston and Boyer¹ presented their findings in a Special Report that described a new approach to recognizing scholarly activities for those faculty who were not engaged in, what was considered at the time, traditional research activities. They described scholarship of discovery, integration, application, and teaching as four types of scholarly activity that faculty may engage in to advance the professions and improve the teaching/learning environment for students. This landmark work allowed faculty to engage in a variety of activities that could be counted towards their scholarly productivity when being assessed for promotion and/or tenure. As applied to the health professions, this new approach was to be a challenge to all faculty to engage in scholarly activity.

However, while the expanded view of scholarship provided permission and rationale for engaging in a larger variety of scholarly activities, it did not necessarily result in changes in the way that workload effort and resources was determined and/or distributed to allow individual faculty the time and resources to advance their scholarship. In many institutions, if the effort for scholarly activity was not funded, then faculty members were asked to produce scholarly output on their own time or, at best, while finding small pockets of time between serving the needs of the educational mission.

The Research, Discovery, and Innovation Publications (RDI-P) Task Force met from October 2020 to March 2022 to discuss ways in which the Association of Schools Advancing Health Professions (ASAHP), as an organization, can help to guide institutional leaders to assign faculty effort and resources to enable success with the scholarship mission. At each meeting, the members reviewed the minutes of the discussion and were assigned specific tasks that involved collecting further input and perspective from administrators, chairs, and faculty members at their institutions. At the subsequent meeting, we would discuss the findings and modify our discussion accordingly.

Therefore, the purpose of this White Paper is to propose a guiding framework for faculty, program directors, department chairs, and deans to determine their faculty's individual or team scholarly goals, assign appropriate percent efforts (funded/unfunded), and guide an overall faculty mix that balances required teaching loads with scholarly activities.

Modifiable Factors

At its first meeting, the Task Force identified seven modifiable factors that can influence workload allocation for scholarship. While we acknowledge that each individual institution is structured in different ways that may affect each of the issues, we expect that the reader will find some points that are particularly relevant to their situation. The issues were as follows:

1. *Limited range of the spectrum for effort distribution:* Often, an institution will build a limit for the amount of effort that an individual faculty can engage in scholarship (i.e., 0–20%). These limits can prohibit a developing scholar from growing their success. Also, faculty may prefer to prioritize teaching and clinical assignments ahead of scholarship and never get around to take full advantage of their assigned scholarship percent effort. Further, faculty members may be compensated for additional clinical revenue and teaching load. As a result, there could be a trade-off between extra compensation and increased scholarship.
2. *Matching expectations with reality:* Faculty with differing academic training, in different institutions, and at different stages of promotion and tenure (or nontenure tracks) have different expectations regarding what is needed to earn promotion in academia. Different health professions offer a variety of levels of terminal degrees, with some professions terminating with a clinical degree and others terminating with an academic research doctorate. Those with a research doctorate are indoctrinated into academia through their training and typically have a clear understanding of what is required to earn promotion. Those with clinical degrees may or may not have a clear understanding of what is required to be promoted in academia. Clarity of expectations and mentorship are needed for both groups and need to be tailored to each individual.
3. *Clinical training undervalued as adequate prep for translational or implementation research:* Many faculty in schools of health professions have had considerable clinical training and experience. Until the advent of highly funded translational clinical research efforts, the role of the clinician-researcher was undervalued. With many professional programs including research courses as part of their clinical training curriculum, clinicians are graduating with some basic expertise in the conduct of research, thus preparing them to be able to partner with experienced researchers to provide clinical validity to their work.
4. *Limited support for mentorship availability:* In smaller departments, and with retention of senior faculty an issue, mentors may not be available for specific junior faculty needs. Mentoring serves to steer junior academic faculty toward opportunities to develop and advance their careers. Palepu et al.⁷ and Steiner et al.¹⁰ confirmed the great benefit of mentoring; they reported that junior medical faculty who were mentored are more likely to have fruitful research endeavors and a significantly higher level of career satisfaction than those without mentors.
5. *Richer collaborations needed:* Many issues in the health care domain are characterized by complexity and uncertainty. Although some health problems may lend themselves to extensive study by a single profession, no discipline is comprehensive enough to be able to capture the overall essential richness of most topics that are being investigated. Epidemiological, economic, psychological, sociological, and cultural aspects represent some key elements in obtaining a more thorough understanding of phenomena being studied. Not only will increased collaboration with disciplines within the health professions enrich the findings of most research being undertaken, further enhancement will result from the synergy generated by including perspectives from other broad fields, such as science and the humanities.
6. *Finding resources and matching them to individual faculty needs:* In a funding environment where budgets are stretched and resources are limited, it might seem impossible to provide support for scholarly activity to individualized faculty. However, this type of support is essential for faculty to remain focused and persistent when engaging in activities that may eventually lead to new grant applications, intellectual property development, high impact publications, and new clinical innovation.
7. *Further time for training needed:* Scientific writing and research method skills are critically important for faculty success both in terms of scholarly publications and securing external grants to support one's research program. Hermanowicz³ reports that the lack of training faculty received in technical and scientific writing is a contributing factor to poor research efficacy and productivity. Mcgaghie⁶ emphasizes that skills needed for scholarship and publication are acquired from deliberate practice over a long time and adds that scholarship and publication in the health professions are governed by rules and best practices.
Radwan⁸ notes that faculty members in health professional schools, particularly with master's level preparation and those with a professional doctorate degree such as doctor of physical therapy and doctor of occupational therapy are not prepared to independently conduct research since the curricula for these professional degrees do not focus on conducting research. Indeed, an integrative research review conducted by Seegmiller et al.⁹ indicate that while the entry-level clinical doctorates in health professions provide adequate knowledge and skills to begin clinical practice, research and specialty

training remains insufficient, highlighting the need for further education after graduation. The researchers document an overall shortage of faculty with research expertise and decreased research productivity particularly among physical therapy faculty.

One final issue of note: The recent global pandemic has taught institutions to be adaptive and resilient under extenuating circumstances. Natural calamities such as earthquakes, hurricanes, tornadoes, deep freezes, blizzards, etc. are to be expected in many regional areas of the US and globally. Social unrest associated with protest, financial depression, political upheaval, declared armed conflict, etc. may also occur. We acknowledge that these calamities may impact the priorities of any educational entity. In our view, the recommendations that we discuss in this White Paper are meant to broaden and diversify the talents and expertise of each faculty member to allow for resilience and adaptation under extenuating circumstances.

Recommendations

With the issues that were identified in the first part of this paper, the RDI-P Task Force identified possible solutions as described below.

1. *Expanding the range of the spectrum for effort distribution:*

- Build institutional flexibility to allow for a variety of effort levels of education, scholarship, and service/clinical. Avoid one size fits all approaches, such as all education-focused faculty have only 10% effort assigned to scholarship.
- Provide monetary incentives for intentional encouragement to broaden effort into scholarship.
- Aspire to identify faculty who can represent each of the four foci for evidence-based scholars.
- Build scholarship activities into teaching and clinical assignments so that when faculty prefer to engage in more of these activities, scholarship is built into the productivity expectations (see ideas around The Evidence-Based Educator Scholar Focus and The Evidence-Based Clinical Application Scholar Focus below).

2. *Achieving matched expectations with reality:*

- Deans/chairs/program directors might identify necessary milestones to provide clear expectations with levels of expertise in areas of scholarship. Meet with follow up sessions to measure progress and success. When mismatches with expectations occur, learn from mistakes and move on.
- Identify different stages of development and preparation. For example, identify faculty who are developing skills; those with emerging skills; those with expert skills.
- Establish policies and resources that clearly describe methods for obtaining support and resources.

3. *Leveraging clinical expertise to enhance translational or implementation research⁴:*

- Find opportunities for clinical experts to team up with experienced researchers.
- Provide venues for researchers to present their ideas to clinically trained faculty so that ideas can be exchanged, and partnerships established.
- Identify flexible methods for providing advanced education to clinicians regarding clinical trials and implementation science approaches.

4. *Building mentorship teams:*

- Distribute faculty into clusters, based on clinical interests, allowing for experts to provide mentorship for emerging and developing scholars.
- The most beneficial mentor matching is when the mentor and mentee share a common background and collaborate on projects. Conventional mentoring is comprised of matching junior faculty with senior faculty members within the same department. However, faculty often have widely disparate interests in most departments, and the senior faculty struggle to offer junior faculty appropriate guidance and mentoring. The new emphasis on multidisciplinary translational research often requires identifying mentors outside the home department or institution. Many academic institutions and professional organizations offer navigation systems for faculty to identify potential mentors through matched research interests and professional portfolios.

5. *Establishing effective research collaborations:*

- Identify teams of researchers that consist of clinicians and researchers with multidisciplinary expertise on various key clinical research problems.
- Incentivize collaboration through time, money, and appreciation.

6. *Identifying and acquiring individual faculty resource needs:*

- Set aside budget dollars for capital and operational research needs. Set policies for how faculty can gain access to the funds.
- Find ways for faculty to share resources by identifying capital equipment that can serve a variety of research projects.
- Promoting the hiring of post-docs and research fellows to provide further research skills to teams.

7. *Identifying gaps in scholarship training and growing faculty skills:*

- Take advantage of the myriad of training opportunities on the web and within the institution.
- Have each faculty assess their strengths and weaknesses when moving forward on their scholarship with help from mentor and supervisor. An individual development plan (IDP) can be helpful.

- Provide opportunities and scholarships for faculty to pursue advanced training courses in translational or implementation research programs at the home institution or affiliated institutes.
- Create opportunities for faculty to develop writing skills through grant writing workshops, writing groups, and basic English writing skill classes.
- Leadership can provide supported incentives and time for faculty who engage in training activities.
- Establish mentor/mentee relationships around identifying skill acquisition.
- Start with focused effort on building Evidence-Based Educator Scholars.
- Examples of efforts to improve faculty writing and research skills include research groups, peer-writing groups, small grants program, research fellowships, mentoring relationship, faculty development/faculty scholars' programs, and NIH and other governmental summer institutes and training programs in research methods and grant writing, etc.^{2,5}

Extra notes on Emergency Preparedness recommendations:

- Diversify teaching, research, and clinical portfolio, to include best-evidence for resiliency and adaptation during crises. Include contingency planning to help with planning for possible challenges ahead.
- Identify propensity for crises at each institution (i.e., hurricanes, chemical explosions, tornadoes, floods, etc.)
- Explore telehealth/telecommuting options and its role in supporting faculty scholarship to allow teams to continue to work during crises.
- Set aside funds to take advantage of “first mover benefits.” For example, supporting flash projects related to the pandemic to encourage early adopters to COVID research frenzy.

Introduction to the “Research Spectrum Approach”

Given the above-mentioned challenges that can impact success with integrating research into the academic enterprise, we propose a comprehensive model that takes into the account the varieties of experiences that faculty, teaching in schools of health professions, may focus their scholarly efforts. What follows is a description of four foci of scholarly activity (Evidence-based educator; Evidence-based clinical application; Evidence-based collaborator; and Evidence-based principal leader) for which a dean, department chair, and/or program director can develop strategies to align faculty interests and growth opportunities towards advancing scholarship. Taken together, the four foci described below can be used to initiate individualized development plans, and determine appropriate and feasible workload mixes across teaching, scholarship, and service activities, and can be used to

monitor and report on successes in building a robust scholarly enterprise.

Each focus presents a purpose/goal, a recommended percent effort, and some thoughts on how this opportunity can practically applied and how successes can be measured. A Boyer category is provided as an anchor to compare with that framework. An individual faculty member may choose to distribute effort across one or more of these foci, if time allows, and alter the focus as interests evolve.

The Evidenced-Based Educator Scholar Focus

The evidence-based educator scholar will reserve part of their effort to dig deep into scholarly resources to update and inform the content and educational methods that are used for delivery related to the courses that they lead. The time spent in this endeavor would be supported by the leadership so that actual hours are set aside. In addition, faculty can demonstrate outcomes in this area by reporting on content changes and education methods to team members. Ideally, courses are reviewed at least once every two cycles, and significant changes can be clearly identified. Potentially, faculty can publish course innovations in peer-reviewed journals and/or presented at regional/national meetings.

- Purpose/Goal: Reading and understanding the literature related to course content and delivery; for each course that a person teaches, engage in regular evidence-based analysis of content and best practices for delivery.
- Recommended % effort: Approx. 4 hours per week (10%) or 2 hours per course; no external funding support expected (tuition supported).
- Traditionally thought of as teaching effort, but we suggest a scholarly activity that creates synergies; may lead to new ideas; and protect faculty's time.
- Metrics: number of papers read and logged per week; percent teaching material updated; number of peer-reviewed dissemination products; significant changes to course delivery method/best practices; continuing education experiences/gateway; group discussions (informal or formal).
- Comparable Boyer category: Teaching and/or Integration scholarship realm.

The Evidenced-Based Clinical Application Scholar Focus

The evidence-based clinical application scholar will reserve part of their effort to utilize scholarly resources and clinical experience to develop clinical applications (e.g., assessment and interventions; program development; new technology, cost-saving ideas, etc.) that serve the betterment of healthcare for target populations. The time spent in this endeavor would be supported by the leadership so that actual hours are set aside, and

clinical partnerships may be necessary. In addition, faculty can demonstrate outcomes in this area by collecting patient outcome and satisfaction data. Ideally, implementation science approaches can be used to systematically achieve success. Potentially, faculty can publish clinical innovations in peer-reviewed journals and/or presented at regional/national meetings.

- Purpose/Goal: Creating evidence-based practical applications/programs; generate reviews of literature with a point of view.
- Recommended % effort: Approx. 8 hours per week (20%); no external funding support expected (tuition supported); may also be added with Educator Scholar 10% effort.
- May be thought of as new program development that creates synergies; may lead to new revenue generating clinical programs or marketable products; best achieved in collaboration with a clinical entity or technology transfer office.
- Metrics: Comprehensive topic reviews submitted/published/presented; new evidence-based practice/programs created; intellectual property/trademark/patent application.
- Comparable Boyer category: Application scholarship realm.

The Evidenced-Based Collaborator Scholar Focus

The evidence-based collaborator scholar will reserve part of their effort to participate in teams of investigators. The time spent in this endeavor would be supported by grant funds so that actual hours are set aside. In addition, faculty can demonstrate outcomes in this area by reporting on results and innovations for their contribution to team members. Potentially, faculty can publish as co-authors and, when appropriate, take a lead author role on their particular expert contribution to the overall project.

- Purpose/Goal: Financially supported team member on funded projects; a role or roles in designing, managing, implementing, analyzing, and disseminating research studies; journal manuscript reviewer.
- Recommended % effort: Approx. 16 hours per week (40%); at least 10–20% external funding support as co-investigator.
- May be thought of as team-based research that may lead to new discoveries informing clinical practice or best education practices; best achieved in collaboration with a lead investigator with considerable experience and success with writing grants and publishing research.
- Metrics: Research proposals submitted (co-investigator); actual studies conducted (IRB applications); co-authorship on peer-reviewed papers/presentations/intellectual property.

- Comparable Boyer Category: Discovery scholarship realm.

The Evidenced-Based Principal Leader Scholar Focus

The evidence-based leader scholar will reserve part of their effort to lead scholarly teams, as principal or co-principal investigators. The time spent in this endeavor would be supported by grant funds so that actual hours are set aside. In addition, faculty can demonstrate outcomes in this area by reporting on results and innovations for their project. Lead investigators are also heavily engaged in leadership activities such as training junior investigators, developing research lab spaces/environments, collaborating with other lead investigators, and garnering national/international recognition for their work. Potentially, faculty can publish as lead authors and, when appropriate, take a senior (last) author role when mentoring others to take the lead.

- Purpose/Goal: Principal investigator on funded projects; leading the design, management, implementation, analysis, and dissemination of research studies; training and mentoring others; leading emerging science/editor/peer-scientific review.
- Recommended % effort: Approx. 24+ hours per week (60%+); at least 30–50% external funding support as PI and co-investigator.
- May be thought of as research-focused faculty with lesser effort involved with teaching that may lead to new discoveries informing clinical practice or best education practices; best achieved by individuals with considerable experience and success with writing grants and publishing research.
- Metrics: Research proposals submitted (principal-investigator); research funding obtained; actual studies conducted (IRB applications); co-authorship (first/last author) on peer-reviewed papers/presentations/intellectual property.
- Comparable Boyer Category: Discovery scholarship realm.

Taken together, the four foci described above can help academic leaders work with individual faculty to identify areas of interest and expertise. The framework can be used flexibly with individual faculty and is not meant to be a prescription for all faculty to follow.

Conclusion

This White Paper proposed recommendations and a guiding framework for allowing faculty, program directors, department chairs, and deans to determine their faculty's individual or team scholarly goals, assigning appropriate percent efforts (funded/unfunded), and guiding an overall faculty mix that balances required teaching loads with scholarly activities. The document

is meant to spur further dialogue within the ASAHP community and within each individual institution. The hope is that each institution will engage in internal discussions about how the nature of the individual institution and school may dictate these decisions so that health professions faculty will grow and develop ability in scholarly pursuits and provide benefits to the education, research, and clinical service missions of the academic institutions.

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