Educational Scholarship Guides

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Overview

An Association of American Medical Colleges (AAMC) Educational Working Group on Educational Scholarship was established in 2005 and charged to develop a series of educational documents that describe the definition, peer review, publication, and recognition of educational scholarship in health education. Drawing on the educational scholarship literature, the documents illustrate how published educational works are comparable to other forms of scholarship that are commonly used for promotion and tenure purposes. The working group developed the following four documents which are included in this publication.

Educational Scholarship Guide for Faculty - A document developed to guide faculty who are considering publishing their educational resources. It presents the fundamentals of educational scholarship and illustrates how educational resource publications as a form of scholarship are comparable to manuscripts that are published in traditional journals.

Educational Scholarship Guide for Promotion and Tenure - A fact sheet created for all faculty and administrators, particularly those who serve on promotion and tenure committees. This fact sheet describes the principles of educational scholarship and how peer-reviewed educational resources may be considered compelling scholarly contributions to support promotion and tenure.

Worksheet: Evaluating Educational Scholarship - A worksheet designed to help users evaluate virtually any educational resource based on accepted standards of scholarship.

Checklist: Author Submission - A practical checklist developed to help authors prepare their educational materials for submission to MedEdPORTAL.

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Additional Resource:
> *Advancing Educators and Education: Defining the Components and Evidence of Educational Scholarship*
> AAMC Consensus Conference on Educational Scholarship; July 2007
> Available for free download at: www.aamc.org/publications

Educational Scholarship Guide for Faculty

This document was developed to guide faculty who are considering publishing their educational resources within MedEdPORTAL. It introduces the principles of educational scholarship and illustrates how MedEdPORTAL publications as a form of scholarship are comparable to print publications. This document was developed by the 2005 Association of American Medical Colleges (AAMC) Working Group on Educational Scholarship.

What is Educational Scholarship?

Educational scholarship refers to any material, product or resource originally developed to fulfill a specific educational purpose that has been successfully peer-reviewed and is subsequently made public through appropriate dissemination for use by others.

In what ways are MedEdPORTAL publications similar to publications in traditional print journals?

New forms of digital publishing have provided unprecedented opportunities for peer review and publication of scholarly works online. From its conception within the AAMC Group on Educational Affairs, MedEdPORTAL was designed to serve as a prestigious publishing venue through which faculty may disseminate their educational works. Structured like a traditional print journal, MedEdPORTAL:

- Maintains an editor and an editorial board.
- Follows a peer review policy that mirrors practices employed by established biomedical and dental print journals.
- Employs a rigorous peer review process based on accepted standards of scholarship using invited expert reviewers to conduct all reviews.

An educational resource successfully peer-reviewed and published through MedEdPORTAL is comparable to a peer-reviewed research paper published through a reputable print-based journal. Authors who publish through MedEdPORTAL benefit from the Association of American Medical Colleges' authority and credibility and have access to a critical audience drawn from its broad membership. Publications in MedEdPORTAL should be considered compelling scholarly contributions suitable for use to support promotion and tenure decisions.

How do Promotion and Tenure Committees view educational works – as distinct from works of research – that are published?

As early as 1992 several medical schools were encouraging their faculty members to provide evidence of their educational work in portfolio-like documents that could be sources of teacher recognition.[1] As of 2000, at least half of all medical schools showed evidence that they valued the educational activities of their faculty with an emphasis on peer review and dissemination, with many schools providing detailed advice about how faculty members could assemble their best educational materials for promotion packets.[2]

How do I cite my MedEdPORTAL publication?

There are established conventions for citing various types of digital, database, and other online resources. MedEdPORTAL citations may be presented in one of two common styles:

1. **National Library of Medicine (NLM) Style:**

   Zachow R, Schwenkler J, Sadley C, Case for Medical Physiology Small Group Discussion: Atrial Fibrillation. MedEdPORTAL; 2007. Available from: www.aamc.org/mededportal, ID = 596

2. **American Psychological Association (APA) Style:**

   Zachow, R., Schwenkler, J., Sadley, C., (2007). Case for Medical Physiology Small Group Discussion: Atrial Fibrillation. MedEdPORTAL: www.aamc.org/mededportal, ID = 596

I am up for promotion. Specifically, where might I document my MedEdPORTAL publication in my CV or promotion dossier/packet?

Many institutions have standardized formats for faculty CVs; some institutions offer the following subsection headings within the Bibliography section:

- Peer Reviewed Educational Materials
- Enduring Materials (Peer Reviewed and Non-Peer Reviewed)
- Other Forms of Educational Scholarship

Authors may also include documentation of their work within their educational portfolio. To support portfolio documentation, MedEdPORTAL published authors may generate usage reports directly from the MedEdPORTAL website that lists all of the users which have accessed or downloaded their published resource. The usage report contains each user's name, institution, country, email address, date the resource was accessed, and in some instances explanation of how they plan to use the resource. All of this information can be compiled and added to your CV or promotion dossier/packet to demonstrate utilization and impact.

As a faculty member with numerous research, teaching and service responsibilities, why should I take the time to complete the submission form and submit my educational material to MedEdPORTAL?

The benefits for including your work in MedEdPORTAL may be realized at multiple levels:
- You receive recognition for peer-review of scholarly work that may be considered by promotion & tenure committees. In addition, all successfully reviewed materials are provided with the AAMC Peer Reviewed Logo, a special mark of distinction.
- You may obtain feedback of your work from the peer-review for enhancement or expansion of the resource.
- The MedEdPORTAL process allows you to select and codify the specific conditions under which the work may be used by others (i.e., MedEdPORTAL allows submitting authors to create a Creative Commons copyright license).
- You are able to expand the audience of potential users of your work beyond your own discipline.
- You can communicate your professional expertise and interests to faculty at other health education institutions.

Bibliography

1 Simpson DE, Hafler J, Brown D, Wilkerson L. Documentation Systems for Educators Seeking Academic Promotion in U.S. Medical and dental Schools. *Acad Med.* 2004;79(8):783-90.

2 Hafler JP, Lovejoy FH Jr. Scholarly Activities Recorded in the Portfolios of Teacher-Clinician Faculty. *Acad Med*. 2000; 75(6):649-52.

Educational Scholarship Guide for Promotion and Tenure

This document was developed by the 2005 Association of American Medical Colleges (AAMC) Working Group on Educational Scholarship. All faculty and administrators, particularly those who serve on promotion and tenure committees, need to be aware of the principles of educational scholarship and how peer-reviewed educational resources can be considered as compelling scholarly contributions to support applications for promotion and tenure. The following short summary may suffice.

The History of Educational Scholarship:

In 1990, Ernest Boyer, then President of the Carnegie Foundation for the Advancement of Teaching, called for a radical realignment of emphasis among the scholarly functions that make up the full scope of academic work. He argued that the term "scholarship" correctly applies to four domains[1], or areas of academic endeavor. They are:

1. The scholarship of **discovery**, which is consistent with traditional research;
2. The scholarship of **integration**, which makes connections across disciplines and places specialties in a larger context;
3. The scholarship of **application**, which demonstrates the vital interaction between research and practice, wherein the one continuously informs the other; and
4. The scholarship of **teaching** (educational scholarship), which emphasizes the creation of new knowledge about teaching and learning in the presence of learners.

By 1992 several medical schools had signaled their acceptance of the validity of educational scholarship by encouraging faculty members to provide evidence of their educational work in portfolio-like documents used in conjunction with teacher recognition.[2] As of 2000, at least half of all medical schools affirmed the value of their faculty's educational activities, with many schools providing detailed advice to faculty members as they assembled their best educational materials for promotion packets.[3]

Scholarship Defined:

Once the concept of scholarship was expanded, a new concern quickly arose regarding how one could determine if work done in a domain other than discovery/research was suitable to be called scholarship. Building on Boyer's work, Glassick, Huber and Maeroff[4] identified six characteristics that all works of scholarship, including educational scholarship, have in common. They are:

1) **Clear goals** – the educator explicitly states the basic purposes for the work, and defines realistic, achievable objectives, including desired goals and outcomes.
2) **Adequate preparation** – the educator shows an understanding of existing scholarship relevant to the endeavor and has skills and resources drawn from this research and from prior experience to advance the project.
3) **Appropriate methods** – in conjunction with the material and the context, the educator chooses, applies and, if necessary, modifies methods wisely.
4) **Significant results** – the educator achieves the goals, and contributes notably to the field in a manner that invites further exploration.
5) **Effective presentation** – the educator uses a suitable style and organization to present the work with clarity and integrity in appropriate forums to reach the intended audience.

6) **Reflective critique** – the educator thoughtfully assesses the work him/herself and uses the resulting perceptions, along with reviews and critique from others, to refine, enhance or expand the original concept.

Peer Review and Dissemination:

The expansion of the concept of scholarship to include other kinds of academic work besides traditional research and the widespread acceptance of Glassick's six criteria for scholarship only compliments the roles that peer review and dissemination continue to play in all higher education, including health education. Peer review has always been a systematic evaluation tool in assessing research and now, given Glassick's criteria, peer reviewers are readily able to judge whether work in any domain meets the quality and standards of scholarship in the academic community.[5]

In addition to traditional forums of disseminating scholarship (for example, journals) a number of new venues are available to support peer review and dissemination in health education across the country. Faculty members may submit educational products such as syllabi, videotapes, e-learning courses, PBL cases, OSCE tools among others for peer review. As suggested above, these products are reviewed using a peer review process that closely parallels that which journals use, with standards for acceptance consistent with Glassick's established criteria for scholarship. Rather than publishing in a journal these products are published in educational repositories.

The advent of online publishing venues has increased the ability for health educators to offer their work for peer review and dissemination without diminishing the intellectual rigor long associated with such a process. Moreover, the impact factor (e.g. breadth and size and type of audience) associated with the new repositories should be judged as with any traditional form of dissemination.

In summary, educational scholarship has emerged as a valid domain in which health educators may produce meaningful work suitable for rigorous peer review using processes and criteria that parallel traditional academic models. Furthermore, the peer-reviewed and disseminated products of educational scholarship can rightly be counted as evidence of scholarly worth in academic promotion decisions.

Bibliography

1 Boyer EL. *Scholarship reconsidered: Priorities for the Professoriate* 1990; The Carnegie Foundation the Advancement of Teaching: Princeton, NJ.

2 Simpson DE, Hafler J, Brown D, Wilkerson L. Documentation Systems for Educators Seeking Academic Promotion in U.S. Medical Schools. *Acad Med.* 2004; 79(8): 783-90.

3 Hafler JP, Lovejoy FH Jr. Scholarly Activities Recorded in the Portfolios of Teacher-Clinician Faculty. *Acad Med*. 2000; 75(6): 649-52.

4 Glassick CE, Huber MR, Maeroff GI. *Scholarship Assessed: Evaluation of the Professoriate*. 1997; San Francisco, CA: Jossey-Bass.

5 Shapiro ED, Coleman DL. The Scholarship of Application. *Acad Med.* 2000; 75(9): 895-8.

Worksheet
Evaluating Educational Scholarship

This worksheet is designed to guide users in evaluating educational materials in light of criteria established for all scholarship, including educational products in health education. The intent is to determine whether the materials meet the criteria and thus discern the degree to which they are ready for dissemination. It was originally developed by Dr. Sheila Chauvin and subsequently adapted for MedEdPORTAL by the 2005 Association of American Medical Colleges (AAMC) Working Group on Educational Scholarship.

For what specific educational activity was this material originally created? In the context of a particular teaching/learning situation, what was this material supposed to achieve? Define the educational activity.

Glassick[1], et al. (1997) defined six Criteria for Assessing Scholarship:

Clear Goals: The scholar explicitly states the basic purposes for the work and defines realistic, achievable objectives, including desired goals and outcomes. Important questions regarding teaching and learning have been taken into account.

Adequate Preparation: The scholar has a solid understanding of existing scholarship relevant to the endeavor (generic and discipline-specific) as well as adequate skills and resources drawn from this research and from prior experience to advance this specific project.

Source: www.aamc.org/mededportal

Appropriate methods: In conjunction with the material and the teaching/learning context, the scholar's selections of educational methods fit the goals and are used effectively; the methods are modified as necessary to accommodate situational changes.

Significant results: The scholar achieves or exceeds the original goals; the scholar's work contributes substantially to others (e.g., learners and colleagues) and to the field; the scholar's work is open to further exploration (e.g., by self, by others, collaboratively with others).

Effective presentation: The reviewer can discern that appropriate style and methods of presentation are used and that the resulting communication to the intended audience is clear and unambiguous.

Reflective critique: The scholar thoughtfully assesses the work him/herself and uses the resulting perceptions along with reviews and critique from others, to refine, enhance, or expand the original concept.

Bibliography

1 Glassick CE, Huber MR, Maeroff GI. *Scholarship Assessed-Evaluation of the Professoriate*. San Francisco, CA: Jossey-Bass, 1997.

Checklist
Author Submission

This checklist was created to help authors prepare their educational materials for submission to MedEdPORTAL. Use it on your own or with your co-authors, making notes as you go along. You may wish to consult an educational or faculty development consultant who may be available on your campus to enhance not only the success of your current work for MedEdPORTAL but all your future works of educational scholarship. This checklist was developed by the 2005 Association of American Medical Colleges (AAMC) Working Group on Educational Scholarship.

Preparing for Submission:

1. Identify the material you wish to prepare for submission and peer-review.

2. Briefly describe the material:

3. Write a short descriptive title:

Co-Author Permission:

4. Are there co-authors for the material?
   ☐ Yes (continue to the next question)
   ☐ No (skip to question 6)

5. Have you notified all co-authors and asked for their permission to submit to MedEdPORTAL?
   ☐ Yes (continue to the next question)
   ☐ No (seek verbal permission from all co-authors before proceeding)

   Important Notice: Once the MedEdPORTAL online submission form has been successfully completed and submitted, each co-author will automatically receive an email notification with an attached copy (adobe PDF file) of the completed submission form. The email will also contain a direct link to the MedEdPORTAL *Submission Agreement* that they must agree to online before MedEdPORTAL staff will be able to process your submission.

Author Instructions:

6. Review MedEdPORTAL's *Author Instructions* available at the following web address:
www.aamc.org/mededportal

Submission Form Questions:

7. Download and review a list of all the questions found on the MedEdPORTAL submission form located at the following web address (also available in the *MedEdPORTAL Training Materials* publication):
www.aamc.org/mededportal

8. After reading the MedEdPORTAL *Author Instructions* and the submission form questions, do you wish to pursue publishing your educational material through MedEdPORTAL?
   ☐ Yes (continue to the next question)
   ☐ No (discontinue checklist or pursue other venues for publication)

Evaluate Material Prior to Submission:

9. **Is your material enduring?** That is, after using it, are you satisfied that it will be useful over time?
   ☐ Yes (continue to the next question)
   ☐ No (implement the necessary changes prior to proceeding)

10. **Can you provide simple, clear information to guide others in using the material as you intend?**
Often prospective instructors considering adopting your material appreciate receiving the following information as a kind of instructor's guide: Why was it originally developed? What was the conceptual background? For whom was the material originally intended? What was the purpose or goal? When and where did you use it?
   ☐ Yes (continue to the next question)
   ☐ No (implement the necessary changes prior to proceeding)

11. **Is your material complete?** Are the various parts assembled in a way that will be easy for the person receiving them to use the material appropriately? Is your material considered a full standalone learning module that an educator or student can take and either implement or learn from without ever having to contact you for additional information? Does your resource contain an instructor's guide or a step-by-step guide on how best to implement or utilize the educational material?
   ☐ Yes (continue to the next question)
   ☐ No (implement the necessary changes prior to proceeding)

12. **Is your material effective?** How do you know your material achieved your intended purpose? Can you summarize the results regarding its effectiveness?
   ☐ Yes (continue to the next question)
   ☐ No (implement the necessary changes prior to proceeding)

13. **Is your material generalizable?** That is, does the material reflect content, practices, and/or applications that would be beneficial to other users in similar and/or different situations?
   ☐ Yes (continue to the next question)
   ☐ No (implement the necessary changes prior to proceeding)

14. **Is your material transferable?** Have you received written permission to use all third-party copyrighted materials included in your submission? Have you identified and described all special implementation requirements or guidelines associated with utilizing the material?   Can these requirements or guidelines be reasonably addressed by other users?
    ☐ Yes (continue to the next question)
    ☐ No (implement the necessary changes prior to proceeding)

    Important Notice: It is the AAMC policy that all MedEdPORTAL submissions be free and clear of any copyrighted materials before moving forward with the peer review process. This includes all text, diagrams, articles, cartoons, or multimedia. If you do have copyrighted materials we require that prospective authors obtain written permission to use any third-party materials. This written permission should acknowledge that it is intended to be used for MedEdPORTAL and may be distributed under the Creative Commons License as part of your resource. Alternatively, if there are items where the author(s) are not known, or it will be difficult to receive the necessary permission, then it may be simply removed from your resource.

15. **Is your material reproducible?** Can you present your material clearly enough that other users could implement/use it as you have intended and achieve similar results?
    ☐ Yes (continue to the next question)
    ☐ No (implement the necessary changes prior to proceeding)

16. **Is it sufficiently clear and complete so that others could build upon your original work?** Can you present your educational material in a way that could facilitate others' adaptation to similar or different situations or applications?
    ☐ Yes (continue to the next question)
    ☐ No (implement the necessary changes prior to proceeding)

17. **Can you provide insights or guidance for other users of your material?** For example, based on your development, use, and refinement of the material, can you communicate clearly your insights or lessons learned, suggestions and/or cautions to facilitate others' effective use and/or adaptation of the material?
    ☐ Yes (continue to the next question)
    ☐ No (implement the necessary changes prior to proceeding)

Submitting Material to MedEdPORTAL:

18. If you answered *Yes* to questions 9-17 or you can effectively address aspects that are not present, then proceed with preparing your material for submission to MedEdPORTAL.

19. Download and review all the peer review criteria and questions on the MedEdPORTAL *Peer Review Form* the reviewers will be asked to answer when evaluating your material for possible publication. A copy of the *Peer Review Form* is available for download at the following web address (also available in the *MedEdPORTAL Training Materials* publication):
    www.aamc.org/mededportal

20. Complete the online MedEdPORTAL *Submission Form* located at www.aamc.org/mededportal (click on the link labeled *Publish Resources*). Be sure to address the peer review criteria as appropriate to each section. A sample submission form and instructions can be downloaded at the following web address (also available in the *MedEdPORTAL Training Materials* publication): www.aamc.org/mededportal.