## "Toward a Common Understanding"

# Advancing Education Scholarship for Clinical Faculty in Canadian Medical Schools

## **A Position Paper**

Canadian Association for Medical Education (CAME) Advancement of Education Scholarship Working Group

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#### **EXECUTIVE SUMMARY**

#### The current situation:

Demands for evolution and transformation of medical education in Canada have never been greater. <sup>1-3</sup> Indeed, providing leadership in developing new approaches in health professions education is emerging as a critical role for Academic Health Science Centres. <sup>4,5</sup> As a result, there is a growing need for faculty members to focus on education scholarship as part of their academic commitment. Consequently, the Canadian Association for Medical Education (CAME) adopted the following recommendation as part of their 2010 strategic planning initiative:

"That CAME should create a position paper on the scholarship of education in Canada"

Accordingly, an Advancement of Education Scholarship Working Group (AES-WG) was established. This position paper presents the findings and recommendations of the AES-WG.

## Our focus:

In creating this position paper we had one central concern: to ensure that the amount of time and work that CAME members and other clinical faculty often dedicate to the development of educational programs and strategies is appropriately recognized as legitimate academic work. And so the following question was used to guide our work.

What strategies are required to appropriately evaluate and support clinical faculty involved in education scholarship?

## What is education scholarship?

Unfortunately, when Boyer (1990)<sup>6</sup> first introduced the 'Scholarship of Teaching' as one of the four pillars of the professoriate (the others being discovery, application and integration) the term was not well described.<sup>7</sup> And so in answering our question, we first had to define education scholarship. Reviewing recent initiatives and literature<sup>8-13,15-28</sup> led us to craft the following definition.

Education Scholarship is an umbrella term which can encompass both research and innovation in health professions education. Quality in education scholarship is attained through work that is: peer-reviewed, publicly disseminated and provides a platform that others can build on.

This definition is deceptively simple. It reflects the growing understanding that education research is a multifaceted field including basic, applied and practice-based areas of inquiry;<sup>14</sup> anyone of which can inform the evolution and transformation of health professions education.

This definition also acknowledges the important contribution of the design, implementation and evaluation of educational innovations (e.g., teaching strategies, workshops, curriculum etc). Understanding education scholarship as encompassing both *research and innovation* is important since it expands our consideration of what can be 'counted' as legitimate academic work. The challenge then lies in ensuring that, regardless of the focus, the work is scholarly and can therefore be evaluated using appropriate academic standards. Accordingly, the qualities of "peer review, public dissemination and in a platform that other can build on" are highlighted in the definition. Most importantly, this last quality calls for *making explicit conceptual frameworks which inform the work so that* those engaged in education scholarship can advance the field by contributing to a deeper understanding of the area under investigation.

This definition also reinforces that education scholarship is an activity separate and distinct from teaching. <sup>29-31</sup> Indeed, participation in teaching and educational administration/leadership can lead to involvement in education scholarship. Education scholarship, however, calls for the development of skills and knowledge distinct from teaching and leadership. Specific strategies to evaluate and support clinical faculty must be directed accordingly.

## **Methods:**

Understanding the Canadian context provided the key starting point. We felt that taking stock of the current situation would provide a solid foundation for moving forward. And so we began by examining how education scholarship is represented in promotion policies guiding academic clinical faculty. We then conducted interviews with key informants at each of the 17 Canadian medical schools regarding opportunities for participating in and academic advancement and recognition through education scholarship. We also held a think tank with key leaders and faculty where we shared preliminary results and sought further direction. Our work was also informed by the results of an environmental scan of Canadian fellows and scholars programs. Finally, throughout our work we consulted the literature.

## **Results:**

The themes emerging from the data were grouped into four levels: national, institutional, support system and individual (see Table 1). These levels correspond to the focus and scope of the finding e.g., a national level issue is one that is common across all organizations. The individual level, however, captures themes directly applicable to those involved in education scholarship.

At the national level, we found that education scholarship is explicitly represented in 9 of the 17 promotion policies. However, the description and focus varied widely. Consequently, in these policies, it was often difficult to understand and/or distinguish the relationship among teaching, leadership, research and education scholarship. This finding was further reinforced in the key informant interviews.

At the institutional level, the need for explicit metrics for assessing the impact of education scholarship emerged as a key theme. At the support system level, department heads were

identified as being critically influential in providing career advice. A number of informal initiatives were described with respect to providing support, but few formally organized or coordinated systems. As well, these initiatives tended to be focused on a range of activities, of which education scholarship was just one component.

## Table 1 – Results

## **NATIONAL LEVEL:**

- The inclusion and level of description of education scholarship in promotion documents varies widely amongst institutions.
- The boundaries between education scholarship, teaching, leadership and research tend to be blurred.

## **INSTITUTIONAL LEVEL:**

- Evidence for accomplishments in education scholarship tends to focus on traditional metrics such as peer-reviewed publications.
- It is difficult to measure and evaluate the impact of education scholarship.

## SUPPORT SYSTEM LEVEL:

- The department head plays a central role in advancing education scholarship as a possible career path.
- Institutions tend to rely on informal mentoring to support those interested in undertaking education scholarship.
- Having conversations with knowledgeable individuals is a key strategy for successfully engaging in education scholarship.
- Institutional support systems for those interested in education scholarship tend to be idiosyncratic and ad hoc.

## **INDIVIDUAL LEVEL:**

- Incentives for engaging in education scholarship tend to be intrinsic (e.g., personal satisfaction) versus extrinsic (e.g., funding or other rewards).
- Success in education scholarship is maximized through alignment of interests with other academic roles.
- There are multiple ways in which individual clinicians can become engaged in education scholarship (e.g., through teaching activities, educational leadership roles, etc).

Finally, for individual faculty it was readily acknowledged that education scholarship tends to be just one "building block" of an academic career; with involvement ranging from one project to undertaking a significant program of research. Successful engagement is aided by declaring an area of interest thereby creating a "density of activity" across multiple academic roles. Being explicit about roles and expectations, particularly with respect to protected time, was identified as a critical strategy.

#### **Recommendations:**

Recommendations were then developed in accordance with each of the key issue areas (see Table 2). In the body of the position paper, each recommendation is augmented with material from the literature which is followed by suggested next steps. For example, recommendation #5 calls for being explicit about how education scholarship can contribute as one building block within an individual's academic career. Based on a study of faculty career tracks,<sup>52</sup> a rubric is provided. The rubric provides a template that can guide decision making such as the amount of protected time required for education scholarship activities within a broader academic portfolio. As a next step, it is suggested that the rubric be further developed including examples of education scholarship activities and possibly guidelines for protected time.

## **Table 2 – Recommendations**

## **NATIONAL LEVEL:**

#### Recommendation #1

Adopt a common language and definitions for education scholarship which clearly distinguishes amongst teaching, administration/leadership, research and education scholarship.

## **INSTITUTIONAL LEVEL:**

#### Recommendation #2

Develop guidelines which articulate the range of products, appropriate evidence and describe how to assess the impact of education scholarship.

### SUPPORT SYSTEM LEVEL:

## Recommendation #3

Ensure that those in key leadership positions have a robust understanding of how to integrate education scholarship into an academic career.

#### Recommendation #4

Ensure that there are specific mentors identified and developed across the system who can provide advice and assistance to clinical faculty on how to engage in and "package" education scholarship as a viable academic career path.

#### **INDIVIDUAL LEVEL:**

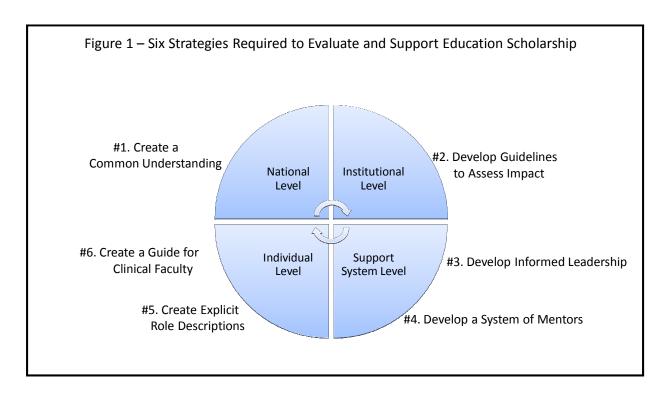
## Recommendation #5

Make explicit how activities related to the various roles of academic clinicians would qualify as education scholarship.

#### Recommendation #6

Ensure that each school has and disseminates a guide for clinical faculty that describes the institutional approach to, opportunities and supports available for clinical faculty to successfully engage in education scholarship.

As illustrated in Figure 1, the recommendations work together to ensure that clinical faculty engaged in education scholarship are appropriately evaluated and supported. We would suggest, however, that *Recommendation #1: Creating a common understanding is a foundational strategy*. Such a common understanding will provide the basis for developing appropriate metrics, informed leadership and mentors as well as creating explicit role descriptions and a guide for clinical faculty.



## **In Conclusion:**

Since the time of Boyer, education scholarship has taken on a critical role in advancing health professions education. We argue in this position paper that properly evaluating and supporting this work begins with acknowledging that education scholarship encompasses a broad spectrum of activities; activities related to both education research and innovation. Indeed, clinicians who engage in education scholarship are most likely to be involved in multiple activities, e.g., teaching, education leadership and clinical care. Creating a common understanding of educational scholarship will allow for the contributions of these "amazing" and "extraordinary doctors" to be appropriately recognized.

#### BACKGROUND

## Purpose of the Canadian Association for Medical Education's (CAME) Advancement of Education Scholarship Working Group (AES-WG)

The Canadian Association for Medical Education (CAME) is a grassroots organization of medical educators dedicated to the success and improvement of medical education in Canada. In the fall of 2009, CAME conducted a survey and a series of focus groups to determine priority areas for future CAME activities. With respect to education scholarship the following recommendation emerged:

"That CAME should create a position paper on the scholarship of education in Canada that can be used to establish common criteria for promotion, common understanding of scholarly activities related to education, and an evidence-informed common set of minimum standards for scholarly work."

Consequently, in the fall of 2010, a CAME Advancement of Education Scholarship Working Group was established. Membership was drawn from the 17 medical schools across Canada and included:

Dr. Elaine Van Melle, (Chair) Queen's University

Dr. Vernon Curran, Memorial University of Newfoundland

Dr. Mark Goldszmidt, University of Western Ontario

Dr. Susan Lieff, University of Toronto

Dr. Jocelyn Lockyer, University of Calgary

Dr. Christina St-Onge, Université de Sherbrooke

Ms. Libby Alexander (Research Assistant), Queen's University

Ms. Stephanie Mustchler, Liaison Officer (AFMC)/Association Manager (CAME)

## The focus of this paper

This paper addresses primarily the situation of fulltime clinical faculty members who are engaged in, or are interested in becoming engaged in, education scholarship. Often referred to as "Clinician Educators", these faculty members tend to be involved in designing, implementing and evaluating educational innovations (e.g., new teaching or assessment strategies) and/or curriculum development. Increasingly, we are also seeing faculty take on programmatic research in health professions education\*. They may undertake these activities as a part of their teaching responsibilities, as part of a leadership position such as a program director in a postgraduate program, as a curriculum leader in undergraduate medical education or as an education researcher.

<sup>\*</sup>We have deliberately chosen to use the term "health professions education" since although this paper addresses the situation of medical professionals, we wanted to include opportunities for involvement in activities related to the broader field of health professions education.

Their contributions are often invaluable in realizing the academic mission of a health sciences centre and in advancing the field of health professions education.

These contributions, however, can fall outside of what is considered to be traditional academic work. Consequently, these accomplishments tend not to be well understood within the academic environment. This position paper reviews the current situation across Canada and provides recommendations for ensuring that these vital activities are appropriately understood, evaluated and supported.

This position paper should also have relevance for non-clinical faculty, trained at the Masters or PhD level and engaged in research in health sciences education. This research may focus on developing theories that inform health sciences education or in examining activities directly related to teaching and learning (e.g., evaluating educational innovations, curriculum design research etc). The challenge lies in ensuring that this critical expertise and knowledge clearly informs and contributes to education scholarship undertaken by clinical faculty.

It is also the intent of this paper to assist those in academic leadership and mentor positions (e.g., senior leaders in an academic health sciences Centre, department and /or division heads, promotion committees, etc) by clarifying the spectrum of activities that constitute education scholarship and by describing strategies required to evaluate and support the work of those clinical faculty members undertaking scholarship in health professions education.

Many aspects of this position paper should also have relevance for adjunct or part-time clinical faculty members as well as basic science faculty involved in education. We recognize, however, that it is beyond the scope of this work to do justice to their specific situation.

#### INTRODUCTION

Recently, the future of medical education in Canada, at both the undergraduate and postgraduate level, has been under intense scrutiny. These "Future of Medical Education in Canada" (FMEC)<sup>1,2</sup> initiatives have created an imperative for educational reform. The implementation of the "Triple C Competency-based Curriculum" <sup>3</sup> is also calling for significant change in family medicine residency education. Indeed, demands for evolution and transformation of medical education in Canada have never been greater.

The design, implementation and evaluation of innovative educational practices will be foundational for moving the system forward. As well, providing leadership in developing new educational approaches and models in health sciences education is a critical role for Academic Health Science Centres. Yet, there continues to be concern that research and clinical work are valued over activities related to teaching: particularly when it comes to what 'counts' toward academic promotion. And so it is timely to seriously consider:

What strategies are required to appropriately evaluate and support clinical faculty involved in education scholarship?

In the course of our work, it became apparent that education scholarship is not particularly well defined or understood. Consequently, we begin this position paper by synthesizing the literature in order to answer the question "What is education scholarship in health professions education?" Based on this foundational work, we then examine how education scholarship is currently represented in the promotion policies and processes across the 17 medical Canadian schools. Analysis of this data is used to identify key issues and formulate recommendations regarding the advancement of education scholarship.

## What is education scholarship?

The importance of education scholarship was first introduced by Boyer (1990) when he clearly identified the "Scholarship of Teaching" (SoT) as one of the four pillars of the professoriate (the others being discovery, integration and application). In this now seminal work, his intention was to elevate the practice of teaching in the academic environment. Although Boyer's work was met with wide agreement in principle, unfortunately the term SoT was not clearly defined. This lack of clarity has contributed to the difficulty in identifying and recognizing education scholarship as important academic work.

Since Boyer, much work has gone on in both the higher education as well as the health professions education literature to clarify what is meant by education scholarship.<sup>8-12</sup> It is beyond the scope of

this position paper to do justice to the full range of discussions. We have however carefully considered ongoing developments in this work to inform our approach to education scholarship. For example, one approach has been to define the components of discovery, integration and application separately and in turn, relate these activities to the SoT. These terms, however, tend not to be discreet definable activities when applied to education scholarship. For instance, over time designing innovative instructional material has come to fall under the rubric of education scholarship. This activity entails the scholarship of integration (e.g., drawing from multiple disciplines), as well as the scholarship of application (e.g., applying theory to practice). <sup>13</sup>

Furthermore, the "scholarship of discovery" tends to be narrowly equated with "traditional" research primarily concerned with discovering knowledge and generating theories. Education research, however, is a diverse field not readily defined by any one approach or area of inquiry. Indeed, it can include experimental, applied as well as practice-based research. More specifically, there is a growing level of diversity in health professions education research. For example, the emerging field of design-based research can lead to both generating theory as well as advancing practice. The increasing focus on the use of social science frameworks also represents growing diversity in the field. 17,18

Consequently, in answering the question "What is education scholarship?" we wished to create an equally inclusive but less complicated approach. In describing education scholarship as "any material, product or resource originally developed to fulfill a specific educational purpose" the American Association of Medical Colleges (AAMC) provides a more straightforward definition. In this definition, education scholarship becomes circumscribed as one sub-activity specifically related to the practice of teaching. The advantage of this approach is that it clearly recognizes the growing importance of non-traditional academic work such as the design, implementation and evaluation of educational innovations; the often time-consuming work carried out by clinician educators for which it may be difficult to receive recognition within a traditional academic environment. The disadvantage of this approach, however, is that it tends to limit education scholarship to activities stemming directly from the practice of teaching: a perspective which does not overtly include the many facets of education research.

Therefore, in creating this position paper we deliberately chose to approach *education scholarship* as an umbrella term that can encompass a broad set of practices. It includes what we tend to think of as "traditional research in education", <sup>14</sup> as well as activities which focus specifically on advancing the practice of teaching and learning<sup>21</sup> including the design, implementation and evaluation of educational innovations.

Understanding education scholarship as encompassing both *research and innovation* is important since it expands our consideration of what can be 'counted' as legitimate academic work. As such it allows us to explicitly evaluate and support both *traditional research in education* and accomplishments, e.g., publications in peer-reviewed journals, as well as *non-traditional academic activities*, e.g., the design, implementation and evaluation of an educational innovation,

e.g., a new teaching strategy, tool, programme or curriculum. The challenge lies in ensuring that, regardless of the focus, the work is scholarly and can therefore be evaluated using appropriate academic standards.

Indeed, it is generally agreed that, to be successful, all activities related to education scholarship require the same rigorous, disciplined approach inherent in any scholarly endeavour. This requirement is clearly embodied in the *six standards of scholarship*<sup>22</sup> (see Table 1). Complementary standards have also been developed to guide the design of educational innovations<sup>23</sup> (see Table 2).

Application of standards ensures that all activities and products arising from education scholarship can be judged by the following three hallmark qualities.<sup>24</sup> That the work is:

- peer-reviewed;
- *publicly disseminated*; and,
- provides a platform that others can build on.

Our review of ongoing developments resulted in the following definition.

Education Scholarship is an umbrella term which can encompass both research and innovation in health professions education. Quality in education scholarship is attained through work that is: peer-reviewed, publicly

In this definition, "research" is not limited to any one approach but embraces the growing diversity in the field to include all potential areas of inquiry; experimental, applied and practice-based research (e.g., investigating an issue directly related to teaching and/or learning). <sup>14</sup> The term "innovation" acknowledges that all activities related to the design, implementation and evaluation of educational innovations can be considered as education scholarship (e.g., creating new strategies or tools for teaching and learning, developing or improving an educational program, creating a new or revised curriculum etc) When considering how to evaluate and support those involved in education scholarship, there are a number of advantages and challenges inherent in this approach.

With respect to evaluation, it is important to go beyond traditional academic considerations. For example, the quality of "peer review" is most often equated with the number of publications in a "high impact", peer- reviewed journal. The inclusion of educational innovations however requires us to acknowledge the importance of peer reviewed journals related to health professions education and that their related impact factors may need to be assessed differently. It is also important to evaluate impact in relation to non-traditional avenues of dissemination (e.g., demonstrating the adoption of a peer reviewed innovation in a way that impacts on practice). The challenge in "public dissemination" is to also consider expanded avenues for dissemination. For example, the dissemination of educational innovations can include web-based repositories, technical reports and/or other non-traditional venues for the sharing of innovations.

## Table 1 - The Six Standards for Scholarship

## 1. Clear Goals

- Does the scholar state the basic purpose of his or her work clearly?
- Does the scholar define objectives that are realistic and achievable?
- Does the scholar identify important questions in the field?

## 2. Adequate Preparation

- Does the scholar show an understanding of existing scholarship in the field?
- Does the scholar bring the necessary skills to his or her work?
- Does the scholar bring together the resources necessary to move the project forward?

## 3. Appropriate Methods

- Does the scholar use methods appropriate to the goals?
- Does the scholar apply effectively the methods selected?
- Does the scholar modify procedures in response to the changing circumstances?

## 4. Significant Results

- Does the scholar achieve the goals?
- Does the scholar's work add consequentially to the field?
- Does the scholar's work open additional areas for further exploration?

## 5. Effective Presentation

- Does the scholar use a suitable style and effective organization to present his or her work?
- Does the scholar use appropriate forums for communicating the work to its intended audiences?
- Does the scholar present his or her message with integrity and clarity?

## 6. Reflective Critique

- Does the scholar critically evaluate is or her own work?
- Does the scholar bring an appropriate breadth of evidence to his or her critique?
- Does the scholar use evaluation to improve the quality of future work?

## Table 2 – Standards for the Design of Educational Innovations

- 1. Clear description of the problem
- 2. Extent of the problem in the field
- **3.** Potential solutions/theoretical frameworks
- **4.** Rationale for selecting a particular solution/theoretical framework
- **5.** Description of implementation
- **6.** Critical analysis of implementation
- 7. Evaluation of potential impact
- **8.** Extent of sustainability

Perhaps, however, one of the most important, yet challenging, qualities to evaluate is that of "providing a platform that others can build on." This characteristic calls for those engaged in education scholarship to advance the field by contributing to a deeper understanding of the area under investigation. This requires *making explicit conceptual frameworks which inform the work*. <sup>25</sup> Since education scholarship includes research and innovation in education, meeting this quality requires consideration not just of theories, but also models and/or principles derived from evidence based practice.

With respect to providing support then, assisting clinicians in developing specific expertise, such as knowledge of theoretical frameworks, is an important concern. Indeed, a major criticism is that those engaged in education scholarship often fail to appropriately consider the importance of theory. Since research and innovation in education scholarship can be informed by multiple frameworks the learning curve is often steep. Furthermore, depending upon individual interests and desired levels of involvement, there are multiple avenues available for developing the required expertise.

For example, participation in professional development activities, Masters and PhD level courses are all viable means. It has also been suggested that becoming a "scholarly teacher", where the literature is used to inform and shape one's own approach to the practice of teaching, is one way to develop the expertise required to engage in education scholarship (see Table 3). Indeed, *engagement in scholarly teaching can be an important precursor to high quality, rigorous education scholarship* <sup>8,30,31</sup>. It is important to note, however, that involvement in teaching is not the only way to become engaged in education scholarship. Educational leadership positions can also provide opportunities for advancing teaching and learning through research and innovation.<sup>32</sup>

Regardless of "the way in" describing education scholarship as encompassing both research and innovation reinforces the understanding that *education scholarship and teaching are <u>not</u> synonymous activities*. Education scholarship "requires a kind of 'going meta' in which faculty frame & systematically investigate questions related to student learning". <sup>24</sup> The practice of teaching, however, draws from personal experience in a way that directly informs the refinement of teaching activities. This distinction is not to suggest in any way that one activity is more important than the other. It is simply to suggest that helping someone to develop expertise in education scholarship requires different strategies than developing expertise in teaching. Table 3 provides an overview of the distinctions between teaching and education scholarship.

Table 3 - Distinguishing Amongst Teaching, Scholarly Teaching and Education Scholarship

Teaching	Scholarly Teaching Education Scholarship				
Focus of activities					
Continual refinement of teaching activities based on an intuitive and subconscious decision-making process.	ties based on an intuitive and specific problem in teaching practice as informed by educational theories, work that is:				
Source of knowledge development					
Drawing from personal experience.	Drawing from personal experience, educational literature and/or discussion with others in the field.	Drawing from personal experience, educational literature and engagement in educational research/development activities.			
Focus of knowledge development					
There is potential to improve teaching.	There is potential to improve student learning.	There is potential to advance the field.			
Focus of knowledge dissemination					
Primarily personal use.	Peers at the local and institutional level.  A range of educators at the provincial, national and internation level.				
Outcome of activities					
The development of a repertoire of effective teaching algorithms and teaching strategies.	Growing sophistication and expertise in understanding teaching and learning.	Increasing growth of knowledge in the educational community.			

## In summary:

# Education Scholarship is an umbrella term which can encompass both research and innovation in health professions education.

Quality in education scholarship can be evaluated through work that is:

- peer-reviewed;
- publicly disseminated; and
- provides a platform that others can build on.

As such, strategies to evaluate and support education scholarship must take into account both traditional as well as non-traditional academic activities. Systematic application of the standards of scholarship and innovation should contribute to the production of high quality education scholarship. Making explicit appropriate conceptual framework(s) is a central feature in ensuring quality.

Although one can come to be engaged in education scholarship through participation in teaching and leadership activities, education scholarship, teaching and leadership are all separate and distinct activities. This perspective fits well with the theme emerging in our research that participation in education scholarship is not a "one size fits all" endeavour. The key seems to lie in explicitly aligning individual interests within the full scope of an academic role. This is identified as a unique challenge as we examine "What strategies are required to appropriately evaluate and support clinical faculty involved in education scholarship?"

## RESEARCH QUESTIONS

In order to identify strategies to evaluate and support clinical faculty involved in education scholarship, we thought it was important to create an appreciation of the current context within which academic clinicians come to make decisions regarding the role of education scholarship as part of their academic work. In this fashion, our recommendations could build on issues and concerns directly relevant to the context of academic clinicians. Indeed, context is critical in understanding how individuals come to make sense of and take action in relation to a new idea<sup>33,34</sup>. There is evidence to suggest that promotion policies and processes have evolved to accommodate widening perspectives on what counts as scholarship in the academic environment. <sup>35-37</sup> Accordingly, we chose to focus our investigation on how promotion policies and processes influence the advancement of education scholarship in the academic environment. The following two questions were used to guide our work:

- 1. How is education scholarship represented in the promotion policies across the 17 Canadian medical schools?
- 2. What is the process and evidence required for a clinical faculty member interested in focusing on education scholarship as part of their academic career?

## **METHOD**

## **Data Collection**

We used an interpretive approach to policy analysis to guide data collection.<sup>38</sup> This two-step process included: identifying the promotion policies and/or guidelines that clinical faculty would look to for direction regarding what is considered as education scholarship in their academic environment, and identifying those communities that interpret or create meaning for those policies.

The full list of promotion documents reviewed is presented in Appendix A. It should be noted that additional documentation was also examined as required. For example, one university had developed an elaborate web-based series of material which assisted in the understanding of the promotion guidelines. As well, the possible roles of academic clinicians were described in some of the promotion documents whereas other institutions described roles as a separate document. These were also obtained and reviewed as seemed appropriate to the study.

With respect to the community, we relied on the CAME Board members to ascertain key informants at their institution. A key informant was defined as "an individual who has both experience and understanding of education scholarship, as well as knowledge of and experience with the promotion process governing clinical faculty at the institution." Since we ensured anonymity as part of the ethical review process a list of key informants is not presented in this document. However, all 17 Canadian medical schools participated in the semi-structured interviews conducted with the key informants. The interview protocol is presented in Appendix B.

Our work was also informed by a "Think Tank" held at the 2011 Canadian Conference on Medical Education. There were approximately 65 attendees at the Think Tank session with representation from both senior leadership and clinical faculty. As such this group provided input from the wider community engaged in education scholarship. During the Think Tank, we presented a preliminary analysis of the promotion policies as well as a document entitled

"Toward a Common Understanding of Education Scholarship" (see Appendix C). Questions related to this document and findings to date were discussed in facilitated focus groups (see Appendix D).

## **Data Analysis**

The following three questions were used to guide the document review:

- 1. Is education scholarship explicitly referred to within the promotion policy? If so, how is it defined or represented?
- 2. How is evidence presented or described in relation to academic promotion through education scholarship?
- 3. Are there specific roles or pathways described in the promotion policy in relation to education scholarship?

The interviews were transcribed verbatim. Atlas.ti, a qualitative software program, was used to assist in the analysis of the data. A thematic analysis was conducted in relation to each of the question areas. This analysis entailed abridging the meanings expressed by the interviewees into shorter formulations.<sup>39</sup> This material was then compared and contrasted across the schools and summarized into main themes.

The analysis of the promotion policies, interview data and Think Tank feedback was combined to produce key issue areas. We then turned to the broader field, including the review of the literature and current initiatives, to form recommendations. Our work was also informed by a concurrent environmental scan of scholars and fellow programs at Canadian medical schools. Beyond tying the findings to existing literature <sup>41</sup>, a number of additional steps were taken to strengthen the trustworthiness or validity of the study.

First, investigator triangulation, where a number of researchers with different backgrounds reviewed the data, was accomplished. A summary of the interview data was prepared by one member of the CAME AES Working Group. This summary included an overview of key themes, representative quotations and the raw interview data. The summaries were then reviewed and discussed by the working group. Second, methodological triangulation was attained through the use of different data collection strategies. More specifically, the key informants were provided with a summary of the analysis of the promotion documents at their institution and asked to make any adjustments required in order to ensure accuracy of the interpretation. Finally, the data analysis included identification of common themes as well as outliers, or experiences which may have been unique to one or a few institutions, but which could provide important direction for the overall purpose of the research. In the data analysis included identification of common themes as well as outliers, or experiences which may have been unique to one or a few institutions, but which could provide important direction for the overall purpose of the research.

It is also important to highlight that every effort was made to ensure seamless participation of the three francophone schools. First, the promotion documents presented in French were reviewed and analyzed by a francophone Task Force member. Second, the interview protocol was translated into French and the interviews with the three francophone schools were conducted in French. The transcripts were produced in French and then translated into English. Finally, one of the focus groups for the think tank was conducted in French with the transcript of the event subsequently translated into English for inclusion in the analysis.

## **RESULTS**

As part of the analysis, the themes emerging from the data were grouped into four categories; National, Institutional, Support System and Individual (see Table 4). These groupings correspond to the main focus of the theme. For example, the blurring of boundaries between education scholarship, teaching, leadership and research impacts every school and therefore has implications for advancing education scholarship on a national level. On the other hand, evaluating the impact of education scholarship occurs at the institutional level through promotion policies and accompanying documentation systems. Consequently, developing appropriate metrics is placed at the institutional level. Themes corresponding to leadership and mentorship fall under the category of support systems. Understanding incentives for and engagement in education scholarship is best understood as they relate to the individual clinician.

## **National Level**

As indicated in Appendix A, every university has a specific policy or guideline document that describes the requirements and processes guiding promotion for academic clinicians. There is a wide variation in the level of detail contained within each of these documents, but for the purposes of this study, there was enough information to generate an understanding of how education scholarship is represented across the country. These documents were reviewed for the inclusion and description of education scholarship, the type of evidence required in relation to accomplishments in education scholarship and the description of education scholarship as a possible role for academic clinicians.

Overall, these results suggest that education scholarship is not clearly defined or represented in promotion policies across Canada. Indeed, the lines between education scholarship, teaching, leadership and research activities tend to be blurred. As is further elaborated in this section, this finding was echoed in the key informant interviews.

The key informant interviews also provided insight into how education scholarship is assimilated into, and characterized within, the promotion process. What becomes apparent is that it is primarily up to the individual clinician to determine how to integrate education scholarship into their academic role. Although there are a variety of institutional support strategies available for those clinicians interested in education scholarship, these supports tend to be; informal and ad hoc,

address a broad range of activities including education scholarship, not necessarily in line with the full depth and breadth of activities encompassed within education scholarship and again, often rely on the individual clinician to initiate involvement.

## **Table 4 – Summary of Key Themes**

## **National Level**

- The inclusion and level of description of education scholarship in promotion documents varies widely amongst institutions.
- The boundaries between education scholarship, teaching, leadership and research tend to be blurred.

## **Institutional Level**

- Evidence for accomplishments in education scholarship tends to focus on traditional metrics such as peer-reviewed publications.
- It is difficult to measure and evaluate the impact of education scholarship.

## **Support System Level**

- The department head plays a central role in advancing education scholarship as a possible career path.
- Institutions tend to rely on informal mentoring to support those interested in undertaking education scholarship.
- Having conversations with knowledgeable individuals is a key strategy for successfully engaging in education scholarship.
- Institutional support systems for those interested in education scholarship tend to be idiosyncratic and ad hoc.

#### **Individual Level**

- Incentives for engaging in education scholarship tend to be intrinsic (e.g., personal satisfaction) versus extrinsic (e.g., funding or other rewards).
- Success in education scholarship is maximized through alignment of interests with other academic roles.
- There are multiple ways in which individual clinicians can become engaged in education scholarship (e.g., through teaching activities, educational leadership roles etc).

## **National Level:**

• The inclusion and level of description of education scholarship in promotion documents varies widely amongst institutions

Of the 17 promotion policies or guidelines examined, 9 contained specific reference to activities associated with education scholarship (see Appendix E). Of the 9 documents, the focus and level of detail varied widely in terms of what was referred to as education scholarship. At the most basic level, one document simply included reference as a foot note under the category of 'performance in research and scholarly activities':

"Note: Publications and presentations related to research and scholarly activities in teaching and education may also be included."

At the opposite end of the spectrum, another institution made reference to the full range of activities by including education scholarship under the heading of teaching (including leadership related activities) as well as research/scholarship:

## Under the heading of Teaching:

"Superior educators will have published education-related research or experiences in prestigious medical/dental education journals, presented papers or posters at national and international education meetings and encouraged trainees in these endeavors. They will be regular and/or invited participants in the Faculty's continuous professional development efforts and/or actively participated in Faculty departmental or divisional continuing medical education events."

"Leadership on the educational realm shall be considered a measure of superior performance and includes activities identified above but also the development, implementation and/or evaluation of innovative teaching methods."

## Under the heading of Research/Scholarship:

For individuals with a substantial time allocation to teaching in their job description, scholarship may be represented not only by publication but also by activity enhancing pedagogical advances including implementation and evaluation of innovative teaching methods and the creation of tools or programs to further student and faculty development efforts. The activities will have been publicly shared, critiqued, and reviewed according to accepted standards. It may include the development of educational workshops, web-based courses, curricular enhancements or standards for application.

This review of promotion policies suggests that there is a high degree of variability among the schools and that the full depth and breadth of activities affiliated with education scholarship is not explicitly represented in promotion policies on a national level.

It was interesting to note that 3 of the 8 documents in which education scholarship was not referenced were those presented in French. Indeed, it was identified as part of the Think Tank discussion that there does not appear to be a comparable French term. As with all 8 schools in this category, this fact does not mean that education scholarship is not recognized as part of the promotion process. In fact, as identified in the interviews, a number of these schools were highly supportive of including activities related to education scholarship as part of the promotion process.

## **National Level**

• The boundaries between education scholarship, teaching, leadership and research tend to be blurred

Throughout the promotion documents, education scholarship was linked with teaching, leadership and/or research activities. In fact, it was often difficult to distinguish between education scholarship, teaching, leadership and research activities. A review of possible evidence described in the documents in relation to "teaching" versus the category of "education scholarship" highlights further the blurring of the boundaries (see Table 5).

Table 5
Evidence and Accomplishments Related to Teaching and Scholarship as Listed or Described in Promotion Documents\*

School	1	2	3	4	5	6	7	8
Under "Teaching"								
Educational leadership positions	V	V	V	V		$\sqrt{}$		$\sqrt{}$
Development of effective teaching resources	V	V	V	V	V	$\sqrt{}$		
Under "Scholarship"								
Innovation in curriculum design/development	V	V		V	<b>√</b>	$\sqrt{}$	V	V
Leadership roles in program		<b>√</b>	<b>√</b>	√		$\sqrt{}$	<b>√</b>	$\sqrt{}$
development and direction								

<sup>\*</sup> only eight of the nine documents referencing education scholarship provided this level of detail.

The key informants, however, did indicate that in their experience at their institutions, education scholarship was distinguished from teaching through the following characteristics:

Education scholarship is . . .

- o innovative
- o evaluated for effectiveness
- o shared with others
- o subject to peer review
- o recognized beyond the institution
- o developing a niche and taking it to a higher level beyond the local institution

## **Institutional Level**

 Evidence supporting accomplishments in education scholarship tend to focus on traditional metrics

With respect to presenting evidence, the following products were referenced most frequently during the key informant interviews in relation to education scholarship:

- o Peer-reviewed publications
- Presentations
- Level of grant funding

Less traditional products of education scholarship were also noted in some of the interviews:

- Educational innovations
- o Teaching/curricular material

Additional categories noted in a few instances were:

- o Mentorship activity
- o Awards for innovation
- Position and policy papers
- o Web based publications e.g., MedEd portal

## **Institutional Level**

• It is difficult to measure and evaluate the impact of education scholarship

Lack of familiarity with educationally-focused journals was raised as an issue with respect to assessing the impact of education scholarship. This was noted as a particular issue since these journals tend to have a lower impact value than the more widely known clinical and science focused publications. Consequently, lack of familiarity can lead to undervaluing faculty publications and accomplishments.

With respect to funding, it was noted that grants for education scholarship tend to be smaller amounts, particularly when compared to funding for clinical research. Consequently, education scholarship is likely to be judged as being less valuable than other forms of research.

Finally, the need to acknowledge that educational innovations may have impact not reflected in traditional venues (publications and funding) was raised as an issue. For example, the dissemination of a teaching or curricular innovation into practice might come about as part of an invited presentation. This could take place on a local national or international level. This form of dissemination was noted as being an important but not well documented form of impact.

## **Support System Level**

• The department head plays a central role in advancing education scholarship as a possible career path

As part of the interview process, key informants were asked to describe the supports available to faculty members interested in engaging in education scholarship. The results are presented as follows.

As illustrated in the following quotes, the department head emerged as a key player.

"So they would usually at the prompting of their department head go out and seek out programs to develop expertise" (Interview #3)

"The biggest responsibility is on the division and department heads to make sure that people don't get to the seven-year mark and find out they don't have enough to get promoted" (Interview #7)

However, with respect to support from the department head, the following comment was noted:

It is quite mixed in terms of how effective it is. It depends partly on the size of the department and the amount of support the department has had. And of course, the interest in the department head in doing that" (Interview #3)

Indeed, a general theme raised was that department heads vary in their understanding of education scholarship and may or may not be comfortable in providing specific direction. Accordingly, having a department Educational Committee, a departmental Education Coordinator or department point person or departmental Peer Review Committee were also noted as important support strategies emerging from the departmental structure.

## **Support System Level**

• Institutions tend to rely on informal mentoring to support those interested in undertaking education scholarship

The importance of mentors specific to education scholarship was also mentioned quite often.

"I would say go to that person in your division because they have already gone through this and so get their information as well" (Interview #10)

As illustrated by the quote, mentoring systems were described as being informal in that they relied on individuals being able to identify faculty already accomplished in the area. In addition, as with

department heads, it was noted that mentors may or may not be up to date with respect to current understandings of, and evidence for education scholarship.

## **Support System Level**

# • Having conversations with knowledgeable individuals is a key strategy for successfully engaging in education scholarship

Besides department heads and mentors, meeting with senior leaders, leaders in faculty development (specifically in medicine) and meeting with university-wide leaders was also mentioned as possible routes for advice. In fact, senior leaders in a few institutions were highly engaged providing this type of advice. Indeed, the importance of having directed conversations with knowledgeable individuals emerged as an important strategy for supporting individuals interested in education scholarship. A key aspect of the conversation was described as providing advice on how education scholarship contributes to and aligns with a larger academic portfolio and academic advancement. Providing examples of material and ensuring that advice is offered early in a clinician's career were also noted as important conversation points.

## **Support System Level**

## • Institutional support systems tend to be idiosyncratic and ad hoc

Participating in formal education programs such as teaching scholars and Masters programs as well as workshops were also noted as an important support strategy. Some of these events, however, tend to be generic in that they cover a range of topics, not just education scholarship e.g., preparing a CV, teaching dossier, general promotion workshops, developing teaching skills.

A few schools mentioned relying on the support from a Centre dedicated to education scholarship. Leadership derived from such a Centre was described as being instrumental to advancing education scholarship. Centres were seen to help clarify how to properly conduct education scholarship. Providing support in the way of research assistance was also identified as a role of these centres. Other support strategies included the existence of funding streams to support education scholarship. One school mentioned actually providing a paid sabbatical. Schools where there existed a critical mass of educational activities and leadership noted the benefit of having an educational research community to support and encourage those interested in education scholarship.

Overall, there was a wide variety of supports described in relation to education scholarship. It was noted however that the support systems tend to be "piecemeal", informal and ad hoc for the most part. As well, during the key informant interviews it became apparent that initiating involvement in education scholarship tends to be left to the discretion of the individual clinician to initiate and make the appropriate contacts. This finding was also central to the description of how education scholarship becomes incorporated into an academic role.

## **Individual Level**

• Incentives for engaging in education scholarship tend to be intrinsic (e.g., personal satisfaction) rather than extrinsic (e.g., funding or other rewards)

When asked why a clinician might become engaged in education scholarship, the following reasons were provided:

- Personal career satisfaction
- O Desire to be part of a winning team
- o Able to join a community
- Personal satisfaction and enjoyment
- o Sense that you have something special to contribute
- o Keeping up with peers
- o Prestige/status
- o Sense of progression
- Validates the work you are doing
- o Important to individual to receive the level of recognition

These responses suggest that participation in education scholarship tends to be internally driven and motivated by factors intrinsic to the individual.

## **Individual Level**

 Success in education scholarship is maximized through alignment with other academic roles

Clinicians who engage in education scholarship were described as most likely being involved in multiple activities e.g., teaching, leadership and scholarship. These individuals were referred to as "amazing" (Interview #1) or "the extraordinary doctor" (Interview #13). The challenge in going forward for academic promotion was to show how these activities complement one another and work together to create a specific area of focus or expertise. Otherwise, concern was expressed that "you are a Jack of all trades, master of none" (Interview #1). Also referred to as a "declared interest" the key is to show how all of your activities contribute to a "density of activity" related to education scholarship (Interview #2).

The next step is to show how a focus in education scholarship combines with all other academic activities to provide a comprehensive case for promotion. This was referred to as creating a "blended case" (Interview #1) or putting together "building blocks" (Interview #15). The end result is that education scholarship is usually one facet of an academic career.

## **Individual Level**

## • There are different degrees of engagement possible in education scholarship

Depending upon an individual's degree of interest, education scholarship can simply be one area of involvement or can play a significant role in an academic career. The key question then in relation to defining a role and career pathway which includes education scholarship becomes "Is this person going to be primarily a researcher who does some clinical work or are they going to be primarily a clinical teacher, educator who does some research?" (Interview #7). It was suggested during the interviews that part of the answer to the question should include an identification of a committed amount of time. However, even under these ideal conditions, a further challenge identified is that:

"It's very easy for doctors to get very quickly caught up and doing too many clinics and not having enough protected time to do the academic activity they are supposed to do" (Interview #8).

"With the clinical GFT stream there are often serious arguments because people say 'Go ahead and do your research, my friend, but I absolutely need someone here. You have to be on call. You have to do this and that. And sometimes the protected time just doesn't happen." (Interview #13).

As a possible strategy for addressing the issue of protected time, 6 of the 17 schools have identified specific tracks/roles which allow for a focus on education scholarship (see Table 6).

Four of these descriptors are presented in the promotion guidelines. Two of the schools have created separate documents that speak to these roles.

It is interesting to note that education scholarship fits into these roles variably. For example, in one case the description accompanying the 'Clinician Educator' describes a focus on clinical scholarship. Education scholarship is not identified in the document per se, although in the interview it is in this role where education scholarship was noted as being possible. As well, potential time allocations indicated for education scholarship can vary widely ranging from 30-100%. (In the case of 100% time allocation, it should be remembered that these documents can also apply to non-clinicians.) Finally, the potential for conducting education scholarship in relation to a role as a Researcher/Scientist alongside ones clinical work was also identified. Although this case was described as being more of an exception, it was indicated that this would allow for more of a concentrated focus.

Table 6 - Described Roles for Academic Clinicians

Medical School	Academic Roles for Clinicians
Saskatchewan	Clinician Teacher, Clinician Investigator, Clinician Scientist, Scientist,
	Administrator Scientist, Administrator Clinician, Educator*
Western	Clinician Teacher, Clinician Researcher, Clinician Educator*, Clinician
	Scientist, Clinician Administrator
McMaster	Clinician Educator*, Research Educator, Clinical Scholar
Toronto	Clinical Teacher, Clinical Educator*, Educational Researcher/Scientist,
	Educational Administrator
Ottawa	Clinical Teacher, Clinical Educator*, Clinical Investigator, Clinical
	Scientist, Scientist, Clinical Administrator
Memorial	Excellence in Clinical Medicine, Scholarship of Discovery, Scholarship of
	Education*

<sup>\*</sup>indicates where education scholarship fits

In summary, the blurring of the boundaries between education scholarship, teaching, leadership and educational activities is a foundational issue. It makes it difficult to fully appreciate the range of possibilities available to those interested in engaging in education scholarship. It also makes it difficult to know how to evaluate these contributions appropriately. Indeed, in the absence of clarity, it seems that the more traditional metrics, such as peer reviewed publications, predominate. This can result in undervaluing accomplishments in education scholarship.

Furthermore, this lack of understanding makes it difficult for those in leadership or mentorship positions to provide advice and support. This is particularly problematic since participating in informed conversations was identified as a key strategy for successful participation in education scholarship. As well, support systems tend to cover a wide range of skill development with variable

inclusion of and focus on education scholarship. This adds to the challenge in initiating and sustaining engagement in education scholarship, which seems to rely heavily on individual motivation and initiative.

Despite the lack of clarity, the fact that different degrees of participation are possible emerged during the study. Being explicit about the expected level of involvement and being deliberate about aligning education scholarship with other academic roles were identified as important considerations.

These findings were used to form recommendations regarding strategies required to appropriately support and recognize clinical faculty involved in education scholarship.

## DISCUSSION AND RECOMMENDATIONS

In formulating these recommendations, we carefully took into account the fact that the 17 institutions are at different degrees of evolution with respect to their approach to education scholarship. The recommendations were deliberately crafted to complement existing policies, processes and initiatives. We carried over the thematic levels from the results section as an organizing framework for the recommendations. The recommendations are described further as follows:

## **Table 7 – Recommendations**

## National level

#### Recommendation #1:

Adopt a common language and definitions for education scholarship which clearly distinguishes amongst teaching, administration/leadership, traditional research and education scholarship.

## **Institutional level**

## Recommendation #2:

Develop guidelines which articulate the range of products, appropriate evidence and describe how to assess the impact of education scholarship.

## **Support System Level**

### Recommendation #3:

Ensure that those in key leadership positions have a robust understanding of how to integrate education scholarship into an academic career.

## Recommendation #4:

Ensure that there are specific mentors identified and developed across the system who can provide advice and assistance to clinical faculty on how to engage in, design, implement and integrate education scholarship into a viable academic career.

## **Individual Level**

## Recommendation #5:

Make explicit how activities related to the various roles of academic clinicians would qualify as education scholarship.

#### Recommendation #6:

Ensure that each school has and disseminates a guide for clinical faculty that describes the institutional approach to, opportunities and supports available for clinical faculty to successfully engage in education scholarship.

## **National Level**

#### Recommendation #1:

Adopt a common language and definitions for education scholarship which clearly distinguishes amongst teaching, administration/leadership, traditional research and education scholarship.

There needs to be a *common understanding of education scholarship created* across the 17 Canadian medical schools including key stakeholder organizations. Making explicit what is and what is NOT included under the umbrella of education scholarship is a critical aspect of this recommendation. This is a *foundational activity* without which it will be difficult to properly evaluate and support clinical faculty and ultimately advance education scholarship. A common understanding will provide the focus required to effectively direct the efforts of education leaders and clinical faculty.<sup>34</sup> Without a common understanding we will continue to blur the boundaries between teaching, leadership and education scholarship.

**AS A NEXT STEP...** this recommendation requires consultation with the 17 Canadian medical schools and key stakeholder organizations. As part of this consultation we recommend that the following definition of education scholarship be endorsed.

Education Scholarship is an umbrella term which can encompass both research and innovation in health professions education. Quality in education scholarship is attained through work that is: peer-reviewed, publicly disseminated and provides a platform that others can build on.

Endorsing this statement requires recognizing that education scholarship is NOT synonymous with teaching or education leadership activities. Rather, involvement in teaching or education leadership may lead to engagement in education scholarship but teaching, leadership and education scholarship require separate and distinct knowledge and skill sets and should therefore be evaluated and supported as separate and distinct activities.

Endorsing this statement also acknowledges that education scholarship can include activities related to both research and innovation. With respect to research this includes traditional or experimental research, applied as well as practice-based areas of inquiry in health professions education. With respect to educational innovations, adopting this definition recognizes that the design, implementation and evaluation of new tools, strategies, programs and curriculum can all be counted as viable activities under the umbrella of education scholarship provided that these are peer reviewed, publically disseminated and provides a platform that others can build on.

## **Institutional Level**

#### Recommendation #2:

Develop guidelines which articulate the range of products, appropriate evidence and describe how to assess the impact of education scholarship.

This work should include an elaboration of the expanded range of products which can legitimately be considered under the umbrella of education scholarship (see Table 8). Standards, as presented in Tables 1 and 2 also play a key role in evaluation. Most importantly, work should be accompanied by a description, or perhaps a series of questions, of what constitutes appropriate evidence for assessing impact. This description should be anchored in the qualities of peer review, public dissemination and in a platform that others can use and adapt (see Table 9). A clear articulation of impact, what it is and how it should be assessed in relation to education scholarship is an important feature of this recommendation.

## **Table 8 – Products Affiliated with Education Scholarship**

Educational Research Study

• Paper, presentation, poster

Design, implementation, evaluation of an educational innovation

- Teaching strategies/methods
- Assessment tools
- New/revised educational program/workshop
- New/revised curriculum
- Technical paper/report
- Paper, presentation, poster

## Table 9 – Assessing the Impact of Education Scholarship: Sample Questions

## **Description of Product:**

What was the process for peer review?

What was the vehicle for dissemination?

Did dissemination take place on a local, national or international level?

Is there a platform for others to build on?

Did the approach taken meet the standards for scholarship?

e.g., Is there an explicit conceptual framework guiding this work including a theory(ies), model(s) or evidence-based best practices/principles.

AS A NEXT STEP... this recommendation requires further elaboration regarding the types of products affiliated with education scholarship and how to assess the impact of such work. Assessment of impact could refer to key journals in the field or include a description of how work has been used or adapted by others. Given the interdisciplinary nature of education scholarship, providing appropriate credit for collaborative efforts and multiple contributions is another topic which needs to be addressed. This description should be used to guide promotion committee members as well as those in leadership positions regarding how to appropriately assess education scholarship.

## **Support System Level**

#### **Recommendation #3:**

Ensure that those in key leadership positions have a robust understanding of how to integrate education scholarship into an academic career.

Schools must ensure that key academic leaders (e.g., department heads, promotion committee members, senior and departmental education leaders) are able to participate in meaningful conversations and provide informed advice as to how to successfully integrate education scholarship into an academic career. Indeed, those in leadership positions play a critical role in motivating clinicians to engage in education scholarship. <sup>45,46</sup> Many academic and clinical leaders, however, are not sufficiently knowledgeable about education scholarship and theory. <sup>46,47</sup>

AS A NEXT STEP... this recommendation requires the development of a strategy for ensuring that those in key leadership positions have an understanding of what education scholarship is, why it is important, the standards for developing a scholarly approach and range of possible approaches and outcomes (see Figure 1). This understanding will reinforce the fact that education scholarship requires persistent dedication over time; particularly since the necessary skills and perspectives differ significantly from both teaching and clinical research. Encouraging education leaders to build on an individual's intrinsic motivation is particularly salient in relation to education scholarship. Interestingly, this strategy is also central in successful career planning alignment in an academic environment. The ultimate goal is to ensure that clinicians are well informed early on regarding strategies and options for successfully integrating education scholarship into an academic career.

## **Recommendation #4:**

Ensure that there are specific mentors identified and developed across the system who can provide advice and assistance to clinical faculty on how to engage in, design, implement and integrate education scholarship into a viable academic career.

Schools could benefit from being able to access a formally organized mentoring system. The focus of such a system would be to provide in-depth information and support to clinicians which may not always be available at the institutional level. <sup>46,51</sup> This system would provide critical information such as: the breadth of opportunities available for skill and knowledge development (e.g., faculty

development courses/workshops, Masters courses/programs, PhD courses/programs, fellowships), funding opportunities, how to build and sustain a program of scholarship, how to align education scholarship with other academic roles and responsibilities, how to profile accomplishments for academic advancement.

**AS A NEXT STEP...** this recommendation requires the creation of a system of expert mentors who could assist clinicians over the progression of their academic career. It is not enough to develop required skills and knowledge. <sup>52</sup> Rather, navigating the field of education scholarship requires ongoing pragmatic support and advice regarding how to align and sustain education scholarship as part of an academic role.

What How Outcome Practice-based Issue /Initiative Scholarly Approach Education Scholarship •Gaps in the Literature Marrying scholarly **Educational Research Study** Research: Educational Issue inquiry to research and paper, presentation, poster innovation Design, implementation, **Innovation:** Design, Implement, evaluation of an educational following: Evaluate an Educational Glassick's 6 Standards/ innovation Innovation Standards for the design teaching strategy/method assessment tool of educational innovations new/revised program/workshop emphasizing: new/revised curriculum technical paper/report Theoretical framework(s) paper, presentation, poster

Figure 1 – Options for Engaging in Education Scholarship\*

\*Education Scholarship is an umbrella term which can encompass both research and innovation in health professions education. Quality in education scholarship is attained through work that is: peer-reviewed, publicly disseminated and provides a platform that others can use or adapt.

#### **Individual Level**

#### **Recommendation #5:**

Make explicit how activities related to the various roles of academic clinicians would qualify as education scholarship.

Schools need to be explicit about how education scholarship can contribute to the overall role of an academic clinician. This recommendation acknowledges that this is a complicated task given the multiple roles of an academic clinician and the possible range of involvement in education scholarship. Table 10 provides an initial conceptualization of how this task might be accomplished.

Table 10 is modeled on a study undertaken by Coleman<sup>53</sup> who examined faculty career tracks in American schools. He found that generally: Clinician Teachers focused on research anywhere from 5-10% of their academic time, Clinician Educators 5-50%, and Investigator/Researchers 50-100%.

Although the specific results may not be directly transferable to the Canadian context, creating clear work expectations and assessing people on these expectations is an important strategy for ensuring that education scholarship is assessed and acknowledged as a viable academic role. For example, if the person's work is 50% clinical, 30% teaching and 20% education scholarship, then education scholarship needs to be evaluated as reasonable productivity for 1 day per week.

AS A NEXT STEP... this recommendation requires a more detailed description of how education scholarship relates to the various educational roles. Since protected time is critical, <sup>54</sup> this description should be accompanied by guidelines of expected time allocation which can be dedicated to education scholarship. This description could be used as a guideline that schools can adapt to their unique circumstances. This recommendation could be strengthened by the creation of a range of examples on how education scholarship can be aligned within an academic career. For example, a clinician may have primarily a leadership role as a Postgraduate Program Director, but as part of that role be instrumental in the development of a curricular element on self-reflection. In this case, involvement in education scholarship may play an important yet limited role in that individual's academic career trajectory. On the other hand, an individual clinician may wish to become engaged in education scholarship as a key aspect of their career. This recommendation is an essential step in ensuring that education scholarship is properly circumscribed and aligned as one building block in the life of an academic career.

Table 10 – A Rubric for Integrating Education Scholarship into Academic Roles

Educational Roles	Scholarship (basic science, clinical, education)	Teaching	Administration/ Leadership	Clinical Care
Clinician				
Teacher				
	Education			
	scholarship has			
	different			
Clinician	expectations and			
Educator	percentages of time			
	allocation			
	depending upon the			
	individual			
Educational	clinicians career			
Researcher/	trajectory and			
Scientist	balance with other			
	academic roles and			
	responsibilities.			
Educational				
Leader				

# **Individual Level**

#### Recommendation #6:

Ensure that each school has and disseminates a guide for clinical faculty that describes the institutional approach to, opportunities and supports available for clinical faculty to successfully engage in education scholarship.

Schools need to provide clinical faculty with clear information regarding local opportunities and institutional infrastructure available to support education scholarship. Clearly, there is a diverse range of programs and resources available to faculty within the Canadian medical schools. These programs provide a mixture of skill and knowledge development related to teaching, leadership and/or education scholarship. The challenge is to provide clear leadership and direction specific to education scholarship.

**AS A NEXT STEP...** this recommendation requires each school to examine their institutions policies, resources and infrastructure regarding how education scholarship is represented, evaluated and supported. This might include:

- updating academic promotion documents
- being explicit about how education scholarship fits into faculty roles or "career tracks" 53-56
- describing how education scholarship can be a route to academic promotion within the given institution 56-58
- describing or creating local programs and resources focused on developing skills and knowledge in education scholarship<sup>60-64</sup>
- describing how institutional leadership for education scholarship is organized e.g., describing the role of a department of medical education<sup>65</sup>

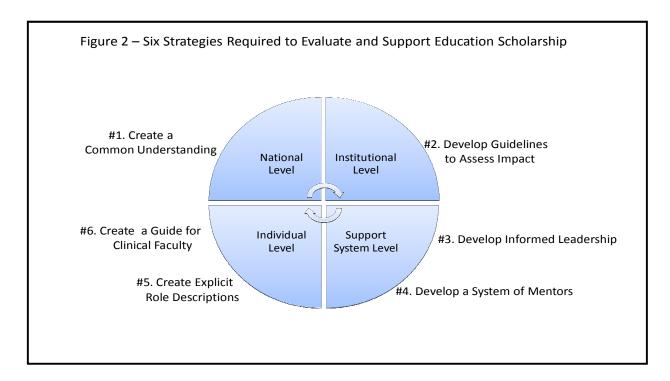
The end result should be more than a compilation of resources and supports. It should be an institution specific guide showing the range of possibilities of how education scholarship can be a part of a career path and how it relates to other activities (teaching and leadership). The following questions could be considered in responding to this recommendation: <sup>67</sup>

- 1. Is there a clearly written statement about the core contribution of education scholarship to the mission and goals of the School of Medicine and/or Academic Health Sciences Centre?
- 2. Are the types of education roles and corresponding opportunities for education scholarship clearly described?
- 3. Are expected roles and levels of participation in education scholarship, including time commitments and work expectations, described for individual faculty members engaged in education scholarship?
- 4. Are the promotion expectations and standards for education scholarship clearly described?
- 5. Is there an organized infrastructure, including the required leadership, community and resources, available to support faculty members engaged in education scholarship?

#### **CONCLUSION**

Since the time of Boyer, education scholarship has taken on a critical role in advancing health professions education. We argue in this position paper that properly evaluating and supporting this work begins with acknowledging that education scholarship encompasses a broad spectrum of activities; *activities related to both health professions education research and innovation*.

Accordingly, six recommendations have been identified that will assist in evaluating and supporting clinical faculty involved in education scholarship. These recommendations should not be taken in isolation but are intended to complement each other (see Figure 2). We would suggest however that *Recommendation #1: Creating a Common Understanding* is a foundational strategy. Such a common understanding will provide the basis for developing appropriate metrics, informed leadership & mentors as well as creating explicit role descriptions and a guide for clinical faculty.



Our research suggests that clinicians who engage in education scholarship are most likely to be involved in multiple activities e.g., teaching, education leadership and clinical care. Indeed, engaging in education scholarship is not a "one size fits all" activity: each medical educator embarks on their own a unique journey. The key to a success seems to lie in explicitly aligning individual interests within the full scope of an academic role. Creating a common understanding of education scholarship will allow for the contributions of these "amazing" and "extraordinary doctors" to be appropriately recognized.

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# **APPENDIX A – List of Promotion Documents Reviewed**

University	Date of Approval	
Name of Policy Document		
University of British Columbia		
The University of British Columbia, Faculty of Medicine Policy on Clinical Faculty Appointments		
University of Alberta		
Faculty of Medicine and Dentistry, Guidelines for the Evaluation of Academic Staff for Merit		
Increments, Tenure and Promotion		
University of Calgary		
Faculty of Medicine, Criteria for Appointment, Promotion, and Assessment of Clinical, Adjunct and		
Adjunct/Research Faculty		
University of Saskatchewan	2011	
College of Medicine Standards for Promotion and Tenure		
University of Manitoba  Promotion and Tanura Guidalines, Faculty of Medicine	2009	
Promotion and Tenure Guidelines, Faculty of Medicine  Northern Ontario School of Medicine,		
Policy and Procedures for Faculty Appointment and Promotion	2011	
University of Western Ontario	2011	
Candidate's Guide for Physicians Appointed in Clinical Departments and Clinical Divisions of Basic	2011	
Science Departments	2011	
McMaster University		
McMaster University Revised Policy and Regulations with Respect to Academic Appointment, Tenure	2007	
and Promotion	2007	
University of Toronto		
Manual for Academic Promotion to Associate and Full Professor	2011	
University of Ottawa		
Standards and Procedures for Promotion of Clinical Faculty, Faculty of medicine	2011	
Queen's University		
Statement on promotion policy for Geographically full-time and adjunct-1 appointees of the faculty of	2004	
health sciences		
McGill University		
Academic Appointments and Promotions, Faculty of Medicine	2011	
Université de Montreal		
Professeurs de Clinique: Engagement à Titre de Chargé D'Enseignement de Clinique Nomination à	2007	
Titre de Professeur Adjoint de Clinique et Promotion au Titre de Professeur Agrégé de Clinique ou		
doe Professeur titulaire de Clinique.		
Université de Laval		
Critères de Nomination et de Promotion des Professeures et Professeurs de Clinique (2009) and		
Critères de Promotion des Professeurs Membres de l'Association des Médecins Cliniciciens	2009	
Enseignants de la Faculté de Médecine de l'Université Laval (2004).		
Université de Sherbrooke		
Règles Internes D'Évaluation Professorale à la Faculté de Médcine et des Sciences de la Santé de		
l'Université de Sherbrooke (FMSS) en vue de la Promotion Universitaire		
Memorial University of Newfoundland	2009	
Promotion and Tenure, Non-Bargaining Unit Criteria for Clinical Faculty		
Dalhousie University		
Faculty of Medicine, Promotion and Tenure Guidelines	dated	

# APPENDIX B – Interview Protocol Advancing Educational Scholarship in Academic Medicine: A Canadian Initiative

### **Interview Questions**

#### **Introduction:**

This interview is part of a project initiated by the Canadian Association for Medical Education regarding how to best promote and support health education scholarship across the 17 Canadian medical schools. More specifically, we are focusing on full-time clinical faculty who are already engaged in or may be interested in pursuing educational scholarship as part of their academic career path. As a first step, we reviewed the promotion policies to see how educational scholarship is represented. More specifically, we were looking to see to what extent (if any) a distinction was made between accomplishments in teaching versus educational scholarship. We were also interested in documenting the categories of evidence required for academic promotion in educational scholarship. Finally, we summarized pathways for promotion through educational scholarship as described within the various promotion policies. The purpose of this interview is two-fold. First, we would like to make sure that the information presented on the summary charts accurately represents your institution. Second, we would like to better understand the process and evidence required at your institution to be promoted through educational scholarship. The interview should take approximately one hour. The collated results will be used to form recommendations for a position paper on educational scholarship. Do you have any questions before we begin?

1. I would like to begin by understanding your background in relation to academic promotion and educational scholarship. Could you please provide a brief description of your experience? For example, are you involved at all in promoting educational scholarship at your institution? Have you been involved in integrating educational scholarship into your promotion policies? Have you been involved in creating any documents that are intended to capture contributions in relation to educational scholarship? Are you or have you been involved in the academic promotion process particularly as it applies to educational scholarship?

Note: These are just a few possibilities. The intent of the question is to ensure that we are interviewing an individual who is knowledgeable about educational scholarship and academic promotion at their institution.

2. Now I would like to get an understanding of how educational scholarship is represented in the promotion policies for clinical faculty in the School of Medicine at your institution.

At this point it is important to clarify whether the university-wide or faculty of medicine promotion policy has most relevance to the clinical full time faculty.

Please refer to the summary document sent to you prior to the interview. Appendix A in this document captures how educational scholarship is treated in the promotion policy at your institution. Is this consistent with your understanding?

Please refer to Appendix B in the document. Is this an accurate representation of your institution's policies and how teaching and educational scholarship are distinguished at your institution?

Take them through the chart and get as much clarity as possible with respect to whether or not and how Teaching versus Educational Scholarship are distinguished/represented at their institution.

**3.** How have, or have the promotion policies at your institution changed over the years to accommodate evolving perspectives regarding educational scholarship?

Probe for at what point educational scholarship was formally integrated into the promotion policy. If it is not yet in the promotion policy, find out why not and if there are plans underway to change this. Find out as well if there are projects currently underway with respect to educational scholarship and academic promotion. For example, an updating of the policy or the creation of documents to capture evidence with respect to educational scholarship.

4. I am also interested in understanding how involvement in educational leadership and/or educational innovation contributes to academic promotion at your institution. Please refer to Appendix C in the summary document sent to you prior to the interview. Is this an accurate representation of how evidence for educational leadership and/or educational innovation is captured in the promotion policy?

Probe for the extent to which these are explicitly acknowledged and seen as important as part of the academic promotion process.

Now I would like to turn to the promotion process:

5. Can you describe the progression that a full-time faculty member would undertake at your institution if they are interested in being promoted based on their accomplishments in educational scholarship in health professions education. (Anticipate that the process will be different depending upon how long the faculty member has been at the university. Start with a new faculty member and work them up through the ranks).

What kind of evidence is required to be promoted based on educational scholarship? Is

- there any evidence in particular that is required for a successful application?) Is there any type of evidence in relation to educational scholarship that may cause some controversy or be debated with respect to perceived academic importance? (*Listen for if the qualities are being described from a traditional perspective e.g., number of publications, amount research funding OR if the qualities are being described as being unique to educational scholarship e.g., a curriculum which has been adopted by other institutions, publication of an on-line module etc)*
- 6. What are the incentives for clinical full-time faculty members to go through the process of academic promotion? (want to find out if it is an expectation for all clinical faculty members to undertake academic promotion or if it is optional and if so, why would someone go through the process). Is it important for full time clinical faculty members to also apply for tenure?
- 7. What kinds of supports are available at your institution to provide advice to or assist full-time clinical faculty members who are interested in academic promotion through educational scholarship? *Probe to see if there is anyone specific who is a champion for educational scholarship at the institution.*
- **8.** This is the end of our formal questions. Is there anything else you would like to add?

of

# APPENDIX C - THINK TANK MATERIAL

# **Part 1: Background Document:**

# Toward a Common Understanding of Educational Scholarship

### What is educational scholarship?

In 2009 the American Association of Medical Colleges (AAMC) provided the following definition:

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.

This definition makes it clear that to be considered educational scholarship it is not enough to simply engage in an educational activity. Rather *three hallmark qualities* must be present (Hutchings & Schulman, 1999; Fincher & Work, 2006).

- that the work is peer-reviewed;
- that the work is publically disseminated; and,
- that the work is done in a form that others can build on.

Glassick et al (1997) also described the following six standards as foundational when considering the expanded definition of scholarship. These standards emphasize that following a <u>systematic process of inquiry</u> is also a key requirement of educational scholarship. In other words, just like any other scholarly endeavor, educational scholarship must be anchored in what is known in the field including the <u>consideration of theoretical developments and conceptual frameworks</u> (Bordage, 2009).

#### **Table 1 The Six Standards for Scholarship**

- Clear Goals
- Adequate Preparation
- Appropriate Methods
- Significant Results
- Effective Presentation
- Reflective Critique

Glassick, C.E., Huber, M.T. & Maeroff, G.E. (1997). Scholarship Assessed: Evaluation of the Professoriate. Carnegie Foundation for the Advancement of Teaching.

#### Who is involved in educational scholarship?

This definition emphasizes that educational scholarship is directly related to participation in educational activities. Consequently, those involved in educational scholarship tend to be clinicians who teach or clinicians who hold educational leadership positions. Given the importance of interprofessional education, this group also includes faculty members in other areas of health sciences education (e.g., nursing, rehabilitation therapy etc). As well, there are those educators trained at either the Masters or Doctoral level, whose work also focuses on activities directly related to educational activities (e.g., implementation science, evaluating educational innovations, curriculum studies etc).

# What is the distinction between teaching, scholarly teaching and educational scholarship?

Since educational scholarship tends to arise from involvement in teaching, it is easy to confuse the two activities. To make things more complicated, it has also been suggested that engaging in scholarly teaching is a distinct activity and an important precursor to becoming involved in educational scholarship (Richlin, 2001; Weston & McAlpine, 2001). Consequently, in order to develop criteria for educational scholarship it is important to distinguish between teaching, scholarly teaching and educational scholarship.

#### What are the implications?

- Adoption of these definitions, qualities and distinctions make it clear that teaching and educational scholarship should be considered as related but separate activities.
   Consequently, for the purposes of academic promotion, teaching and educational scholarship should each have their own distinct set of criteria and evidence-informed standards.
- We need to think beyond the traditional considerations of publications, presentations and grant funding when considering the evidence for and impact of educational scholarship.
   For example, creating innovative curricula, on-line module development, implementing innovative teaching practices should all be included as legitimate activities under the rubric of educational scholarship.
- Based on these definitions, qualities and distinctions, we need to clearly define under what conditions involvement in educational leadership and the creation of educational innovations are considered to fall under the rubric of educational scholarship.

Table 1 - Distinguishing between teaching, scholarly teaching and educational scholarship

Teaching	Scholarly Teaching	Educational Scholarship				
Focus of activities						
Continual refinement of	Reflection on or examination	The systematic investigation				
teaching activities based on an	of a specific problem in	of an issue which results in the				
intuitive and subconscious	teaching practice as informed	creation of a product presented				
decision-making process.	by educational theories,	in a form that can be reviewed				
	relevant literature and/or	by peers for quality, and				
	discussion with those in the	publicly disseminated for				
	field.	others to learn from and build				
		upon.				
Source of knowledge development						
Drawing from personal	Drawing from personal	Drawing from personal				
experience.	experience, educational	experience, educational				
	literature and/or discussion	literature and engagement in				
	with others in the field.	educational research/				
		development activities.				
Focus of knowledge development						
There is potential to improve	There is potential to improve	There is potential to advance				
teaching.	student learning.	the field.				
Focus of knowledge dissemination						
Primarily personal use.	Primarily personal use.	Primarily personal use.				
Outcome of activities						
The development of a	Growing complexity in the	Increasing growth of				
repertoire of effective teaching	understanding of teaching and	knowledge in the educational				
algorithms and teaching	learning.	community.				
strategies.						

#### APPENDIX D – THINK TANK MATERIAL

#### **Part 1: Think Tank Trigger Questions**

#### What is your advice?

- 1. In addition to the three points listed below, what do you see as being the main implications of using the attached description of educational scholarship? Please consider the process of promotion and tenure as well as other possible implications.
  - Teaching and educational scholarship should be considered as related but separate
    activities. Consequently, for the purposes of academic promotion, teaching and
    educational scholarship should each have their own distinct set of criteria and evidenceinformed standards.
  - We need to think beyond the traditional considerations of publications, presentations and grant funding when considering the evidence for and impact of educational scholarship. For example, creating innovative curricula, on-line module development, implementing innovative teaching practices should all be included as legitimate activities under the rubric of educational scholarship.
  - We need to clearly define under what conditions involvement in educational leadership
    and the creation of educational innovations are considered to fall under the rubric of
    educational scholarship.
- 2. What significant outcomes (e.g., recommendation or product) should emerge from the CAME AES WG position paper?
- 3. How can CAME as an organization best support its members and institutions with respect to advancing educational scholarship?

Appendices: Page 52

Any other advice or feedback that you would like to forward to the AES WG?

#### APPENDIX E – THINK TANK MATERIAL

#### Part 2: Summary of Small Group Discussion

### Regarding the description of educational scholarship:

- It is important to differentiate educational scholarship from teaching and leadership activities but it is also important to make sure that teaching and educational administration is not devalued when creating a description of educational scholarship.
- A description cannot be too prescriptive and should be able to accommodate the different nuances of the individual promotion policies.
- A description of educational scholarship needs to go beyond the student-teacher interaction and include activities that support the dissemination of knowledge.
- It's important to highlight that educational scholarship involves the process of learning, not just products.
- It is important to be clear about how teaching and leadership contribute to educational scholarship.
- It is important to distinguish between scholarly teaching and educational scholarship.
- It is important to include the role of educational theory and the "science of education" in creating a description of educational scholarship.
- The description needs to consider the shift from the "imperative of proof" to the "imperative of understanding"
- The description needs to include examples of educational scholarship.
- It is important to indicate that not everyone will want to, or is able to, engage in educational scholarship.
- In the description we must be clear that scholarship is scholarship regardless of the focus.
- The description should not be too narrow and put the criteria too high. It is important to allow for the true value and range of work to be recognized.
- In the Francophone universities a great deal of work has already been done to recognize scholarship for academic promotion but it has not always been called such in the promotion handbooks. We need to find a suitable French term for educational scholarship.

#### Regarding the outcomes of the project:

- It is useful to see the variability across the system and given this variability it important to use the common description to create a shared understanding of educational scholarship.
- The common understanding should be used to guide faculty in how to engage in educational scholarship rather than focusing on adapting promotion policies.
- Advancing educational scholarship requires changing how people think. The position paper needs a clear communication strategy that can begin this cultural shift. The communication strategy should include a short statement that indicates to senior leadership how to promote and support educational scholarship at their respective institutions.
- It is important to ensure ownership from "grassroots" individuals for whom this document will have meaning for in their everyday activities.

- It is important to consider how to maximize the influence of the paper on senior leadership. This could include identification of metrics that are comparable across the different schools. These metrics should still allow for individual institutions to have their own criteria for promotion.
- We need to develop metrics for educational scholarship which:
  - o start with the diversity of activities related to educational scholarship that go beyond the traditional "research" rubric;
  - o allow for discrimination between different levels of and types of impact e.g., dissemination at the local versus national versus international;
  - o include an understanding of impact factors of various journals within the discipline;
  - o include a list of activities/outcomes/content/criteria for dissemination that would qualify for educational scholarship;
  - o ensure that dissemination gives weight to the process of educational scholarship as well as the product (similar to ensuring that the methods section of a paper is as important as the results section);
  - o include an understanding of the relative value of educational grants as compared to other research grants (e.g., 25,000 versus 1 million);
  - o emphasizes the imperative of understanding rather than an imperative of proof;
- We need to describe the processes and what is considered as peer review when it comes to educational scholarship. We need to consider how to strengthen the peer review process with respect to educational scholarship.
- Examples of impact should take into account the Assistant Professor, Associate Professor and Professor level.
- Need to provide mentorship to help people understand how educational scholarship goes beyond the list of criteria on a promotion form.
- Faculty development at the department chair level is important.
- Should consider recommending that champions for educational scholarship be appointed by the Dean at each institution.
- Need to show a clear pathway for promotion and be explicit about the different tracks as related to educational scholarship.

#### Regarding the role of CAME in advancing educational scholarship:

- CAME needs to use this document to open up dialogue within and between universities.
- CAME should be advocating to the national organizations e.g., AFMC and senior leadership e.g., deans, regarding educational scholarship.
- CAME could be a resource for expertise/information to evaluate/review accomplishments in educational scholarship, but it is important to have other sources of peer evaluation as well. They could consider looking to AMEE's ASPIRE model as a possible example of how to make this happen.
- CAME could organize workshops on teaching dossiers and mentoring.
- CAME could identify role models who could provide positive examples for younger faculty interested in engaging in educational scholarship.
- CAME should consider awards to recognize excellence in educational scholarship.