The Clinical Teacher's Toolbox



From clinical educators to educational scholars and leaders: strategies for developing and advancing a career in health professions education

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Editor's note: This toolbox by a team of highly experienced and well-respected global scholars considers the journey from health professional to clinical educator and on to a career in academia. The content is based on experience and is guided by the literature. The authors acknowledge that they are from higher-income countries and that the recommendations, although relevant to others in such settings, may lack wider applicability. Scholarship requires wide reading of the educational literature and is helped by networking with colleagues, joining professional associations and engaging online. Eventually it is helpful to define one area of interest upon which to concentrate and to undertake formal learning in relevant topics. Having a mentor is ideal, as is joining a research team when feasible. Other recommendations include: as an academic, having a plan for career advancement incorporating formal qualifications and relevant professional development; acquiring an understanding of how to achieve promotion; undertaking roles such as committee membership of societies; seeking leadership responsibilities; and continually exploring new ideas and developing new skills. As with other areas of professional practice, it is important to engage in reflection and to be part of a community of practice.

Health professions education (HPE) is gaining visibility as a specialised field of practice and scholarship

INTRODUCTION

ealth care practitioners with a passion for education have a range of options to advance their professional trajectory. Health professions education (HPE) is gaining visibility as a specialised field of practice and scholarship; however, just as health professions educator roles vary in scope, responsibilities and nomenclature (Table 1), so do the criteria for academic progression and interpretation by different promotion committees.¹⁻⁴ Consequently, aspiring educators may find it challenging to prioritise areas of interest, identify activities to achieve personal and institutional goals, and grasp opportunities to develop into academic scholars and leaders, should they wish to do so.

This toolbox article provides ideas and recommendations for academic and clinical educators seeking roles as educational scholars and leaders. The recommendations, listed under four categories (Figure 1), are based on literature and experts' ideas generated at the 2019 Association for Medical Education in Europe (AMEE) conference. AMEE, an international association for health professions educators, implemented a mentoring programme (comprising one-to-one mentoring meetings and a speed-mentoring workshop) in 2019 to encourage networking, collaborations and career development discussions. The mentors were 15 international educational leaders from

higher-income countries, and we acknowledge that involving educators from low-resource countries would have brought alternative perspectives.

BEGIN A CAREER AS A SCHOLAR IN HPE

Not every educator wants to pursue scholarship and leadership; however, for novice educators who wish to engage in scholarship, strategies that can help you get started include identifying areas of interest, joining a team of researchers and scholars. recognising whether your work is adequately original and completing that first presentation or paper. This can feel overwhelming, but perseverance, mentorship and learning from initial failures can guide successful scholarship.^{4,5} To raise awareness of educational developments, we suggest reading literature on topics of interest, subscribing to e-mail alerts from journals, joining professional associations or online communities and reflecting on potential areas for inquiry in one's educational setting. This helps to identify gaps that need to be addressed in undergraduate, postgraduate and continuing professional development education. Although it is tempting to pursue multiple ideas, finding a niche of interest (e.g. assessment, professional identity formation, simulation) can accelerate the development of expertise. If you are keen to develop yourself further as an educator or researcher, then formal learning can be invaluable. This will equip you with the jargon, theories and concepts (as

well as practical strategies) used in HPE. It is useful to learn how to work with a librarian or use an online repository to run literature searches to stay updated in your area of interest.⁴

If you are interested in research, a mentor can help you to identify relevant theoretical and conceptual frameworks, develop research questions and select appropriate methodology.⁶ Good mentors, who are both strong educators and proficient researchers, may be hard to find. Consider establishing a developmental network of supporters and mentors with different but complementary areas of expertise to quide you in conducting rigorous research in the areas that interest you.7 Try to envision a series of studies to reflect on how the outcomes of one study could generate subsequent investigations. Collaborating with a mentor in their research can help the continuing development of skills. For example, journals require ethical approval for most projects before considering publication, and therefore writing study protocols and applications to Ethics Committees or Institutional Review Boards would be part of the learning.

Upon entering the field of educational research, say 'yes' to some projects that may not be completely aligned with your chosen focus. This can create opportunities to establish collaborative relationships and to clarify your interests. Scholarship often means volunteering time outside of working hours; this

Table 1. The spectrum of health professionseducation (HPE) roles and definitions

HPE role	Definition
Teachers	Actively engage in teaching health professionals and serve critical roles in their professional development ¹
Educators	Apply theory and evidence to inform their teaching, design educational products, engage in scholarly presentations and/or publications ²
Scholars	Pose questions about the theoretical basis of teach- ing and learning, explore the impact of educational initiatives and disseminate findings externally ⁴
Leaders	Lead educational initiatives, programmes or depart- ments of education, and oversee teams of teachers, scholars and educators ³

can be difficult to balance with personal and/or professional commitments. Your first funded opportunity may not present itself in your first or second year as an educator. Identify areas of interest, undergo additional training and seek advice from your mentors frequently. While beginning a career as an educational scholar can take many forms, each educator should decide what is feasible for them to pursue based on their workload, personal obligations and career goals.

CONTINUE TO ADVANCE AS MID-CAREER EDUCATIONAL SCHOLARS

After joining a community of educational scholars by reading the literature, attending meetings and presenting and/ or publishing your work, think about consolidating your scholarly interests. Seek to move from the periphery towards the centre of a scholarly community and sustain the momentum of scholarly outputs. If you are an educator with both clinical and educational obligations, try to make your educational work count twice, i.e. try to publish the educational resources that you are designing and thus align your occupation (what you are paid to do) with your professional vocation (how you want to make an impact).⁸ Scholarship is not just original research. In

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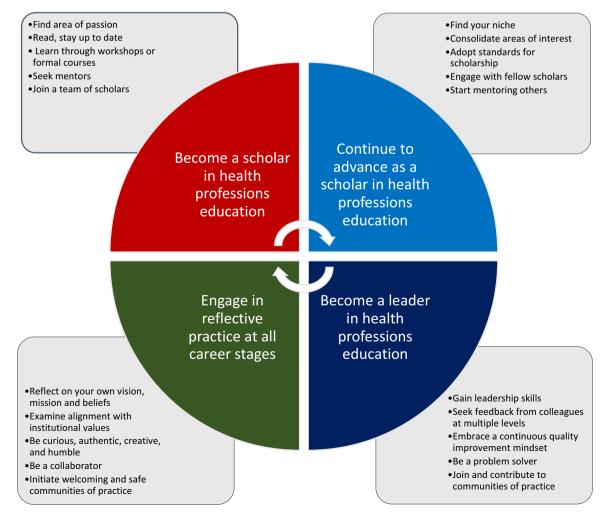


Figure 1. Four foundations for moving from teaching and education to scholarship and leadership in health professions education.

Moving to an educational leadership role ... requires an identity shift and a reappraisal of your own strengths and weaknesses 1990, Ernest Boyer categorised scholarship under four domains: the scholarship of discovery; the scholarship of integration; the scholarship of application; and the scholarship of teaching.⁹ Charles Glassick's standards, summarised in Box 1, can further guide educators in advancement as scholars.

Try to familiarise yourself with your institution's educational promotion criteria (serve on the committee if possible), and be strategic about your choice of scholarship/academic activities, document your activities and gather evidence of their impact. Many institutions require staff to maintain a teaching portfolio: an example can be found at https:// www.mededportal.org/publicatio n/626/. Mentors and colleagues can provide advice on career development and feedback on your CV and educational portfolio. Many educators are generous with their time and advice; do not hesitate to reach out to scholars and leaders you already know and to e-mail people you don't know for guidance. Attending and volunteering at educational meetings, facilitating workshops with educators outside your institution and engaging in social media can help you to

connect with national and international collaborators and organisations. Opportunities to network include arriving early at workshops, sitting next to someone you do not know and exploring common interests and projects. Consider preparing an 'elevator pitch', a persuasive summary of your work and expertise that can be described succinctly.¹⁰ Alongside developing links outside your institution, keep your own educational leaders or supervisors updated on your work and consider seeking external professional recognition, e.g. as an AMEE or an AdvanceHE

SEEK LEADERSHIP ROLES IN HPE

Fellow.

Leadership requires a unique set of skills, a sense of organisational mission, and an understanding of the context and systems within which you work.³ Moving to an educational leadership role from a clinical role requires an identity shift and a reappraisal of your own strengths and weaknesses. A 5-year plan that includes positions or qualifications you would like to achieve, your educational philosophy and vision, and how to pursue it can make it easier for you to decide

Box 1. Glassick's standards of excellence in educational scholarship⁹

- Clear goals: identify important questions in the field, clearly state the purpose of the work, and establish objectives that are realistic and achievable
- Adequate preparation: show an understanding of existing scholarship in the field, and develop the necessary skills and resources to conduct the project
- Appropriate methods: use methods appropriate to the goals, apply them effectively and modify them in response to changing circumstances
- Significant results (this step refers to the achievement of educational goals and not to statistical significance): goals should be achieved adequately, should add to the field and should open areas for further exploration
- Effective presentation: present work using effective style, organisation, and with clarity and integrity
- Reflective critique: critically evaluate your own work, and use reflections to improve the quality of future work

which initiatives and projects to engage in and which to defer.

Effective leadership involves studying the body of literature on education and leadership, management and followership (highly effective team members who work closely with leaders and actively contribute towards the accomplishment of defined goals), and a willingness to discover and apply new ideas.³ Effective leaders are also skilled at creating a psychologically safe environment, relationship building, and respecting and inviting suggestions from the whole team. Professional development activities can help to develop specific skills in: academic leadership, change management, leading meetings, delegation and empowerment, negotiation, public speaking, financial management, planning and project management, and emotional intelligence.¹¹

Volunteer or solicit nominations to serve on local and national education committees and task forces. We recommend getting involved with local and regional societies, networking with regional leaders, and slowly expanding your horizon to national and international society committees. Be willing to take on small leadership roles, such as managing small projects or developing and implementing a focused assessment method. Enthusiasm, meeting deadlines and a willingness to take on tasks, including those at the margins of your comfort zone, can help others to recognise your leadership potential and think about you for future opportunities.

Observing coaches, mentors, colleagues and friends in their leadership roles can be a rich experience. Ask them as well as near peers to give you honest, constructive feedback on how you impact others, your strengths and areas for development, and how you can cultivate your leadership style. Maintaining an effective relationship with your supervisors ('managing up') and keeping them informed about your successes and challenges are important, even when one is near the top of any hierarchy. You may be regarded as a sound candidate for larger leadership positions if you demonstrate problem-solving skills and help to deliver better outcomes.

When working relationships need to be terminated, it is important to do so without conflict. Career development continues even after taking on leadership roles, and you may find yourself working alongside or reporting to colleagues you once managed or with whom you had a prior working relationship.

ENGAGE IN REFLECTIVE PRACTICE AS A HEALTH PROFESSIONS EDUCATOR

At all career stages, selfawareness, a positive mindset and reflective practice are critical for growth. Reflective practice includes the ability to reflect *in* (during an activity, resulting in immediate change in action), *on* (after an activity, for future change in action plans) and *for* (towards goals for personal, professional and institutional growth) action.¹²

Curiosity, collaboration, authenticity, creativity, consistency, humility and the ability to align your own values with those of the institution are essential gualities for reflective practice. These characteristics pave the way for meaningful and sustainable change at the organisational/institutional level, and are part of being an effective scholar and leader. Other important qualities include the ability to inspire and mentor others, the willingness to collaborate with peers, juniors and seniors, and the acknowledgement of their expertise and experience.

Experienced scholars and leaders continually seek out activities to explore new areas of practice and to develop new skills. Such activities can build a peer-mentoring group outside your own organisation. For the mid- to late-career faculty member, self-curation through the selection of conference presentations, audiobooks, webinars, workshops, podcasts and literature reading is an appropriate means for staying current and discovering new ideas. This requires staying open and curious, rather than merely reinforcing existing beliefs that could become prejudices.

Whenever feasible, engage in a community of practice (CoP; a group with shared interests. passion and commitment who learn from each other) for professional development.¹³ As a novice educator, you may start at the periphery of a CoP; however, as you advance in your career, you will engage more with the community and will move closer to the centre. As a leader, nurture the development of CoPs, ideally anchored in common values and shared commitments and resources, welcome new members into the community, and allow everyone to contribute to continuing learning and growth within the community.

Appreciative inquiry is a helpful framework for programme development and implementation.¹⁴ In contrast to a focus on problem solving, appreciative inquiry engages in selfdetermined change by identifying the positive outcomes and envisioning what might work well in the future, rather than trying to fix what is broken. Finally, work on mentorship skill development in order to maximise the benefits to the mentee and the mentor.¹⁵ You do not automatically develop these capabilities just by seniority, and this requires a collaborative

humanistic approach to professional development.

CONCLUSION

This toolbox article focuses on helping academic clinical professionals become successful educational scholars and leaders. For those entering the field, finding their passion, trying out new things, networking and seeking a team of mentors will be highly rewarding. For mid-career educators, developing a niche, consolidating areas of interest, gaining expertise in targeted areas, sustaining scholarship and mentoring others can promote continued development. Those who take on educational leadership roles should develop their leadership skills, volunteer to take on committee and other roles, nationally and internationally, and seek multisource feedback, thus positioning themselves as excellent candidates for larger leadership and mentoring roles. Reflective practice, curiosity, humility and authenticity are characteristics that are essential for educational scholars and leaders at all levels. The suggestions in this article provide a menu of options and clinical educators should select what is feasible and applicable to their own context and professional goals. After all, even the most successful educational scholars and leaders will thoughtfully consider which balls to juggle.

REFERENCES

- Geraci SA, Babbott SF, Hollander H, Buranosky R, Devine DR, Kovach RA, Berkowitz L. AAIM report on master teachers and clinician educators part 1: needs and skills. *Am J Med* 2010;**123**(8):769–773.
- Sherbino J, Frank JR, Snell L. Defining the key roles and competencies of the clinician-educator of the 21st century: a national mixed-methods study. Acad Med 2014;89(5):783–789.
- McKimm J, O'Sullivan H. When I say.. leadership. *Med Educ* 2016;**50**(9):896–897.

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- McGaghie WC. Scholarship, publication, and career advancement in health professions education: AMEE guide no. 43. *Med Teach* 2009;**31**(7):574–590.
- Wang FY, Stankiewicz CA, Bennett NL, Myers JS. Hit the ground running: engaging early-career medical educators in scholarly activity. Acad Med 2019;94(11):1837.
- Bordage G, Lineberry M, Yudkowsky R. Conceptual frameworks to guide research and development (R&D) in health professions education. Acad Med 2016;91(12):e2.
- DeCastro R, Sambuco D, Ubel PA, Stewart A, Jagsi R. Mentor networks in academic medicine: moving beyond a dyadic conception of mentoring for junior faculty researchers. Acad Med 2013;88(4):488–496.

- Simpson D, Fincher RM, Hafler JP, Irby DM, Richards BF, Rosenfeld GC, Viggiano TR. Advancing educators and education by defining the components and evidence associated with educational scholarship. *Med Educ* 2007;41(10):1002–1009.
- Glassick CE. Boyer's expanded definitions of scholarship, the standards for assessing scholarship, and the elusiveness of the scholarship of teaching. Acad Med 2000;75(9):877–880.
- Dzara K, Kesselheim J. Going up? Tips for the medical educator's "elevator pitch". Acad Med 2018;93(12):1884.
- Swanwick T, McKimm J. Faculty development for leadership and management. In: Steinert Y, ed. Faculty development in the health professions: a focus on research and practice. New York, NY: Springer; 2014; pp. 53–78.

- Schön DA. Educating the reflective practitioner: toward a new design for teaching and learning in the professions.
 1st edn. San Francisco, CA: Jossey-Bass; 1987.
- de Carvalho-Filho MA, Tio RA, Steinert Y. Twelve tips for implementing a community of practice for faculty development. *Med Teach*. 2019. https://doi.org/ 10.1080/0142159X.2018. 1552782
- Sandars J, Murdoch-Eaton
 Appreciative inquiry in medical education. *Med Teach* 2017;**39**(2):123–127.
- Ramani S, Gruppen L, Kachur EK. Twelve tips for developing effective mentors. *Med Teach* 2006;**28**(5):404–408.

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