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Small, sustainable, steps to success as a scholar in Health Professions Education - Micro (macro and meta) matters

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Abstract

Introduction: The aim of this short communication is to examine the journey of scholarship in health professions education (HPE).

Methods: We will focus on tangible small steps to start, sustain, and succeed along this journey. Through a proposed innovation in scholarship – micro-scholarship – we will describe how this is similar to and an extension of bite-size or micro-learning, and workplace micro-practice related to just-in-time (JiT) learning settings.

Results: We will demonstrate how the small steps for generating and engaging with micro-content can be similarly applied to micro-scholarship. Then, progressive and iterative refinement of output and practice of micro-scholarship can be combined and result in macro-scholarship after cycles of public engagement for final digital or print publication. This stepwise approach creates an accessible, sustainable strategy to achieve success as a scholar in HPE. We will elaborate on micro, macro, and meta matters and celebrate how these small steps encourage and allow broad participation in the creation, critique, and progressive refinement of scholarship.

Conclusion: Small, sustainable, steps leads to success as a scholar in Health Professions Education - Micro (macro and meta) matters.

Keywords: *Micro-Scholarship, Micro-Learning, Just-In-Time (JiT) Learning, Community of Practice (CoP), Technology, Network Effects, Post-Publication Peer Review (PPPR)*

I. INTRODUCTION

Modern changes in the pace and way we conduct and experience teaching and learning have resulted in production and consumption of smaller chunks of content. Succinct, bite-size content is easier to remember and consumes less cognitive bandwidth with reduced cognitive load. In addition, it is also significantly easier to share and engage with within a professional community of practice (CoP). Compact modular, bite-size content is also ideal for just-in-time (JiT) micro-learning and workplace micro-practice (Yilmaz et al., 2022), or on-demand learning and practice, with which we are all familiar. In this paper, we will extend this idea of micro-learning and micro-practice to scholarship, by

examining the “new” idea of micro-scholarship – defined as “the process of making visible the smallest accessible and assessable steps that document a scholarly journey, which can then be assembled and presented as an outcome of academic scholarship” (Goh et al., 2021). Mobile technology tools and platforms support open display, access to, and iterative engagement with this content by a community of practice (CoP), both in learning and scholarship (Goh et al., 2021; Goh & Sandars, 2020; Schlegel, 2021).

II. MICRO-MATTERS

Just as a musical composition is made up of individual notes, a construction from its individual parts, and a meal

of its individual ingredients, commonly accepted and acknowledged finished works of scholarship in HPE are composed of its individual parts. A conference presentation or journal paper, peer reviewed, read by and engaged with by a CoP, contains core components – e.g., the title (which includes key ideas); key words (which are defined and illustrated in the presentation or paper); and cited published work by earlier authors (from a review of the field, including takeaways from the author(s) that are relevant and that the authors intend to discuss, elaborate, and build upon). However, a close examination and reflection of these core parts of finished works of scholarship show that they not only form the ingredients of the final work, but that they also fall within the categories of scholarship proposed by Boyer, with evaluation criteria described by Hutchings and Shulman; (Goh et al., 2021; Goh & Sanders, 2020). Boyer’s model for scholarship includes (1) integration, (2) application, (3) teaching and learning, and (4) discovery.

Innovative JiT micro-content on mobile platforms is easily accessible for members of a CoP to engage with, evaluate, critique, and build upon. All online content, including, e.g., on Twitter, blogs, or modular courses, is subject to creative reader collectives, which post comments, repost, reshare, and create new meaning and value from individual posts of content, contributing to group engagement, which has many of the characteristics of scholarship (Schlegel & Primacio, 2021). We propose that these artefacts and activities illustrate examples of Boyer’s Scholarship categories, including demonstrating the Scholarship of Teaching and Learning SoTL. Digital and online content and platforms support and scale our efforts as learners and scholars, no different yet more facile as compared to in-person activities, with increased importance placed on being a public professional, and respecting intellectual property, shown by proper citation of digital content, and use of this content with permission where applicable, followed by data-driven dissemination (Arrington & Cohen, 2015; Kern et al., 2015). This public reaction and appraisal of content compares to wide audience post-publication peer review (PPPR) with the added value of a feedback-loop through responses on comments. Just as developing bite-size, short format, JiT digital, online content, has transformed and continues to transform our educational and professional practices, a similar process can now facilitate and support granular, open digital display and engagement of both our initial and subsequent steps when engaging in scholarship in HPE, similar to and an extension of micro-learning. Practicing micro-scholarship involves encountering a “new idea”; researching its meaning; adding relevance to specific discussion themes and takeaways; discovering key published and presented work; and then both taking note of and making notes on these findings during reflection and discussions within a local CoP. This

micro-scholarship is subsequently made open and visible to a global readership or a CoP, through private, semi-private, and public engagement platforms. Micro-scholarship content gets progressively refined through iterative engagement with members of a CoP, through discussion, feedback, critique, and personal reflection. The relevance and usefulness of this content, as well as confidence in the authors of this micro-scholarship content, is progressively enhanced. We also learn how and where this content is best disseminated and presented, and best ways this might be combined and stacked. The iterative in-person and scalable digital conversations amplifying the spread and engagement with this material to create meaning, in step-by-step fashion, form the core practices of both micro-scholarship (Goh et al., 2021) and bite-size engagement with material (Schlegel, 2021). After refinement, these pieces can be combined into larger pieces of finished work of macro-scholarship. Thus, activities undertaken as part of micro-learning or micro-scholarship are accessible, independent, and sustainable small, step-wise efforts that can and do add-up. Progression along the developmental path of a scholar will include a variety of conversations within a CoP, such as the supportive networks of peers, senior practitioners, mentors and coaches, including collaborative (team)work and initially supervised instruction as part of a successful scholar’s journey. Conversations and engagement within a CoP do range from positive and helpful to (those that are or perceived to be) occasionally provocative and challenging. However, professional and good-natured discussion generally guide scholarly development similar to trial and error, and progressive improvement and iterative steps enable learning and growth.

III. MACRO-MATTERS

Simply put, a finished larger work is made up small pieces that have been selected and refined, through an iterative process of reflection and feedback, by engaging with a CoP or specialised collective of readers. Open (digital) practice from an early stage, the platforms (places and readers) we engage in, and our active participation in professional CoP of global specialised readers provide both “informed” and “critical” feedback – and review of these “early” and “small” or “micro” pieces of work – from a (much wider) audience. The key distinction is who engages with this work, from as wide a spectrum of professional practice, experience, and expertise as possible, and from a diversity of points of view. Digital tools and practices facilitate and scale this process. This is similar to the work of artists, who engage in open sketching, including showcasing early drafts and ideas, prototyping, drawing, and artistic creation in open studios. When members of a CoP engage through digital platforms the impact from their individual and collective

input can scale exponentially through network effects (Azhar, 2021).

IV. META-MATTERS

The process of scholarship mirrors the stepwise, sequential, cumulative process of learning, and training for proficiency and mastery in any area of practice. Our roles as practitioners, educators and scholars are all informed by learning science. Digital devices, tools, platforms, and practices exponentially scale up the impact of our efforts through applied network theory and interactions. Ultimately, we live and practice professionally within our CoP, which provides both the audience and peer reviewers of our public work, thus driving a fruitful evolution of our profession. Our ultimate aim is to engage a CoP in conversations, including broader participation in the production, refinement, and consumption of products of scholarship, in form and format, and through processes accessible for all. Micro-scholarship is a starting point that allows wider participation and engagement in the process of scholarship. The components of micro-scholarship, when refined and confidently presented, are contained within published finished macro-scholarship outputs. Then, micro-scholarship and macro-scholarship add collaboration and value within a larger scholarship ecosystem and professional CoP, a meta-level practice or meta-system, within which micro- and macro- level activities occur. An explicit example of the outputs and process of moving from micro, through macro, to meta practice illustrated

<https://www.slideshare.net/dnrgohps/illustrated-stacked-microscholarship-steps-along-academic-path-of-educational-scholar>. Another example of enhancing scholarship of teaching and learning SoTL across different levels might include, e.g. a remote consultation with members of scholarly project teams, prompting to publish a themed blog post, which, in return, becomes now a generalizable, transferrable offering to the global CoP, moving from the meta-system to the macro-level, as evidenced by comments from different institutions and subsequent implementation of ideas (Arrington & Cohen, 2015).

V. CONCLUSION

In this paper, we have examined, showcased, and celebrated the small sustainable steps to success as a scholar in HPE, describing micro, macro, and meta matters and illustrating how combining small components of scholarship is an effective strategy for dissemination, access, engagement, conversation and collaboration within a CoP in HPE.

Notes on Contributors

Poh-Sun Goh pitched initial idea, was involved in active discussion and brainstormed with co-author iterative refinement of core message(s), wrote first draft, and actively revised series of subsequent drafts, and submitted final draft. This manuscript built on previous collaborative work, cited in article on Micro-Scholarship and Digital Scholarship.

Elisabeth Schlegel was involved in active discussion and brainstormed with co-author iterative refinement of core message(s), and actively revised series of subsequent drafts, and including and approving final draft. This manuscript built on previous work, cited in article including on bite-sized learning.

Ethical Approval

As this manuscript is a description of an innovative approach to scholarship, ethical approval and IRB application was not required.

Data Availability

There is no additional data separate from available in cited references.

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Declaration of Interest

Both authors declare that there are no possible conflicts of interest, including financial, consultant, institutional and other relationships that might lead to bias or a conflict of interest.

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