

Micro-Scholarship: An innovative process using common technology tools
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by

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Abstract (49/50 words)

Micro-Scholarship is a flexible process that eases an educator's scholarly journey by making their small steps (Micro-Assets) visible, assessable, stackable, and transferable. This process uses existing technology tools and relationships in a stepwise and supported manner to create Macro-Assets (traditional scholarly outcomes) including articles, presentations, and workshops.

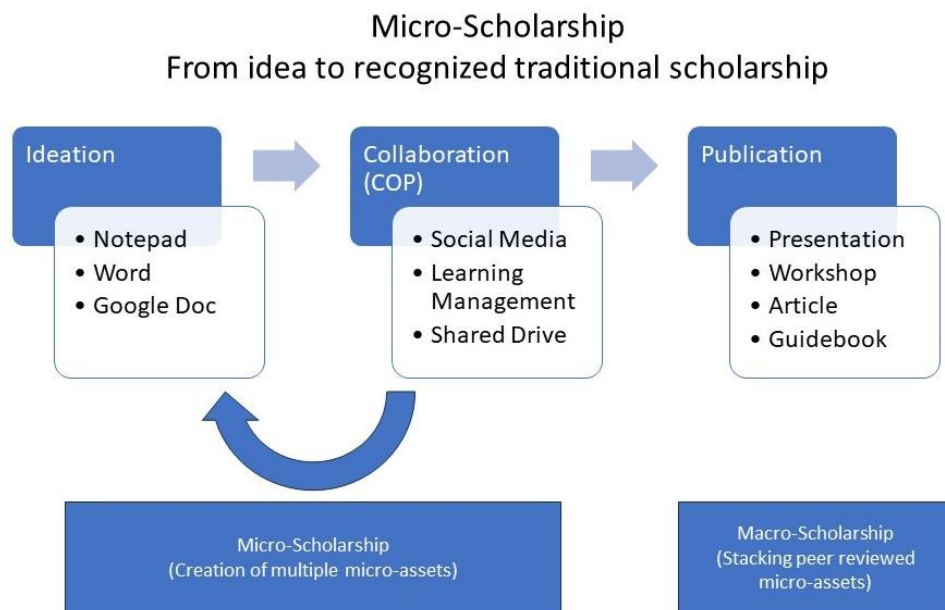
(XXX words)

Micro-Scholarship is a flexible, innovative, and accessible process that makes the small steps of an educator's scholarly journey visible, assessable, stackable, and transferable. [1] Our framework helps educators reduce cognitive load by creating small stackable products called Micro-Assets and connecting with their audience through familiar technology. To use a culinary analogy, most chefs never create a new ingredient as they are limited in time and resources to identify, source, and create a new ingredient. Their innovation is how they combine (stack) ingredients (Micro-Assets) in unique ways to tantalize their diners. Our process demonstrates creating Micro-Assets through common tools (such as MS Word, SlideShare, Google Docs) and receiving feedback from a community of practice (CoP) through social media to create traditional scholarly outcomes (Macro-Assets), which include articles, presentations, and workshops. We will conclude by providing several practical illustrative examples of how the process has produced recognized and valuable Macro-Assets.

Beginning a health professions education scholarship project can be daunting for any educator. Educators ask questions such as, "Where do I start?", "Where can I get early feedback on my work?", or "Where do I publish?". Micro-Scholarship answers these questions as it begins with a series of small steps, aided by a variety of common technology tools, to develop traditional Scholarship through the creation of Micro-Assets incrementally. This process builds on existing ventures, such as HEAL digital assets and open educational resources (OER), which are small reusable pieces of scholarship designed to stack into a recognizable product. As a process, Micro-Scholarship is ongoing and sustainable, leading the educator from ideation to peer collaboration, and ending in products such as peer-reviewed conference papers, journal publications, or presentations. The educator, by using common technology tools, makes visible the smallest accessible and assessable steps that document their scholarly journey. This innovation aligns directly with the IAMSE Medical Science Educator Toolkit definition that

describes Educational Scholarship as, “any scholarly work which is developed to address a specific objective within the field of education, and which is peer-reviewed and disseminated.” [3]

Learning new technology tools is often time-consuming and can be a barrier to entry for a new activity. Micro-Scholarship avoids these barriers by using familiar technology tools that are free or low cost. For example, a scholar can write their initial ideas in a word processing document (MS Word, Google Docs), then share access to their peers, create comments, and track changes. This iteratively developed document can become a slide show (MS PowerPoint, Slide Share) to illustrate the concept and receive feedback. During this process blog sites (Blogger), Learning Management Systems (Canvas), and cloud storage (Google Drive), can be used to make the work accessible to the wider CoP, which also provides a place for reflection, support, and challenge from peers.



CHANGE micro-assets IN BOTH BOTTOM BOXES TO Micro-Assets

The educator creates multiple Micro-Assets, which when stacked can be presented as the traditional outcomes of scholarship that help advanced teaching and learning. We present several illustrative examples of Micro-Scholarship, using common technology tools, to produce Macro-Scholarship.

- Poh-Sun Goh has published [two blogs](#), which are micro-assets of his overall scholarly journey as an educator. These blogs in combination with his HEAL and OER resources, are used in teaching, faculty development, and within his different CoPs.
- Micro-Assets stacked into Macro-assets include pre-conference workshops and sessions that have been accepted at the IAMSE 2021, IAMSE 2022, IAMSE 2023, AMEE 2023, and SGEA annual meetings.

- Multiple lectures, workshops, and faculty development sessions using Micro-Scholarship concepts across the world (Vanderbilt, Nottingham, NUS, Aga Khan)
- Publications (Medical Teacher [1], [self-published guide](#)).

Micro-Scholarship offers an innovative iterative approach that formalizes the process and outputs of educational scholarship by using familiar technology tools while emphasizing the requirement of engaging in personal reflection and obtaining peer feedback from a trusted CoP. There is an additional benefit of continuous peer review and collaboration, transforming the solitary process of scholarship into one infused with peer feedback and support. An important feature of Micro-Scholarship is that the scholar creates building blocks that match the Scholarly Approach and Scholarship/Dissemination sections of the IAMSE Medical Science Educator Toolkit which has a focus on a “thoughtful and informed approach” and “peer-reviewed dissemination of the work”. [3] These building blocks or Micro-Assets, are continuously refined through reflection, taking notes, sharing notes, and matching them to the audience's needs.

The authors have been heartened by the interest and growth in Micro-Scholarship during and after numerous presentations and training events that they have delivered in Singapore, the United States, and the United Kingdom.

Conflict of Interest

On behalf of all authors, the corresponding author states that there is no conflict of interest.

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