COMMENTARY

A Tool for Creating Snapshots of Faculty Contributions to Pharmacy Education

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Most faculty members' contributions to pharmacy education are significant but often challenging to document and describe. In addition, contributions may go unrecognized or rewarded unless the work results in a publication or presentation. Drawing on a metaphor of the importance of a fisher taking a photo to capture memories of a successful fishing trip, this commentary examines methods for faculty to identify and organize their academic contributions. Frameworks and a visual tool are presented to assist pharmacy educators in thinking systematically about the full breadth of education contributions. Using the frameworks and visualization tool provided, a more complete picture of education contributions can be developed, allowing educators to create visual "snapshots" of their work for others to see and appreciate.

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INTRODUCTION

After landing a particularly noteworthy catch, the excited fisher might reach for a camera to document the occasion. The photo is evidence of hard work, sustained effort, and pride in their accomplishment. Sharing the photo with others might initiate a spirited discussion about the challenges and successes of the process. The viewers may even be inspired to trade stories about their fishing experiences and exchange knowledge. Like the fisher who shares snapshots of their accomplishments, pharmacy educators need to document and showcase their teaching experiences for others to see and appreciate.

Stakeholders, such as deans and department heads, want to know about faculty activities. However, pharmacy educators may struggle with mechanisms for reporting their work in annual reviews, as well as reappointment, promotion, and tenure processes. While efforts have been made to recognize teaching excellence in pharmacy, it remains challenging to identify, describe, and document the breadth of education-related activities.[1-3] Logging classroom hours, numbers of students precepted, and articles published are insufficient for capturing the full scope of education-related contributions. To make education more "visible and valued," medical educators have identified five categories of educational activity: teaching, curriculum development, advising and mentoring, education leadership, and administration and learner assessment.[4,5] Among the supporting evidence options for these education contributions, activities that are easy to count and list predominate, and publication continues to be privileged and highly valued.[6-8] Given the wide range of activities that support education, it is critical that faculty be provided the language, tools, and frameworks to consider the full scope of their educational activities and to document both their quantity and quality.[4,5,8] The aim of this paper is to expand the discussion about education-related contributions in academic pharmacy to aid faculty in making those contributions more visible and valued. More specifically, it discusses broadening our thinking regarding contributions to education; frameworks to help identify, organize, and showcase contributions; and a specific tool for describing, documenting, presenting, and reflecting on contributions more fully.

DISCUSSION
Recognizing the Full Breadth of Contributions

As part of annual reporting processes, most pharmacy educators have spent time brainstorming and asking themselves, "What education-related activities did I complete this year?" While some activities are obvious and required on their curriculum vitae (CV), such as presentations, funding received, and committee involvement, there are

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likely many other less obvious activities deserving of documentation. Figure 1, developed through brainstorming by the authors and refined through feedback from multiple groups of faculty, presents a sampling of the many different education-related activities. In this figure, the typical CV items represent only a few of the more than 40 activities that could be shared with stakeholders. Clearly, careful consideration is needed to identify and acknowledge the full scope of an educator's work.

Figure 1 is not meant to be comprehensive. Examples can and should be added. It is also not meant as a checklist or to suggest that each educator have every one of these activities represented in their work. Figure 1 was created to broaden the Academy's perspective on a faculty's contributions to pharmacy education so that we can better recognize and illuminate those contributions that may not be as visible and valued as they should be. In reality, educators do not have just one or two "prize fish" to showcase. Each semester results in a bountiful catch (contributions) that require a collective, thoughtful display.

Thinking Systematically About Education Contributions

Using frameworks may be helpful for thinking systematically about the full scope of education-related activities. As a starting point, most pharmacy educators are familiar with sorting and organizing their work as research, teaching, and service. While this time-tested framework may be familiar, using it may not prompt educators to include the broader array of contributions they make to pharmacy education.

For a more comprehensive view, the framework described by Simpson and colleagues may be useful.[4,5] This alternate approach specifically prompts activities in curriculum development (eg, creation of new programs or quality improvement procedures), advising and mentoring (eg, coaching in a teaching certificate program for residents), education leadership and administration (eg, becoming the faculty point-person for co-curriculum or interprofessional education), and learner assessment (eg, the creation of a new student observation checklist for a simulation).[4,5] A fisher provides a coherent story that articulates and emphasizes their effort, skills, and dedication. Likewise, educators must not only *identify* but also *organize* their education-related contributions to effectively scaffold the presentation of their work. Pushing the boundaries of the traditional CV categories may be necessary to adequately document and showcase all of their accomplishments.

Once educational contributions are identified and organized, faculty should expect that their claims will be scrutinized by stakeholders. While this scrutiny may include the *quantity* of the contributions, we encourage faculty to move beyond lists and describing their education

Figure 1. A brief brainstorm of education-related activities and contributions. Note: circles represent teaching contributions typically found in the CV.

activities and role responsibilities. In addition, faculty should collate supporting evidence of the *quality* of these contributions. Evidence of student learning, student ratings of teaching, and peer evaluations are just some of the documents faculty can use to communicate their achievements to others.[2,4,5] Simpson and colleagues also suggest that framing contributions locally, regionally, nationally, and internationally can provide a powerful message about a faculty member's academic engagement.[4,5] As schools seek to make pharmacy education more visible and valued, strong and persistent advocacy is needed to shift institutional policies and practices toward stronger documentation, evaluation, and recognition of faculty efforts.[9]

A framework can also aid in thinking proactively about the future and negotiating teaching responsibilities over time. Ideally, an educator's contributions meet tangible student and curricular needs. However, in an ideal situation, there is also a match between those needs and the contributions that best align with the educator's teaching talents, expertise, and interests. Hitting this "sweet spot" between institutional and individual faculty needs can be tricky, especially when there are other educators to consider. In preparation for these conversations, educators can use the frameworks above and the tool described below to create a full picture of their current contributions, as well as those they could or should make.

Creating a Visual Snapshot of Education Contributions

Following discussions within the University of British Columbia's Centre for Teaching, Learning and Technology and honed through extensive campus-wide stakeholder workshops, the Educational Leadership Mapping or "ELM Tool" was developed.[10] The Tool and an example of its use are provided in Figure 2. It provides a robust framework for critically examining education-related activities in ways that can be documented and clearly described in annual reports and for career advancement decisions. The ELM Tool is a two-dimensional representation of the intellectual work of teaching. The "dimensions of teaching" are represented by a continuum of activities ranging from delivering teaching and learning activities to dissemination. Implied is a kind of directionality and a sense of professional growth where teaching excellence, scholarly teaching, and the scholarship of teaching and learning are important considerations for educators and emerging educational scholars, including pharmacy academics.[2,11] Traditional teaching documentation may tend to focus at the "practitioner" level, emphasizing the work that the teacher is doing, particularly instructional delivery. However, in "forms of enactment," additional activities are documented, including those that enable instruction as "manager" (eg, planning, training of teaching assistants, coordinating the teaching team), as well as activities that motivate and influence others at the "leader" level (eg, local colleagues, disciplinary peers, faculty policies).[12] In practice, the ELM Tool allows educators to examine, tease apart and map the different aspects of their teaching and learning work in terms of roles, activities, and influence. Importantly, no aspect of education-related work is privileged and instead, its full breadth is seen as highly interwoven and synergistic. The ELM Tool helps identify the products of education-related work, creating tangible evidence for documenting and sharing with others, and provides a powerful visual validation of the efforts educators are undertaking to improve the quality of teaching practices and programs, as well as their growth as educators and educational scholars.

To illustrate teaching-related contributions for a course, one author mapped activities related to his medicinal chemistry teaching (ie, a 10-week, year one module). The lower left-hand corner (ie, "delivery" and "doing") represents the face-to-face time spent with students in lecture and during tutorials, called *integration activities* (IA). The next entry documents the activities related to designing and enabling the education, which can require considerable time and investment. Tangible evidence of this work is represented as outputs or educational artifacts (eg, syllabi, problems sets, and examinations) that can be shared with others and/or listed, described, and documented in CVs and teaching dossiers, as applicable. The last entry documents the influence of professional growth as a scholar on the quality of the medicinal chemistry curriculum and pedagogical practices within the school and nationally in the form of a new medicinal chemistry special interest group (SIG) for teachers.[13] This entry may have been missed without the focused thought prompted by the influencing row of the ELM Tool.

As described above, the ELM Tool aids the user in describing and documenting their work more fully. Although teaching portfolios have also been used to describe and document contributions and certainly have value, they can require significant time for faculty to assemble and for administrators and colleagues to read.[14] An advantage of the ELM Tool is that versions can be drafted relatively quickly, with entries added or updated as new insights occur. In addition, the succinct visual created can be easily shared in documentation (eg, annual reviews, dossiers, portfolios). Regarding the full scope of teaching activities, the Tool can be applied in different teaching contexts (eg, classroom, experiential, other areas) or with different audiences (eg, professional students, residents, graduate students), resulting in multiple snapshots of the work of teaching. When compiled over semesters and
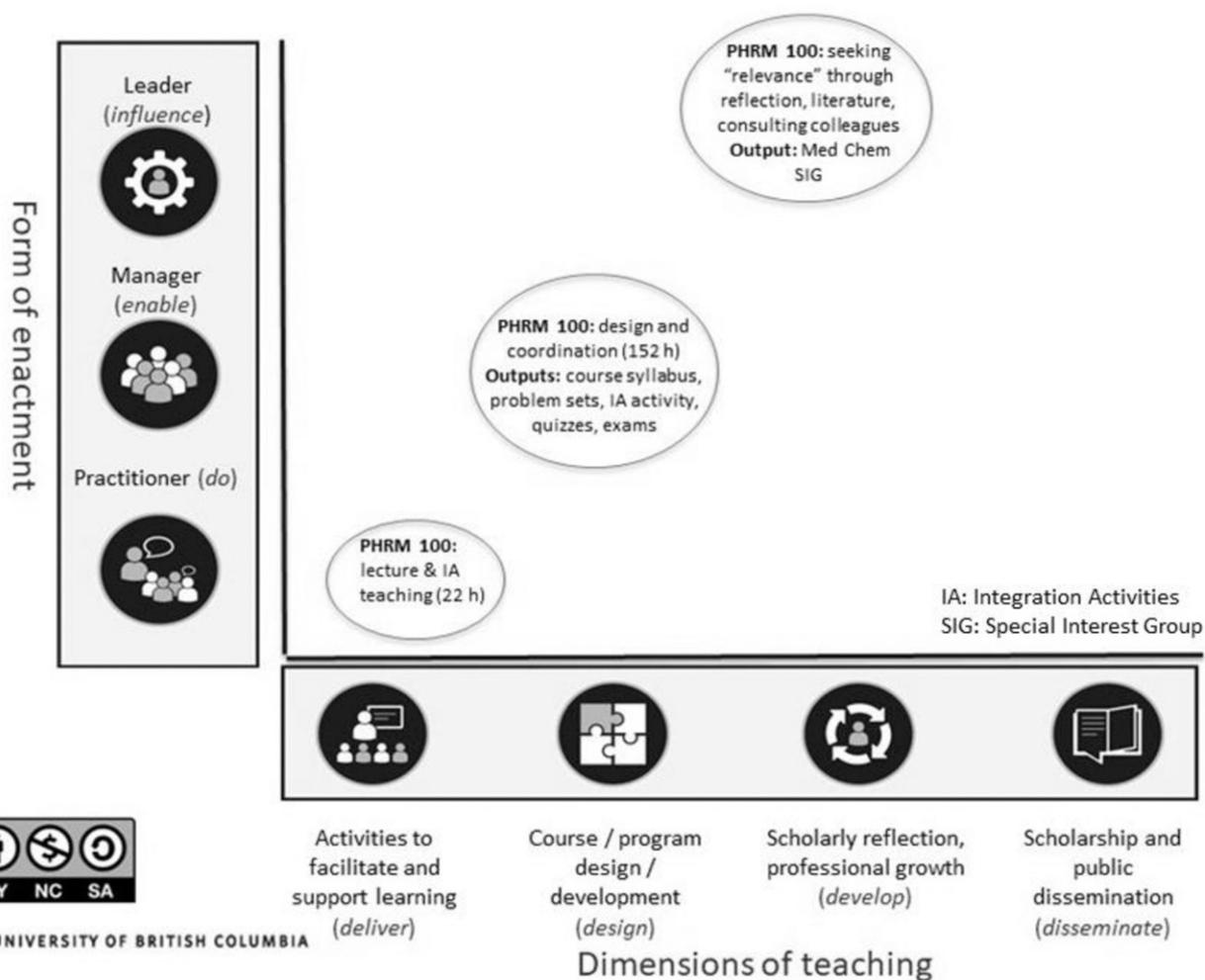
The ELM tool is available through a Creative Commons License (Attribution-Non-Commercial-ShareAlike, ie, CC BY-NC-SA).

Figure 2. The Educational Leadership Mapping Tool and its application to an example of medicinal chemistry teaching.

years, the Tool can capture the shifts in teaching responsibilities and the full scope of a faculty's contributions over time in requirements for promotion or award dossiers.

The ELM Tool also supports teacher reflection. Once a draft is made, the faculty can examine the resultant "white spaces." Figure 2, for example, exposes significant gaps on either side of the mapped activities, prompting questions, such as "Are there ways that medicinal chemistry is being delivered that might be influencing others?" or "Are there aspects of wisdom gained as a teaching practitioner that should be disseminated and made public?" After identifying an important gap in the influence-disseminate area (upper right), the ELM Tool's user responded by initiating focused scholarly inquiry aimed at exploring the relevance of learning medicinal chemistry in the Doctor of Pharmacy curriculum. Additionally, reflection identified opportunities to disseminate the learning-centered curriculum design and pedagogical practices at local and national

conferences. As emphasized previously, iterations of the Tool can be compiled and superimposed, like transparencies, to see strengths and identify gaps across the entirety of education contributions.

While the goal is not to fill the entire figure, the ELM Tool can be used to help determine possible future actions within the context of the educator's role, interests, and expectations. Another author plotted each major activity or goal for the next year onto the ELM Tool. In doing this, the "Practitioner" row filled quickly with courses requiring instruction (delivery) and coordination (design). Also, with an administrative role, there were activities in the "Manager" (enable) row. However, there were gaps in the "Leader" row, as well as gaps in the columns for "Scholarly reflection, professional growth" and "Scholarship and public dissemination." Seeing activities mapped created a visual representation of currently planned time and effort and highlighted the need for

additional conversations to initiate work in missing areas now and/or in the future. Using the ELM Tool in this way, with specific stakeholders or audiences in mind, provided a helpful way to organize current education contributions, prepare for important conversations, and plan for the future. Stakeholders have indicated that the ELM Tool has focused their attention through a common language for discussing teaching and learning work, purposeful identification and listing of the products of teaching work, proactive thinking about "gaps," and more sophisticated discussions about the intellectual work of teaching overall. While ELM map(s) can become complex and messy, the visual has positively prompted stronger documentation of the full scope of the educator's educational activities, influence, and growth.

CONCLUSION

If our hypothetical fisher had come home from the fishing trip without a picture, their friends' response to their expedition would have been different. Without a picture, the listener may have found it more difficult to appreciate the effort the fisher had invested in catching the fish or to share details about their own experiences. Additionally, if our fisher had come home without a cohesive story and instead, just a long list of facts, they would have faced a different reception from their friends. Likewise, educators should fully document and "hold up" their contributions for others to see. A framework such as the ELM Tool can prompt reflection and guide organization of materials for more effective presentation of the educator's work. Additionally, pharmacy faculty colleagues examining their collective "catch" can aid in garnering support and identifying the next trip (ie, teaching-related investment) they could or should make. In the quest to make their contributions to pharmacy education visible and valued, educators must continue to work to find methods to document and share teaching activities and accomplishments.

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