Evolving and Unchanged: How a Series of Workshops at an Academic Library Reflects Its Roles and Values

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Introduction

Nearly a year into my program at University of the British Columbia University ischool to earn my MLIS degree, I was lucky to be recruited to work at the Research Commons, which is affiliated with the Koerner Library at UBC Library. One of my major responsibilities was to lead the workshops on a statistical analysis tool, namely SPSS. When I joined, the workshops were on hiatus so they could be fundamentally restructured to cater to beginners.

Throughout the preparation stage and even into teaching it for a while, what I deemed an essential question plagued me: why on earth should the students bother to come to our workshops instead of watching numerous online tutorials on SPSS at home? After all, we are enjoying an unprecedented level of freedom and convenience when it comes to learning, thanks to the proliferation of digital and open educational resources. That lingering question, though, drove me to think pedagogically about what would be the most effective approach to delivering the workshops and how it relates to the *evolving roles* of academic libraries, and more specifically, those of the Research Commons, whose mandate is to support graduate students' research and learning needs. As a result of the continuous contemplation, the workshops evolved over the course of two years. And now when I am looking back on how they morphed, I find the gradually-formed teaching philosophies and tactics resonate deeply with some of the imperatives of academic libraries on the horizon, and meanwhile embody a sustained core value of libraries.

Improving Data and Statistical Literacy

In the early stage of developing the workshops, I felt the scope for the workshops were muddled: our focus seemed to be on the software itself, but was statistics off-limits, an area we should carefully avoid? If not, how far could we go? Should we talk about some basic concepts regarding data types to ease the transition into this software? The ambiguity, however, turned out to be offering us space to experiment with variance in approaches to strike a right balance.

It took us a while to realize that it was impossible and unwise to draw a clear line between the statistical software and statistics. It would only leave a vague mark on our audience's mind if we only talk about a function without touching on the statistical rationale that underpins the function. Thanks to my partner Lok Heng Chau's extensive knowledge of statistics, we were able to weave this important piece into the fabric of the workshops.

I also found that only showing how to perform some basic operations was not effective. Here is one of the insights I gleaned: since it's a user-friendly software, it's really easy to keep clicking buttons with-

out knowing what you are doing; if you don't keep a critical eye to the deceptive ease of use, chances are you will have to spend more time straightening out what you need to do. In order to get this message across, when we came to the places where those potential traps lurked beneath the apparent ease, I would jump at the opportunities, challenging the audience to think for a moment about what they should do and *why*. This tactic proved to be an effective way to encourage the students to think critically and understand the underlying patterns.

In order words, what trickled into the workshops were elements of critical thinking, data literacy, and statistical literacy; the latter two have been spotlighted by the University of Michigan School of Information as key cross-disciplinary skills (Fontichiaro et al., 2017). The alignment with cross-disciplinarity is how we can add value; the Research Common--as the hub for spurring innovation and supporting research needs across disciplines on campus--is well-positioned to promote these cross-disciplinary skills.

In a more general sense, as the 2017 NMC Horizon Report states, embedding digital fluency more deeply and learning is critical. In addition, how the Report interpret the way libraries should cultivate digital literacy is illuminating:

A major element of fostering this fluency is recognizing that simply understanding how to use a device or certain software is not enough; people must be able to make connections between the tools and the intended outcomes, leveraging technology in creative ways that allow them to more intuitively adapt from one context to another. (Becker et al., 2017, p.7)

Part of our contents matched this goal: when we were discussing the basic data types, the similarities and distinctions between SPSS and other quantitative analysis tools such as Excel and R, we were actually fostering the ability to draw connections between tools and use this one critically. But I believe more work could be done in this aspect in the future.

Openness and Intellectual Freedom
A funny fact is that I had to learn this software and scraps of statistical knowledge from scratch after my designation as the facilitator for the SPSS workshops. And yet I soon realized that this learning experience was actually a blessing: the learning pains were so fresh that I could easily identify the places where a beginner may stumble. More importantly, I used my experience to relate to the students who were terrified of statistics and showed to them how they could definitely learn the software while picking up statistics in a gradual way, a little at a time. To our amazement, we discovered many students were glad that this was a place where they could freely ask any basic questions about SPSS and statistics that they otherwise wouldn't or couldn't ask, for various reasons, in their own departments. This openness to all learners, regardless of their background or level of previous experience, and the endeavor to dismantle the mental barriers to mastering this statistical analysis tool, I believe, carry one of the key values libraries have been historically upheld: intellectual freedom. By practicing this principle of openness, we were helping students be freer to think, learn and grow.

Conclusions
Getting back to the fundamental question I had been interrogating myself with, the one regarding our

added-values, I think we have found our voice. And maybe connecting this quest for our niche with the instructional traditions of academic libraries would shed light on how I arrived at the conclusions. Academic libraries have long been serving at the forefront of teaching how to judge information credibility. But when an academic library is extending its services by providing training on research tools, is it still possible to preserve the tradition of instilling the spirit of keeping a critical eye to information -or data? Is it possible to approach "non-conventional" workshops in a way that suits a library's position and values at a deeper level? I believe the answer is yes. In our case, those initially flickering moments of promoting critical thinking, data/statistical literacy, and embracing the spirit of eradicating cognitive or emotional barriers to learning, and open to everyone with no assumptions about his/her previous knowledge, have become integral to the SPSS workshops. As such, in the role of *engaging learning*, the library stands firmly against the sweeping force of millions of web tutorials which exclusively focus on cut and dried "how-to".

In an era when academic libraries strive to transform their roles, and advance their missions, I hope my reflection could provide an empirical narrative of how an instructor- who was at an academic library's shared space and hub for research serving a large constituency of researchers and students- explored ways of teaching that can echo the library's attempt to extend its territory while defending its fundamental values.

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