

Taking the Easy Way *In*: Leveraging Applied Learning Into Scholarly Contributions

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Abstract

This paper presents a rationale, justification, and practical guidelines for working with select undergraduate students to efficiently leverage their applied experiences into scholarly contributions. A review of the literature indicates that a) graduate programs heavily weight undergraduate research in the selection process, but that b) research opportunities are not equitably distributed among students, and furthermore, c) traditional research experience is not a very good predictor of graduate school success anyway. By capitalizing on existing applied activities, faculty can help a more diverse range of students bolster their curriculum vita, without stretching the student (or ourselves) too thin. This paper offers practical guidelines that have been successfully implemented in an undergraduate university setting with a dedicated applied learning mission.

Introduction

In my culture, “Taking the Easy Way Out” is an idiom typically used to insult someone for finding an easy way to avoid doing a hard thing (Take the easy way out, 2024). The implied offense echoes the common modern sentiment that prizes an overbusy, overworked lifestyle as being morally superior (Cohen, 2018). But lean approaches to quality improvement, progressive postmodern philosophy, and contemporary human experience all call into question the assumption that the “hard way” is necessarily best.

The purpose of this paper is to outline a rationale, justification, and practical guidelines for helping undergraduate students “take the easy way” into advanced education by leveraging existing applied experiences into the scholarly presentations/publications that many graduate programs demand of applicants. A lean mindset is applied with the goal of aligning key resources with the tasks most likely to yield the best outcomes without unduly wasting time and energy.

Primary of Research Experience in the Graduate Application Review

Survey data indicate that graduate application committees heavily weight undergraduate research experience (URE) in the selection process. Across a variety of professions, applications with more research experience receive stronger consideration (Hall et al., 2004; Landrum & Clark, 2005; Miller et al., 2021; Muffly et al. 2009; Norcross et al., 2005; Weiner, 2014; Woo et al., 2023). Clearly, we should be encouraging students to maximize research involvement if they hope to compete for graduate positions.

But Sometimes They Cannot

Unfortunately, opportunities for undergraduate research are finite and inequitably distributed (Carpi, 2017; Miller et al., 2021; Woo et al., 2023). Supervising URE is a labor-intensive endeavor, and limited opportunities are available. Subjective bias affects faculty selection of how to offer the coveted positions, and may differentially impact underrepresented minority groups (Woo et al., 2023). Furthermore, students are differentially able to accept said offers (Woo et al., 2023). Those who are managing family caregiving responsibilities, those who must work long hours to afford education, and those who were underprepared by their secondary education, are less capable of engaging in extracurricular research (Miller et al., 2021; Woo et al., 2023). The ongoing impact of historical discrimination means that the group of students who are not offered—or cannot take advantage of—URE opportunities, may overrepresent the underrepresented (Carpi, 2017; Miller et al., 2021; Woo et al., 2023).

Frankly, We Can't Either

As applied educators, we face myriad challenges that may reduce our capacity to mentor traditional research. And in applied education, where we must “expect the unexpected” it is particularly unwise to injudiciously add more to our workload without considering the potential domino-cascade of unintended consequences (Author, 2020a). In this paper, it is assumed that faculty are already operating at capacity in terms of how many URE we offer, and that few of us can offer more without reducing our overall performance. An

overambitious student research agenda will mean lower quality individual student projects along with the various repercussions that always follow from overextending ourselves (Author, 2020a).

And Maybe We Shouldn't Anyway?

Whenever we face a mismatch between resources and aspirations, a lean approach--which focuses on minimizing wasteful tasks to improve quality--may be of service. In this case, our key lean strategy is to transcend the tendency to assume that everything we are doing actually should be done (Drucker, 2006; George et al., 2004). At heart, it is a contrarian philosophy that allows those willing to question the status quo to achieve better results. So rather than assuming that URE is a top priority and automatically allocating more resources toward it, we start by asking whether URE should be a top priority at all. Immediately, we are faced with three contraindications.

First, while it is intuitive to assume that URE would be a good predictor of graduate school success, available research indicates otherwise. Overall, undergraduate research experience does not predict success in graduate school very well (Miller et al., 2021, Sibulkin & Butler, 2015; Woo et al., 2023). Most informatively, a meta-analysis involving 18 unique samples, totaling 3,525 students, found that URE is largely unrelated to academic performance, degree completion, professional/practical performance, and even publication productivity (Miller et al., 2021). There was one notable exception, in which URE did predict success in a graduate program. Importantly, this graduate program was specifically dedicated to academic science, with a mission statement identifying “practicing the scientific method” and achieving “scientific breakthroughs” as key objectives. It is possible that in this case, URE was rendered a valid predictor because it was so directly relevant to the program mission. In any case, the author cautioned other programs to empirically identify their own unique predictors, in part due to the paucity of research affirming URE as a common valid indicator (Weiner, 2014).

Second, the modern scholarship scene is increasingly dysfunctional, with a proliferation of predatory venues, insidious trickery, and outright fraud (Author, 2020b). Modern hiring, tenure, and promotion practices force such an overabundance of low-quality research that assessing the worthiness of sources has become a science in its own right (Bauerlien et al., 2010). While good research is utterly essential to human progress, more does not necessarily mean better.

Finally, applied learning educators understand that the best researchers do not always make the best practitioners; these two skill sets are sometimes distinct. Expecting all students to excel at the traditional research process in order to access advanced training in applied fields may needlessly perpetuate inequity and lost talent.

It Is Okay to Do Things the Easy Way

We have arrived at a troubling intersection of findings that suggest URE a) is heavily weighted by graduate application committees, b) is inequitably

distributed among students, and c) seems to rarely predict success in graduate school anyway. Thus, creative, efficient approaches to the problem are both necessary and permitted (Author, 2024).

In the demanding field of applied education, pragmatic challenges necessitate a solution that simultaneously:

- Increases opportunities to add research to the curriculum vita (CV) of a wider range of students.
- Adds little to the workload of faculty mentors.
- Provides a pedagogically sound learning experience, albeit one that may look different from traditional UREs.

We need to provide meaningful opportunities to a wider range of students, without exhausting our bandwidth.

Lean Strategy

As applied educators we already provide authentic assignments that engage students in the application of professional knowledge and skills to real-world tasks. This approach generates enormous motivation, self-regulation, and intellectual engagement (Nasrollahain, 2024), which can then be leveraged into scholarly contributions. Instead of scrambling to proffer new traditional research opportunities, we can capitalize on the applied experiences we already curate. In this way we adopt a lean strategy that maximizes returns from what we already do best, rather than diverting resources to peripheral endeavors (George et al, 2004).

One approach, which has been successfully and repeatedly implemented in an undergraduate applied learning university (Allen, 2022; Evans, 2023; King, 2023, Miles, 2024; Pohl, 2022; Tauchen, 2022) is offered here. For the purposes of this paper, we will call it an Applied Literature Review:

Step 1. Students participate in an existing applied learning curriculum for several weeks in order to get an understanding of the real-world implications of the work.

Step 2. Students are engaged in a detailed review of the profession's code of ethics (or similar foundational literature).

Step 3. Students are asked to integrate their understanding of professional ethics with their applied experience to identify one real-world problem they need to learn more about in order to do their best work.

Step 4. Class time is dedicated to a supported workshop guiding students to access the professional literature of their discipline to find the best answers to the problem they have selected.

Step 5. Students synthesize a summary of their findings to share with their classmates, including direct implications for their immediate applied goals.

The assignment is authentic, applied, ethically grounded, and student-directed. It is built into the existing curriculum, and should replace other content as needed, so that faculty are not attempting to append this to an already

overflowing workload. Step 5 is the final step for most students. However, select students, based on performance, can be encouraged to use their final summary as the foundation of a conference or journal proposal. Thus, some of the work has already been done. While additional mentoring will be necessary, this approach is immensely more time-efficient than supervising the same student in a fresh new traditional research project. More students can be offered more opportunities for URE without overextending faculty resources. An Applied Literature Review generates more weighty and intriguing proposals than a standard literature review, increasing the likelihood of acceptance. And because the process is also time-efficient for students, a more diverse subset will be able to take advantage of the opportunity.

Triple Dipping

This approach is a strategically efficient and pedagogically-sound means of optimizing student URE for their CV. In addition, it presents at least three ancillary advantages to address three looming challenges:

- Many underrepresented minority students do not know if they want to seek further education and may be reluctant to invest in URE (Carpi, 2017; Miller et al., 2021). However, the Applied Literature Review approach represents a valuable opportunity to practice a skill set with more obvious value. Because across many disciplines, while some professionals conduct research studies, most of their colleagues apply said research. Thus, students are simultaneously preparing for two possible post-baccalaureate paths. Students who can describe the process of 1) engaging in the field, 2) noticing a skill gap, and 3) deliberately accessing the professional literature for support, will present at least as well in a job interview as on a graduate school application. Furthermore, while Applied Literature Reviews may not offer practice in the typical process of scientific, laboratory, or traditional scholarly research, they do offer experience in related scholarly skills, such as navigating the submission process, applying for travel support, preparing content, and performing in scholarly venues.
- The field of graduate student selection currently has a precariously wobbly stance on the use of standardized test scores, such as the Graduate Record Examination (GRE), which may or may not discriminate against underrepresented minority groups (Woo et al., 2023). While graduate faculty are wrestling with this conundrum, it behooves undergraduate faculty mentors to emphasize the importance of alternative measures. The primary objective of this paper is to encourage the efficient optimization of the CV. But the Applied Literature Review simultaneously promotes stronger letters of recommendation (LOR). Faculty who mentor this type of project are able to observe a distinctive sample of student performance, which can effectuate more distinguished

LORs. This is particularly valuable because preliminary research suggests that LORs may actually be meaningful predictors of graduate school success (Hall et al., 2004; Kuncel et al, 2014; Woo et al., 2023) and they are heavily weighted by many graduate school selection committees (Landrum & Clark., 2005; Norcross et al, 2005; Woo et al., 2023). Enhancing our ability to write supportive letters describing a broader range of skills can contribute to diversification of the graduate student population.

- As higher education grapples with the challenges and opportunities posed by advances in Artificial Intelligence (AI), an Applied Literature Review assignment doubles as an assessment that is too personalized to be fully delegated to ChatGPT. This activity meets best practice recommendations for assessment in the age of AI, including execution during class time, a presentation format, student-directed topic selection, and authentic skills practice in realistic situations (Rudolph et al., 2023)

It Is Easy to Second Guess the Easy Way In

When committing to take the “easy way” in, it is easy to question ourselves. In my pursuit of this unabashedly strategic solution, I have occasionally encountered the sentiment that my process is inferior to traditional URE. In fact, if the overall system were not in the state of disarray expounded above, then I am not sure I would be writing this paper. But the graduate student selection system is struggling with significant issues that have a substantial impact on diversity and equity. And as contrarian, postmodern philosopher Robert M. Pirsig (1989) points out, “A real understanding of Quality does not just serve the System, or even beat it or even escape it. A real understanding of Quality captures the System, tames it and puts it to work...” (p. 226). Because of the inherent import of what we do, applied educators are in a powerful position to lead the way in shifting the narrative. When pursuing quality within a dysfunctional system, deviating from the status quo can be highly functional.