Introduction

In 2011, a group of University of Saskatchewan (U of S) students proposed the establishment of a multidisciplinary undergraduate research journal. The Office of the Vice President of Research (OVPR) saw alignment with its Undergraduate Research Initiative (URI) and agreed to fund the journal. The University of Saskatchewan Undergraduate Research Journal (USURJ) is a double-blind faculty-reviewed, open-access journal. It is based in the Writing Center, which is part of the University Library at the U of S. Each year, an average of twenty student editors gain experience in academic publishing processes. Dozens more students submit papers and experience the rigors of undergoing faculty review and editing a manuscript to publishable quality. This library-based partnership ensures a rich, immersive experience from which student editors and authors gain valuable skills transferrable to life after graduation.

There are few opportunities for undergraduates to participate meaningfully in the dissemination of scholarship. Typically, they are limited to the role of consumers of literature and are authors of papers that only their professors will read. USURJ provides an opportunity for undergraduates to begin
to see themselves as content creators and contributors to professional scholarship—whether by critically evaluating the contributions of their peers or by submitting a paper themselves.

A successful, sustainable undergraduate journal requires a home on campus and stable funding for continuity. USURJ benefits from staff oversight and mentorship from a writing center coordinator, a librarian, and a science faculty member, as well as financial support from the University Library, the OVPR, and the College of Graduate and Postdoctoral Studies. These partnerships and contributions ensure that students receive mentorship, expertise, and guidance in a range of writing, editing, and scholarly communication topics, an experience of value not only to them but also to libraries, institutions, the academy, and society.

This chapter articulates this teaching and learning value, relates the experience of the journal’s first years and lessons learned and offers practical advice should other libraries want to establish similar partnerships to support undergraduate research journals.

Background

The University of Saskatchewan is the largest postsecondary institution in the province of Saskatchewan, Canada, with over 21,000 students. It is a public medical-doctoral institution, and a member of the U15 group of research-intensive universities in Canada, which advocates for the advancement of Canadian research and innovation. Undergraduate research has become a key initiative at the U of S, leading to the institutional support for USURJ.

Since 2014, USURJ editorial boards of approximately twenty undergraduate students are mentored and engaged in the process of producing a scholarly publication each year. By the spring of 2017, eighty-six students (unique), including seven graduate student mentors and three graduate student editors-in-chief, have worked for the journal at a commitment of five to twelve hours per week over eight months. In that time, the journal has published six issues and fifty-nine articles, with additional artwork from six undergraduate students featured. USURJ publishes continuously, but articles are collected into two issues per year, allowing for student editors, authors, and the campus community to profile and celebrate student work at winter and spring receptions.

All but three positions on the journal’s editorial board are reserved for undergraduate students. The editorial board includes a librarian faculty advisor, a writing center staff advisor, a graduate and an undergraduate student editor-in-chief, six undergraduate senior editors (according to disciplinary category or task), several undergraduate student associate editors, a web ed-
itor, layout editors, and communications editors. *USURJ* editors also gain as-needed advice from former *USURJ* editors, now in graduate studies. As the journal’s editors-in-chief and staff advisor tend to be from writing-intensive humanities disciplines, a science professor acts as an intermittent advisor.

Student editors receive training from the faculty advisor, staff advisor, and editors-in-chief throughout the year. An intensive training session in the fall, followed by weekly team meetings, occasional workshops, and social events, prepare students to work as journal editors and to function well as a team. Some teams will request training topics that are suited to their specific concerns. A comprehensive training manual is required reading and a useful resource for editors; it covers such topics as delivering negative messages, anonymizing manuscripts, and using the Open Journal Systems (OJS) platform. Finally, *USURJ* editors complete parts of PKP School, which is a suite of online, self-paced courses on publication for journal editor and journal managers using the OJS platform. The editors-in-chief, senior editors, and faculty and staff advisors meet each week to share updates, concerns, ideas, and plans, and the senior editors meet each week with their associate editors to work on paper edits, find reviewers and brainstorm ways to garner submissions for their section. Graduate student mentors sometimes help at these section meetings, as do the faculty and staff advisors and the editors-in-chief.

During the spring and summer, a new graduate editor-in-chief and the faculty and staff advisor maintain communication with authors and reviewers, engage in assessment and planning activities, and refine training. This spring and summer activity allows the journal to keep its publication cycle from stalling and to improve its operations each year, making it a more fulfilling and productive experience for authors and editors alike. Additional past projects for the graduate editor-in-chief have included completing PKP School courses, interviewing deans and department heads to determine how best to promote the journal, and revising the *USURJ* training manual.

The Student Voice

Each year, we assess the journal’s impact in terms of its teaching and learning value via anonymous editor and author surveys. The findings from these assessments help us to articulate our value to funders and plan improvements from year to year. The feedback and ratings from students have been crucial to improving the educational value, training, and operations. Student feedback has led to minor and significant changes to journal operations, and it has helped us to see the larger value, and potential, of the journal’s activities.

A survey request to all *USURJ* authors and editors from the past two years (2015–2017) garnered forty-seven author and twenty-one editor responses on
topics related to specific learnings around publication processes; how the role of scholarly publication contributes to the research community; and writing, including the writing process, revision, citation, and organization. We concentrated on these topics not only to measure the value of having writing center and library involvement but also to report to the journal's funders on the depth of learning that was occurring. More broadly, we wanted to know the teaching and learning impact of the journal: what authors and editors learned and experienced, and whether they were satisfied with the experience when comparing their intentions (for submitting or getting involved) to the actual outcomes. We will incorporate some of the results of the 2015–2017 assessments in the following sections.

Scholarship as Conversation

Our experiences with USURJ, and what we gleaned from the survey responses, indicate that undergraduates can benefit considerably from being included in content creation. Nevertheless, undergraduate students are typically limited to being passive consumers of scholarly information. Traditional information literacy instruction is often skills-based and practical: introducing students to the concept of primary sources, such as journal articles, and how to locate, assess, and access such sources for use in assignments. But the processes underlying the production of journal articles remains abstract and mysterious to most students. Library outreach on scholarly communication topics related to the dissemination of research results is more frequently directed at faculty and graduate students. Undergraduates have been largely excluded from these conversations. However, undergraduates benefit when they are included in both the dissemination of their scholarly work and in outreach on issues related to the scholarly publishing ecosystem. The ACRL Framework for Information Literacy in Higher Education encourages engaging undergraduate students in this way.

The Framework was developed by an ACRL task force in response to the rapidly changing higher education environment. One of the elements that is changing is the extent to which undergraduate students are participating in research and knowledge creation on campus: “Students have a greater role and responsibility in creating new knowledge, in understanding the contours and the changing dynamics of the world of information, and in using information, data, and scholarship ethically.” Student participation as authors and editors in an undergraduate research journal such as USURJ has the potential to fulfill objectives in several of the six frames of the ACRL Framework, but perhaps most meaningfully in “Information Has Value” and “Scholarship as Conversation.” Both concepts express the importance of students seeing themselves as contributors to scholarship.
Students as Authors

Involving students in dissemination activities completes the cycle of undergraduate knowledge creation on campus, and “with the production of original scholarly or creative work comes the expectation to disseminate and share the new knowledge or creation with the scholarly community.” Many students lack the confidence to submit their work to a full-fledged professional journal at this point in their career, and so having a locally produced journal for undergraduate research provides a venue to bridge this gap. USURJ enables undergraduates to “contribute to scholarly conversation at an appropriate level” and “see themselves as contributors to the information marketplace rather than only consumers of it.” These are key dispositions of the “Scholarship as Conversation” and “Information Has Value” frames (respectively).

For most authors, contributing to USURJ is their first experience submitting a work to a scholarly journal. It is an eye-opening and memorable experience. Some are surprised that the paper that got them a great grade in class may be highly criticized by reviewers or that the publication process can be so long and grueling. One USURJ student author commented, “I thought my paper and research was rock solid when I handed it in and was at first a little disheartened to see so many comments, but the comments made me dig deeper into my research, think more broadly about my topic, and even change some of my arguments.” Another remarked on the authenticity of the experience: “I learned a lot more about the process of research and writing research articles. The knowledge from publication was more concrete than what I learned in class.”

The most obvious benefit to student authors is the intensive writing and editing experience they receive in preparing their papers for a broader audience, outside the walls of the classroom: “I was able to look at my own work in a more detached manner, which helped me learn a little more about how to evaluate my own work objectively.” Apart from the writing skills improved through working on their papers, improvements to authors’ professional communication were a secondary outcome; one student noted that she “learned about how to communicate professionally with editors, staff, etc.”

In our annual surveys, student authors (47) reported a range of general and specific learnings, with the strongest learning happening around scholarly publishing and writing in general, such as writing for professional publication and writing for an informed public audience, and the process for publishing in a scholarly journal (see table 20.1). More specific learnings around writing, including revision, citation, formatting, and organization, were less significant, possibly because some of the respondents did not make it to review, or through review to publication.
TABLE 20.1
USURJ Author Learnings

<table>
<thead>
<tr>
<th>“I LEARNED ABOUT”</th>
<th>Positive Response (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How to write for professional publication</td>
<td>72</td>
</tr>
<tr>
<td>How to write for an informed public audience</td>
<td>79</td>
</tr>
<tr>
<td>The process for publishing in a scholarly journal</td>
<td>83</td>
</tr>
<tr>
<td>How scholarly publication contributes to the research community</td>
<td>68</td>
</tr>
<tr>
<td>How to support points with evidence</td>
<td>64</td>
</tr>
<tr>
<td>How to revise intensively, following reviewer feedback</td>
<td>70</td>
</tr>
<tr>
<td>How to cite and document a paper properly</td>
<td>57</td>
</tr>
<tr>
<td>How to improve the organization of a paper</td>
<td>60</td>
</tr>
<tr>
<td>How to write a better abstract</td>
<td>64</td>
</tr>
<tr>
<td>How to manage the writing process in general (from research question to final proofread)</td>
<td>70</td>
</tr>
</tbody>
</table>

Students as Editors

Frequently, the discussion surrounding undergraduate research journals focuses on the benefits to students as authors, but we believe that the more intensive learning comes from involving students as editors on their own journal. It is a unique and rich experience, giving students exposure to the behind-the-scenes operations of a real scholarly journal. And there is evidence that students value “learning about scholarly communication in the context of ‘real-life’ research experiences.”12

Editors also witness the rigors of the peer review process—but from a different angle. Over the course of an academic year working on the journal, student editors will manage several papers through the publishing process, from submission to publication. They will see a range of reviewer behaviors, from careful and constructive to harsh and overly critical. It is an entirely realistic introduction to peer review. Editors need to develop skills of diplomacy and discretion in interacting with these reviewers, as well as in selectively communicating their comments to the authors. Delivering negative news, including rejection, is an especially delicate skill that students have an opportunity to develop and practice.
An accepted paper will usually undergo significant revisions. The editors work with the authors to ensure that the revisions are made and other copyediting is done. Evaluating academic writing and providing constructive feedback are not skills commonly addressed in classrooms. Through the revision process, editors are developing their abilities to “critically evaluate contributions made by others in participatory information environments,” a knowledge practice in the “Scholarship as Conversation” frame. Students are learning highly transferable communication, writing, editing, and critical-thinking skills in an immersive environment. One editor remarked, “In three years of school I have had almost zero experience reading other students’ work. Identifying the strengths and weaknesses in other undergraduate work has greatly improved my own writing.”

Running a journal is a team effort, and team members need to be in continual communication to facilitate the collaboration. USURJ student editors work in disciplinary teams led by another undergraduate student who acts as the senior editor for their section. The sections meet weekly to discuss the papers under their purview. It is a considerable time commitment for busy undergraduates, and they need to adhere to strict and sometimes tight timelines to meet publication schedules. This involves the collaboration of team members and the leadership of the senior editor to ensure all members of the section are engaged and on track, which can be challenging during lull times when waiting for reviews or revisions. One student editor noted, “[Teamwork] wasn’t my motivation at the beginning, but I really grew to appreciate the team dynamic.” Student editors also receive mentorship in their activities from the editors-in-chief, graduate student advisors, and staff and faculty advisors. USURJ is a student-run journal, but the advisors invest considerable time in guiding and facilitating the students’ work.

From our annual survey results, approximately half (21) of all editors from 2015 to 2017 reported on learning similar writing skills to authors, in addition to topics specifically related to editorial work. One editor commented, “Working together with others definitely helped me improve my writing.” Possibly due to the regularity, depth, diversity, and range of work they did throughout an eight-month period, editors had more positive responses, showing richer and deeper learning compared to authors (see table 20.2). As noted, most research around student learning outcomes for undergraduate research journals has focused on authors’ experiences. If our surveys are any indication, editors have a richer learning experience compared to authors, further enhancing their self-identification with scholarly producers.
TABLE 20.2  
**USURJ Editor Learnings**

<table>
<thead>
<tr>
<th>“I LEARNED”</th>
<th>Positive Response (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>About the process for publishing an article</td>
<td>100</td>
</tr>
<tr>
<td>How to evaluate the credibility of authors of articles</td>
<td>92</td>
</tr>
<tr>
<td>When to cite other authors in a paper</td>
<td>79</td>
</tr>
<tr>
<td>How to use at least one formatting and citation style</td>
<td>75</td>
</tr>
<tr>
<td>How to work collaboratively</td>
<td>100</td>
</tr>
<tr>
<td>How to write constructive feedback</td>
<td>96</td>
</tr>
<tr>
<td>How to use Open Journal Systems</td>
<td>96</td>
</tr>
<tr>
<td>How to edit in groups</td>
<td>100</td>
</tr>
<tr>
<td>How to prepare my own work for publication</td>
<td>100</td>
</tr>
<tr>
<td>How to communicate with professors</td>
<td>96</td>
</tr>
<tr>
<td>How to write about research for an informed public audience</td>
<td>92</td>
</tr>
<tr>
<td>The process for publishing an article in a scholarly journal</td>
<td>96</td>
</tr>
<tr>
<td>How scholarly publication contributes to the research community</td>
<td>75</td>
</tr>
<tr>
<td>How to support points with evidence</td>
<td>92</td>
</tr>
<tr>
<td>How to revise intensively, following reviewer feedback</td>
<td>100</td>
</tr>
<tr>
<td>How to cite and document a paper properly</td>
<td>79</td>
</tr>
<tr>
<td>How to improve the organization of a paper</td>
<td>100</td>
</tr>
<tr>
<td>How to write a better abstract</td>
<td>71</td>
</tr>
</tbody>
</table>

**Student Intentions versus Outcomes**

Student editors have many motivations and expectations when applying to work on the journal, as do student authors. We were curious to know whether the authors’ reasons for submitting work to the journal—and the editors’ reasons for getting involved with the journal—were satisfied and whether there were unintended outcomes for them. This is what we learned from the annual surveys.
Authors

Of the options given, the strongest reason for authors (47) submitting their work was around developing their skills to an end: CV-building or applying for graduate studies. Of authors, 66 percent wanted to “gain skills for graduate studies,” with 43 percent reporting that they did. In submitting their work, most wanted to “build a stronger CV or resume” (89 percent) and 70 percent felt that they did.

Other highlights included the following:
- 36 percent wanted a challenging learning experience, and 38 percent felt that they did get one.
- 47 percent wanted to be competitive as a graduate school applicant and 1 percent (4 out of 47) used the process of review or publication to get into graduate school.\(^\text{16}\)
- 34 percent wanted more intensive feedback on their work, with 36 percent feeling that they got that feedback.
- 81 percent wanted to learn more about academic publishing or publication processes, with 77 percent feeling that they did.

Editors

Particularly relevant to this chapter, of the editors (21) surveyed, the strongest reasons for applying to work with the journal were wanting to “contribute to a culture of undergraduate research on campus” (95 percent) and holding an “interest in publishing and publishing processes” (90 percent). By the end of the year, all respondents felt that they did contribute to the culture of undergraduate research and had satisfied their interest in publishing. Of the editors, 91 percent wanted to improve their editing and proofreading skills, and 86 percent felt that they did.

Interestingly, working on a team toward a goal was not a huge motivator (24 percent), but 76 percent felt that they did so. In the same vein, 43 percent wanted a connection with other students interested in research or publishing, and by the end of the year, 52 percent felt that they made that connection. Only 29 percent were motivated by wanting to connect with faculty, but 43 percent felt that they gained that connection. One student editor commented, “I really enjoyed working as an editor with USURI. It was a great experience and I was able to develop a network of research-oriented people.”

Other highlights included the following:
- 48 percent wanted to help other students, and 76 percent felt that they did.
- 48 percent wanted to get student work out there, and 81 percent felt that they did.
• 66 percent wanted to be competitive as graduate school applicants; 14 percent successfully used the experience to get into graduate school.\(^{17}\)

• 52 percent wanted a challenging learning experience; 66 percent felt that they gained a challenging learning experience.

In sum, author and editor feedback contributes to our understanding of the depth of learning experienced for each, which helps us to understand how to increase student involvement with the journal, realize learning outcomes, and assist returning editors and editors-in-chief in creating a more meaningful experience. Furthermore, it helps us to articulate the value of USURJ to our funders.

**Transferable Skills**

Whether as an author or an editor, students develop numerous transferable skills by being involved in the production of an undergraduate journal. These transferable skills are often called “graduate attributes” in the higher education sector. Hill and Walkington define graduate attributes as “a framework of skills, attitudes, values and knowledge that graduates should develop by the end of their degree programmes.”\(^{18}\) Such competencies are intended to help students succeed after graduation—whether academically in graduate school or in their careers outside academia—and, of course, as informed and productive citizens. At the U of S, graduate attributes clearly map to what we call “Core Learning Goals” in the Learning Charter.\(^{19}\) This document provides a framework to optimize student learning on campus and is intended to guide the development of further policies for teaching and learning.

Several of the Core Learning Goals in the U of S Learning Charter can be met by student involvement in USURJ, including the following:

• Apply critical and creative thinking to problems, including analysis, synthesis, and evaluation.

• Utilize and apply their knowledge with judgement and prudence.

• Exercise intellectual integrity and ethical behaviour.

• Recognize and think through moral and ethical issues in a variety of contexts.

• Communicate clearly, substantively, and persuasively.

• Share their knowledge and exercise leadership.\(^{20}\)
The students that seek out publishing or editorial opportunities with *USURJ* tend to be high achievers with plans to continue to graduate school. A published article or editorial experience is an impressive inclusion on a CV or graduate school application, but the students are also simply better prepared for a research career. They have an insider understanding of how scholarly publishing works. This means that when they submit future research to professional journals, they are better prepared for potentially harsh reviews of their work, several rounds of revisions and editing, and long wait times until publication. In our surveys, one *USURJ* editor remarked, “I learned so much about the process of creating an academic journal. I had no idea what to expect going in and was very pleased.”

Some of our students will not go on to become researchers, but teaching them about scholarly communication issues through participation in an undergraduate research journal will ensure that they “become better information consumers. Their ability to critically evaluate what they read is instantly valuable in all aspects of life, regardless of their profession.”

**Articulating Value**

In these times of budget reductions and increased emphasis on outcomes, it is becoming vitally important for academic libraries to demonstrate their value to their institutions and other stakeholders.

**Benefits to Library and Writing Center**

Producing an undergraduate research journal is an opportunity for libraries and writing centers to articulate their value through concrete support of the research mission and specific strategic initiatives of the institution.

The 2013 ACRL white paper *Intersections of Scholarly Communication and Information Literacy: Creating Strategic Collaborations for a Changing Academic Environment* emphasizes the need for academic libraries to develop new collaborations on campus to lead our constituents in responding effectively to the rapidly changing digital information environment. The white paper argues that this is a role that is uniquely situated to libraries and where we can demonstrate leadership and articulate our value to the university and academia—especially at a time when many question the purpose and continued existence of a library.

In order for academic libraries to demonstrate alignment with and impact on institutional outcomes, librarians must accelerate the transition to a more open system of schol-
CHAPTER 20

arship and transform student learning, pedagogy, and instructional practices through creative and innovative collaborations.24

As noted above, USURJ is based in the writing center, part of the University Library, but is also supported by the OVPR and Graduate Studies, a partnership that evolved over time, due in no small part to the efforts and advocacy of staff and student champions within Student Learning Services and the OVPR. This collaborative partnership among several units is vital to the sustainability of the journal, both financially and through the yearly turnover of undergraduate student editors. But the collaboration also helps the broader campus community understand the contributions of the library and writing center to the research mission of the institution. As Hensley, Shreeves, and Davis-Kahl report from their survey of campus coordinators of Undergraduate Research Programs, libraries are “well positioned to provide the intellectual and technical infrastructure support for the dissemination of undergraduate research; and, where these services are offered, they were of high value to the respondents.”25 The authors also predict the demand for libraries to offer these services will continue to increase.26

Research output is another strategic consideration of most higher education institutions. The U of S is a member of the U15 group of research-intensive universities in Canada. As such, it experiences considerable pressure on each college of the institution to contribute to the production and dissemination of original research to maintain this status. The University Library at the U of S is a college and faces the same pressure. Our librarians are faculty and researchers. They conduct research and disseminate the results, but have substantially less time allocated for these activities compared to teaching faculty, so output is lower. Therefore, the other ways that the library supports research output on campus increase in significance. Contributing to the success of researchers, scholars, and practitioners is a Core Strategy of the University Library’s Strategic Plan.27

Benefits to Institution

Undergraduate research activities are good examples of high-impact educational practices. These are teaching and learning practices that have been shown to be beneficial to university students from a wide range of backgrounds.28 High-impact practices (HIPs) are effective because they typically involve experiential or active learning situations that provide opportunities to integrate, synthesize, and apply knowledge, thus engaging students in deep, meaningful learning. These activities often culminate in some kind of performance or other output.29 It can easily be seen how undergraduate jour-
nals fulfill this last criterion. HIPs also create circumstances where students interact with faculty and other students on a substantive task over an extended amount of time—often requiring them to devote considerable time and effort to the task. This deepens the student’s investment in the task and its outcome and understandably increases his or her engagement. The editorial teams working on USURJ would appear to fit this description as well.

HIPs have been shown to increase rates of student retention and engagement, so they are of great interest to university administrators. One assessment even established a connection between student success and participation in an undergraduate research journal. And Hensley, Shreeves, and Davis-Kahl assert that “there is a growing body of evidence indicating that scholarly disengagement can be reversed when students participate in high-quality, discipline-oriented undergraduate research programs.” Furthermore, undergraduate research initiatives and journals have the potential to be used as recruitment tools to attract bright prospective students or in fundraising campaigns as a good news story about innovative research. The U of S has promoted its Undergraduate Research Initiative (URI) in recruitment activities, and it has proved to be a popular topic among potential students.

The URI, a collaboration between the OVPR and the Office of Vice-Provost Teaching and Learning (OVPTL) at the U of S, promotes undergraduate involvement in original research on campus and provides some funding each year to USURJ. The journal clearly supports the mission of the URI in providing students with a local outlet to which to submit the results of their research. USURJ is not alone; many universities now support undergraduate research journals. The Council on Undergraduate Research (CUR) maintains a lengthy list of such journals. There are numerous benefits to institutions in establishing and supporting undergraduate research journals.

**Benefits to the Academy**

Perhaps the most obvious benefit to academia in general is the preparation of students for graduate school, then as early career researchers. The Boyer Commission recommended that “as undergraduates advance through a program, their learning experiences should become closer and closer to the activity of the graduate student.” Ideally, these experiences would enable the smooth transition from senior to graduate. Indeed, the College of Graduate and Postdoctoral Studies at the U of S is particularly excited about the role that USURJ plays in nurturing future graduate students. Graduate students who have some prior experience in the research and publication process are likely to be more successful. There are major changes developing in the scholarly communication system though, and students need to be prepared for these, too.
The current journal publishing system is inequitable and financially unsustainable. Librarians have been advocating for change to this system for more than a decade now, but our primary audience for this kind of advocacy has been those who are most active in disseminating research: graduate students and faculty. We need researchers as allies since they are major stakeholders in the system and have more real power to bring about fundamental change. However, culture in academia is entrenched in tradition and slow to change. But “libraries have an opportunity to engage and influence future scholars during the formative undergraduate research process.” It is our hope that engaging undergraduates in these issues during their work on USURJ will create future champions for positive changes in journal publishing.

Undergraduate students are a prime audience for outreach and education efforts around scholarly communication issues. They are highly aware of the cost of their education and resources that support and enrich it, especially when it comes to the cost of textbooks and student loans. College students are also highly attuned to issues of social justice and are more likely to be involved in civic engagement initiatives.

An overhaul of the scholarly publishing system is a long-term benefit to the academy as a whole—in efficiency, equity, and cost-effectiveness.

**Benefits to Society**

Graduates with attributes outlined above have the potential to be better citizens overall, benefiting society. Universities are under pressure to show stakeholders how they produce graduates with qualities that are useful to society and that prepare them for life after graduation, whether that be in the workforce or in graduate school. Information literacy skills that students learn while working on USURJ, such as critically reading and evaluating information, will enable them to be better information consumers. This is especially important today as disreputable publishers and fake news outlets proliferate online.

**Good Practices**

Advice for journal editors is abundant online but typically directed at those involved with traditional scholarly publishing outlets. These best or good practices include guidance for editors on dealings with authors, reviewers, and the journal’s publishers or owners and advice on various ethical and policy considerations (for example see COPE’s Code of Conduct and Best Practice
Guidelines). While many of these topics can inform library staff who are supporting undergraduate research journals, there are also unique concerns that such advice does not address. The first three years of USURI were not without bumps in the road, but staff involvement and a stable home for the journal has made that road smoother with each passing term. In the setup of a student journal, there is an array of one-time tasks—some challenging and some simple—that we assisted student editors with in the early days. These tasks include setting up hosting; registering in the Directory of Open Access Journals; completing Open Journal Systems site setup; beginning the construction of a reviewer database; creating peer review, copyright, privacy, and security policies; crafting author guidelines; obtaining an ISSN; creating layout templates and publication agreements; designing a workflow; and assigning DOIs. After these one-time tasks, the ongoing help of staff has been invaluable in meeting the shared challenges of journal sustainability and quality.

Maintaining Journal Quality

Staff involvement, whether it is from writing centers, libraries, or faculty, can translate to improved undergraduate research journal quality. It is important, though, that staff and faculty do not sweep in to “fix” problems, but rather they should teach and mentor students to be independent as time goes by. For the maximum educational benefit to editors, undergraduate journals should be student-run. Library, faculty, and writing center professionals, often published authors themselves, can mentor student editors in

- editing and proofreading processes and group editing strategies and logistics
- vetting papers
- imparting knowledge about information literacy, researcher profiles, new media, and research skills
- educating around academic integrity and citation practices
- understanding copyright and open access
- demystifying the world of scholarly publishing, making it less intimidating
- interpreting reviews
- assisting with technical infrastructure
- assisting with crafting constructive feedback and delivering negative news
- finding reviewers (Staff and faculty are more likely to have established networks and can encourage student editors not to be intimidated.)
- articulating transferable skills in CVs and learning portfolios
This mentoring makes for a richer educational experience for student editors and reduces the chance that they will lose interest in the endeavor as they wait long days for a reviewer or author response or struggle with unexpected communication and editing demands.

**Ensuring Journal Sustainability**

Writing center and library support for undergraduate research journals is not unprecedented. According to an environmental scan currently being conducted, 13 percent of the fifty-one North American undergraduate research journals surveyed work with a writing center or a writing program, and 41 percent work with libraries or librarians. The involvement of staff and faculty effects better continuity for undergraduate journals, which tend to have spotty publication records and cohorts of students with different levels of enthusiasm, morale, and commitment from year to year. Weiner and Watkinson, writing about the *Journal of Purdue Undergraduate Research (JPUR)*, emphasize concerns about sustainability in the formation of their journal (emphasis ours):

> How to sustain a new publication was one of the central topics of discussion of the faculty group. An analysis of the list of undergraduate research journals on the Council for Undergraduate Research (CUR) website revealed that almost half of the 65 publications listed in 2009 either had broken links or displayed “current issues” over two years old. A consistent feature of the journals that were struggling was that they appeared to be entirely student-run, with the inevitable problems of staff turnover, while successful and sustainable publications always had a permanent home within the institution, usually within a dedicated office of undergraduate research.

*JPUR* is student-produced but works through a partnership between the university’s press and libraries, the Purdue Writing Lab (Department of English), and the marketing and media office. Also noting the risk of discontinuity for undergraduate journals, Buckland advocates “partnerships with faculties or departments [to] help prevent the fly-by-night publication of journals” and emphasizes the “importance [of] someone in the faculty who will ensure that when the current editors of the journals graduate, there is someone to step into their place.”

Of course, though Buckland emphasizes faculty involvement, staff involvement can effect the same continuity, as we have seen in the context of
Our involvement in USURJ has affected sustainability and continuity, as we possess skills and abilities in

- managing the turnover of undergraduate editors via record keeping and established hiring practices
- helping student editors to navigate the practicalities of physical space: booking rooms for editing, events, information sessions, meetings, and training
- assisting with the maintenance of morale (Staff involved can take the long view as they have seen the kinds of twists and turns that are a normal part of journal management, including waiting for faculty reviewers and dealing with disgruntled authors.)
- helping to troubleshoot Open Journal Systems, or other journal management systems, as these platforms tend to be unintuitive and challenging to the occasional user
- remembering and keeping records of traditions and celebrations held from year to year (For example, USURJ has two student-run receptions annually, and without the help from staff, some of the logistics and challenges might be a deterrent to editors who are already busy with journal management.)
- advocating for the journal in terms of funding, for example, in helping to prepare reports and structure assessment in a consistent way from year to year (Staff could advocate for increased Undergraduate Research Initiative funding for USURJ in its third year and for multiyear funding from the College of Graduate and Postdoctoral Studies.)

Conclusion

Library, faculty, and staff involvement can contribute to the sustainability of a student journal, provide a richer learning experience for authors and editors, and improve its quality. In turn, a strong undergraduate journal helps to fulfill common institutional priorities, around such areas as research intensiveness, student retention and engagement, and learning outcomes. As student authors and editors can begin to see themselves as content creators, not just consumers, their involvement in scholarly dissemination activities fulfills many objectives in the ACRL Framework for Information Literacy, particularly in the frames “Information Has Value” and “Scholarship as Conversation.” Stephanie Davis-Kahl writes, “Though student journal publishing requires a high degree of faculty-librarian-student dedication, time commitment, and investment of financial and human resources, it can be a valuable and exciting experience for all involved.” In articulating their value to oth-
ers, librarians, faculty, and writing center coordinators might also realize the value to themselves. Helping student scholars is energizing in that it reminds us of why we do the work we do, and the endeavor can bring richness and learning to us as professionals and scholars. We have been fortunate to see journal development through the eyes of developing scholars and have grown professionally and have gained deeper insights into the assumptions, practices, and traditions of the scholarly marketplace.

Notes
5. Many survey questions referred to in this paper were the same as those shared by Weiner and Watkinson, “What Do Students Learn,” 17–31.
11. We surveyed authors regardless of whether they had only submitted and then were rejected outright; had gone through the review process but had not been published; or had been published. Future surveys will compare the responses to these categories.


15. Ho, “Creating and Hosting Student-Run Research Journals.”

16. We administered the survey in the spring, before final exams, and not all authors were graduating, applying to graduate school, or already receiving replies to graduate school applications.

17. The survey was given in spring, before final exams, and not all editors were graduating, applying to graduate school, or already receiving replies to graduate school applications.


20. University of Saskatchewan, “Core Learning Goals.”


41. Hill and Walkington, “Developing Graduate Attributes through Participation.”

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