

Improving Learner-Driven Teaching Practices through Reflective Assessment

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[See table of contents](#)

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Article abstract

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Results – We reflect on five different learner-driven teaching practices: co-creative syllabus design, learner-defined personal learning goals, soliciting and responding to learner feedback, interdisciplinary discussions and exercises, and self-evaluation. We discuss improvements and refinements that we implemented in response to our reflective assessment, including more frequent checking in with students; more clarity regarding self-evaluation and grading; one-on-one meetings with all students; allowing students to negotiate, discuss, and determine assignment deadlines and dates; more flexibility with students' work products; and increased pedagogical transparency. As a further result, our reflective process models an approachable framework for engaging in reflective assessment.

Conclusion – This paper presents a model for reflective assessment of teaching in an academic library. We present a discussion of learner-driven teaching practices, and we offer a practical pathway for other teachers and practitioners to assess their teaching. We find that reflective assessment is an effective and insightful approach for understanding and improving learner-driven teaching practices.

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Research Article

Improving Learner-Driven Teaching Practices through Reflective Assessment

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Introduction

As academic librarians continue to assume the role of teacher—in both traditional reference and bibliographic instruction contexts, and in delivering credit-bearing courses—the role of teacher assessment will continue to become more important. At Montana State University (MSU), library faculty members regularly teach credit-bearing courses on topics related to information science, including library research skills, data curation, information ethics, and privacy. To improve our teaching practice, we have followed an approach of reflective assessment.

This article demonstrates a reflective practice to assess teaching practice. Our individual and shared experiences led us to articulate and cohere around a shared viewpoint: to develop

and improve learner-driven teaching practices. We evaluate via reflective assessment six learner-driven teaching practices that we employ in our teaching. We find that reflection is an effective method of teacher evaluation, serving as an approach for assessing pedagogy, generating insights, and connecting with colleagues, ultimately supporting meaningful transformation of teaching practice. In reference to credit-bearing courses taught by librarians, Burke (2012) noted that many librarians “find developing assessment tools daunting” (p. 169) due to insufficient teacher training. In sharing our own approach to reflective assessment of teaching, we consider this paper a response to Burke’s call: “the author hopes that librarians, who have developed successful assessment strategies, will share their experiences with the larger academic library community in the not too distant future” (p. 169).

Literature Review

Librarians as Teachers

Vassilakaki and Moniarou-Papaconstantinou (2015) identified six emerging roles for information professionals, one of which is “Librarian as Teacher” —referring to librarians’ active engagement in teaching and learning processes. In academic libraries, forms of teaching can vary widely, from providing workshops and guest presentations to teaching semester-long, credit-bearing courses. As Vassilakaki and Moniarou-Papaconstantinou wrote, “it appears that librarians as teachers assume a range of responsibilities associated with teaching and learning and, thus, their educational role continues to develop in a way that incorporates them entirely into the academic community” (p. 41). Cohen et al. (2016) identified credit-bearing courses as the least common form of teaching performed by librarians, amounting to only 19% of library teaching efforts, but also suggest that there is “growing recognition of the teaching mission of the library on campus” (Cohen et al., 2016, p. 576). Similarly, Loesch (2017) described the foundations of library research assistance as being essentially oriented toward teaching learners, solidifying the role of teacher as an appropriate and even fundamental function for librarians. The Association for College and Research Libraries (ACRL) (2017) also articulated the role of librarian-as-teacher, emphasizing “activity in the classroom or other instructional environments where the librarian interacts directly with learners.” In this role, librarians enter the instructional environment prepared to deliver learner-centered instruction, establish goals and learning outcomes, employ “innovative instructional techniques and tools,” and perform assessment. Of note, librarians demonstrate “enthusiasm for teaching and learning and a commitment to professional development, lifelong-learning, and reflective practice” (“Teacher” section, bullet 6). The landscape of librarian-as-teacher is promising for further reflective investigation.

Assessment of Teaching in Academic Libraries

Analyses of teacher evaluation methods are well-represented in the literature. Ackerman, Gross, and Vigneron’s (2009) comprehensive review of the literature succinctly highlighted serious concerns surrounding common assessment methods such as student evaluations of teaching and peer observation reports, especially as related to validity, bias, subjectivity, and abuse. Subsequent research has demonstrated student evaluations of teaching to be inaccurate and problematic, especially as they are likely to reflect biases such as racial and gender stereotypes (Boring, 2017; Hornstein, 2017; Mengel, Sauermann, & Zölit, 2019; Mowatt, 2019). Assessing one’s own teaching can also potentially be “time consuming, daunting, and disheartening” (McCartin & Dineen, 2018, p. 47). Assessment of teaching is further complicated by the unique role of the librarian-teacher. In a 2012 study, respondents to the authors’ survey reveal a somewhat cynical perspective: “feedback is often collected randomly . . . in the event that there would be a need to ‘prove my success as a teacher someday’” (Cunningham & Donovan, 2012, p. 198) rather than to demonstrate an impact on student learning or to improve teaching. The question of who owns the assessment process is also a paramount consideration: those engaging in teaching assessment must assume personal ownership of the process in order to support personal responsibility and investment in the outcomes (McGivney, 2017). In light of these concerns related to traditional methods of teacher assessment, alternate modes of assessment—such as reflective assessment—can serve as a model for an intentional assessment practice that can improve teaching practice.

Reflective Assessment in Libraries

Reflection is a process of thinking about ourselves and the world (Reale, 2017). It can also be a legitimate method of assessment (Moon, 2004). Black and Plowright (2010) offered a working definition of reflective assessment:

“Reflection is the process of engaging with learning and/or professional practice that provides an opportunity to critically analyse and evaluate” (p. 246). Macaluso (2014) furthermore told us that “the greater purpose of self-reflection is to develop a sense of where one’s strengths and areas for improvement lie and what steps one might take to improve or grow as an educator” (p. 124). Within this frame, the growth-oriented act of reflection becomes a legitimate tool of assessment (Graf & Harris, 2016).

Reflective practice, however, has not always been present within librarianship. In calling for a practice of reflection, Doherty (2005) noted that librarians at that time were “not very reflective practitioners” (p. 12). Six years later, Booth (2011) identified reflective practice as an element of effective instructional literacy and called for librarians to reflect upon prior experience as an act of assessment that can improve future teaching and learning. And more recently, Corral (2017) demonstrated that reflective practice is an emerging standard for teacher-librarians, as represented in textbooks, journal literature, and case study analysis that focuses on the adoption of reflection to plan, evaluate, and improve instruction; identify professional development needs; and foster a reflective teaching culture.

At this point, the act of reflection can be found across librarianship (Association of College and Research Libraries, 2016), and particularly within the context of information literacy and instruction (Downey, 2016; Tewell, 2018). For example, McCartin and Dineen (2018) describe an assessment practice that empowers students as participants in their own learning and assessment, along with reflective teacher self-assessments. They write that “continual assessment of teaching is essential to professional growth” (p. 47), noting that dialoguing with peers is a fruitful approach for reflective assessment. For Sen and McKinney (2014), reflective writing proved effective for assessing information literacy among

undergraduate students, who reflected on their own actions past and present while looking forward to future learning and professional practice. And for Deitering, Rempel, and Jensen (2018), reflection was a successful element of assessment within a cohort of graduate student instructors.

Background and Institutional Context

In this section, we describe our institution, the classes that we reflected upon, and a statement about our teaching philosophy, which centers around learner-driven pedagogy.

MSU is a mid-sized, land-grant university. MSU has a Carnegie classification of “very high research activity” and a “very high undergraduate” enrollment profile (Carnegie Classification of Institutions of Higher Education, 2020). In 2019, the university enrolled 16,766 students and employed 600 tenure-track faculty, 14 of whom are in the library. The MSU Library offers courses under the LSCI rubric. One course, *LSCI 121: Library Research Skills* is permanently numbered and is offered every semester. Other courses offered are usually “Special Topics” courses that are only offered once or twice.

Courses

The courses assessed in this paper are:

- *LSCI 121: Library Research Skills*
 - Library Research Skills is a course focusing on both the concepts and skills needed to conduct library research with an emphasis on electronic information sources. This course is offered every semester, has been taught in multiple modalities (face-to-face, online, and blended), and is required for some majors. Undergraduate students—most often first and second year—from a variety of majors typically enroll in this course.

- This course was taught by Young in Spring 2015, Mannheimer in Spring 2017, and Regan in Spring 2018, Fall 2018, and Spring 2019.
- *LSCI 491: Contemporary Approaches to Community Building Using Social Media*
 - This course looks at social media from the perspectives of information analysis and community building. Utilizing a service learning approach, students engaged in the theories and methods related to social media community building through both in-class discussion and community outreach. This special topics course was not required; 24 undergraduate students from a variety of majors enrolled in the course.
 - This course was taught by Young and co-teacher Doralyn Rossmann in Fall 2016.
- *HONR 494: Information Ethics and Privacy in the Age of Big Data*
 - This course focused on ethical theory and practice from an interdisciplinary perspective by examining the ethical guidelines of various fields, with an additional focus on practical skills related to privacy on the web. This course was an upper-division undergraduate seminar taught for the Honors College. Eleven students from 10 different majors enrolled in the course.
 - This course was taught by Young and Mannheimer in Spring 2018.
- This course uses hands-on activities to teach strategies for active curation and management of data, covering a broad range of practical and theoretical issues in the emerging field of data curation. This special topics course was taught for the first time in Spring 2020; six students enrolled in the course—all undergraduate juniors and seniors majoring in computer science.
- This course was taught by Mannheimer and co-teacher Jason Clark in Spring 2020.
- *LSCI 291: Technology, Ethics, and Society*
 - This course examined ethical issues in the development, testing, and implementation of emerging technologies. Students learned about a variety of different technologies and their potential applications, including CRISPR, synthetic biology, reproductive technologies, food technologies, geoengineering, artificial intelligence and autonomous systems, robotics, the internet of things (e.g. smart cities), social media, and other information technologies. This special-topics course was not required; 13 undergraduate students from a variety of majors enrolled.
 - This course was taught by Young and Mannheimer, and co-teachers Kristen Intemann, Mary Ann Cummings, and Brock LeMeres in Spring 2020.

We then applied our reflective assessment insights to the following courses:

- *LSCI 121: Library Research Skills*
 - This course was taught again by Regan in Fall 2019.
- *LSCI 391: Data Curation for a Data-Driven World*

Teaching Philosophy: Learner-Driven Teaching

As librarians and teachers, we draw together a wide range of interests and sources that inform our pedagogical viewpoint and teaching practices, focusing on social responsibility, participation, and power sharing. These sources include LIS professional values, feminist ethics,

constructivist theory, transformative learning, and participatory design.

The American Library Association (ALA) stated core values of *democracy* and *social responsibility* (American Library Association, 2019) guide us toward a commitment to sharing power with students and supporting justice in the classroom. The ACRL Framework for Information Literacy for Higher Education (Association of College and Research Libraries, 2016) further inspires us to consider that in the current information ecosystem, learners “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” (p. 7). Individual practitioners within the LIS profession also influence our thinking, particularly conversations around the ethics of care (Nowvieskie, 2015), described as an “intentionally feminist ethical framework centering relationships and emotion” (Dohe, 2019, “Whither the ethics of care” section, para. 1). We look beyond our discipline for additional guidance and inspiration. The professional practice of participatory design is important, as it centers on a “commitment to designing futures that challenge power relationships and transform patterns of exclusion and social injustice” (Robertson & Wagner, 2013, p. 68).

We also look to established learner-driven and power-sharing strategies to guide our teaching. For example, constructivist theory suggests that new learning builds on prior knowledge (Good & Brophy, 2008). By understanding students’ past experiences, we can build a trajectory of learning that connects prior knowledge to the current learning objectives, and then extends to a lifelong pattern of curiosity, connection, and knowledge-building (Mannheimer & Banta, 2018). In our approaches to learner evaluation, we are influenced by the idea of “grade contracts” that provide learners with some guidance for expectations and paths of improvements (Danielewicz & Elbow, 2009;

Posner, 2015). We are also influenced by Trede and Smith (2014), who marked out the complexities and power differentials of grading, recommending “transparent and self-questioning assessment dialogues amongst assessors as well as between assessors, the assessed and those who design assessments” (p. 165). The concepts of minimal grading (Berns, 2020; Elbow, 1997) and “ungrading” (Ferguson, 2013) are also influential to us, providing alternatives to traditional grading structures. In practice, these ideas are built on a foundation of trust. In developing a pedagogy of participation, Stommel (2017) said to “start by trusting students” (para. 3).

In evaluating our own teaching, we look to Mezirow’s (1990) theory of transformative learning as inspiration for applying reflective assessment as a way to improve teaching practice. As Reale (2017) described Mezirow: “reflection paves the way for deep understanding in the form of transformative learning. As we teach, we must also think of ourselves as learners, in and among our students and colleagues” (p. 84). The practice of reflection is therefore critical not only for improvement and growth, but also for creating space for participation and trust in ourselves, each other, and our students—all as both teachers and learners together.

As a statement of teaching philosophy, we approach our teaching through the lens of participation and trust for everyone involved in the learning process. Our foundational positionality and experiences inform our reflective practice, in particular, all three authors are committed to sharing power with students in order to support a trusting, inclusive, and participatory classroom. This power-sharing is foundational to our teaching practice and is the main subject of the reflective assessment described in detail below. By sharing power with students, we support students as co-creators in their own learning and assessment, and we also empower ourselves to self-assess

our own teaching practice in order to build and strengthen trust and participation.

Assessment Aim

In applying the connected strands of teacher assessment, librarians as teachers, and reflective assessment, we sought to use reflective assessment as a method for evaluating our learner-driven teaching practices. Our main research question can be formulated as follows: As teachers, how can we apply reflective assessment to improve learner-driven teaching practices that empower students as trusted participants in their own learning and assessment?

Methods

Reflective Assessment with Colleagues

Within the broader methodology of reflective assessment, we specifically followed the method outlined by Reale (2017). After reviewing the literature on reflective assessment, we selected Reale to guide our practice because she is an LIS researcher, teacher, and practitioner—as are the three of us. Furthermore, not only is Reale’s reflective practice rooted in the LIS profession, but she also offers specific approaches for a reflective practice with colleagues. In our case, we wanted to co-develop our learner-driven teaching practices as colleagues. Reale (2017) stated that “when we reflect together, we have esprit de corps, and we understand that reflection on our practice, both together and alone, is an added value to our teaching” (p. 82). Reale’s approach is conversational and emergent, and she acknowledges that some may dismiss this approach as just a regular meeting. But a reflective assessment meeting is not a regular meeting—reflection happens “with both the explicit and implicit intention that we will improve our practice” (2017, p. 83). Thus it is the conscious intentionality towards improvement that defines the rigor of reflective assessment for Reale, and for us as well. The data that we produced during our reflective dialogues form

the basis of our evidence based approach for assessing and improving our learner-driven teaching practices. As an example of reflection, Reale (2017, p. 99) described how tangible evidence is produced through a deliberate attention to process that involves both questioning and answering oneself through guided writing. In this model, the reflective dialogue (Regan, Young, & Mannheimer, 2020) is the evidence that we interpret to assess our teaching. We have attempted to model Reale’s approach to reflective assessment in a way that demonstrates an approachable method for assessing teaching with colleagues.

As a scope for conducting our own reflective assessment, we focused our reflections on our individual and shared experiences in implementing learner-driven practices while teaching undergraduate credit-bearing courses in a variety of topics in library and information science, including library research skills, data curation, information ethics, privacy, and social media. Our reflective outcomes were co-developed through a series of dialogues and discussions among our author group, described in more detail in the procedures section below.

Procedures

In the subsections below, we provide a description of our step-by-step procedures for conducting reflective assessment, summarized in Table 1. Our author group conducted our procedures in Summer 2019, after the close of the spring semester, with a view toward preparing for future teaching semesters.

1. Articulate shared viewpoints and goals.

Our author group came together in coherence around a shared viewpoint related to a learner-driven pedagogy. In our initial meeting, we articulated our foundational positionalities in order to identify a shared foundation for reflection. For us, our aim was to support a learner-driven classroom by more intentionally

Table 1
Overview of Reflective Assessment Procedures

Procedure	Description
Cohere around shared viewpoints	Our author group came together in coherence around a shared viewpoint related to power sharing and learner-driven pedagogy.
Identify teaching practices for reflection	Through conversation, we identified five teaching practices that we wanted to explore further using our reflective process.
Conduct reflection	After responding individually to a set of reflective prompts, we compiled our responses into a single document for review and discussion.
Discuss and analyze reflections to produce insights	We met over several sessions to dialogue through our reflective narratives, analyze our ideas, and develop shared insights.
Apply insights to improve teaching	To close the assessment loop, we applied our reflective insights to improve learner-driven teaching practices.

and effectively sharing power with students. We aimed to apply an assessment method that could help us understand our own and each other's teaching practices, and to make improvements based on reflective insights. Our goals for conducting a reflective assessment of our teaching are drawn from Moon (2004), which included building shared understanding, a process of review, and action in the form of continuing development of teaching practices.

2. Identify Teaching Practices for Reflection

To identify practices for reflection, we asked ourselves, "What are the practices that we employ to share power with students and support a learner-driven classroom?" Through conversation, we identified five teaching practices that we wanted to explore further using our reflective process:

1. Co-creative syllabus design
2. Learner-defined personal learning goals

3. Soliciting and responding to learner feedback
4. Discipline-based discussions and exercises
5. Self-evaluation

Each author has separately applied these practices in the classroom. This allowed us each to bring our independent experiences together around shared practices in our reflective dialogue.

3. Conduct Reflection

We structured our reflective practice around a subset of prompts offered by Reale (2017), who notes that "these are the kinds of questions that can initiate and support reflective thinking and learning" (p. 88):

1. What previous approaches have worked for you? What approach would be its opposite?

2. What limits would you like to break through?
3. What data are you seeing, and what story are you telling yourself?

The courses assessed in this paper are *LSCI 121: Library Research Skills*, *LSCI 491: Contemporary Approaches to Community Building Using Social Media*, and *HONR 494: Information Ethics and Privacy in the Age of Big Data*. Among Reale’s full set of eight reflective prompts, we felt that the three identified above were the most stimulating and generative for our particular situation. A practical motivation was also present: we chose three so that we could feasibly produce and analyze the data. With the goal of our reflection in mind—to reveal insights for enhancing learner-driven pedagogy—each author independently created written reflections for each of our five learner-driven teaching practices. For each teaching practice, we responded to the three reflective prompts identified above. This procedure created a total of 15 short narratives. We then compiled all of our responses into a single Google Doc (selected for its collaborative functionality) for shared review.

4. Discuss Reflections to Produce Insights

The three authors spent four hours over the course of two sessions to dialogue through our reflective narratives, analyze our ideas, and develop shared insights. These discussions functioned as collegial inquiry (Henderson, 2001), described by Reale (2017) as “deliberate and intentional engagement with colleagues with the specific intention of improving upon practice and problem solving—together” (p. 85). The three authors read through all of the narratives and made notes about key concepts and overlapping ideas. Then we discussed our reflections as a group. We identified teaching practices that have worked to help promote and support power sharing and learner-driven pedagogy. In addition, we identified practices that have not worked as well. As Reale (2017) wrote, “reflective practice with colleagues is a

catalyst for development. It can be a humbling experience, to be sure, and one in which we are challenged to interrogate our own truths, our own way of being” (p. 86). As a group, we interrogated our own truths and generated insights through dialogue to improve our teaching. Note that our process did not take the form of a traditional content analysis. Instead, we used informal discussions as guided by Reale to arrive at meaningful results.

5. Apply Reflective Insights to Improve Teaching

Our final step was to apply our reflective insights to further develop and improve our learner-driven teaching practices for courses taught in Spring 2020. These courses were *LSCI 121: Library Research Skills*, taught by Regan in Fall 2019; *LSCI 391: Data Curation for a Data-Driven World*, taught by Mannheimer in Spring 2020; and *LSCI 291: Technology, Ethics, and Society*, taught by Young and Mannheimer in Spring 2020. In this step, the results of our reflective assessments were used to inform revised teaching strategies, thus “closing the loop” and improving our learner-driven teaching practice.

As a note to the reader, the process of reflective assessment can be nonlinear and emergent, and does not always provide the clearest through line of analysis. Our reflective texts and dialogues were wide-ranging, and our results section below captures highlights from our reflections and conversations as they relate to our central thesis of developing and implementing a learner-driven pedagogy that intentionally and effectively empowers students as trusted participants in their own learning and assessment.

Results

In following Reale’s (2017) approaches outlined above, we model a practice of reflective assessment with colleagues that can help us improve our teaching by sharing power with students and thus enhance the learner-driven

classroom. Each section below is scoped around one pedagogical practice. We begin each subsection with a quote drawn from our reflections, followed by a narrative summary of our shared experiences (for a full transcript of our reflections, please see Regan, Young, and Mannheimer, 2020).

Co-creative Syllabus Design

“I understand something that students don’t always immediately see: that I’m trying to tell a story when I teach a course. Although these courses are often structured as a series of exercises, I want to create a through line of knowledge that builds over the semester—and I want learners to be involved in the creation of this story.” —Matthew Regan

Our reflections showed that we all aim to incorporate student participation into syllabus design, pushing back against the idea of the professor as the expert and the authority figure. We wanted to put power into the hands of students, encouraging them to build content for their own syllabus, informed by the topics that most interest them (for example, choosing readings for the course or helping to define which skills they most wish to focus on). However, our reflections suggested that the success of this strategy has been dependent on several factors:

- students’ class standing—i.e. freshman, sophomore, etc.;
- whether the course was required or an elective;
- whether the course was predominantly skills-based or theoretical; and
- how much prior knowledge the learners had about the topic.

For *Library Research Skills*, which we have all taught, we found that most students were lower-division undergraduates, most students enrolled in the course because it was required for their major, and most students had limited

knowledge of the course topics. Our reflections revealed that in the context of library research skills, the idea of a flexible, evolving syllabus caused some students confusion and anxiety, rather than empowering them.

However, Young and Mannheimer found that when we taught the upper-level course *HONR 494: Information Ethics and Privacy in the Age of Big Data*, the learners were more prepared with a foundational understanding not only of the topics of the course, but also the general structure of college courses. This allowed the students to more easily and fluently engage with selecting readings and talking about the syllabus.

Based on our reflections on our experiences, we concluded that co-created syllabi may best be reserved for upper-division undergraduates or graduate students, electives that students enroll in based on interest, predominantly theoretical courses, and courses for which students have some prior knowledge of the subject matter.

Learner-Defined Personal Learning Goals

“I want students to be able to guide their own education. I want them to think of a class as their own, active opportunity to pursue knowledge—not a passive opportunity to be ‘taught.’” —Sara Mannheimer

All of us had similar experiences when encouraging students to identify personal learning goals in each of our courses. We often found that the students had trouble articulating goals that were meaningful for their growth as learners, instead falling back on very broad goals that did not feel specific to their personal learning path. By explicitly helping students see the connection between their existing knowledge and the learning outcomes of the course, we can help them develop personal learning goals that are meaningful to their lifelong learning trajectory.

One of our responsibilities as educators is to help students understand the learning objectives

of the course, and then connect those objectives both to their existing knowledge and their goals for future knowledge. Our reflections revealed two key insights to support learners in developing personal learning goals.

First, all of us have conducted the learning objective review and personal learning goal identification process early in the semester, but through this assessment, we determined that if we wait until later in the semester, students may be better equipped to identify meaningful learning goals. If more time has elapsed in the semester, students have a better understanding of the topics of the course and have begun to meld this new knowledge with their existing knowledge. Our reflections suggest that students may have more success building future learning goals if they start with a firmer foundation of knowledge about the topics of the course.

Second, the assessment data showed that personal learning goals really are *personal*. It follows that we as educators should provide a safe space for students to sincerely reflect on their goals. One strategy we used to create this safe space is to have one-on-one meetings with each student in which we discuss learning objectives and learning goals, but we acknowledged that this strategy does not immediately scale up to large classes. Our data revealed that our students needed more time and space to reflect on their own learning goals and on how those goals related to the learning objectives of the course.

Soliciting and Responding to Learner Feedback

“Students have opinions, fears, frustrations, and joys that they may hold on to all semester long and then may or may not report out in a course evaluation. These thoughts must find a space to be aired sooner and with greater follow-through.” —Matthew Regan

We all recognized the importance of soliciting learner feedback and cultivating an environment

where dialogue and regular, consistent exchanges of information between student and teacher take place; where learners are invested in course content and co-own the learning process; and in which feedback is not punitive.

Our practices were similar in that we all created time and space for this information exchange: via start-of-semester face-to-face meetings, through early in-class listening sessions, or in midterm self-evaluations. These were met with varying degrees of success. A major obstacle arose in the form of student anxiety and uncertainty. Meeting with a faculty member one-on-one can be intimidating; in-class listening sessions may cause students to bottle up, perhaps because they feel put on the spot in front of their peers. Similarly, we found that midterm evaluations, if not anonymized, may stifle honest sharing. We grappled with understanding the best way to engage learners and inspire them to participate and share in the process of learning.

Our reflections showed that our systems of feedback and response tended to flow in one direction, depending on the method in question. Course evaluations, for example, flow anonymously from students upward to teachers and administrators. Our learning management systems empower faculty members to share detailed feedback with students along with a grade for a given assignment. We found that this unidirectional feedback flow seemed to inhibit rather than foster our values of power sharing, mutual learning, and co-creation, and also did nothing to advance fostering intentional dialogue between students.

Although time-intensive, our reflections suggested that face-to-face meetings are worth pursuing because they build rapport with students and help demystify the course. Students who have less investment in the course (perhaps because it is required or was an elective that fit their schedules) can be honest about this and we as faculty members can commit to working with them to make the

course a valuable addition to their academic experience. Barriers to the success of this method include faculty and student schedule conflicts and, as mentioned above, student discomfort with face-to-face meetings. In our reflections, we identified small-group discussions as a potential solution: using class time for small groups to discuss what is working well and what could be different, then reporting on their conversations.

Interdisciplinary Discussions and Exercises

“Since we teach through a library curriculum at an institution that does not offer a library degree, the students enroll in our library classes from all over campus. This presents challenges and opportunities for bringing different disciplinary perspectives together around similar topics.” — Scott Young

Our assessment data suggests that a significant challenge for us as librarian-teachers at MSU is that our course offerings do not align with a curriculum that students are completing as they work toward a degree in our field. Our classes are either electives that students opt into or skills-based courses required for their majors. However, LSCI courses are not often seen as integral to students’ overall academic experience at MSU. As such, students who enroll in LSCI courses often come from different disciplinary backgrounds and therefore bring varying knowledges to the course topics in the content. This provides an opportunity to engage students and encourage them to bring forward their developing expertise. In practice, we apply small-group exercises and regularly reconfigure the group compositions so that students from different disciplines can come together around a common topic with unique perspectives. Discussions in these interdisciplinary groups can often lead to unexpected and creative insights related to the course topics.

We determined that engagement is most evident when students feel a personal connection to the learning material. For some students, this might

be working on a project from the context of their major (which for many will be closely connected to their future careers). For other students, this may be an opportunity to experiment with a personal interest or something they are intellectually curious about.

In our reflections we observed that discipline-based discussion and exercises also provide students with a chance to lean on and learn from each other—whether they share a major or not. Small group work may be intentionally developed so that students from different majors work with each other to learn something about a discipline with which they are less familiar. Conversely, students may work in peer groups based on their major, academic, or personal interests to better understand the power of the scholarly conversation and how different perspectives even within a discipline can contribute to problem solving and knowledge building (e.g. several students in a class may be focused on the same final project topic but be approaching it from very different perspectives—these differences can and should be highlighted to foster creative thinking). Regardless of the form it takes, we found that students engaged more enthusiastically with content that related to their discipline. We also found that when students engaged with their peers in other disciplines, all students benefited from the variety of viewpoints. As lifelong learners, we librarian-teachers agree that learning experiences feel most engaging when we can bring our own interests to the table—and connect these interests to the diverse interests of others.

Self-evaluation

“The data I see here comes through the self-evaluations themselves, where students have shown themselves generally to be insightful, honest, and sincere in their self-reflections. This data tells a story of trust and self-realization.” — Scott Young

In an effort to foster the aforementioned dialogues and counteract the traditional power dynamic of the teacher-learner relationship, we have each implemented self-evaluation approaches for grading in each of the courses we have taught. In addition to the qualitative feedback that we provide throughout the semester, we offer structured prompts for students to evaluate themselves, with rubrics for consultation and guidance. We found students to be insightful, honest, and sincere in their self-reflections. In all of our experiences, we observed that students tended to offer grades that were slightly lower or exactly the same as we would have assigned. We see this as a demonstration of trust and self-realization, with self-grading serving as a powerful tool to help students recognize that a grade is earned through a complex process rather than simply given by an authority figure. We found that in taking time to discuss the self-assessment process itself, we helped students understand the motivation and value behind active student self-assessment. As a result, we reflected that our classes felt more relaxed, open, and creative, without the concern of the “gradebook.”

At the same time, we acknowledged challenges with this approach. Students sometimes struggled to let go of traditional grading approaches. Students found it difficult to gauge their level of effort or to measure progress when the typical markers of grades and points are absent. Moreover, students still looked to us as the authority in evaluating performance. Indeed, within the broader institutional context, we are the authority; we are required to assign students a grade at the end of the semester. We wished we could more effectively extend the values and practices a self-evaluative approach from our own classrooms to the wider college.

Discussion

Our reflective assessment—conducted in Summer 2019—gave rise to a number of ideas for new or revised practices that support learner-driven teaching practices. We then

implemented new and revised practices in subsequent courses. In this section, we provide descriptions of how we applied these techniques in the classroom in Fall 2019 and Spring 2020. In bringing assessment insights into actual practice, we “close the loop” of the assessment lifecycle by demonstrating how our teaching practice changed as a result of our assessment process.

More Frequent Checking In

In response to our reflections regarding soliciting and responding to learner feedback, Mannheimer implemented three anonymous surveys during her Data Curation for a Data-Driven World course in Spring 2020. The survey asked students to anonymously identify “roses,” i.e. helpful or interesting things about the course so far, and the elements of the course that have worked, and “thorns,” i.e., the least clear or most frustrating parts of the course so far, and anything that could be improved in the structure or content of the course. She then shared the results from the “roses and thorns” survey with the class and communicated what would be changed in response to the feedback. For instance, the survey showed that learners wanted more clarity about assignment instructions, due dates, and times; in response, Mannheimer created a document that provided an at-a-glance overview of all assignments for the semester, when each would be assigned, and when each would be due.

Regan also solicited feedback early in the semester for his Library Research Skills course in Fall 2019. Students were provided with an anonymous check-in survey in the third week of the semester and then again in the sixth. This enabled Regan to keep his finger on the pulse of student affect and to anticipate potential changes in course direction, teaching style, and assignment clarity.

Providing Clarity about Self-evaluation and Grading

Mannheimer reviewed the policies for self-evaluation and grading during the first class session of Data Curation for a Data-Driven World in Spring 2020. However, students were still unsure about self-evaluation and grading. Therefore, she spent part of a class period during the fourth week of the semester revisiting the grading rubric and facilitating small-group conversations about self-evaluation. In the future, she will also assign reading that can provide more information and therefore help guide the discussion about self-evaluation as a grading strategy.

One-on-one Meetings with All Students

As librarians, we are keenly aware of the value in working with students one-on-one at the point of need, as happens in typical research consultations and reference transactions. Our reflections showed that one-on-one meetings are also a valuable method for supporting the learner-driven classroom. In order to strengthen relationships with students, Regan piloted an approach whereby he met with all students across two sections of his Fall 2019 Library Research Skills course. Each meeting took place outside of the classroom during class time while the rest of the class was engaged in a hands-on group activity. Each student was allotted approximately five minutes for this check-in; meeting with all students from two sections took approximately four weeks. The scope was made clear: "This meeting is an opportunity for us to get to know each other on a human level and for you to tell me anything that might help me understand you, your learning style, your academic goals, and your ability to successfully complete this course."

During meetings, students revealed personality traits, discussed competing demands for time such as jobs, families, and classes they had to complete for their majors. Some disclosed their status as student athletes with rigorous training and game schedules while others talked about their status as nontraditional students for whom school was "never my thing." Overall, these

meetings afforded Regan the opportunity to sit back and practice deep listening.

Allowing Students to Negotiate, Discuss, and Determine Assignment Deadlines and Dates

When introducing the three major assignments in his Fall 2019 Library Research Skills course, Regan undertook the practice of asking students whether the assignment parameters—including the due dates and deadlines—were fair. This required flexibility on Regan's part. Learning about student work outside of the class he taught was helpful to see the whole picture of a student's academic life: some students were in writing-intensive courses for their major, others had work obligations or busy times that might have interfered with their ability to submit the best possible version of the assignment. Each assignment was discussed thoroughly, with ample class time allotted for clarifying questions and negotiation of criteria and submission deadlines. Students were mostly amenable to the parameters they received, but the asking was crucial: it actively demonstrated to them that their voices mattered and that they had a say in how and when their learning was to take place. This was clearly a novelty for at least one student, who remarked anonymously via course evaluation: "I loved how you would ask us how we felt about a certain assignment being due at a certain time. I've never had a professor ask a class about when they would like a project due. You are very considerate towards other projects or essays that students have due around the same time as your assignment."

More Flexibility with Students' Work Products

In order to create new flexibilities for student work and participation, Mannheimer and Young offered multiple formats for student engagement in the online discussion forums of our Spring 2020 course *Technology, Ethics, and Society*. Where previously we asked students to respond to readings and discussion prompts in writing, we now offer three options for students to choose from:

- A written response, around 250 words.
- An audio or video response, about 2 minutes.
- A sketch that expresses your thoughts. This could be a drawn picture or a graphic using whichever medium you prefer, such as an infographic software, Microsoft Paint, or pen and paper. Once you have created your sketch, attach a caption (2 or 3 sentences) that explains or interprets the sketch.

In practice, students responded with a variety of creative expressions that enlivened discussions. In one course, for example, an assignment that asked for student sketches produced the most discussion posts that semester, with students opening their responses with comments like “I really like your drawing here, and I think it speaks volumes,” and “I do like your graphic and thoughts here.”

Pedagogical Transparency

To help students respond effectively to our learner-driven methods, we realized that openness and communication is crucial for accomplishing our goal of inclusive and participatory learning. For this reason, we have each begun sharing readings and facilitating meta-conversations with students related to our pedagogy itself. This helps students see their own power in the classroom, and it also shows students that we as teachers are acting intentionally. Being open with our approach helps students understand the structure and motivation of learner-driven practices, which in turn helps students perform better in a more open-ended and co-creative learning environment.

Conclusion

In this article, we model an approach to reflective assessment that aims to assess learning-driven teaching practices among a small group of librarian colleagues. We find that

reflective assessment is an effective and insightful approach for understanding and improving learner-driven teaching practices. Our reflective dialogues produced insights into our past teaching practices that we then applied to improve existing learner-driven teaching practices and to generate ideas for new practices.

First, we articulated a set of learner-driven teaching practices that we had each implemented in previous courses. These practices formed the basis of our reflective assessment: co-creative syllabus design, learner-defined personal learning goals, soliciting and responding to learner feedback, interdisciplinary discussions and exercises, and self-evaluation. Then, following a reflective activity that produced insights related to our teaching experiences, we produced refinements to these practices and we generated ideas for new practices, including more frequent checking in with students; more clarity regarding self-evaluation and grading; one-on-one meetings with all students; allowing students to negotiate, discuss, and determine assignment deadlines and dates; more flexibility with students’ work products; and increased pedagogical transparency.

This process of assessment is iterative, and so we intend to re-initiate the cycle of assessment in the future. We view the process of reflection itself as a practice of professional bonding, mutual learning, and continual improvement. As librarian-teachers, we may teach individually, but we are rooted in a community of other librarians both locally and profession-wide. By sharing our experiences via reflective assessment, we can improve our teaching practices and also connect with each other and our wider community. Ultimately, this paper offers a set of replicable learner-driven teaching practices, as well as an approachable framework for conducting reflective assessment. We encourage others to follow similar learner-driven practices and reflective assessments in their own teaching.

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