

Peer Review: A Critical Primer and Practical Course

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Introduction

For many years I have been a practicing librarian and writer. At the beginning of my career I helped start a journal, served on its editorial board, and worked with my colleagues to develop journal policies. Over time and as my research evolved, it became clear to me that most librarians and other early career professionals in academia have not had adequate training to consider peer review in scholarly publishing. Just what should peer review do? Who is involved? Why is it important? How does one approach it as a reviewer?

Often peoples' first foray into peer review is when they must submit writing to a peer-reviewed journal, or when they are asked to provide a review for a manuscript. How does one prepare to take on that task? In this open educational resource, *Peer Review: A Critical Primer and Practical Course*, I have developed a series of eight learning modules that address the training and learning gaps I have identified in my personal experience and through my research regarding peer review.

The eight modules offered ask you to engage in a variety of learning activities. You may be asked to read, listen, watch, think aloud, write, and engage in other activities that are all designed for them to explore peer review from their own experiences and come to their own conclusions. This course attempts to engage you with active learning in each of the modules. The course is scaffolded, and there are activities in the later modules that ask you to refer back to their work in previous modules. All materials in this course have been curated from items freely available on the web, which are also all cited for further reference.

Course Objectives

This course aims to offer anyone taking it the following:

- An overview of what peer review is, who the actors are, and its position in the scholarly communication landscape
- An observation and identification of the positives and negatives of opaque and open peer review implementations, as well as the challenges presented by peer review to each of the actors in the process
- The opportunity to critically examine peer-review implementations
- The opportunity to create and express one's personal values for a peer-review practice and connect that practice to their profession
- The opportunity to practice providing peer review

Course Outline and Learning Outcomes

[Module 1: What is Peer Review?](#)

This module presents the basics, and positions you to dig more deeply into peer review.

By the end of the module you should be able to:

- Summarize a basic peer-review process
- Identify your personal knowledge gaps with peer review
- Discover new information about peer review
- Examine your own understandings of the peer-review process

Module 2: Opportunities and Challenges in Peer Review

This module goes a bit deeper into issues inherent to contemporary peer-review practices and processes.

By the end of the module you should be able to:

- Identify positive aspects of, and problems with, peer review
- Consider ethical dimensions of the peer-review process
- Interpret peer-review challenges and compose reactions to them

Module 3: Bias and Power Structures in Peer Review

This module asks you to begin examining bias and power structures, including your own.

By the end of the module you should be able to:

- Examine personal bias(es)
- Explore how bias can manifest in peer review
- Identify policies intended to mitigate bias
- Identify and analyze bias and power structures in peer-review systems

Module 4: Critically Examining Established Peer-Review Practices

This module expands upon the concepts and exercises covered in Module 3, and deepens the examination of bias and power

structures. You are asked to examine peer-review practices with a lens of criticality.

By the end of this module you should be able to:

- Identify concepts and practices that reinforce bias and power structures in peer review
- Examine peer-review systems for bias and imbalances of power
- Identify established anti-bias practices
- Develop strategies for eliminating bias in peer-review systems

[Module 5: Innovations in Peer Review](#)

This module allows you to discover innovations in peer review, asking you to use your own creativity to innovate and imagine the future for peer review.

By the end of this module you should be able to:

- Recognize basic online systems used for peer review
- Consider the ethical implications that technology has on peer review
- Discover recent peer-review innovations
- Evaluate innovations for their potential to implement opportunities and diminish challenges presented by traditional peer-review systems

[Module 6: Librarians and Peer Review](#)

This module is specifically for library workers and library students. It uncovers themes particular to the field of library

and information science as well as the practices of our professional community.

By the end of this module you should be able to:

- Identify peer-review practices in LIS literature
- Outline librarians' roles in peer review, both as scholars and as educators
- Illustrate peer-review challenges and opportunities specific to LIS

[Module 7: Developing Peer-Review Norms, Guidelines, and Expectations for LIS \(or Your Discipline\)](#)

This module can be specific to library and information science (LIS) workers and students, but it is also applicable to other disciplines. It is a module that mostly requests students to complete activities based on the knowledge they have gained in the first 6 modules.

By the end of this module you should be able to:

- Define the role of peer review in LIS/your discipline
- Develop a rubric for referees to do peer review based on its purpose
- Develop a policy document for peer-review workflows and decision making

[Module 8: Developing Your Peer-Review Practice](#)

This final module also asks you to engage in peer review as a reviewer.

By the end of this module you should be able to:

- Articulate your positionality and values in relation to peer review
- Professionally evaluate a work in your field using your positionality and guiding values

How to Use This OER

This OER could be used as a self-paced course for anyone interested in discovering peer-review processes. It could also be used by instructors in Library and Information Science programs, librarians, or other educators who want to offer students lessons in the peer-review process.

Each module offers a brief introduction and reiterates its learning outcomes. It then offers Activities and Exercises, which are structured to be completed in the order they are presented. Activities are coded with easy-to-identify icons, and are numbered according to module and activity number. For example, the first activity in Module 1, Free Write, is numbered 1:1. Some of the activities ask you to refer back to previous activities. In those instances, the numbered activity is provided.



Read: for written content



Watch: for visual content



Listen: for audio content



Do: for active learning exercises

Finally, each module provides a list of references for the readings and other content.

You will be producing materials during this course. Since modules request you to use content they have created from previous lessons, I recommend that you create an organizational system where they keep all content related to this course. Because this learning will ask you to reflect, it may also be helpful to you to keep a handwritten journal or a running journal document for your reflections and thoughts as you progress through the course. In addition to saving your work, consider sharing what you have done and your thoughts via social media using the course hashtag: #PeerReviewPrimer. Some activities request that you make and share social media posts. Remember these are all suggestions intended to create community engagement; if you do not want to post to social media that is fine; the content and exercises will still be helpful, and hopefully fun!

Offering Feedback

Anyone using these materials is invited to provide feedback to its creator, Emily Ford. I can be reached at forder@pdx.edu, and I welcome feedback via email and also invite you to set up a time for a phone call to discuss the course or anything related to it. I also invite you to use the course hashtag #PeerReviewPrimer while engaging in its activities and share your thoughts on social media.

Upon completing the course you will be asked to complete

a course evaluation, after which you will receive a certificate as evidence of your completion of the course.

1. What is Peer Review?

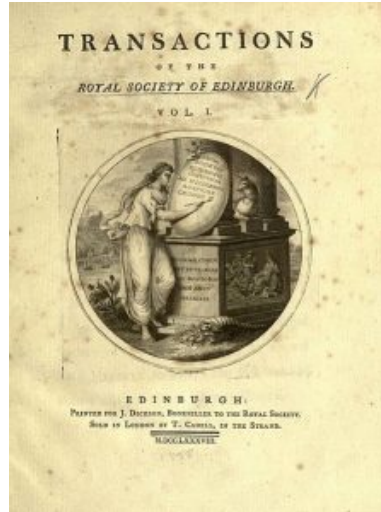
Introduction

Peer review is often seen as the proverbial bread and butter of ensuring quality in academic research and its publications. It is a process that has been used to validate and improve research submitted for publication, and proposals submitted for grant funding. While it has changed over time, particularly in the 21st century, peer review was first developed in the aristocratic learned societies and royal academies of the eighteenth century.

This lesson will provide a historical context of peer review, an overview of its current status, and an exploration of the many human roles of a peer review process. It will also allow you to reflect upon your own understandings of peer review, and offer you the opportunity to grow those understandings.

At the end of this module you should be able to:

- Summarize a basic peer-review process
- Identify personal knowledge gaps with peer review



The cover of the 1788 volume of the journal Transactions of the Royal Society of Edinburgh. This is the issue in which James Hutton published his Theory of the Earth in 1788.

- Discover new information about peer review
- Examine your own understandings of the peer-review process.

Activities and Exercises



Do: Free Write (1:1)

Set a [timer](#) for five minutes and write down (or record yourself thinking aloud) everything you know about peer review. After your five minutes are up, read (or listen to) what you wrote or said. Write down three questions you have about peer review. Save these questions; you'll use them later.



Watch: The Peer Review Process (1:2)

This American Chemical Society video, [The Peer Review Process](#), offers a two-minute explanation of the peer-review process.



Read: Modern Peer Review (1:3)

Read the blog post, [The Birth of Modern Peer Review](#), by Hadas Shema on the Scientific American blog, [Information Culture](#), and “Peer Review and Academic Prestige” (pages 12-13) in [Untangling Academic Publishing](#) by Aileen Fyfe and co-authors.



Do: Peer Review Flow Chart (1:4)

Create a flow chart depicting a typical peer-review process. Your flow chart should account for rejection, revisions, and acceptance. It should also indicate the players in each process. (e.g. editor, referee, author, or any other folks). After completing your flow chart, show it to a colleague/mentor/peer/friend/someone and discuss it with them. Reflecting upon your discussion, modify your flow chart based on any new understandings you gained.

Keep this flow chart; you will use it again in subsequent modules.



Read: Roles in Peer Review (1:5)

Read Chapter 4, “Roles of Peer Review” (pp. 53-90) in [Stories of](#)

[Open](#) by Emily Ford. (It seems like a lot of reading, but really it's not!)



Do: Research Your Question (1:6)

Pick one of the questions you wrote down about peer review in the first activity (1:1), and spend 10-15 minutes researching the answer. A basic web search is enough. This activity is about engaging in a discovery process, even if your question isn't answered.



Do: Free Write

Set a [timer](#) for 5 minutes and write (or record yourself thinking aloud) about what you've learned. Need a writing prompt? Try one of these:

- A typical peer review process is...
- I was surprised to learn that...
- I expected peer review to be...
- Some problems in peer review seem to be...

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2. Opportunities and Challenges in Peer Review

Introduction



Stewpot Opportunity Center mural

In this module we dive a little deeper into the nuances of peer review. The peer-review system has been the subject of much debate. In this module we will take a cursory look at some of the opportunities that peer review affords and the challenges it presents.

Although the activities and exercises in this module will offer you exposure to some of the opportunities and challenges, it is important that I present them here.

Opportunities:

- Authors/researchers get meaningful feedback on their work
- Process helps to ensure the quality of scholarly work/knowledge production

Challenges:

- Long publication timelines
- Acknowledging referees' hidden labor

- Ethical dilemmas

These are certainly not exhaustive lists, and subsequent modules will offer you space and time to reflect on these challenges, as well as the power structures and biases within peer-review systems and processes.

At the end of this module you should be able to:

- Identify some positive aspects of and problems with peer review
- Consider ethical dimensions of the peer-review process
- Interpret peer-review challenges and compose responses to them

This module begins the unveiling of what I hope will be an opportunity for you to discover the multitude of layers of complexity in current peer-review systems and processes, but it is not the end of this discovery. In fact, all subsequent modules will build on the understandings you have gained from this module and future exercises will ask you to dive more deeply into challenges and opportunities.

Activities and Exercises



Do: Brainstorm (2:1)

Set a [timer](#) for five minutes and write down (or record yourself thinking aloud) what you think are the opportunities and challenges presented by peer review. Save this list; you will use it later.



Read and
Review? (2:2)



Do: Why Peer

Read [Peer Review in Scholarly Publishing Part A: Why Do It?](#) by Kiron Koshy and co-authors. Make a list of the arguments presented in this short piece. Save this list; you will use it later. Identify one of the arguments presented and compose a social media post (e.g. Twitter, TikTok, Facebook, etc.) substantiating your agreement or your disagreement with the argument. If you feel comfortable sharing what you have composed on social media, please use the course hashtag: #PeerReviewPrimer.



Listen and Reflect: Scientists Aim
To Pull Peer Review Out of the 17th Century
(2:3)

Listen to [this four-minute segment](#) from NPR's Weekend Edition program. While you're listening, or after, reflect on the problems presented by the individuals interviewed in the piece. What lingering questions do you have about these problems?



Listen and



Read: Peer

Review Labor (2:4)

Listen to two minutes of the audiobook [What is Peer Review? \(A Short Guide\)](#) by Jo VanEvery, minutes 11:30-13:30, discussing the labor of peer review.

Read [Recognition in Peer Review](#) by Haseeb Irfanullah posted on the Scholarly Kitchen and this editorial from *Nature Genetics*: "[What's Taking So Long?](#)"

Read [Owning the Peer Review Process](#) by Charlotte Roh.



Read and Reflect: Sharing by a Reviewer on Social Media (2:5)

Read this case report from the Committee on Publication Ethics: [Sharing by a Reviewer on Social Media](#). Reflect on this case:

- If you were the reviewer would you have published the tweet?
- What do you think of the advice that COPE gave?
- Taking into account your own experiences, what you already know about peer review, and what you have read and understood from this course so far, what advice would you have given?



Do: Responding to Comments (2:6)

Find 3-5 egregious reviewer comments from [Shit My Reviewers Say](#) on Tumblr. Now make creative reactions to each one you selected. Your reaction could be finding an appropriate gif, a poem, a song, or a dance video that would capture your feelings and reactions if you had received these comments. If you feel comfortable, please share your reactions on social media using the course hashtag: #PeerReviewPrimer.



Do: Edit your Lists (2:7)

Now that you have learned a bit more about the opportunities and challenges offered by peer review, modify the lists you made in the first activity in this module (2:1) and the list of arguments made by Koshy and co-authors in [Peer Review in Scholarly Publishing Part A: Why Do It?](#) (2:2). Thinking back to what you either agreed with or disagreed with before, have you changed your mind? Add reasons why one should peer review, and add more challenges that you have identified or thought of.

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3. Bias and Power Structures in Peer Review

Introduction

Being human and living in the world means that we inherently bring our past experiences, learning, and socialization to everything we do, including engaging in the peer review processes, whether as an author, referee, editor, etc. We are biased and thus carry those biases in all that we do and experience.

[Merriam-Webster](#) provides a basic definition of bias: “a tendency to believe that some people, ideas, etc., are better than others that usually results in treating some people unfairly.” In addition to this basic definition, we need to understand bias as socially constructed by [in-groups and out-groups](#). Out-group bias occurs when we think our in-group is better than the out-group.

Social power structures also come into play in peer-review work. In their chapter, [“Conceptualizing Structures of Power,”](#)



All Souls College, Oxford, England

the authors of the open textbook *Introduction to Women, Gender, Sexuality Studies* unpack this concept:

“By **power** we mean two things: 1) access to and through the various social institutions mentioned above, and 2) processes of privileging, normalizing, and valuing certain identities over others. This definition of power highlights the structural, institutional nature of power, while also highlighting the ways in which culture works in the creation and privileging of certain categories of people.”

As you move through this module it is important to remind yourself that bias and power structures are inherent in society. This module will help you in beginning to uncover what those systemic or personal biases and power structures may be. Some of this work may incite feelings. That is okay; you are human. It may be uncomfortable work, but it is in discomfort that we begin to learn. If you are feeling discomfort, take a moment to pause and reflect why that is. What has brought you to this state of discomfort? Your prior experiences? Your beliefs or attitudes?

You will revisit the ideas and discoveries you make in this module throughout the rest of this course, especially in Module 4: Critically Examining Established Peer-Review Practices.

At the end of this module you should be able to:

- Examine personal bias(es)
- Explore how bias can manifest in peer review
- Identify policies intended to mitigate bias
- Identify and analyze bias and power structures in peer-review systems

Activities and Exercises



Do: Harvard Implicit Bias Test (3:1)

Take one or two of the [Harvard Implicit Bias tests](#). (From this linked page read the content, and then click on “I wish to proceed.”) If you have taken some of these before, that’s okay. Spend 2-5 minutes after the test free writing, or recording yourself thinking aloud based on these prompts: What did you learn? How did it make you feel?



Listen and/or



Read:

Citation Politics and Editorial Alteration of Reviewer Reports (3:2)

Listen to the 14-minute Canadian Broadcasting piece, [The Politics of Citation: Is the Peer Review Process Biased Against Indigenous Academics?](#) (The audio is linked under the headline picture.)

Either read the news article by Cathleen O’Grady from Science Magazine, “[Delete Offensive Language? Change Recommendations? Some Editors say It’s OK to Alter Peer Reviews](#)” or listen to the 45-minute podcast episode from The Black Goat, [You Took the Words Right Out of My Mouth](#). Both discuss the same instance of an editor altering a peer

reviewer's report. I highly recommend reading both the article and listening to the podcast episode if you have the time.



Review and/or Watch: Peer Review Bias (3:3)

Review [this image](#) on peer review bias from Samir Haffar and co-authors' article [Peer Review Bias: A Critical View](#) and/or watch the [supplemental video](#) (it's about 7 minutes long).



Do: Revisit Your Flow Chart and Brainstorm (3:4)

Find the peer-review process flow chart you created in Module 1: What Is Peer Review? (1:4). For each step on the flow chart reflect on the following questions:

- Which actor has power?
- Where may bias come into play?
- Who has the ability to hold others accountable for their bias?

After you have examined each step, brainstorm a list of ways to lessen the harmful consequences of power and bias in the peer-review process.



Do: Review and Compare Journal Policies (3:5)

This activity asks you to explore the policies sections of two different journal websites. Then, you will compare them. For each journal listed, review the policies and written guidelines regarding peer review. Make a mental (or written) list of the biases and power structures that these policies intend to mitigate. Also note if you feel there is power or bias that is unaddressed by the documentation. After reviewing both journals, which do you feel does a better job explaining the process and expectations? Which does a better job of eliminating bias and harmful power structures? If it is helpful for you, make a table comparing the contents

- [Atmospheric Chemistry and Physics](#) – Review the policies, which are linked under the “policies” drop-down menu on the home page, as well as the topics under the “peer review” drop-down.
- American Speech and Hearing Association journals – Review the page [What to Expect in Peer Review](#), as well as the contents of their [Peer Review Excellence Program](#) (in three sections: [The Peer Review Process](#), [Peer Review Policies](#), and [Peer Review Procedures](#)).

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4. Critically Examining Established Peer-Review Practices

Introduction

In this module we will expand on the opportunities and challenges presented in [Module 2: Opportunities and Challenges in Peer Review](#), as well as the work you did in [Module 3: Bias and Power Structures in Peer Review](#).

This module offers you more time to think critically about

established peer-review norms and practices, as well as reflect on your own personal biases and how you might thoughtfully work with your awareness of them. When we think critically, we think about the players in peer review processes, why things are the way they are, and if they have to be that way.

A Note on Critical Examination

This module asks you to critically examine established peer-review practices. The module approaches critical examination as it is rooted in [Critical Theory](#), a historical and philosophical approach that studies social and political contexts: “It must explain what is wrong with current social reality, identify the actors to change it, and provide both clear norms for criticism and achievable practical goals for social transformation” (para. 3).



Classic pose with a magnifying glass – model Gwyneth Ellis

By the end of this module you should be able to:

- Identify concepts and practices that reinforce bias and power structures in peer review
- Examine peer-review systems for bias and imbalances of power
- Identify established anti-bias practices
- Develop strategies for eliminating bias in peer-review systems

Activities and Exercises



Read and Reflect: Editorial and Ethical Policies (4:1)

Review the [editorial and ethical policies](#) for peer review at the American Journal of Public Health. (Scroll about halfway down the page to get to the peer review section.)

Read the [Ethical Guidelines for Peer Reviewers](#) from the Committee on Publication Ethics (COPE).

Take some time to consider and reflect on these questions:

- Does what you read from the American Journal of Public Health policies match the Ethical Guidelines outlined by COPE? How do they, and/or how do they not?
- What are the strengths and weaknesses of the COPE guidelines? Would you change anything about them?



Do and Reflect: Defining Rigor (4:2)

Use this prompt to free-write for five minutes: I know something is rigorously researched and of quality when...

Next, spend some time (~10 minutes) looking for a concrete definition of rigor or quality in academic research and publication in your field. You could look on the open web or via handbooks or encyclopedias at your library. Then, when you've found a definition that you like, write it down. Reflect on the following questions in a journal or aloud on a recorder:

- Did my personal definition match the one I found ?
- What concrete measures are used to evaluate rigor?
- Who defined it for my field?
- In their 1996 article, [*Ways of knowing, culture, communication and the pedagogies of the future*](#), Paul Wildman and Sohail Inayatullah assert, "The search for rigour is also often the call for the elimination of difference" (p. 733-734). Based on what you have found, do you agree or disagree with this statement? Why? Why not?



Read: Anti-Racism in Scholarly Publishing (4:3)

Read the [*Introduction to Antiracism Toolkit for Organizations*](#) from the Coalition for Diversity & Inclusion in Scholarly Communication and one more toolkit section of your choice.

Also review the [Library Publishing Coalition's Roadmap for Anti-Racist Practice](#) and [Anti-Racist Scholarly Reviewing Practices: A Heuristic for Editors, Reviewers, and Authors](#).



Do: Develop an Anti-Bias Plan (4:4)

Based on the readings from this module, as well as any knowledge or questions you have gained throughout this course, develop an anti-bias plan for a journal of your choosing. This is really a free-form exercise. You could decide to make a detailed document much like you read from the Library Publishing Coalition, or it could be a document that outlines a mission statement and values for a publication of your choosing. Whatever it is, consider what you have learned, and outline concrete things that you would consider the most important parts of an anti-bias plan for peer-reviewing work at a journal publication.

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5. Innovations in Peer Review

Introduction

When web technologies became ubiquitous, they disrupted the scholarly dissemination ecosystem and provided opportunities to grow journal and publication audiences and expanded the manner in which research was shared. These technologies also allowed researchers to more



"The 'Woman inventor' greets the members and visitors of the Patent Centennial Convention and presents this number, the first ever published and devoted to the cause of woman inventors of this country."

quickly share ancillary and supplemental materials like data sets, instruments, lab notebooks, videos, audio files, and other behind-the-scenes research documentation.

Similarly, these technologies provided opportunities to innovate peer-review practices, taking them from the realm of print publication to online platforms. In this section we will explore some of the recent innovations in peer review and consider their merits and the potential ethical challenges they introduce.

By the end of this module you should be able to:

- Recognize basic online systems used for peer review
- Consider the ethical implications that technology has on peer review
- Discover recent peer-review innovations

- Evaluate innovations for their potential to implement opportunities and diminish challenges presented by traditional peer-review systems

Activities and Exercises



Watch, Read, and Reflect: Journal Systems (5:1)

Watch this [video about the peer-review process](#) from PLOS. It depicts a straightforward review submission in their journal management system called Editorial Manager.

Read the Open Journal Systems (OJS) [Review Process page](#), the [Springer How to Target and Invite Reviewers page](#), and the [reviewer invitation template letter](#) from Radiology.

Read [What Are Innovations in Peer Review and Editorial Assessment For?](#) By Halffman and Horbach

Now that you have seen a bit how technical systems work, what do you think? Set a timer for 5 minutes to write down your thoughts or record them aloud. Having trouble? Here are some guiding questions:

- What does an online system do for peer review?
- How can online systems be personalized or depersonalized?
- From this introductory glance at systems, what is your gut reaction?



Watch, Read, and Reflect: Innovations (5:2)

In this section you'll be asked to read and reflect on some innovations in peer review. Listed first are the readings and content on each topic, followed by reflection questions. There are a lot of innovations to explore. They are all worthwhile. However, if you are short on time, complete either the Artificial Intelligence section or the Open Peer Review section.

Artificial Intelligence

- Read [How AI Is Accelerating Research Publishing](#) by Rachel Burley
- Watch [Computation Support for Academic Peer Review](#) from the Communications of the ACM.
- Watch: [Research Paper Review Assistant Tool: One-Stop Solution for Reviewers to Conduct High-Quality Review](#) from RAX

Reflection Questions:

- Generally, what is your reaction to AI innovations in peer review based on what you read and watched?
- What advantages and disadvantages do you see in using AI for peer-review tasks?
- Who is represented in AI and who is not?
- Would the use of AI make more sense in some disciplines than others?
- Do you think using AI in peer review is ethical? Why or why not?

Open Peer Review

- Watch [Open Peer Review Explained](#) from Open Research Europe
- Read [About Peer Review](#) from the journal eLife
- Read [Transparent Peer Review—A Practical Solution to Implement Open Peer Review at Scale: A Case Study](#) by Domingo & Harris
- Read [It's Time to Do Something: Mitigating the Negative Impacts of Computing Through a Change to the Peer Review Process](#) by Hecht and co-authors.

Reflection Questions:

- Generally, what is your reaction to open peer review based on what you read?
- What advantages and disadvantages do you see in using open or transparent peer review?
- Who is represented in open review and who is not?
- Would the use of open review make more sense in some disciplines than others?
- Do you think open peer review is ethical? Why or why not?

Other Innovations



Do: Find Other Innovations

Search the web to see if you can identify 1-3 additional peer-review innovations. Do some reading, and reflect using the following questions:

- Generally, what is your reaction to the innovation based on what you have read?
- What advantages and disadvantages do you see in the innovation?
- Who is represented and who is not?
- Would the use of this innovation make more sense in some disciplines than others?
- Do you think this innovation is ethical? Why or why not?

Struggling to identify an innovation? Here is one suggestion:

- [Peer Community In](#) (PCI) – “a free recommendation process of scientific preprints based on peer reviews”



Do: Vision Board (5:3)

Make a vision board* (digital or physical) of the future of peer review. Your vision board should be thoughtful and take into consideration everything you have learned and reflected upon in this course so far. Does your vision include a technology that has not yet been invented? Great! Does your vision eliminate all technologies in the process? Also great! Consider the innovations that you have learned about in this module, and decide whether you want to further develop them with your vision or completely eliminate them. Whatever your vision, consider these guiding questions:

- What problems can technology solve in peer-review processes?
- What aspects of peer review require a human approach vs. what can be automated in a human-centered way?

- How does this vision board reflect my values?

After you have completed your vision board, write a short narrative (one or two paragraphs) explaining your vision. Be sure to address your reasoning for your vision, making apparent how you have evaluated the options you present within it. Share your vision board on social media using the course hashtag.

*What is a vision board? A vision board is a collection of images (or sounds or other objects) or other inspirations that represent your vision. Think of it as a mural or collage of things that represent what you see for the future. Here's a [short blog post about vision boards](#).

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6. Librarians and Peer Review

Introduction

This module is specifically for library workers and library students. It uncovers themes particular to the field of library and information science as well as the practices of our professional community. It asks you to learn more about peer-review practices and processes as it relates to the Library and Information



*A riff on Banksy's famous Flower Bomber street art, this image shows a female librarian getting ready to hurl Margaret Atwood's *The Handmaid's Tale*.*

Science (LIS) community, whether that is in its practices in scholarship or whether it is in our daily roles as library workers.

Library workers are in an interesting position when it comes to peer review. We may be teaching students what peer review is, or we may be helping students learn techniques on how to identify peer-reviewed literature. We may be cataloging materials or running publishing programs that include peer-review literature. This module asks you to explore the processes specific to our field and to reflect on its unique challenges and opportunities.

By the end of this module you should be able to:

- Identify peer-review practices in LIS literature
- Outline librarians' roles in peer review, both as scholars

and as educators

- Illustrate peer-review challenges and opportunities specific to LIS

Activities and Exercises



Read: Peer Review Approaches in LIS (6:1)

“The Elusive Norm: Peer Review in LIS” (pp. 31-52) in [Stories of Open](#) by Emily Ford.

Read [A Privilege, a Gift, and a Reason for Gratitude: Appreciating the Human Dimension of Peer Review](#) by Dali and Jaeger.

Read [Open Ethos Publishing at Code4Lib Journal and In the Library with the Lead Pipe](#) by Ford and Bean.

Read [Digital Publishing for Near Future](#) by Jaime Ding.



Listen: Joyce Gabiola on up//root (6:2)

Listen to this podcast episode: [Joyce Gabiola on Care, Intentionality, and Amplifying Voices](#). (The most germane part of this podcast episode is the discussion of the [up//root](#) publication, which starts at 23:00 and ends at 35:00. However,

the whole episode is good, so listen to the whole thing if you can!)



Do: Find Peer-Review Processes in LIS Journals (6:3)

Find three peer-reviewed LIS journals and browse their website for information on their peer-review processes. After reading through the information you've found, review your peer-review flowchart that you made in Module 1 (1:4) and that you revisited in Module 3 (3:4). Do you need to make any adjustments for it based on practices you have observed in LIS from your findings, as well as from the above reading and listening? If so, make these adjustments.

Need ideas on peer-reviewed journals in LIS? Check out [DOAJ's list of LIS journals](#).



Do: Outline Librarians' Peer-Review Activities as Librarian and Scholar (6:4)

Librarians are not just writers and researchers. They are also educators who engage with students about the peer-review process and teach students how to find and identify peer-reviewed literature. In this activity you should create a list outlining the different activities librarians perform related to peer review. You could focus on a type of librarian if you like.

For example, a medical librarian may interact differently with peer review than would a system librarian. In essence, our jobs as librarians differ, and so will how we approach peer review or in what ways we perform peer review. Consider creating a table that compares the labor of the librarian in their many work-related disparate roles (instructor, cataloger, facilitator, searcher, reference specialist, etc.). Below is an example.

Librarian at Work**Scholar**

Teach peer review in classes *Serve as a reviewer*



Do: Reflect/Journal (6:5)

Set a [timer](#) for ten minutes and write or record yourself thinking aloud about the following questions:

- What is your perception of peer review in LIS, and where does this perception come from?
- In your current work role in LIS, be it as a student, library worker, etc, what do you do in relation to peer-review, or how could it be related to peer-review in LIS?
- What are the unique things about LIS that should be reflected in its peer-review processes and practices?
- Using the knowledge you have gained throughout this course, what are the challenges unique to peer review in LIS? What are the unique opportunities?

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7. Developing Peer-Review Norms, Guidelines, and Expectations for LIS or Your Discipline

Introduction

One of the most common bits of feedback (or complaints!) I hear from those serving as peer reviewers is the lack of clear guidelines and expectations for what it means to adequately provide a review.

These rarely exist, and when they do, they are often out of date. In this module the norms and guidelines you create will be enormously helpful for you as you move forward with any potential reviewing you do in the future. (You may even want to offer them as a working draft to a journal in your field!)

This module builds on the activities and the thoughts you surfaced in Module 6: Librarians and Peer Review. This penultimate module of this course focuses more heavily on activity and exercises than intaking new information, and



Checklist written on a chalkboard

everything you do in this module will be useful in the final module.

By the end of this module you should be able to:

- Define the role of peer review in LIS / your discipline
- Develop a rubric for referees to do peer review based on what peer review is supposed to do or be for
- Develop a policy document for peer-review workflows and decision making.

Activities and Exercises



Read: How to be a Good Peer Reviewer (7:1)

Read [How to Be A Good Peer Reviewer](#) by Jasmine Wallace.



Do: Define Peer Review for Your Discipline (7:2)

Using what you have learned in this course, define peer review for LIS or your discipline. Your definition should answer the following questions:

- What is the goal of peer review in LIS or in your discipline?

- Who is peer review in LIS or in your discipline for?

What you come up with might sound like a mission statement. Share your definition on social media using the course hashtag.



Do: Develop a Peer-Review Rubric (7:3)

Based on your definition and what you have learned about peer review, pick a journal in your field. Using what the journal says on their About page regarding their scope, mission, etc., develop a peer-review rubric. Your rubric should include questions that peer reviewers are meant to answer when they assess a submission and also outline what peer-reviewers should NOT consider in their assessment. For an example, see the [Acceptance Criteria](#) from *Frontiers*.



Do: Develop a Workflow and Acceptance and Rejection Criteria (7:4)

For the journal you selected above, revisit your peer-review flowchart from Activity 1:4, and review whether it needs any modifications. Make them as needed. Next, develop guidelines and policies for acceptance, revisions, and rejection. Consider the following questions:

- Who makes the ultimate decision?
- On what is the decision based?
- Are there any particular special considerations that should be a part of this process?

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8. Developing Your Peer-Review Practice

Introduction

In this final module you are asked to generate even more documentation of your peer-review values and positionality and then to put your values into practice. You will be asked to reflect on your values, concerns, and



Stages of monarch development – caterpillar and butterfly

questions regarding peer review. Understanding that your values, concerns, and questions will change over time due to your experiences, life and work circumstances, and interests, you may consider regularly revisiting these exercises throughout your professional life. This might be a module that you revisit every year to see how your positionality and practices have changed.

At the end of this module you should be able to:

- Articulate your positionality and values regarding peer review
- Professionally evaluate a work in your field using your positionality and guiding values

Activities and Exercises



Do: Brainstorm and Express Your Values (8:1)

Make a quick list of what you value in peer review. If it is instructive, review the lists you made for Module 2. Now, develop a peer-review values statement that describes your peer-review practice. Your statement should offer your [positionality](#) and express your values when it comes to peer review. You might consider these guiding questions:

- What do I most value about the peer-review process?
- Do I have an anti-oppression practice in peer review? How does or will that manifest?
- How will I frame critical feedback in a way that is constructive?
- How will I attempt to eliminate my own biases when I am reviewing others' works?

This could be as long as you like, but one page should be able to capture your thoughts succinctly.



Do: Conduct a Review and Write a Referee Report (8:2)

Find a work on a [pre-print server](#) in your field or a work at an openly peer-reviewed publication like [F1000Research](#). LIS folks could use the [LIS Scholarship Archive](#).

Using the rubric you developed in Activity 7:3, guidelines you developed in Activity 7:4, and your peer-review values statement from Activity 8:1, referee a work of your choosing. If the platform you are using allows you to contribute comments or otherwise publicly evaluate the work, do it! When you are done, take some time to reflect. How did it feel to conduct peer review? What was trickier or easier than you thought it would be? Were you able to easily adhere to your values and the other documents you created?

Lastly, share on social media about your experience using the course hashtag, #PeerReviewPrimer.



Do: Course Evaluation (8:3)

Congratulations! You have completed all 8 modules of this course. Please complete the [course evaluation](#). After you submit your evaluation you will receive a certificate you can print or save to show that you have completed the course.

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About the Author

Emily Ford is Associate Professor and Urban & Public Affairs Librarian at Portland State University. Her research uses narrative inquiry methods to understand peer review and she is an advocate for open peer review. In 2021 her book [*Stories of Open: Opening Peer Review through Narrative Inquiry*](#) was published by ACRL Press. In her spare time she is the proud human guardian of two cats and three fancy rats, volunteers at a local no-kill cat shelter, and runs tree-lined trails through forests near her home.