

Student Reflections on Information Literacy

Slide 1: Reflection for group - think back to your highschool years, we all had experiences during that time in life that shape who we are and while many of us may have never set foot in a school library, the majority of us learned about finding and evaluating information. Whether you did or didn't actually spend time in a library & media center, I want you to think about that time in your life and then try to remember if you ever were taught what you may now recognize as information literacy instruction.

Slide 2: Review the structure of the presentation

Slide 3: The assignment that is used for the analysis is part of a 15-ish week course that looks at a variety of aspects of digital technology and developing those skills to leverage within the higher education context. In the flow of the course, students have already examined technical aspects of digital technology and networked technology, looked at issues of culture, identity, privacy, and commerce in relation to digital technology and are then moving into information and media literacies.

Slide 4: The weekly content has two readings that explain general models and components of information literacy along with a short video on the topic as well. This content provides them with definitions of what information literacy is so that they can better identify and talk about their experiences in the discussion forum.

Slide 5: The prompt shown here asks students to reflect on a specific experience of learning information literacy skills when attending school. This online asynchronous discussion format is likely all too familiar for those of you who are experienced in online teaching and learning and in fact has since met with lots of new ways to more authentically support engagement. However, within an undergraduate-level online course these familiar formats often allow students to engage with the concepts without the additional cognitive load of assessing how to participate. Additionally, as outlined in the syllabus, the format of post submissions can be text, audio, or video.

Slide 6: Assessment, as illustrated in the rubric shown, is fairly standard as well for the discussion forums across the entirety of the course and at this point the group has already participated on four such forums. You may notice that the criteria for comprehension and responses is weighted higher than for things like timeliness and editing.

Slide 7: The table here shows some information about enrollments and participation on this assignment over the last three years. In the first column after the years, are the enrollment numbers beginning in 2020 with 18 students, in 2021 with 25 students, and 2022 with 20. The total number of posts per year corresponds well to their respective enrollment numbers with averages just below the three posts that would indicate full participation from all students. Instead, we can see that at rates of 2.7, 2.6, and 2.95, the majority of students are submitting initial posts and responding to others fairly

consistently.

Slide 8: Now that we have a feel for the assignment itself, I'd like to pause for any questions before we begin looking at the framework applied in analyzing the posts.

Slide 9: For this study, I borrowed a framework developed by Cheryl Perkins, who as a result of looking at several models for discussion analysis narrowed down four aspects of critical thinking that might be demonstrated and then applied this to test out on online graduate education course discussions. It should be noted that this model looks at individual level critical thinking rather than group level trends in critical thinking which for an instructor or student is more relevant and actionable information. The beauty of this model is that it has consolidated some much more exhaustive lists of identifying evidence of critical thinking into four categories making it much more manageable to apply in an instructional context.

First, we have **Clarification** which is defined as "All aspects of stating, clarifying, describing or defining the issue being discussed." Second, we have **Assessment** which covers "Evaluating some aspect of the debate; making judgments on a situation, proposing evidence for an argument or for links with other issues." Third is **Inference** that is identified as "Showing connections among ideas; drawing appropriate conclusions by deduction or induction, generalizing, explaining and hypothesizing." Fourth, are **Strategies**, where students are "Proposing, discussing, or evaluating possible actions."

Slide 10: To code individual contributions, I opened Speedgrader in Canvas which displays individual students' contributions to the discussion; so this would include their initial posts and any responses that they wrote in one spot. I pulled the text from these and assigned an alphabet letter to each content document. These documents were then loaded into MAXQDA to be coded using the four aspects of critical thinking from our model. In the illustration, you can see that I have coded this section with Clarification in light blue, Assessment in green, Inference in orange and Strategies in purple. This was fairly straightforward and overall a smooth process, however, right now, I just have three coded examples for us to look at together.

Slide 11: So first off, here is a numeric look at what I found. In this chart individual students are represented by the letters A, B and C. Students A and B had 10 indicators that I coded for critical thinking while student C had 5. Among those coded units a lot of different things were happening. With student A, there is a nice balance of clarification, assessment and strategies. In fact this student had a lot of potential ideas about what could be done better and how. Student B, was more critically minded and provided lots of judgments or opinions but also made several inferences to other course content or contexts. Student C actually had an initial post that was composed entirely of clarifying thinking and really telling the story of what information literacy instruction looked like for them from elementary and middle through high school. They dipped into assessment and strategies in the response posts.

Slide 12: Here is another window into the posts, MAXQDA can generate document portraits based on their coding to give us a color-coded visualization of the text. An interesting thing to know about these documents is that they are all roughly the same length. You may recall that there were word counts both for initial posts and replies, this actually makes it very nice to compare these documents side by side like we are now. While we noted the quantity of critical thinking aspects in the texts before, now we can also get a feel for the flow of how that thinking occurred. The upper two-thirds of each portrait is the initial posts and the bottom third of each are two response posts with any greetings removed. As I am able to continue coding these transcripts, I expect to be able to find similarities in the flow of the work submitted, but already, I can see that clarification is a typical initial first step in addressing the prompt, which makes a lot of sense. The student-authors are responding directly to the prompt in these statements and then proceeding to develop judgments about the experiences they are describing, putting forward ideas about how to improve things or their own practices in regards to information literacy and considering implications or thinking about how these skills might play out in other contexts.

Slide 13: Now, let's take a moment to read this example of Clarifying thinking... Takes the long view beginning with basic literacy and then onto evaluating the credibility of sources.

Slide 14: This snippet about how Wikipedia was presented by educators fell under the assessment category is a thing that came up fairly often and sparked a lot of conversation about what some students saw as reasonable uses of Wikipedia.

Slide 15: This section has a bit of a strategy and follows up with an inference that suggests that these information literacy skills are not isolated to research projects.

Slide 16: This selection digs into a student's narrative regarding being introduced to databases by their librarian and finding information much more readily discoverable. When providing instructor feedback on this particular thread I recall going into some detail about the differences between searching databases and search engine based Internet searches. The student knew this tool worked but as you read, it is unclear if they knew how it worked.

Slide 17: Just to give you a feel for where students in this sample attended school in the past: Fluvanna, Goochland, Greene, Louisa, Madison, Nelson and Orange public schools within Virginia are represented. In my reading, I saw a mix of teacher-led, librarian-led or collaborative instructional approaches. Students generally see this type of instruction as highly related to research projects or papers though they indicate the relevance information literacy has on other aspects of informing themselves. Many, many students spoke positively of their time in library and media center environments as well as the resources they were able to use within those spaces or accessing library tools and collections online. There was a lot of conversation around ways of identifying and understanding bias with a really wide range of ideas about how instruction around this might be approached - some loved acronym-based models, others thought it was

overly complicated when taught, and other yet were concerned about what they aren't able to access in terms of bias - so this is obviously an area of deep interest at this age and stage. As I mentioned before with one of our examples, connections were made to how info lit skills may be applied to other information contexts with particular emphasis on mass and social media. Finally, when it came down to strategies, students mentioned the need for more practice with these skills, the importance of reading broadly on a topic, and the value of using particular tools; specifically source evaluation methods, catalogs and databases, and seeking the assistance of library media specialists.

Slide 18: At this stage in the process, the implications that I am seeing include:

- The importance of subject area teachers to demonstrate evaluation and discovery tools in their particular contexts.
- Having library media specialists take the lead on teaching more advanced skills with the research tools available to their students.
- Making sure that teachers and classes have opportunities to be in our physical spaces but also good experiences in our virtual spaces - so, making our websites as easy to navigate and functional as possible.
- Taking opportunities to develop concepts and provide examples to make explicit connections between the information literacy skills we are teaching in how they might be applied to mass or social media.
- Being really thoughtful about how we are teaching the concept of bias and different methods for evaluating it - with particular attention to the fact that one model for evaluating bias may not match within particular disciplines or with the information that is available or being pursued by our students.
- And finally, no surprise here - this idea of practice really lends itself to the concept that information literacy needs to be something that finds its way into many aspects of a person's educational experience - it is truly a transdisciplinary set of skills. So my final suggestion here is that library media specialists need to think about info lit not just in the composition, science and history contexts but also in mathematics, arts, and physical education contexts as well.

Slide 19: So what's next with this for me? More Coding = finding trends in "clarification" and "inference" statements, not a grounded theory.

-I am considering weighting expressed opinions and strategies, to see if there are things that students feel more strongly about.

And because this is still very much in process, I would like to invite your ideas? What do you think I should be paying attention to or considering...

Slide 20: Wrap it up!