Annotated Bibliography: Thinking Critically About Sources

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Abstract

With the advent of the internet and online databases, contemporary university students are faced with a plethora of potential sources for their work. With online sources in particular, however, it is essential that students can appraise them for reliability. To do so successfully, they need to develop a clear and somewhat sophisticated understanding of the borderline between reliability and unreliability. This paper reflects on the introduction of an annotated bibliography in the Winter Term 2021–2022 as part of the Academic Reading and Writing (ARW) course at International Christian University (ICU) in Tokyo. The task had several aims, one of which was to develop students' abilities to identify reliable sources correctly. Overall, the majority of sources found were reliable. However, the task also highlighted some of the gaps in student understanding of this issue as a result of the complexities and subtleties of appraising sources.

When developing an argument in formal academic writing, writers need to cite the evidence used. Usually, for novice writers, this evidence takes the form of sources. These are previously published works the student has read or listened to which have informed their argument. A crucial aspect of these sources is that they are considered reliable. That is, they are trustworthy. Without such reliability, the writer's argument and credibility are likely to be greatly diminished in the eyes of the reader. It is, therefore, essential that novice writers, such as first-year students at ICU, are taught how to evaluate a source in terms of its reliability. This paper reflects on the insights gained from introducing an annotated bibliography in the Winter Term 2021 to develop skills in evaluating sources. Our insights suggest that students begin the term with a clear, basic understanding of source reliability. However, students need further practice to develop their skills in evaluating publishers seen as prestigious, recognising predatory journals, conducting basic background research on special interest groups, recognising the difference between a publisher and a database, and checking the basic background credibility of an author.

Background

In the Winter Term 2021–2022, five teachers in ARW Stream 3 ran a pilot study involving several changes to the tasks within the syllabus. The original syllabus consists of two themes and several course-wide assignments. Theme one is ethics and associated bioethical topics. In the original syllabus, students write a take-home essay on bioethical dilemmas and then an individually researched essay on a bioethical topic of their choosing. The latter requires

an outline and draft(s) as part of the essay writing process. Theme two is on visions of the future, and students take part in a group presentation done at the end of the Winter Term (commonly referred to as 'the winter project'), and write a short reflection paper on the presentation. In the pilot syllabus, the themes remained the same and, for ethics and bioethics, the take-home essay saw no changes. There were, though, significant changes so that the tasks allowed students, working collegially in groups, to orientate themselves in a topic before adopting a position for the essay. The first task was an annotated bibliography on a bioethical issue chosen by each group (see Appendix). Drawing on this work, the second was a group presentation (i.e., 'the winter project' was moved from the end to the middle of the term) in which they defined the topic and identified some of the issues associated with it. Following this, students wrote an essay on the topic, drawing on their work in the bibliography and presentation. This included an outline and draft, leading to the final paper. Ostensibly, students develop a position for the essay on their own. They also write it individually. However, they are encouraged to consult with their group members whenever necessary, such as when they need advice or when doing peer review.

The Annotated Bibliography

While there is no fixed definition of what constitutes an annotated bibliography, a survey of three North American university websites ("Annotated Bibliography," n.d.; "How to Write," 2021, November 16; "What Is," 2022, December 7) reveals five common features:
- comments on the author's background and credibility
- a summary of the main points of the text
- the relevance of the source to the student's work
- essential bibliographic information
- a critical analysis of the text

For the annotated bibliography pilot, we adopted all these features except for the critical analysis. We did not require critical analysis of the content as one of the overarching goals of this annotated bibliography is for students to broadly familiarise themselves with the topic and to identify some of the important issues associated with it. It is not until students start planning their essay after the presentation that they narrow their focus, and then critically analyse the content of their sources. In this process, they may eschew some of their sources from the annotated bibliography, while perhaps adding others. We also added some specific requirements regarding the reliability of sources. First, we asked students to consider the age of the source, which is vital in a dynamic field such as bioethics. Second, students evaluated the publisher of the source (e.g., a journal, a media source including social network sites, or an NGO). Finally, they needed to make an explicit statement about the reliability of the source overall, taking into account all of these factors.

We encouraged students to prepare the assignment in consultation with their group members, but each student had to produce their own annotated bibliography for three sources. In addition, as this was part of the preparation for the group presentation, students could not duplicate sources across their group. In this way, it was possible to assess the abilities of individual students.

Rationale

We adopted an annotated bibliography for several reasons. Firstly, such a bibliography places greater emphasis on the early stages of the research process. The bibliography reinforces the message for students that in this developmental stage of their understanding of academic writing, the early process stages are at least as important as the product (Hewings et al., 2005). That is, the iterative process of developing questions, researching, reading, and note-taking, *before* outlining and drafting. Secondly, such an activity gives students an initial experience of the essay writing process expected in Research Writing, a second-year ELA course in which students select and research a topic. Finally, we encouraged students to work collaboratively as they researched and developed their ideas. We wanted to emphasise that collaborative working and thinking is a valued and normal part of academia.

Assumptions

We designed the task based on three assumptions. Firstly, since the students are novice researchers, we assumed that without guidance, they would probably include unreliable materials in their sources. Therefore, we provided the criteria to assess reliability (author's background, publisher, date, and a list of references at the end of the work) to enable students to determine whether or not the sources were appropriate to support their work. That is to say, the task would function as a tool to both select appropriate sources and then justify their choices in accordance with the process approach to writing. Secondly, we assumed that students would be drawing on skills they had practised in the Research and Evidence (R& E) course in the previous term. In R& E, they are introduced to a five-step process of evaluating sources by considering Currency, Relevance, Authority, Accuracy, and Purpose (CRAAP). Similarly, our in-house online academic reference tool, the Student Guide to Writing (SGW), teaches students to assess sources through currency, relevance, and reliability, although the latter is not clearly defined ("Using Sources," n.d.). Consequently, our third assumption was that, because the students had experience of assessing reliability both in R& E and with the help of SGW, they would find this part of the annotated bibliography assignment less challenging and potentially less time-consuming than writing the summary of their text. We, therefore, reflected this in the grading criteria by assigning 60% of the grade to the summary and 20% to the assessment of reliability. The remaining 20% was allocated to their explanation of the intended use of the material in their paper.

Initial Findings

As a preliminary remark, it is important to note that our findings are may therefore diverge from those of the other pilot teachers. At times, however, we do include feedback from the other pilot teachers and their students, and such comments are clearly indicated.

It should be noted that students were largely successful in identifying reliable sources. Although data suggests that most students (92% of one section) used *Google* at some point to search for material, it appears that many were able to successfully refine their search by also using the more reliable website such as *Google Scholar* (52%) and ICU library (16%) (Lesley, 2022). Moreover, the annotated bibliography assignments showed that the majority of students accurately assessed their sources through the required criteria of author's background, date of

publication, publisher, and list of references. There were also indications of sophisticated analyses of materials, such as that of a student evaluating the reliability of the information in a newspaper article. They explained that, "Newspapers are not always reliable when it comes to their opinion, but the information that I want to use from this article is their data, so it is fine."

Nevertheless, in some respects, the annotated bibliography was a more complicated task than we had initially anticipated. Our assumption about the degree of difficulty posed by the different parts of the assignment (source reliability, summary, and intended use) proved to be somewhat inaccurate. Although the students' work did, at times, indicate problems with summary writing skills, such as paraphrasing and identifying key points of texts, their notes about source reliability revealed a number of ways in which they struggled to accurately evaluate sources. To us, this part of the task was the area in which students needed the most improvement. Five problems in gauging reliability were identified, four of which relate to assessing the publisher. The fifth regards the credibility of the authors and their sources. An additional issue arose in task achievement in terms of students not analysing the information reported about a source.

Firstly, some students tended to believe that sources from organisations perceived as prestigious are inherently reliable. One example of this can be found in the notes of a student who used an ethics guide to animal experiments from a BBC webpage ("Experimenting on Animals," 2014). The page has no author and no references. Indeed, in the header there is an announcement that the page has been archived and is no longer updated. Nevertheless, the student claims that "the BBC is an international news programme so it is trustable." For this student, anything published by the BBC is suitable academic support.

A second problem lay in a lack of awareness of predatory journals. Another student who was also researching animal rights selected a source published in an online journal by the company MedCrave (https://medcrave.com). The student reports that this is "a famous publisher which is strong in the medical area." Further background checks on the publisher, however, reveal that it is, in fact, a so-called predatory journal that solicits articles, publishing them and then asking the author for payment for having done so. As Dr. Daniel Reichart (2017), a Professor of Physics and Astronomy at the University of North Carolina, explains, there is no vetting process of articles before publication by MedCrave. In light of this, we may need to think about also teaching students to investigate the credibility of databases and raise their awareness of the existence of predatory journals.

Similarly, many students did not consider the potential bias in articles published by Non-Governmental Organisations or other special interest groups. One student chose a promotional video uploaded to YouTube by the animal rights organisation People for the Ethical Treatment of Animals ("Experimenting on Animals"). In this case, it was the size of the organisation that persuaded the student of its validity. They wrote that "it is supported by so many people in so many countries." The fact that the name of the group clearly indicates a position on animal rights with the word "for" failed to alert the student to the potentially subjective nature of the contents of the video.

A fourth area of difficulty was in identifying the publisher as distinct from an online database. For example, if an article were published in the science journal *The Lancet* but students accessed it through the online publisher *Elsevier*, students tended to give the latter as the publisher. That is, they were not able to recognise and assess the reliability of the academic journal itself. Believing *Elsevier* to be the publisher, students then stated that anything published on such a website is reliable. One important problem arising from this is that, if students do not correctly identify the journal, they will not become familiar with and accustomed to searching for sources in reputable journals in their fields of study. Thus, they

miss the opportunity to acquire the valuable short-cut to finding sources that comes from knowing established journals.

A fifth area of difficulty for students was in determining the credibility of authors and their sources. Examples of this can be found in the annotated bibliography of the student who used the aforementioned article from *MedCrave*. They indicated in the notes that the authors are employees of a company managing halaal certification. Indeed, the student justified the trustworthiness of one of the authors by emphasising his work experience. They wrote, "His company is related to animals and he can be an experienced worker." However, they failed to note the authors' lack of academic credentials. Such credentials would be expected in a reliable journal. Moreover, the authors' occupations, together with frequent references to Islam and the Quran as their main sources of information, should have at least indicated to the student that the authors were drawing on religious precepts and were therefore not writing objectively. Teachers need to give students more help in noticing the cues regarding authors' credentials and their source material that indicate unreliability and potentially biased texts.

The final area for improvement was in the task design itself in that some students did not explicitly comment on the reliability of the sources they had found. That is to say, they simply reported the information about their texts but did not evaluate it. For example, "The author has a PhD" as opposed to "The author has a PhD in a relevant field and is therefore an expert." The students who stopped short of commenting may have considered that the existence of the information (author, date, publisher, and list of references) was itself evidence of reliability. In other words, if the information can be found, the source is reliable. Or they may have considered that the reliability was self-evident and did not require further explicit description. However, it is these very comments about the overall reliability of sources that provide the greatest insights into the accuracy of the students' evaluation process. They are therefore central to the teacher's assessment of the student's ability to assess sources.

Discussion

Student work on the annotated bibliography reveals several issues which students find difficult to appraise in terms of reliability. One of the first difficulties stated above is what might be termed 'prestigious' media organisations, such as the BBC, and a tendency for students to uncritically accept their sources. Thus, students need reminding that they should critically evaluate text reliability, regardless of the source of the text.

Similarly, students need to be aware that organisations such as non-governmental organisations and special interest groups invariably have biases which may call into question the objectivity of their reports and media releases. Many of these groups may have highly qualified individuals and academics representing them, promoting the organisation's core values and ideas. However, organisations such as the previously mentioned People for the Ethical Treatment of Animals may have vested interests. Discussion papers and media releases can be reliable genres per se, but students need to be conscious of their possible biases. Therefore, they should conduct basic background research regarding the organisation to identify its agenda and goals. In addition, having identified any agendas, students should then be more alert for instances of charged or emotional language and evidence of card-stacking. Students need to read critically at all times.

A further area in which students clearly need more support in their search for reliable sources is in becoming familiar with the established journals in their field of study. The very concept of a journal is new to the majority of first-year undergraduates and is one that may be

difficult to grasp when doing research uniquely in an online environment. Indeed, the comments of some of our students have indicated that, even in their second year at college, they understandably conflate journals with diaries or magazines. However, if students use journal articles for sources, the likelihood of the material being reliable is greatly increased. Thus, instructors should encourage students to visit the library in person to explore the shelves and familiarise themselves with the concept and functions of journals of particular disciplines.

The last point leads to a broader question regarding the kind of sources we can reasonably expect novice researchers to use to support their academic work. In the pilot annotated bibliography task, we did not stipulate the type of sources students should include but rather, emphasised the criteria for assessing reliability. Perhaps we were actually doing the students a disservice in this way. Had we required one journal article and one book, for example, their struggles to identify reliability may have been circumvented. Or perhaps this somewhat messy process was a very useful awareness-raising activity. Clearly, this is an area that needs more investigation and a wider discussion among the ARW Stream 3 teachers. In that discussion, we should also focus on the appropriateness of sources such as dictionaries, encyclopaedias, and *Wikipedia*. In addition, it would be important to consider the source requirements made of first-year students by ICU professors outside the ELA. We should ask ourselves whether any eventual guidelines about sources should reflect the requirements of non-ELA professors. There is much to be discussed.

Lastly, we suggest that the assignment brief needs some modifications. Apart from the possible inclusion of an instruction requiring students to use particular kinds of sources, we believe that the brief would be better if modified in two other ways. One change is to make the instruction to evaluate the sources more explicit; that is to say, having located the relevant source information (author, date, references, publisher), it is important that students explain how the information impacts their assessment of the source's reliability. This should include the justification of its use in light of any less reliable elements. Another change we propose is in the allocation of points. In view of the relative complexity of this part of the annotated bibliography we think it should be allocated more than its current 20% of the overall grade. A new and more appropriate breakdown might be: assessment of reliability 40%, summary of source 40%, and intended use 20%. Such a breakdown would also send students a clear message that reliability is very important.

Conclusion

The skills needed to evaluate sources take time to practise and develop, and the annotated bibliography provides opportunities for both. Additionally, it provides a record of what students thought when evaluating a source, giving teachers extremely important insights into student strengths and weaknesses in the process. Thus, the annotated bibliography is a powerful pedagogical tool as part of the writing process.

The annotated bibliography task revealed much about how students analysed their sources for reliability. The most encouraging aspect is that most of our students had a basic understanding of the concept of reliability and how to assess sources. This was probably as a result of the R&E course taken in the previous term and the students' use of the criteria given in the SGW One important area for improvement was establishing the publisher and their credibility. In this respect, more work is needed to help students in several important ways: to identify who the publisher is by differentiating between a journal and a database containing many journals, to critically appraise sources from media organisations considered inherently

reliable such as the BBC, to conduct basic background checks to identify predatory journals, and similarly, to research special interest groups for their agendas. Finally, as teachers, we became much more conscious of the complexities around assessing source reliability, including how to establish the overall reliability of a source that is lacking in some features. Such understanding should help us to teach and support students as they gain these skills.

This paper represents our initial reflections on a new task in ARW Stream 3. Admittedly, the sample size was relatively small but initial indications are that students benefited greatly from the task and that it would be extremely worthwhile running the activity with more students next winter. Given the usefulness of the annotated bibliography, we should explore introducing it earlier to ARW Stream 3 students (in a more limited form in Autumn Term, for example) and extending it to RW courses.

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Appendix

Winter, ARW3, CWA X: Annotated Bibliography Assignment Brief

Topic: An annotated bibliography for your winter project. (Here is a sample.) The submission document is at the end.

What you need to do	Find three reliable sources in English which you may be able to use in your winter project. Briefly summarise these sources and explain how you intend to use them in your presentation.
Structure and word count	You need to • cite three sources (using MLA) • comment on the reliability of each source • summarise the main idea(s) in 80-100 words per source • explain (briefly) how you intend to use the source in one or two sentences
Sources	Three English language sources We strongly encourage you to use sources you have read in the CLA. For example, if you have taken a CLA course in Ethics, you may be able to use sources from that course.
Value	5%
General info.	Remember that at any stage in your writing you can have an online tutorial at the Writing Support Desk (WSD). Some of the tutors are specially trained to work with you.

Submission date:

Formatting

Font & Size and Line spacing	Times New Roman, Size 12 1.5 line spacing	Format your sources	Use a hanging indent for your sources.
Title	Centered with capitalization	Alignment	Left align
Header	Write your family names & page number (font = Times New Roman, Size 12)		

Annotated bibliography sample:

<div align="center">Title: Exploring issues associated with gender socialisation</div>

Balvin, Nikola. "What Is Gender Socialization and Why Does It Matter?" *Evidence for Action*, UNICEF, 18 Aug. 2017. Accessed November 20th, 2021. https://blogs.unicef.org/evience-for-action/what-is-gender-socialization-and-why-does-it-matter/

Comment on the reliability of the following**:**
(Main) author's background: Balvin has a PhD (Dr of Psychology) and she works at the Office of Research - Innocenti at UNICEF. Her qualifications and job suggest she is an expert.
Date: It's only 4 years old so it is still relevant.
Publisher: UNICEF is a credible and respected international organisation
Sources: Balvin uses sources. There are in-text citations which are hyper-linked but there is no Works Cited. This makes it reliable but not completely academic.

*Summary (80-100 words)***:** Balvin defines gender socialisation and gives examples of it in different countries. She presents the results of research into how it affects people in various aspects of their lives, such as in schools and at work. She emphasises that the impact during adolescence is particularly strong and potentially long-lasting. She also identifies the people and institutions that create and enforce gender socialisation. Moreover, she examines how the results could be integrated into policy-making to reduce the negative impacts of gender socialisation.

How to use: I will use it in the introduction or in the first main section to give a definition of gender socialisation. In addition, I may use Figure 1 as a visual to help the audience to understand the impact of various levels of gender socialisation.

Annotated bibliography Course-wide Assignment (CWA):
Directions: Remember to look at the assignment brief for full information about this Course-wide Assignment.

Group members' names:

<div align="center">Title: Exploring issues about ...</div>

Name & ID:
Teacher name:
Date:

Source 1
[insert your source here and format in MLA style]

Comment on the reliability of the following**:**
(Main) author's background:
Date:
Publisher:

Sources:
*Summary (80-100 words)***:**
How to use:

Source 2
[insert your source here and format in MLA style]

Comment on the reliability of the following**:**
(Main) author's background:
Date:
Publisher:
Sources:
*Summary (80-100 words)***:**
How to use:

Source 3
[insert your source here and format in MLA style]

Comment on the reliability of the following**:**
(Main) author's background:
Date:
Publisher:
Sources:
*Summary (80-100 words)***:**
How to use:

Grading Criteria

		My grade	**Teacher grade**
Content & structure	You cite 3 sources accurately using MLA. You comment on the reliability of your sources. (Here is a link to Autumn's R&E course material about reliability.)	**/2**	**/2**
	You clearly summarise the main idea(s) in each source (80-100 words per source).	**/6**	**/6**
	You explain briefly how you might use the source in one or two sentences.	**/2**	**/2**
-1 point for late submission. **-1 point for general formatting errors**			
		Total	**/10**
		Convert to 5% =	