Developing Digital Literacy Materials Using the *Navigating Digital Information* CrashCourse Series

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要旨

オンライン情報を正しく理解するためには、クリティカルな思考が必要である。本稿では、デジタル・リテラシーをテーマにしたYouTubeシリーズ「Navigating Digital Information」の視聴と活動、日本人向けにアレンジした教材を用いたクリティカルな思考が育成できる授業の提案を行う。

Abstract

Digital literacy is an ever growing key skill for university students. More than ever, they need to judge information, check sources, and avoid misinformation. This lesson plan explains how the YouTube series *Navigating Digital Information* from CrashCourse was used to build a course on digital literacy. The ten episodes formed the base for all the course lessons. The videos were assigned as homework and then discussed during class. With this, related activities and resources were used to promote discussion and reflection. The purpose was to give students a step-by-step process for learning how to think critically about online information and better understand the world around them.

Introduction

The internet has quickly and dramatically changed how we live and communicate. Despite its many benefits, it has also been used to create a world where misinformation has become rampant. Students need the necessary tools to evaluate what they see online to judge its reliability and validity more than ever.

The *Navigating Digital Information* series from CrashCourse was chosen for this course because the videos are short and designed for educational environments. The series was also made with experts from the MediaWise project, which focuses on digital literacy (CrashCourse, 2019a).

This paper explains how the episodes were used in the classroom. It also shows the kinds of discussions and activities that followed.

Methodology: How the Episodes Were Used

The course followed three main ideas:

1. **Learning step by step**. The lessons started with well-known phrases and concepts like fake news and moved to harder ones like algorithms, social media as well as more controversial topics.

2. **Active learning**. Students did pair and group work, fact checking tasks, and practiced with tools like Wikipedia and Google reverse image search.
3. **Local examples**. When possible, examples from Japan were added, covering topics from domestic sources.

Each class began by reviewing the assigned episode. Afterwards, students worked together using activities to check understanding and application of those skills introduced in the assigned episode. Homework included practicing tasks such as fact checking or reflecting on personal online habits as well as summarizing the following episode before the next class.

Episode-Based Development

Episode 1: What Is Digital Literacy

This episode introduces the course. It covers fake news, misinformation, and disinformation (CrashCourse, 2019a). Examples include the wrongly labeled Fukushima flower photo and a misleading picture of a "Zulu Chief". The video explains that access to the internet is still unequal and billions of people cannot share their voices. Students discuss the important idea of how the quality of information shapes our decisions and ultimately our life. Activities show how students sometimes judge information based only on appearance.

Episode 2: Asking Critical Questions

Students are introduced to three questions to ask when encountering new information.

- Who is behind this information?
- What is the evidence?
- What do other sources say?

In class, students compare websites and check claims on *Snopes* (Snopes, n.d.). They work in pairs to talk about whether the evidence was strong or weak (CrashCourse, 2019b).

Episode 3: Lateral Reading

This lesson focuses on reading in new ways. Students learn that reading vertically only shows what the writer wants them to see. Lateral reading means opening new tabs and checking other sources. Class discussion includes the biases of Japanese newspapers and whether there is a Japanese version of *Snopes* (CrashCourse, 2019c).

Episode 4: Authority and Perspective

Students learn that authority comes from a place of knowledge, correct processes, and those systems enforced to correct mistakes. They look at examples of corrections in the media, including *ProPublica* (ProPublica, 2017). The difference between perspective and bias is explained. Small groups practice discussing these differences (CrashCourse, 2019d).

Episode 5: Wikipedia as a Starting Point

Students explore Wikipedia rules like neutrality and verifiability. They learn about warning labels, talk pages, and locked pages. They also learn that Wikipedia is useful as a starting point but not as

the only source (Wikipedia, 2023). Discussions show why some topics are covered in detail while others are not (CrashCourse, 2019e).

Episode 6: Evaluating Evidence

The focus of this class is on evidence. Students see examples of irrelevant evidence and fake evidence. Spurious correlations, such as Nicolas Cage movies and drowning deaths, are used to show false connections (Vigen, 2015). Students practice confirming if evidence is relevant and reliable (CrashCourse, 2019f).

Episode 7: Photos and Videos

This lesson shows how images and videos can mislead. Students practice reverse image searches. Deepfake videos are shown, including Former President Obama and actor Bill Hader (CrashCourse, 2019g). Even photos and videos need to be checked for context, credit, and location.

Episode 8: Data and Infographics

Students look at how graphs and statistics can be powerful but also misleading. They discuss who made the data and why. Examples included climate change graphs and other "incorrectly labeled" online charts (CrashCourse, 2019h). Students learn about reading data carefully and not taking data at face value.

Episode 9: Click Restraint

The class focused on search habits. Students learn why to not always trust the first link in Google results. They practice scanning titles and comparing multiple sources. Search tools like quotation marks and search phrases like "site:" were introduced (CrashCourse, 2019i). They also discuss how algorithms are made by people and are not neutral.

Episode 10: Social Media and Confirmation Bias

The final episode is about social media. Students talk about the good and bad points of online sharing. Topics include making friends, finding communities, targeted advertising, filter bubbles, and confirmation bias (Pariser, 2011). The class ends with a review of all the skills, especially the need to be careful with information that matches our beliefs too easily (CrashCourse, 2019j).

Discussion and Outcomes

Overall, the general response from students seems positive. Students seem interested in the topics because the examples were real and connected to their own lived experience. In the final presentation where they are asked to reflect on the most important points, students often talk about how the course has made them think more deeply about their online behavior. Group activities like reverse image searching and website comparisons seem especially effective.

Despite the many positive reviews, students often have different levels of understanding when it comes to critical thinking and some often need more support. It was also difficult to localize every example to the Japanese context.

Conclusion

Digital literacy requires practice, not just theory. The *Navigating Digital Information* CrashCourse series provides a clear structure for teaching these necessary skills. By watching, discussing, and practicing each episode, students gain tools to check information and think more critically.

Future work can add more Japanese examples and assess long-term impact. Overall, the course shows that the materials, both in and out of the classroom, not only promote the use of English but assist in making digital literacy education both informative and practical.

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