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Teaching Students to be Critical Online Learners

In a “post-truth” world, how well equipped are our students at distinguishing between genuine news reporting, “fake news” and advertising content?

In 2016, on the back of Donald Trump’s election as President of the United States of America, it seemed increasingly important that our students learn not only how to navigate the extreme volume of online material, but also to interpret real news content from a burgeoning volume of fake news. In 2016, the Oxford Dictionary “Word of the Year” was “post-truth”. I remember asking myself the question: how would I cope with information, in this new context, if I were only 12 or 13 years old?

When I read the article, “Evaluating information: The cornerstone of civic online reasoning” by the Stanford History Education Group (SHEG, 2016), it provided a fantastic template for how to conduct a study that would measure students’ online evaluation of information skills. Specifically, the study targeted students’ capacity to accurately identify and evaluate online news and advertising content from a range of sources, including online news sites, social media posts and online image-sharing sites.

The SHEG study found that overall young people’s ability to reason about information on the Internet can be summed up in one word: bleak (SHEG, 2016, p4).

Student performance

Would our Roseville students perform differently to the SHEG cohort?

This was the question that we wanted to explore, so the Library conducted a Roseville-based study to measure students in this area. Where SHEG had tested middle school, upper secondary and junior college students, we chose to focus on Year 8 students so that we could apply the findings to our Year 7 Information Literacy program and then test

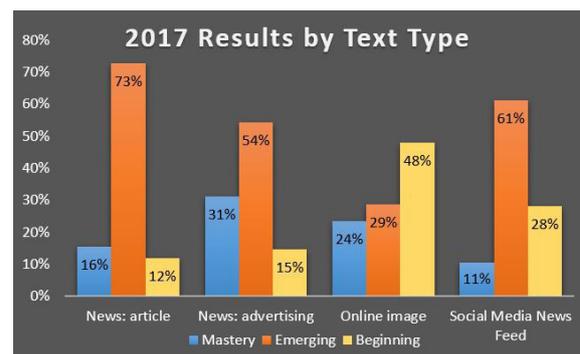
those students in Year 8 to assess the impact of our teaching of these skills. The only modification we made to the SHEG study was that we substituted some of the texts with Australian examples.

How did we assess students’ capacity to evaluate online news information?

The marking code that we used reflected a level of achievement ranging from 1–3 and mirrored the SHEG study. These coded numbers represented the following levels of student achievement: beginning (1), emerging (2) or mastery level (3). Essentially, this means:

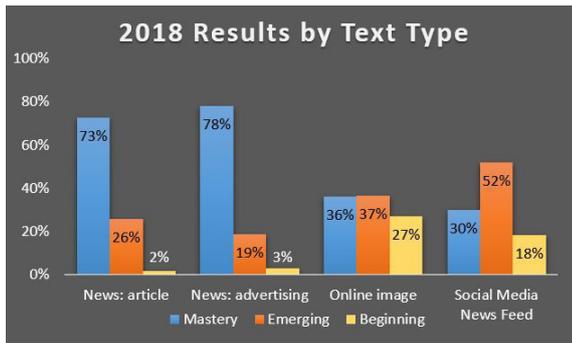
- Beginning = Incorrect or incoherent answer
- Emerging = Correct answer with unclear or absent reasoning
- Mastery = Correct answer with clear and coherent reasoning

In 2017, we tested 120 Year 8 students who had not been directly taught online evaluation of information skills. We discovered that there was indeed a need to teach students “explicitly” how to evaluate online news and advertising content. While students were generally good at identifying texts accurately, their ability to use reasoning to justify their decisions was very limited. More detail can be found in the Roseville College Year 8 2017 final report, Online evaluation of information task (Roseville College, 2017).



Revising our Year 7 Information Literacy Program

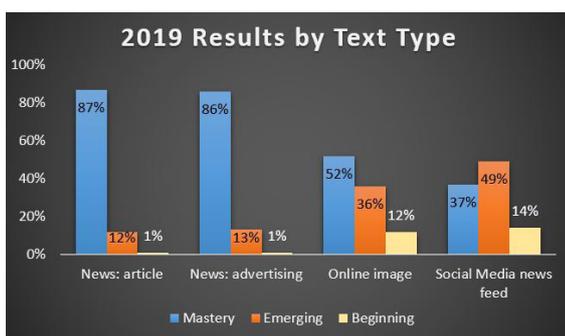
The 2017 study’s results directly informed a short unit of work on “Fake News” (3–4 x 50 minute lessons) that was delivered to Year 7 in late 2017. When we tested this cohort in 2018, we saw a strong improvement in the number of students possessing a “mastery” level of analysis, especially in the areas that we spent the most time teaching: news articles and ‘native’ advertising. More detail can be found in the Roseville College Year 8 2018 final report, Online evaluation of information task (Roseville College, 2018).



Creating a 3 year action research cycle

The Roseville study evolved organically to become a 3 year action-research project run by the Library. Our main purposes were to prioritise online evaluation skills as part of our teaching of information literacy and to measure the effectiveness of our lessons on these skills. What we found was an overwhelmingly positive response from students. The study's results clearly reinforced that if you teach students "directly" how to engage in critical thinking about online texts, then their capacity to accurately identify and evaluate texts, using specific textual evidence to support their beliefs, will improve dramatically. That is, more of them will develop a "mastery" level of understanding.

In 2019, the Year 8 cohort had experienced a greater focus on learning how to analyse online images and social media posts than the 2018 cohort. Due to timing restraints, these text types had not been given the same depth in the previous year and the 2018 results revealed them to be areas for further improvement. The 2019 results showed clearly that where we focused our teaching (the news article and advertising text types), was where the dramatic improvement in skills was most evident. More detail can be found in the Roseville College Year 8 2019 final report, Online evaluation of information task (Roseville College, 2019).



Moving on from the study

A "Fake News" unit has continued to play an integral role within our Year 7 Information Literacy program. Student feedback reflects that they enjoy learning about and critiquing online news content, and we feel strongly about the value of these skills. ACARA's "Critical and Creative

Thinking Learning continuum" supports that students in Year 8 should be able to demonstrate that they can "critically analyse information and evidence according to criteria such as validity and relevance" (ACARA, n.d.). We believe this includes the use of online news content to deepen their understanding of a topic or event.

Our study affirmed that to improve students' capacity to engage with online news information in a critical way they need "direct" instruction and modelling of how to do this.

The results also support that students retain this explicit instruction and continue to apply it over time.

Teaching online evaluation of information skills

Some ideas:

- Deconstruct and construct social media texts, whereby students evaluate news and information for integrity and perspective on a key topic.
- Compare and contrast social media representations of a key topic, thus exploring the complexity of online news content.
- Measure social media's involvement in a key topic/news story in order to influence the spread of news and certain perspectives.
- Measure social media's involvement in terms of human versus bot generated posts (using tools such as: Hoaxy, InVid, Botometer).
- Reflect on the social/political/economic impacts of social media posts in shaping the broader society.

Hoaxy, InVid and Botometer are free software tools that support students in gaining a greater understanding of the corruptibility of online texts; in turn, teaching with them reinforces student understanding of the need to practice greater scrutiny of online content.

Underpinned by democratic values

Teaching students "how" to be critical online learners supports their potential to be critical life-long learners and active, well-informed citizens beyond their schooling. Libraries have a valuable role to play in this area and teacher librarians can work towards embedding these skills in student learning tasks.

Citations and bibliography withheld.