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Examining student perceptions of their knowledge, roles, and power in the information cycle: Findings from a ‘fake news’ event

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Abstract

This project report describes a collaborative effort between librarians, staff, local journalists and students at Old Dominion University (Norfolk, VA) to provide a venue for a discussion about ‘fake news’. Post-event questionnaire results are analysed to explore what students learned as a result of attending the event as well as student perceptions of their own understanding and ownership of the roles that they can play in the information cycle.

Keywords
digital literacy; fake news; higher education; information behaviour; information literacy; media literacy; social media; US

1. Introduction

While the concepts of misinformation, disinformation and propaganda have existed for as long as the dissemination of information, the 2016 presidential election brought the term ‘fake news’ to the forefront of everyday conversations in all parts of our society including in college classrooms. The motivation for this project stemmed from the quickly growing popularity of the term fake news and its impact on the information ecosystem. This project report will describe a collaborative effort between librarians, academic staff, local journalists and students to provide a venue for a discussion about fake news and to explore student perceptions of their own understanding and ownership of the roles that they can play in the information cycle.

In collaboration with academic staff from the Department of Communications & Theatre Arts, the Old Dominion University Libraries hosted an event: Stop Trying to Make Fake News Happen! The event was targeted primarily at students who were enrolled in information literacy (IL) general education courses during that semester. The Instructional Services Librarian coordinated the event. She worked with IL academic staff to ensure their participation, provided lesson plans and supplemental materials to use with their courses if they chose and designed the assessment instrument, the results of which are reported in this paper. Twenty-one academic staff offered extra credit to their students for attending the event. Students received a ticket as proof of attendance. Online classes received extra credit for viewing a recording of the event and completing the questionnaire.

The seven panelists consisted of two journalists from the local newspaper, which is the second largest newspaper in the state; the weekend news anchor and investigative reporter for the local
NBC affiliate; a graduate student in International Studies, whose research is related to disinformation and misinformation; an associate professor of Political Science; an assistant professor of Communications; and the student manager of the Old Dominion University radio station. The host for the panel discussion was Old Dominion University’s Assistant Vice President for Communication and Marketing. Each panelist spoke briefly about their research or occupation and how the rise of the use of the term fake news had affected them. They responded to five pre-planned questions and there was a question and answer session for the audience.

The five questions asked of the panelists were:

1. How do you define the term fake news? Do you think that the definition has changed during the past couple of years?
2. How has the relatively new popularity of the term fake news changed your day-to-day experience of your profession?
3. How does fake news go viral? Do you have an experience to share in which your organization was impacted by a fake or manipulated news story that went viral?
4. What barriers do you think the use of social media to share news and news-related media have created for the general public in regard to being informed citizens? How has social media helped the general public to become more engaged citizens in news or fake news situations?
5. What suggestions do you have for our students on how to determine whether or not a news story is reliable and how can they practice responsible consumption and sharing of news in their everyday lives, both online and off?

A post-event questionnaire was distributed to students via web link from their instructors or QR code on their proof of attendance tickets. In order to address the learning outcomes of the program, the aims of the questionnaire were:

- To determine student perceptions of their own knowledge of the news editorial process before and after the event.
- To determine student perceptions of their own knowledge of the definition of fake news before and after the event.
- To determine student predictions of changes in their thought process in the creation, online consumption and sharing of news or related items as a result of the event.
- To determine student perceptions of the role that they as individuals can play in the creation and dissemination of information in their own communities.

2. Literature review

Many leaders within and outside of libraries have pointed out that while librarians may not like or agree with the term fake news, its recent popularity provides an excellent opportunity for IL education (Batchelor, 2017; Jacobson, 2017). It is necessary to step outside of the one-shot classroom to help students make connections between what they learn in their classes and what they encounter in their everyday lives. Stein-Smith (2017) pointed out that students are not always aware of the links between what they learn in the library one shot and how to navigate the information that they see constantly in their social networking feeds. Additionally, Stein-Smith (2017) indicates that academic staff may not recognize the link between what librarians teach and the need to teach students about fake news. The librarian who conceptualised and organised this
project sought to bridge some of these gaps by collaborating with staff and community members to plan an educational event that took place outside of the one-shot setting.

When discussing fake news with students the role that social media plays in the information cycle cannot be ignored. Several of the panelists at the fake news event discussed social media, and there was an assumption by both students and the panelists that the term ‘share’ referred to sharing on social media. Witek and Grettano (2012) conducted an analysis of user behavior and the functionality of Facebook in relation to IL skills and pointed out that it is important IL instructors understand the influences that Facebook has on students’ relationship with information. In 2014 the Pew Research Center reported that Facebook is a primary source of news but that users who go directly to news websites spend more time on news articles. Additionally, this same report stated that half of social media users have shared information on a social media platform (Anderson & Caumont, 2014). Marchi (2012) found that teens get most of their news from their social media feeds or from the adults in their lives. Teens also expressed a general feeling that it is important for individuals to keep current with news (Marchi, 2012).

Barthel, Mitchell, and Holcomb (2016) reported that Americans are concerned about the impact that fake news could have on society. One goal of this project was to engage in a conversation about individual responsibility and the impact that the individual can have on a community when consuming, sharing and creating information, and to consider how a sense of responsibility is conveyed by the individual. Koohikamali and Sidorova (2017) surveyed college students and discovered that perceived quality of information influences their intent to share information on social media. However, many studies tell us that students are not adept in evaluating information that they find online, either via social media or general web searches (McGrew, Ortega, Breakstone, & Wineburg, 2017; Robertson & Felicilda-Reynaldo, 2015; Walraven, Grand-Grewel, & Boshuizen, 2009). In addition to information quality, likeliness to share information was influenced by the student’s individual enjoyment of the information and individual inclination to take risks (Koohikamali & Sidorova, 2017).

3. Methods

3.1 Methodology

An online questionnaire was distributed to all student attendees of the event via paper ticket and via an email reminder from their professor. The questionnaire link was also provided to distance students who viewed a recording of the event. Participation in the questionnaire was voluntary; however, some participating academic staff chose to give extra credit to students for attending the event or viewing the recording and completing the questionnaire. The questionnaire consisted of five forced-choice items and two open-ended items, all designed to address the learning outcomes of the project.

3.2 Ethics

This research was approved as exempt research by the Institutional Review Board of the institution at which the event and research took place. Participants read a consent notice and brief description of the study prior to completing the questionnaire. All participant information was de-identified prior to analysis of the results.
4. Results

4.1 Participants
Two staff members and 123 undergraduate students completed the questionnaire. Staff answers and comments were removed prior to analysis. Figure 1 describes the participants’ motivation for attending the event. The majority attended the event in-person for extra credit for a class or viewed the recording for extra credit for an online class. Two participants attended simply because they were interested in the topic.

![Participant Motivation](image)

**Figure 1:** Participants

4.2 Participant perception of knowledge
Two items on the survey asked participants to compare their knowledge of specific concepts before and after the panel event. Overall, students perceived that their knowledge increased in the areas of the news editorial process and definition(s) of fake news as a result of attendance, as described in Figure 2.
Figure 2: Compared with before the fake news event, how would you rate your knowledge of the following concepts after the fake news event?

The majority of participants indicated that their thinking and behavior in relation to news, information and related items (such as memes or infographics) would change as a result of attendance at the event as depicted in Figure 3.

Figure 3: Do you think that your thought process in the creation, consumption, and sharing of news, information, or related items will change as a result of the ‘fake news’ panel?

Participants who answered ‘Yes’ received a follow-up open text question asking how their thinking and behavior might change as a result of attendance at the event.

There were 73 responses to the open text item. The researcher used Qualtrics software to code the text responses. Figure 4 below describes the most commonly cited themes. Comments related to credibility, with mentions of fact checking or considering the source most common. Mentions of sharing or consuming on social media platforms including Facebook and Twitter were also common, as well as comments related to the idea that increased knowledge of what fake news or how journalism operates would change the thought process when sharing, consuming, or creating
information. Other themes, though less common, included considering multiple viewpoints of a topic or issue and conducting research related to a news story before believing it or sharing it.

Figure 4: How do you think your thought process in the creation, online consumption and sharing of news or related items will change as a result of attending the fake news panel?

4.3 Perception of responsibility

The questionnaire asked whether participants felt they had a role to play in the creation and dissemination of information in their community with more than 70% responding affirmatively as shown in Figure 5.

Figure 5: Do you think that you can play a role in the creation and dissemination of information in your community?
Participants who responded ‘Yes’ to this item were asked a follow-up open text question about how they could play a role.

There were 82 responses to the open text question. The researcher used Qualtrics software to code the text responses. The most common theme, which 30.1% of participants mentioned in the responses, was related to fact checking or doing research before sharing information. Many participants, 21.36% also indicated that they felt that they could teach peers or family how to identify false information. Some participants mentioned social media platforms specifically, while most seemed to assume that they were discussing social media through use of the term ‘share’. Table 1 provides a visualization of the most common themes that arose from participants.

Table 1: How can you play a role in the creation and dissemination of information in your community?

| Theme                                         | No. of mentions |
|-----------------------------------------------|-----------------|
| Fact checking or doing research before sharing| 31              |
| Not sharing false information                 | 22              |
| Teaching others how to fact check or research  | 21              |
| Calling out or reporting the sharing of false information | 7                |

4.4 Student Takeaways from the Event

The final open-ended item on the questionnaire asked participants for their top takeaway from the fake news panel. The researcher used Qualtrics software to analyze the text responses. Table 2 below lists the top five themes that arose in the comments.

The most common themes in the answers were the importance of fact checking or researching information (17.07%), the impact of fake news on communities (11.59%) and the individual, personal responsibility that each member of society can play in the creation or spreading of fake news (10.97%). Another common mention was the journalism process or the role that journalists play in the creation and sharing of news (10.37%).

Table 2: What is your top takeaway from the fake news event?

| Theme                                         | No. of mentions |
|-----------------------------------------------|-----------------|
| Importance of researching or fact checking before sharing | 28              |
| Impact of fake news on communities            | 19              |
| Personal responsibility                        | 18              |
| Journalism process or role that journalists play | 17              |
| History of fake news                          | 10              |

5. Limitations and lessons learned

It is difficult to assess whether or not a one-time event can truly make a difference in student knowledge and awareness of the role of the individual within the information cycle. A follow-up study to gauge long-term retention of knowledge and impact on perceptions and attitudes would be useful in learning more about the long-term effects of this study.
The project itself was well received; however, one weakness of the event itself was that there was not much time devoted to the question and answer session. One of the goals of the event was for it to be very interactive, allowing students to actively engage with the panelists, and that did not happen at the level desired due to time constraints. At future similar events, it could be beneficial to ask students to submit questions in advance or in an online forum after the event to keep them involved and to address student thoughts and questions.

6. Discussion and conclusions

The questionnaire results indicate that participants perceived that their knowledge and awareness of the role that they can play increased having attended the event. While we cannot determine long-term retention, this event contributed to student learning and sparked student interest and engagement with this issue.

A theme common throughout the responses is that students are well aware of the importance of fact-checking before believing or sharing information. Critical thinking about information sources is a skill that students in the United States begin to develop in formal education prior to beginning college (AASL, 2018), but do they apply this skill in their day to day interactions online? Developing realistic strategies to teach students how to fact-check and consider sources in real life circumstances can contribute to students turning this knowledge into concrete action. Reinforcing the idea that it is acceptable to question what may seem like an authoritative source and to consider multiple viewpoints of an issue is one key way that librarians and other educators can support students.

Many of the participants feel that they as individuals can take actions that could have an impact. One key way that resonated in the responses was by teaching their peers or families how to recognize fake news, or evaluate information or even reporting websites or individuals that share false information on social media. This is an admirable aspiration, as it is sometimes difficult to navigate these conversations when discussing ‘hot button’ issues such as politics or medical care with family and friends. Librarians and faculty can provide opportunities for students to practice teaching others this skill, perhaps by developing role play scenarios for students to work from or allowing students to share their own experiences with family members or friends so they can learn from each other.

Students recognize the impact that social media has had on the information cycle and the impact that the fairly recent fake news phenomenon has had and will have on our society. Student comments indicated that they were not very familiar with the journalism process or the role that journalists play in the creation and sharing of information prior to the event and that the panel discussion helped them to learn more about this topic. By teaching students and other members of the community about what goes on ‘behind the scenes’ at our news organisations, we can help them to perhaps be less skeptical of the news process and more likely to seek out quality sources of information when real time information is needed. Students also indicated that they were not very aware of the history of fake news, the motivations for creating fake news, or the differences between misinformation and disinformation.

Librarians and IL programs can make a significant contribution to educating our students and communities in how information, misinformation and disinformation is created and shared but we cannot do it alone or in a vacuum. Resources and research provided by larger initiatives, such as the work of the Stanford History Education Group (Stanford University, 2018) can be drawn from to...
inform our practices. Locally, it is beneficial to recognise and involve the academic staff and community experts in these areas and libraries are in a position to facilitate collaborative initiatives such as this one that bring in those experts. Motivating undergraduate students to attend educational events outside of class requires providing incentives and staff involvement.

The fake news event at Old Dominion University was successful in several key ways. It helped to further establish and solidify relationships between librarians, academic staff, and community members. It provided a venue for students and content experts to come together and discuss recent happenings within the information cycle and the impacts that they have had on individuals and communities. Most importantly, it contributed to student understanding of the individual role that they play in the consumption, sharing and creation of information and the power that individuals can have within the information cycle.

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