

STUDENT ENGAGEMENT WITH MIS-, DIS-, AND MALINFORMATION THROUGH OBSERVATIONAL RESEARCH

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ABSTRACT

As more people turn to online sources for news and information, it is important to have the necessary skills to distinguish between objective facts and opinions and misinformation, disinformation, and malinformation (MDM). The Homeland Security Program at Eastern Kentucky University is addressing these concerns through MDM instruction and student research. The program developed a core MDM course that features a qualitative observational social media project. Student reviews indicate that topical instruction coupled with the social media research project effectively increases student understanding and identification of MDM. The research application component of the course illustrates the importance of applied research in conjunction with topical learning, which results in deep learning.

Keywords: media and digital literacy; misinformation, disinformation, malinformation, observational research, social-emotional literacy, social media

Truth decay and its concomitants, misinformation, disinformation, and malinformation (MDM) have blurred the line between fact and opinion and engendered the deterioration of civil discourse and the polarization of society (Baron & Ish-Shalom, 2024; Hayward, 2024; Kavanagh & Rich, 2018; Pew Research Center, 2023; Rekker, 2021; Wardle & Derakhshan, 2017). To support a democratic society and social discourse, educating people to evaluate and use information for decision-making is of high importance (Baron & Ish-Shalom, 2024; Basol et al., 2021; Ellison & Hugh, 2024; Kavanagh & Rich, 2018; Moyer, 2022; Pherson et al., 2021; Simpkins, 2023; Wardle & Derakhshan, 2017). Skills in media and digital literacy, critical thinking, and socio-emotional literacy—knowing how to avoid traps such as MDM, as well as benefiting from information and communication in all forms—are necessary to navigate life’s challenges and opportunities (Jolls & Johnsen, 2018; Kosic, 2018; Martens & Hobbs, 2015; Ott, 2024). The Homeland Security Program at Eastern Kentucky University (EKU) developed the Mis-, Dis-, and Malinformation (HLS 280) undergraduate course to develop these skills. As part of the course, students complete a social media monitoring project (*the Project*) using an observational qualitative research methodology to evaluate information posted to social media to determine if MDM is present. The Project forces students to directly apply information learned in the course by examining MDM. The following sections provide detailed information on the overall course, the Project, and future considerations for the course and associated student research.

UNIVERSITY AND PROGRAM BACKGROUND

EKU is a regional, coeducational, public institution of higher education offering general and liberal arts programs, as well as pre-professional and professional training in education and various other fields at the undergraduate and graduate levels. Located in Richmond, Kentucky, EKU has a distinguished record of more than a century of educational service. EKU has a total enrollment of 15,008 students, comprising 12,726 undergraduate and 2,282 graduate students. EKU is accredited by the Southern Association of Colleges and Schools Commission on Colleges and is located in U.S. Census Region 3 (South), Division 6 (East South Central) (U.S. Census Bureau, 2013). The Mis-, Dis-, and Malinformation course is offered by the Homeland Security Program, which has an enrollment of 155 undergraduate students and is administratively located in the Department of Safety and Security within the College of Justice, Safety, and Military Science.

The Homeland Security Program was established in 2007 in response to the nation's homeland security needs and challenges, including human-caused incidents (e.g., terrorism), natural hazards (e.g., hurricanes), and technological hazards (e.g., incidents resulting from accidents or failures of systems and structures). The Homeland Security Program students receive comprehensive educational opportunities that focus on safeguarding life and property, protecting critical infrastructure, preparing for and responding to natural and man-made disasters, providing counterterrorism and law enforcement intelligence support, and employing the latest security technologies. The Homeland Security Program offers a Bachelor of Science in Homeland Security, a Minor in Homeland Security, a Minor in Disaster Management, a Certificate in Intelligence Studies, and a Certificate in Security Management.

COURSE DESCRIPTION

Mis-, Dis-, and Malinformation examines MDM from a homeland security perspective. Students build skills in assessing and evaluating information from various sources, including social media. The course's learning objectives are:

1. Explain misinformation, disinformation, and malinformation (MDM) as an emerging societal trend and complexity that affects the homeland security enterprise (knowledge and comprehension).
2. Assess MDM threats to homeland security from foreign adversaries, domestic actors, groups, and movements (analysis and synthesis).
3. Explain MDM's history, causes, and drivers in the United States and current federal government activities and tactics to combat MDM (knowledge and comprehension).
4. Assess policy issues and challenges of combating MDM in a democratic society with constitutionally protected civil liberties, including freedom of expression (comprehension and analysis).
5. Identify MDM strategies and tactics people, groups, movements, and nations/states utilize (knowledge and comprehension).

6. Appraise how local law enforcement agencies are addressing MDM-related issues and threats through activities such as social media monitoring (analysis and synthesis).
7. Discuss the role of technology and the private sector in addressing MDM from a whole of nation approach (knowledge and comprehension).
8. Assess the credibility of information sources and apply information literacy and critical thinking in the evaluation of information sources to help identify possible MDM (comprehension, application, analysis, and synthesis).

The course is required for the B.S. in Homeland Security. No prerequisites are assigned to the course, which enables non-homeland security majors to enroll. The course is not classified as a general education course, but future planning may allow classification as a general education course. The course is offered in person and online. The first online offering was in Fall 2023, followed by the first on-campus offering in Spring 2024. Due to the newness of the course, only minor changes may be implemented to both modalities for the 2024–2025 academic year, as outlined in the Mis-, Dis-, and Malinformation course plan.

COURSE RESEARCH AND ASSESSMENT

Students use information learned throughout the course to complete a social media monitoring project (*the Project*). The Project aims for students to obtain experience evaluating open-source information posted to social media platforms and to practice identifying and assessing MDM. The goal of the Project is to (a) expand student learning through field/observational research, (b) enable students to gain practical experience in assessing and identifying MDM, and (c) develop oral and written communication skills. Students identify a group or movement that is active on social media. Over a period of roughly ten weeks, students monitor open-source information posted by the group/movement on a specific social media platform (students do not engage the group/movement). Students practice evaluating information posted by the group and assess if it is MDM. Students evaluate social media posts using specific techniques, including SIFT (stop, investigate, find, trace) and vertical and lateral reading (Howard, 2024). Once the monitoring is complete, students develop a written research report and complete an in-class poster presentation summarizing their findings and providing recommendations on addressing MDM posted by the group/movement.

Student performance is assessed through rubrics designed to evaluate student performance, determine if course outcomes were achieved, and provide constructive feedback to improve student outcomes and the course. From the limited offerings of the course, informal student comments and formal course evaluations offer supportive comments. For example, several students stated they enjoyed evaluating a group/movement or news outlet on social media that they had previously heard was engaging in MDM. Although students identified the presence of MDM in some groups/movements, students who examined major/traditional news outlets indicated that the presence of MDM was much less than anticipated. Students also mentioned that, due to knowledge gained from the course on how MDM is developed, crafted, disseminated, and received, they better understand how people believe MDM. Lastly, student comments in formal course assessments suggest that Mis-, Dis-, and Malinformation should

replace other general education courses that provide less value. The student comments suggest that learning through doing (SIFT and vertical and lateral reading) is an effective method to help them understand, identify, and properly respond to MDM.

PLANS FOR MIS-, DIS-, AND MALINFORMATION

The Homeland Security Program has preliminary plans for Mis-, Dis-, and Malinformation in the next academic year and beyond. First, due to the successful launch of the course, the Homeland Security Program intends to work with the ECU General Education Program to designate the course as a general education course based on student comments. The general education designation would also help to encourage non-homeland security majors to enroll in the course. Second, the Homeland Security Program intends to invite students to present their research at the annual Homeland Security Research Showcase. Lastly, any major modifications to the course and the overall Homeland Security Program will be discussed in Fall 2024 during the annual ECU Assurance of Learning Day, which is held in late September. The Assurance of Learning Day allows faculty to discuss student learning and assessment, which is enabled through the dismissal of day classes (Eastern Kentucky University, 2023). Only minor modifications will be made to the course, such as pre-and post-perception surveys and pre-and post-tests focusing on MDM, which will not significantly impact the Project.

CONCLUSION

The Mis-, Dis-, and Malinformation course at ECU provides students with valuable opportunities to examine an issue that impacts them daily as they consume information via social media and other online avenues. Student feedback from the social media project indicates that students anticipate MDM by major/traditional news outlets. The Project and the course suggest that students can be positively impacted through thoughtful and purposeful engagement with a problem or issue when provided the opportunity to learn through “doing” (e.g. applying SIFT and vertical and lateral reading). Although formative and summative assessments are essential, directly engaging in and applying knowledge to a problem or issue helps foster deep learning and better understanding. The first offerings of the course have illustrated that the course project achieves this and has helped students become more critical consumers of information in general topics. Future project iterations will examine MDM surrounding past (e.g., COVID-19) and future events (e.g., elections) to advance applied learning in homeland security. The course and the Project provide many opportunities for student engagement and research into MDM and can be easily directed toward present-day problems or issues.

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