



Selected Papers of #AoIR2021:
The 22nd Annual Conference of the
Association of Internet Researchers
Virtual Event / 13-16 Oct 2021

OPEN PEDAGOGY: INDEPENDENCE AND INTERDEPENDENCE IN TEACHING ABOUT NEW MEDIA

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Open culture involves creation and sharing practices that sidestep proprietary entanglements of traditional media. This research supports consideration of open pedagogy as an inroad toward shared media independence and interdependence. It suggests that when educators adopt open pedagogy, students engage in deeper, more active, and more personalized learning. In this study, students were asked to compare their experiences creating content for a course's open textbook to previous learning activities. Analysis shows that most students found the open pedagogy project highly rewarding and engaging, and a source of connection and community.

Context

Consensus is lacking on a precise definition of "open pedagogy" (DeRosa & Jhangiani, 2017; Hegarty, 2015; Hilton et al., 2019; Schuwer et al., 2017; Wiley & Hilton, 2018). We defined open pedagogy as "involving students in the creation of openly licensed materials" (University of Arizona, 2021). Open licenses enable works to be freely used, built upon, and reshared. Research on open pedagogy is growing, although studies of student experiences with open pedagogy are limited (Baran & AlZoubi, 2020; Hilton et al., 2019; Hollister, 2020).

Faculty interest in open pedagogy has been increasing at the University of Arizona (UArizona) since it implemented the Pressbooks platform, which facilitates both collaborative and independent publishing. Instructor and co-author Daly led the first large open pedagogy project using Pressbooks at UArizona. Her students created content for the interactive *Humans R Social Media (HRSM)* textbook, including multimodal projects about their experiences with technologies (Daly, 2021).

To give students agency, Daly offered the default option of a Creative Commons Attribution (CC BY) license for their contributions, a more restrictive license, or keeping all rights reserved. Most students (72.6%) chose CC BY.

Casey (Cuillier), C., & Daly, D. (2021, October). *Open pedagogy: Independence and interdependence in teaching about new media*. Paper presented at AoIR 2021: The 22nd Annual Conference of the Association of Internet Researchers. Virtual Event: AoIR. Retrieved from <http://spir.aoir.org>.

The transparency given to licensing in this course offered stark contrast to and independence from social media platforms with their opaque Terms of Service. By introducing students to copyright basics and their rights as authors, students felt more empowered. They were asked to envision the media they produced as independent of the “class project” context.

Students also practiced interdependence among creators. For media they created, students incorporated music that artists had openly licensed or contributed to the public domain.

Method

This research built upon an exploratory study by Hilton et al. (2019). Co-author Casey collected quantitative and qualitative data in Fall 2020 through an anonymized survey (N=85) asking students about their experiences with *HRSM*. Dedoose software was used for thematic analysis through iterative, inductive coding of open-ended survey responses. A chi-square test was used to demonstrate that student responses to quantitative questions were not randomly distributed.

This study explored:

1. Whether students prefer this type of open pedagogy project to traditional learning activities (e.g., writing papers, taking quizzes).
2. How students perceived that participating in *HRSM* impacted learning outcomes.

Findings & Implications

In all learning outcome categories, students more frequently rated learning with open pedagogy “better” than “worse.” Table 1 shows that 65.9% of students said the *HRSM* project had greater educational value than traditional learning activities. Most students (54.1%) also reported that *HRSM* helped them master more core academic content, and 51.8% said it helped them become more collaborative learners. Depending on the question, 2.4%–8.2% found the learning outcomes worse with open pedagogy.

Learning outcome	Better with open pedagogy	Same with open pedagogy	Worse with open pedagogy
Educational value	56 (65.9%)	23 (27%)	6 (7.1%)
Mastering core academic content	46 (54.1%)	33 (38.8%)	6 (7.1%)
Collaborative learning	44 (51.8%)	34 (40%)	7 (8.2%)
Critical thinking and complex problem solving	33 (38.8%)	49 (57.7%)	3 (3.5%)
Effective communication	33 (38.8%)	50 (58.8%)	2 (2.4%)
Effective learning	32 (37.6%)	51 (60%)	2 (2.4%)

Table 1. Student perceptions of differences in learning outcomes with open pedagogy (participating in the *HRSM* project) compared with traditional learning activities.

When asked why the educational value of participating in the course's *HRSM* project was better than with traditional learning activities, students most frequently said it was because the project and course were "interactive," "hands-on," "engaging," "enjoyable," and "relevant."

One student wrote that "it really challenged me to apply my learning." Multiple students said the project led to better, deeper understanding of the subject and built skills they could use in the future.

A common theme expressed by students was appreciation of autonomy in the project, including independence and ownership of their learning. One said the open pedagogy project "gives students the ability to be creative in their own way."

The students who rated the outcomes of the course's *HRSM* project worse than traditional learning activities cited technical difficulties, confusion or stress about the assignments, or a preference for traditional activities over project-based learning.

When asked to imagine a future required course, 43 students (50.6%) said they would enroll in the section with activities like *HRSM*; 30 students (35.3%) expressed no preference; and 12 students (14.1%) said they would prefer traditional learning activities. One student described the open pedagogy project as "more freeing but equally as challenging."

In an age of online learning and engagement, this open pedagogy project afforded students a larger collaborative opportunity. Responses indicate *HRSM*'s focus on agency and choice enabled students to share their individuality and creativity. "It made us feel like our opinions and our voices were heard and appreciated for the first time," one wrote. Some students described the project as a safe space to express themselves.

Others valued knowing that their work could be shared beyond the classroom. "I like how it puts student voices out in the world," one wrote. Another said that publishing "gave me more incentive to make sure my assignments were my best product."

Overall, these survey results support the value of open pedagogy, while identifying opportunities for deeper research (e.g., cross-analyzing student learning assessments) and refinement of the survey design (e.g., addressing possible respondent fatigue).

Conclusion

This study tentatively reinforces the benefits of open pedagogy as independent, hands-on learning as well as collaborative interdependence in an online environment. The active nature of open pedagogy holds rich possibilities for cultivating participatory learning activities and involving students in the creation of knowledge as they learn.

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