Plug and Play for Emerging Media Courses

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Abstract
Journalism programs are often stymied by the pace of curriculum development when trying to keep up with emerging technologies. This paper explores a template for a class or module that allows students to deeply explore a new technology and apply it for existing media companies. The structure is not tied to a particular technology and therefore can allow a class or professor to add developing media platforms quickly and without extensive personal knowledge.

There is a resounding need for journalism curriculum to integrate innovation (Drake, 2017) and little agreement on how to do it. For the past three years a small senior project class has been testing a framework to quickly learn about an emerging technology and apply it to journalism practice.

It is clear that journalism educators can't chase every potentially important digital tool that is suddenly en vogue, much less get a full course into the catalog. Educators need to empower students to learn and explore emerging technologies for the possibilities within media organizations of the future. For faculty, the lack of technical savvy and comfort often keeps journalism curricula from moving forward (Powers & Incollingo, 2016), or tied to the personal interests of instructors (Bright, 2018). Ferrucci’s 2018 study found that professional digital journalists recommended journalism education programs focus on training student journalists to understand the applications of various platforms, rather than the specifics of how to use them.

The quick pace of technological changes requires a new approach to the structure of classes. The described class provides an approach that any digitally savvy professor can pick up, even for technology that is brand new to the instructor as well as the students.

The class is currently being applied to journalism on smart speakers (Alexa and Google Nest) but can accommodate any emerging technology that has reached even a small audience. This class is a direct application of Amy Webb's futurism models, which ask us to look at signals on the fringe and decide how and when to jump in (2016). This structure binds students to the current possibilities of an emerging technology while encouraging them to stretch that limit with their own application.

Replicable Class Structure
This framework supports higher-order learning alongside creativity. It is a series of three major assignments in which students first build understanding, then apply that knowledge, and finally create a sample product with the new technology. These assignments step up the levels of Bloom’s Taxonomy without any of the trappings of a traditional lecture and test format. The process is drawn completely from a business approach to exploring, investing, and testing a new technology. Students in the class take on the role of
a media consultant to develop a strong understanding of a technology and then give recommendations for its application.

A key element of this structure is that it does not require any previous knowledge. Most of the understanding is created through exposure. Students are encouraged to play (emerging technologies are often available first in entertainment or even children's toys) and try to immerse themselves personally with the technology. Class readings are easily curated from current industry publications and technology platform tutorials through YouTube or LinkedIn Learning. It is tempting to presume students know everything about technology because they are young (Burton et al., 2015), but many are phobic of the technical aspects of the work.

For the smart speaker focus, students first get a speaker in their home or use it in lab hours. They let it wake them up and play music and read the news. Then students choose an organization that is doing this really well, such NPR or Disney. After diving deeply into what works and why, the students share their knowledge, building broad understanding of the current best practices in interactive audio. Then they each choose a media company that could use their help and create a mock-up of recommendations and a sample of what those would sound like. Students have chosen local television stations and suggested a simple Flash Briefing for Alexa, while others looked at large organizations like Cosmopolitan magazine and mapped out an extensive interactive audio experience using existing fashion or lifestyle advice. While contact with the actual media organization is helpful, in the context of this class it is not required.

The class assignments are designed to adapt to any emerging technology, so as described the class can be focused on artificial intelligence in newsrooms or augmented reality or something new in the coming years.

Assignment 1: Case Studies
Each student researches a single media company that is leading in the application of the specific technology. Case studies can be variable depending on the depth of the class, but each needs to thoroughly describe what the organization is doing and why it works for the audience. This is delivered to the class as a three-minute presentation with a short sample. Here students are provided a visual organizer to scaffold the comparisons and takeaways from the large number of presentations. Collectively, all the students come away with a broad sense of the ecosystem of the particular technology as it is currently being applied by media companies. This is a place to be as expansive as is practical, because the best ideas may be coming from non-traditional sources, such as NGOs or specialty publications.

Assignment 2: Consultant's Report
Now the students switch to choosing a media organization that is not using the technology or not using it well. They take the mantle of a consultant hired by this organization to recommend how and why they should adopt this emerging technology. The students research the existing assets, audience, and resources of the organization. The report is a full, professional set of recommendations allowing students to display an expertise and application of gained knowledge to this novel situation. The report demands a synthesis of reading shown through sources in the text, application of technology requirements, and creativity in the specific recommendation. The report sections include an introduction explaining why the media firm should take up this technology now, an analysis of the market size and business potential, a description of what should be done, and a discussion of resources required. In this class, the report runs about five pages and is written in a business style.

Assignment 3: Sample Content
Whatever is recommended in the consultant’s report then becomes the model for the sample content. This is a chance for students to create with the technology, even in small ways. The idea of a sample allows for the use of simplified options, such as templates or simple models. In the class on smart speakers, this means Amazon Echo’s Blueprints, which are as simple as filling in a form, while other students record short audio files in the department’s podcasting booth. This sets up a sense of accomplishment and competency. In this case, students also have the option to write out a model like a schematic that might be given to a programmer from a content developer.

This particular class is a small senior project with students who are adept enough to manage a lot of flexibility, which supports a variety of tracks. Students can focus the consultant’s report on what connects most with their forthcoming job interviews, such as public relations majors putting extra emphasis on the marketing and audience engagement. A class using
this framework for students earlier in the curriculum might require more uniformity or structure. A course that serves students both in and outside of journalism might need even more flexibility.

**Expanding the View of Industry Work**

This class bridges the gap between the classroom and work by applying new technologies to existing media organizations. Product development is a key part of the future of journalism (Kosterich, 2021), and this class addresses that need directly. This experience is an opportunity for students to think about being catalysts for their future employers and leaders in the media industry.

The most notable outcome after the class has been strong student evaluations suggesting that this project not only helped them imagine innovation in journalism but showed them a path to be part of that. Most of the students are not particularly technologically savvy, but they have a wealth of knowledge in storytelling and content development. Students reported a new perspective on jobs in journalism and public relations. In particular, their goals extended to product development and technology integration.

They expanded job searches and brought the story of their new technology understanding to internships and interviews. As one student wrote in an evaluation, “it is perfect to have as a unique kind of experience to bring up in a conversation with potential employers.”

There are plenty of drawbacks, as with any project. As first imagined, students would interview managers and developers within their chosen organization, but that hasn’t worked out. Students have to cobble together information from published reports or panels, which can be a distraction. The full spectrum of business, content, and resource considerations can overwhelm students. Overall, this is not a deep dive into product development or management and only skims the surface of the business side. There are whole programs to try to get students ready for this high-demand work.

The class structure is rooted on Situated Learning Theory (Lave & Wenger, 1991) because of the need for a tight connection between the skills and their final application. Learning in journalism is best when the projects are connected to the industry and when technology is applied instead of segmented (Sidiroopoulos & Veglis, 2014). This one structure can’t meet the demand for a broad pedagogical approach to integrating digital technologies (Macchiarella & Smith, 2021), but it is flexible enough to create a course that avoids the pitfalls of slow curriculum development and fast technology changes. We can’t know what is coming in terms of media technology, but we can teach students to embrace new tools to meet the legacy goals of the industry.

**References**


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