Generating Content: Teaching Undergraduates Generative AI Tools for Social Media

Allyson A. Spears

Texas A&M University

600 John Kimbrough Blvd., College Station, TX, 77843

Allyson.spears@tamu.edu

Melody Beck

Texas A&M University

600 John Kimbrough Blvd., College Station, TX, 77843

Melodybeck@tamu.edu

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Introduction/Need for Innovation

The rise of AI tools has sparked concerns about bias, ethics, misinformation, data privacy, and educational impacts. For many educators, their concerns come from the pressing issue that these tools can readily solve homework and exam problems (Lau & Guo, 2023). Generative AI is rapidly transforming classroom communication and teaching practices, yet many faculty remain uncertain about its role. Shata and Hartley (2025) found that professors' willingness to adopt AI depends more on its perceived usefulness and trust than on ease of use, suggesting higher education must proactively integrate these tools into curricula to prepare students for an AI-driven workforce. Graduates of agricultural communications programs are increasingly pursuing careers in social media and digital strategy, making it essential to strengthen students' knowledge of AI in both broad application and its potential for content creation and platform integration. As the field of agricultural communications continues to evolve with digital mediums, instructors must work to equip the next generation of students with a competitive edge and vast technical skill application through the appropriate uses of generative AI. The following abstract outlines the activities that students underwent to learn emerging AI tools and develop relevant social media content that could be used in agricultural contexts or grow audiences.

How It Works

Undergraduate students enrolled in Emerging Media in Agriculture and Life Sciences at Texas A&M University spent two 50-minute classes exploring generative AI tools to create social media content. On Day 1 students were provided an overview of the content creation capabilities of the generative AI tools ChatGPT or Google Gemini and HeyGen tools, alongside a step-by-step live demonstration of the process. The purpose of the demonstration was to explore how to create the current trend of "podcast like" video content and AI video generation. After the demonstration students were charged with trialing the process to create their own videos. Students were provided with the prompts used by the instructor but were encouraged to create their own to understand how prompting can impact generative AI results. The steps included using ChatGPT or Google Gemini to create a script and two-character images to be animated in their final video. The script and images were uploaded into HeyGen for animation and video generation. For Day 2 students finished their own videos and volunteered to share their creations with the class. Following sharing, a class discussion surrounding the process and student's perceptions occurred. The class discussed the potential for other uses of the tools and how they could be used to keep agricultural focused social media content relevant to target audiences and consistent with platform trends. Students addressed five open forum questions regarding their overall experiences using the tools, ideas for potential future uses, integration of the tools, consideration of target audiences, and challenges that did or could arise. At the conclusion of these class sessions, students were able to use generative AI tools to develop scripts, modify images into avatars/characters, create a storyline as scenes, and generate animated videos.

Results to Date/Implications

Results are from 34 undergraduate students' responses during an in-class discussion during the fall 2025 semester. Student comments indicated that while AI-driven video creation tools such as HeyGen were accessible and engaging, with one student noting, "once you gave us the steps, I thought it was easy and pretty straightforward," they also presented limitations, particularly in voice quality and authenticity. Several students noted that "the voices sounded very robotic" and it was challenging to match a character's personality with the available options. Despite these frustrations, students highlighted creative applications for agricultural communications particularly for social media use, such as designing crop-based characters "kind of like a veggie tales scene" or using avatars to represent products and brands in novel ways. Importantly, students recognized that audience awareness is critical; one remarked, "I thought my video was super funny, but I showed it to my roommate… and she just looked at me with a blank stare," underscoring the need for thoughtful scriptwriting to bridge knowledge gaps. Ethical and credibility concerns also surfaced, including questions about using others' likenesses, the lack of "human touch or emotion," and risks of misinformation. Overall, this innovation demonstrated strong potential for engagement and creativity but also revealed the importance of balancing AI-driven efficiencies with human authenticity and audience-centered design in agricultural communication contexts. Although students enjoyed the activity and learned a new way to utilize generative AI, their discussion responses displayed valuable insights on their perspectives of the uses of AI.

Future Plans/Advice to others

Generative AI will continue to advance and play a role in society; therefore, it is essential to learn how to use it effectively and to teach students the skills they will need to engage with these tools both in the classroom and in their future careers. Educators and researchers are actively developing strategies to teach AI in ways that are meaningful and practical for technical and digital communications courses (Ranade & Saravia, 2024). As these tools adapt, the activity should be modified to reflect the most updated tool capabilities. Additionally, cultivating supportive social environments and peer modeling can further encourage adoption and responsible use of AI in educational contexts (Shata & Hartley, 2025). Additionally, the results of the activity could be posted on platforms to explore the effectiveness for generative AI in producing engaging social media content (Aldous, et al., 2024). Lastly, discussions regarding appropriate use of AI both in and outside of the classroom should occur to gauge student's knowledge gaps to drive future lessons.

Costs/Resources Needed

The resources needed for this activity include student access to computers, strong internet access, an account to ChatGPT or AI with image generating capabilities, and an account for HeyGen. ChatGPT and HeyGen have free accounts but can be upgraded, ChatGPT Pro ($20.00/month) HeyGen Creator ($29.00/month) for faster speeds and more tool access. The instructor developed a step-by-step guide for students to use for the activity as well as for any post class content creation, that was accessible through the course learning management system. It is encouraged for instructors to familiarize themselves with the AI platforms prior to teaching to help students navigate and resolve any problems they encounter while performing the activity.

References

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