

LAI Center for Teaching Excellence

Leveraging Generative AI in Educational Media Design

Thursday, February 6, 2025

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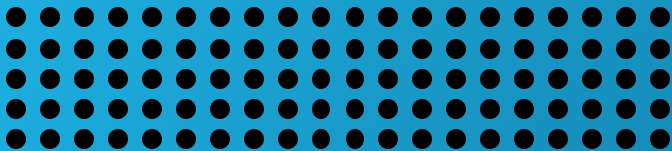
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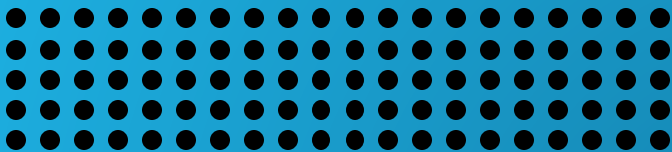
Workshop objectives

1. Identify opportunities for generative AI in educational media.
2. Evaluate generative AI tools for media design and production usages.
3. Discuss ethical considerations and best practices of generative AI for instructional multimedia.



Workshop agenda

- Part 1: genAI in Educational Multimedia
- Part 2: Full example
- Part 3: A deeper look of tools
- Part 4: Ethical considerations
- Part 5: Discussion





Part 1: genAI in Educational Multimedia

What we mean, what we encounter, and what we think is needed.

A disruptive and empowering tech

Just a short list of available tools.

Let us know if you know more!

Image generation

- Aitubo
- Midjourney

Speech generation

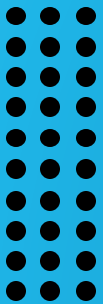
- Natural Reader
- Play.ht
- ElevenLabs

Video generation

- Sora
- HeyGen
- VideoAI

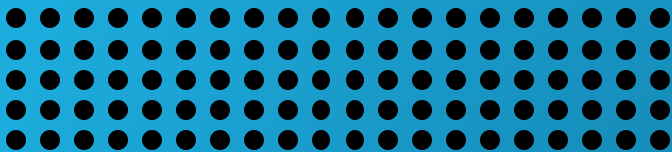
Music generation

- Udio



Challenges commonly encountered with clients/faculty

- Time to write scripts
- Uncertainty where to start writing and designing
- Uncertainty how to compress and/or chunk ideas
- Making visual connection with text for effective storytelling

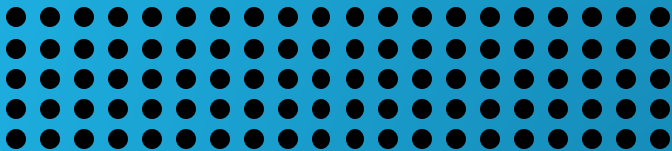


Calling for AI literacy

We believe that we all need to develop skills collaborating with genAI.

What has been challenging for us:

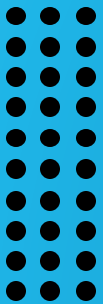
1. Prompting – getting to “realistic enough”
2. Accessibility with tools
3. Feedback from various tools in writing
4. Knowing where is appropriate and not

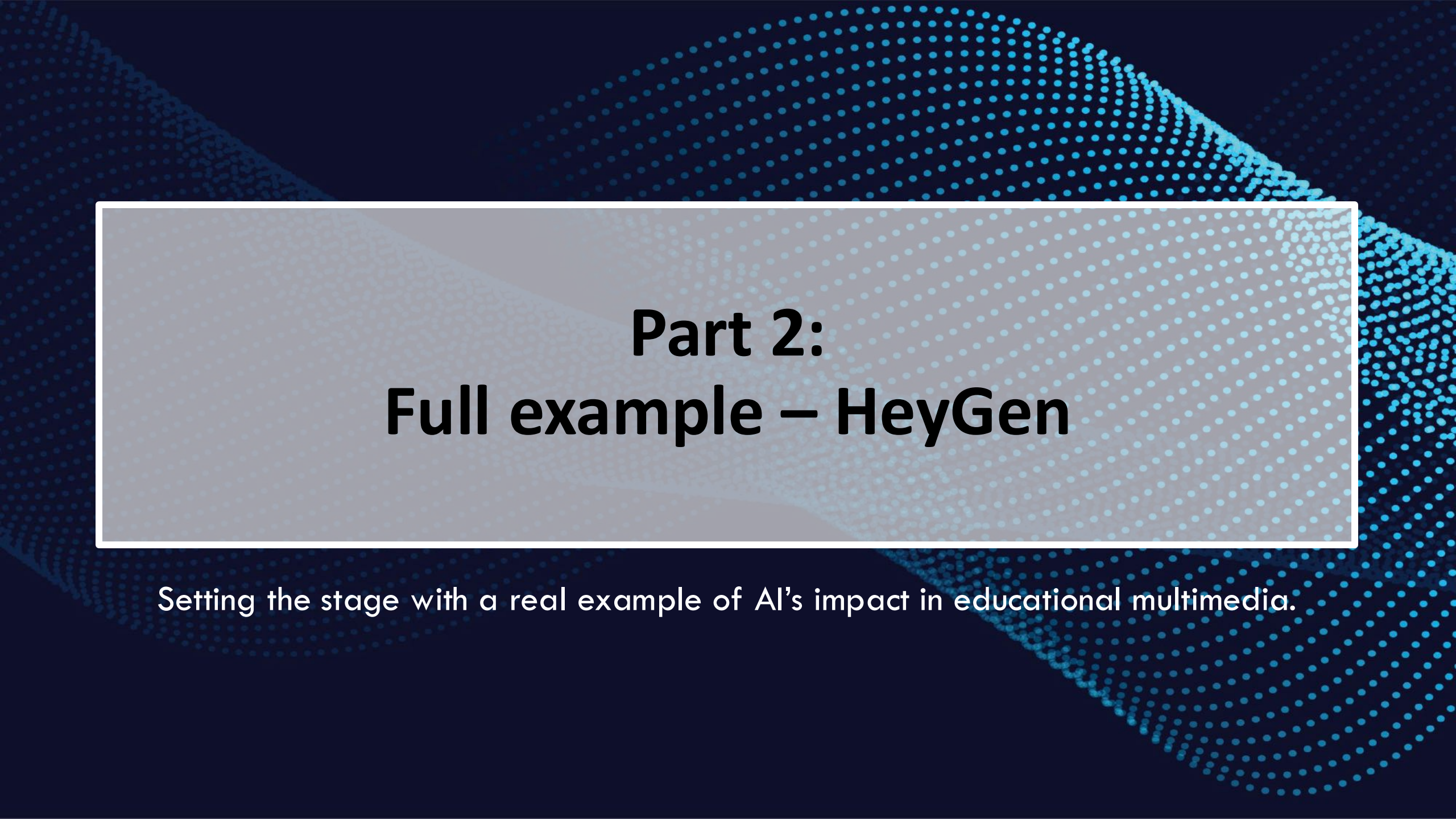


Reasons for a human touch

Collaborating with AI doesn't mean surrender. Human input and value is always central.

- Ensure authenticity, accuracy, and realism
- Check potential bias in output
- Maintain ethical and legal responsibility
- To create what is needed for the problem at hand
- Fine-tune for context and specificity
- Tell a creative story
- Judgment in quality control





Part 2: Full example – HeyGen

Setting the stage with a real example of AI's impact in educational multimedia.

Using HeyGen for an Instructional Situation

You want to create engaging weekly course introductions or assignment highlights but face time constraints, lack of recording skills, tools, setup, or discomfort being on camera. Using AI tools like HeyGen, you can quickly produce professional videos with AI avatars or voiceovers in your likeness. This maintains your instructor presence without complex setups and supports multilingual narration, making content more inclusive for diverse learners

See: <https://www.heygen.com>



Key features of HeyGen



- Avatar customization
- Quick video generation and customization
- Script input and text-to-speech
- Multilingual capabilities
- Exporting videos





Part 3: **A deeper look of tools**

Zooming in on AI applications for text, video, and images.

Shaping text content with genAI

Tool: ChatGPT-o3-mini (reasoning); Deep Seek R1 (reasoning)

Purpose: Preparing outlines for scripts

Suggestions:

1. Give details regarding your audience and present knowns
2. Write in a human-like tone and conversation
3. Use a key phrase to denote when it should work.

** Reasoning means that the model is verifying its *thoughts* with info from additional sources – rather making more connections between facts.

Prompt 1:

I need some help putting together an outline for a script that I'll be recording for video. I want to give you some background and tell you about what I'm creating first. Only when I write, "Please draft me an outline", then I would appreciate if you could create an outline for how I may write my script. Okay?

Prompt 2:

So, the course I'm preparing to teach is on astronomy and throughout the term we look at various findings from the James Webb Telescope. For this lesson we're going to look at discovered exoplanets. Some of those we'll look at are LHS 475 b, HIP 65426 b, and WASP-39 b. As part of this, I'll zoom in on how light is used to discover them (i.e. transit method) and what we think we know of these planets from measured light (i.e. spectroscopy).

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Prompt 3:

Now, let me tell you about the audience. This is for a lower-division undergraduate course at a large university. So, I expect mostly young adults 18-20, and they are a diverse group – with most from the US and others from many other countries. For the most part, they are STEM majors.

Prompt 4:

Finally, this should be a module introduction video. So broad, clear points of focus, and drawing the audience in. It should be 4-7 minutes long, or 400-700 words. Also, it would be helpful if you could help identify some visuals that I could use, such as images provided from the James Webb Telescope.

Prompt 5:

Now, all that said, would you please draft me an outline of how I may write my script for this module introduction video? Thank you in advance.

Creating images with genAI

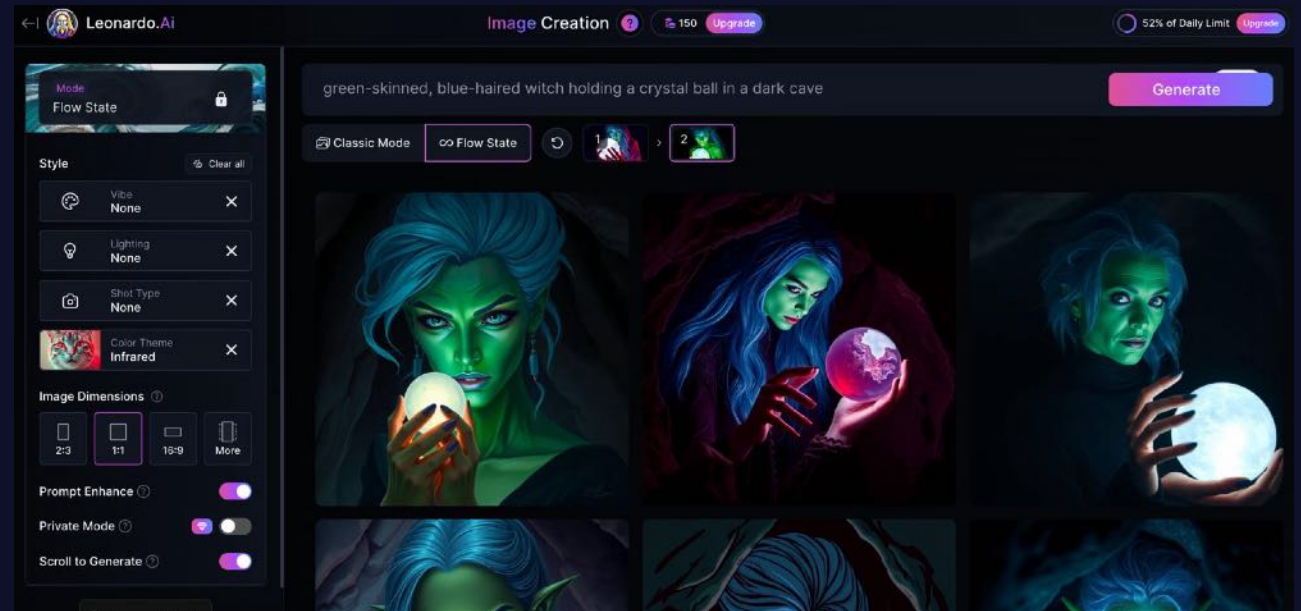
Tool: Leonardo.AI

Purpose:

- Generating images for various styles
- Change an existing part of an image

Suggestions:

1. Be extremely descriptive
2. Closely examine output
3. Test different tools for needs



Creating video with genAI

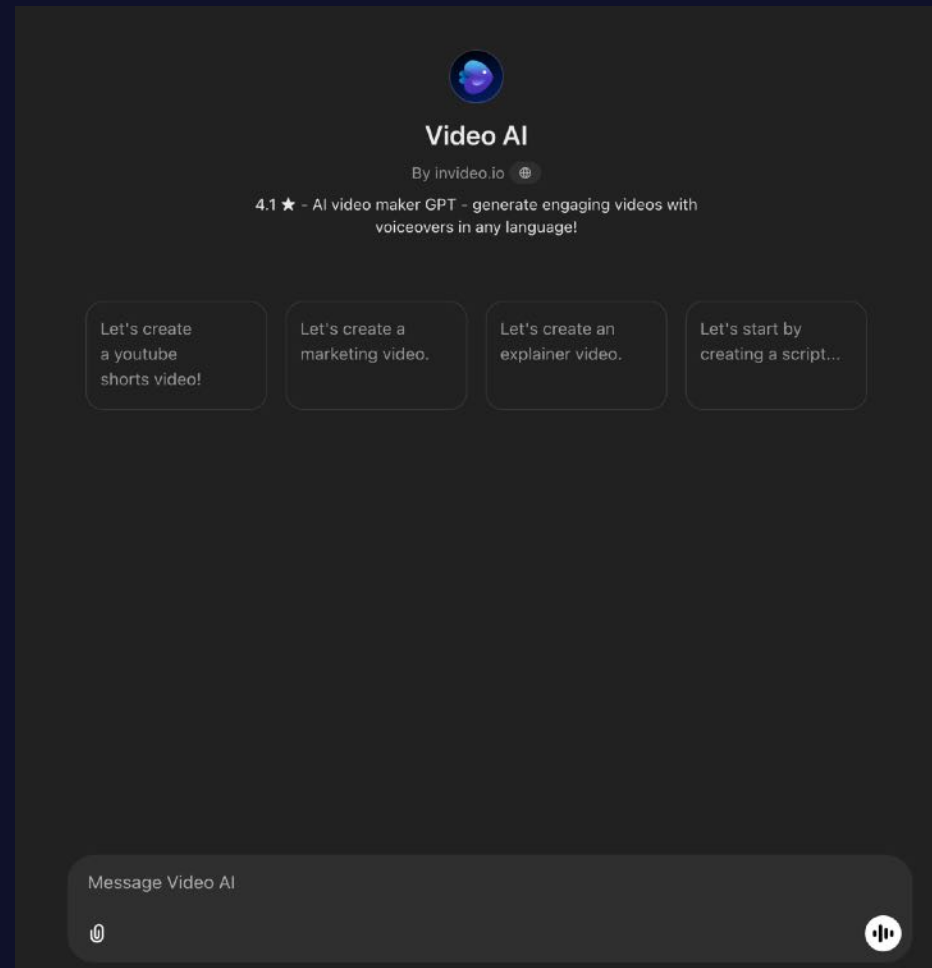
Tool: VideoAI

Purpose:

- Instant video generation from text
- Explainer, marketing videos, animation
- Multilingual video support
- Going from concept to screen

Suggestions:

1. Be extremely descriptive
2. Consider accessibility needs
3. Consider technical use
4. Be aware of tool limitations





Part 4:

Ethical considerations

Suggestions related to roles and considerations for all.

Maintaining trust in relationships by demonstrating leadership and use

Media producers and faculty

- Tell tools and processes
- Collaborate openly, share results
- Acknowledge AI contributions
- Address biases and limitations

Teacher and student

- Define acceptable use with guidelines
- Educate on tools and process
- Encourage critical thinking by discussing pros and cons
- Be aware of confidentiality and privacy risks



Points of consideration

Data privacy and ownership

- Issue: ownership is generally forfeited once fed into the system; who really owns generated content?
- Solution: cite and tell your use

Bias and accuracy

- Issue: roles for men and women; racial assignments
- Solution: be describe in your prompting language

Academic integrity

- Issue: no standard guidelines
- Solution: set guidelines and/or tell your philosophy on use

Transparency

- Issue: easy to pretend it wasn't used
- Solution: collaborate on use; talk about use cases





Part 5: Discussion

Open chat for reflection and questions



Part 6: Conclusion

Wrapping-up and going forward.

Suggestions for going forward

- Strive to find everyday use with AI
- Bounce between tools
- Dig deeper into responses

