2024 RET Project

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Noah Imel and Mary Reddy

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Agenda

01 **Research Briefing**

Research with Tim

02 **Mary's Module**

Propaganda Then vs. Now

03 **Noah's Module**

Digital Citizenship, A.I., and GPT-4 in a Social Studies Classroom.

04 **Conclusion**

Bridging the gap

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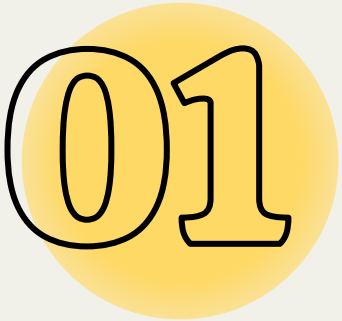

Research Briefing

Is there a connection between demographics and what adolescents are seeing on their social media page?

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Social Media survey(ages 10-14)



In order to understand the correlation between demographics and adolescent viewership, we developed a survey to better understand how an adolescent ENGAGES with their favorite social media platform. Questions consist of



- The types of social media the student currently uses.
- The primary social media platform used.
- What are their top five accounts they follow/engage with.
- What are the topics they watch the most on social media.
- Watch time.

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Hypothesis

Hypothesis: If middle school students use the same social media platforms and engage with the platform similarly to their demographic, then, they should see similar content on the social media platforms because they are interacting and engaging with the same content.



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Literature review

Trick or Please! A mixed-method study on user assumptions about Tik-Tok algorithms(Klug, et al. 2021) The two truths and one lie about the Tik-Tok algorithm..

Recommendation Algorithm in TikTok:Strengths, dilemmas, and possible directions.(Wang, 2022). Problems and possible solutions to the TikTok algorithmes.

For You or For "YOU" Everyday LGBTQ Encounters with TikTok. Simpson and Semaan (2021). A case study on LGBTQ users algorthimic suppression in 2019.

Discoverability: Toward a definition of content discovery through platforms.(McKelvey et al. 2019). How users can be manipulated into "Isolated segregation" where only what we see affirms our beliefs.

Understanding Social Media Recommendation Algorithms. (Narayanan, 2023). Understanding how YouTube, Tik-Tok, Twitter(X) algorithms work with engagement and user interaction.

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Mary's Module

Propaganda: Then vs. Now

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Background

Mary Reddy

- ★ Concord Junior High School
- ★ 3 years
- ★ 7th & 8th Grade Social Studies
- ★ Girls Soccer Coach





Good News

Titanium Maglev Heart Implanted Successfully in a Patient for First Time May Help Others Waiting for a Transplant

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Module Goal

SWBAT identify the impact of propaganda used during the revolutionary war and during the early development of the United States of America and make connections with modern day propaganda that we see on social media.

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CS Standards

6-8.IC.1 : Exhibit legal and ethical behaviors when using technology and information and discuss the consequences of misuse. (E)

6-8.IC.2: Discuss issues of bias and accessibility in the design of existing technologies.

6-8.IC.4: Describe tradeoffs between allowing information to be public and keeping information private and secure.

6-8.IC.4 : Discuss how unequal distribution and participation in technology and computer science disadvantages marginalized populations.

SS Standards

8.H.4: Identify and explain the reasons and actions for the resistance and rebellion against British imperial rule by the 13 colonies in North America (1761-1775)

8.H.5: Analyze the causes and effects of the Revolutionary War (1775-1783), including the ideas from the Declaration of Independence, the enactment of the Articles of Confederation, and the Treaty of Paris (1783. (E)

8.H.6: Identify and provide the significance of major events in the creation of the U.S. Constitution, such as the enactment of state constitutions, the weaknesses of the Articles of Confederation, the Constitutional Conventions, the willingness to compromise, and the Federalist vs. anti-Federalist debates regarding the vote to ratify the Constitution. (E)

8.H.8: Compare and contrast the views of Thomas Jefferson and Alexander Hamilton, and explain how their differences caused the development of political parties,

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Connection to RET

- Drawing from talks of Kevin Bowyer and Tim Weninger
- Imaging
- Misuse of media to spread misinformation

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3 Lesson Module

Lesson 1

- Propaganda - It's Nothing New

Lesson 2

- Create Your Own Propaganda

Lesson 3

- Propaganda and Ethics

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Lesson 1: Propaganda – It's Nothing New

- Students analyze several pieces of colonial propaganda
- Students analyze several pieces of modern propaganda
- Students will make connections between modern fake media and colonial propaganda

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Lesson 2: Create Your Own Propaganda

- Students will choose a side of a colonial conflict (Brits vs. Rebels, Federalist vs. Anti-Federalists, Hamilton vs. Jefferson)
- Create a colonial piece of propaganda using Canva
- Catered to a specific audience (simulating targeted ads/posts)

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Lesson 3: Ethics in Media – Socratic Seminar

- Where should we draw the line?
- What is the difference between presenting biased information & spreading misinformation?
- Is propaganda wrong?

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Background Stem Content

- Mini lesson on how to navigate Canva
- Mini lesson on how misinformation can spread easily today

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Module Sequencing and Assessment

- Each lesson goal is pointing to the module goal
  - Analyze historical & modern propaganda
  - Create your own propaganda: experiencing propaganda from a creator's perspective
  - Ethics: Is it right? - students must be self reflective
- Formative Assessments: Lessons 1 & 3
  - Lesson 1: exit ticket making a connection between old & new propaganda
  - Lesson 3: circulate during ethics discussions & check mark student speakers during whole group discussion
- Summative Assessments: Lesson 2 - Canva created propaganda
- Recommendations: create canva examples to share with kids
- Logistical considerations: seating should be arranged to easily facilitate conversation betweens students

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Real World Connection

- Highlights truth about media they are consuming - hopefully get away from mindless consumption
- Important as they get older & assume more responsibility
- Algorithms adjust in order to maintain engagement - whether or not misinformation is spread
- Connecting with the American colonial period
- Meaningful ethical discussions in regards to digital citizenship

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Module Files

- Crown or Colony - supplemental/extenstion game
  https://www.mission-us.org/teach/for-crown-or-colony/teaching-this-mission/about-mission-1-for-crown-or-colony/
- Teacher's Guide for Crown or Colony
  https://assets.mission-us.org/wp-content/uploads/2019/12/26171019/Mission1-ALL-EDUCATOR-MATERIALS-1.doc
- Breaking Harmony Square
  Common sense lesson link

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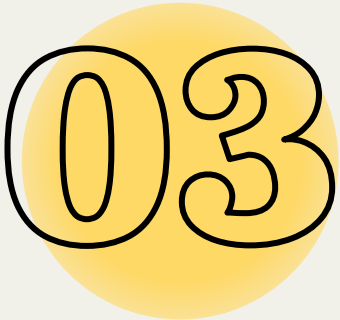

Noah's Module

Digital Citizenship, A.I., and GPT-4 in a Social Studies Classroom.

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Background

Noah Imel

- ★ Schmucker Middle School
- ★ 5th year teaching
- ★ 7th grade social studies
- ★ 8th Grade football coach





Module Overview & Goals

Module Goals:

1. Having students detect real and A.I. Imagery, video, and storylines.
2. Demonstrate healthy social media behavior to students.
3. Use ChatGPT to help students "Think like a historian".
4. Understand how social media(Tiktok, & Twitter) can be a "Threat to Democracy" in South Eastern and Oceania nations.

Standards:

- 6-8.IC.5: Discuss how unequal distribution and participation in technology and computer science disadvantages marginalized populations.
- ISTE Standards 2.B Digital Citizen- . Engage in positive, safe, legal, and ethical behavior when using technology, including social interactions online or when using networked devices.
- ISTE Standards 7.D Global Collaborator- . Explore local and global issues and use collaborative technologies to work with others to investigate solutions.
- Full Standards can be found on CDI.

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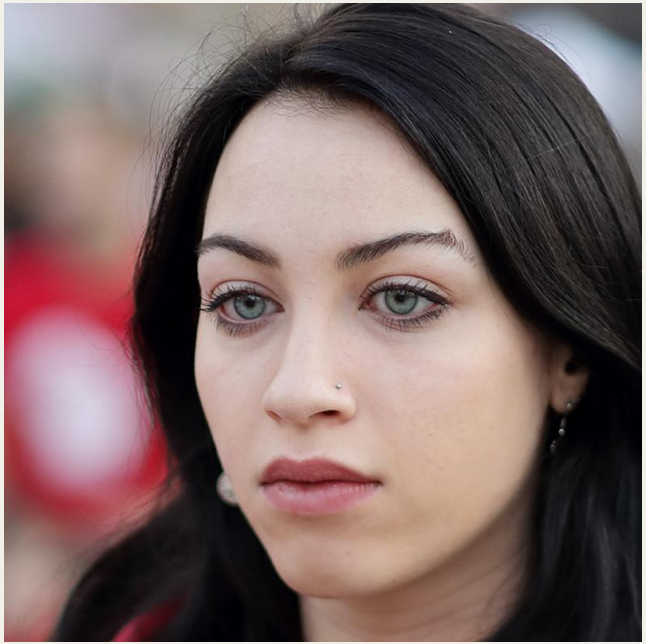
What Image is Real?





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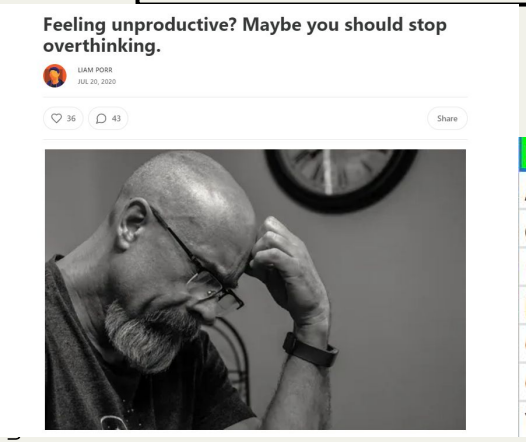
Digital Citizenship in the year 2024

In today's world, generating artificial intelligence content is becoming easier, while detecting it is becoming more difficult.



Human		
Averages	Average perplex	Average Burstine
original student i	241.2486364	251.5238545
1st Chat GPT re	55.591	49.765
Human Post to C	45.833	25.146
Chat GPT post t	49.84	31.359
Chat GPT when	65.015	95.03
Total Average	91.505	90.56

- If one has a general understanding of algorithms and great understanding of generative language models that produce high perplexity & burstiness, then once can push their content further to the masses.
- Higher perplexity & Burstiness scores make the writing sound more human.
- If you have "Bots" that helps too.
- Beware of "Isolated Segregation" that only affirms one's beliefs on social media





How I will Bring digital citizenship to the classroom?

A.I Test, Real or Not

- Teaching students key features on images to identify images as "Real", "Altered" or generally fake.
- Students should understand details an A.I. can miss like body disproportion, claw-like hand, illegible text, lack of detail in hair, facial features, and color.
- Introduction to "A.I. Hallucinations".
- Teacher slides can be found here, Test can be found here

Breaking Harmony Square

- Developed by the State Department for ages 12+.
- Allows students to understand how algorithms work with bots.
- Shows how quickly disinformation can spread faster than true information.
- Shares insight into how trolling and scapegoating can influence a users emotion.
- Breaking Harmony can be found here.

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Can ChatGPT help my students “Think like a Historian???”

- One of the weaker points in our curriculum is talking about the War On Terror Post 9/11.
- However, A.I Dungen allows my students to interact in a Post 9/11 world through the U.S. Army or Afghan National Army.
- Their goal is to bring peace and stabilize Afghanistan in their story.
- The story is generated by Chat-GPT and has improved since the last time I had students play this game.

Connection to standards:

- 7.H.14- Identify and explain recent conflicts and political issues between nations or cultural groups and evaluate the solutions that different organizations have utilized to address these conflicts.
- 7.H.15- Compare and contrast perspectives of history in Africa, Asia, and the Southwest Pacific using fictional and nonfictional accounts, including visual, literary, art, and musical sources.

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Power of “Like” Button

- The like or upvote button can impact the virility of a post, within seconds of the published post.
- I want students to see the power of the "Like" Button through creating positive change within their communities.
- Students will plan a positive change campaign (not political) that they would like to implement on Social Media.
- They will use Canva to put their facts, information, and "emotion" onto Seesaw with anonymous names.
- We will then see what our students "needs" are by their like vote.
- Full Lesson slides can be found on Nearpod & Google Slides.

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Real World Context Throughout Module

- US Anti-Vax campaign in the Philippines to undermine China.
- The use of A.I. in vulnerable democracies, Indonesia. (Subianto)
- Determining what is real and what is not in the news/social media.
- Using A.I. to help bring historical context to students.
- Understanding how Social Media works, something most teenagers use.



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Conclusion

Bridging the gap

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Takeaways

- Understanding how algorithms work and are used.
- Understanding Propaganda Then vs Now
- Bring awareness to Misinformation in society.
- The use of the "Like" Button.
- Emphasizing that activity on social media will make an impact in society.
- Bridging the gap between computer science and social science content.

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