Critical thinking about social media

Goals	 Students develop critical thinking and communicative skills, mainly about the use of social medias Students are able to summarize the acquired knowledge and discuss it Students reflect on the influence and importance of social media in society
Duration	40 minutes
Difficulty	Advanced high school students
Tools and space	Classroom setting, technical equipment for video projection

Topic of the teaching unit

Over the last decade, social psychologists have documented a dramatic rise in mental anxiety and incidents of self-harm among adolescents in the developed world. Heavy social media use is strongly correlated with this trend in adolescent mental health. During roughly the same period, social scientists have come to appreciate that social media is bringing new sorts of influence to bear on social institutions as otherwise diverse as education, public policy, entertainment, and news reporting and consumption.

Together, these trends illustrate a need for today's didacticians to incorporate recent and ongoing work on social media use among adolescents, and to develop pedagogical tools fit for addressing the issues young people face with respect to social media. The aim of this lesson plan is to introduce future teachers to the current research on these issues, and to provide a roadmap for helping students navigate the concerns raised by this research.

Background readings:

- Critical Thinking About Social Media project. 2022. Center for Science, Technology,
 Ethics, and Society at Montana State University https://www.montana.edu/stes/social-media-project/.
- Haidt, Jonathan. 2021. "The Dangerous Experiment on Teen Girls: The Preponderance of the Evidence Suggests that Social Media is Causing Real Damage to Adolescents. *Atlantic Monthly*, online, November 21, 2021.
 https://www.theatlantic.com/ideas/archive/2021/11/facebooks-dangerous-experiment-teen-girls/620767/.
- Haidt, Jonathan. 2022. "Yes, Social Media Really is Undermining Democracy Despite
 What Meta has to Say". Atlantic Monthly, online, July 28, 2022.

 https://www.theatlantic.com/ideas/archive/2022/07/social-media-harm-facebook-meta-response/670975/.
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- Karim, Fazida, Azeezat A. Oyewande, Lamis F. Abdalla, Reem Chaudhry Ehsanullah, and Safeera Khan. 2020. "Social Media Use and Its Connection to Mental Health: A Systematic Review". Cureus 12 (6): e8627.
- Lee, Shieun, David K. Lohrmann, Johua Luo, and Angela Chow. 2022. "Frequent Social Media Use and Its Prospective Association With Mental Health Problems in a Representative Panel Sample of US Adolescents". *Journal of Adolescent Health* 70 (796-803).
- Nominet Digital Youth Index. 2021. Interview Series. https://vimeo.com/656603054, https://vimeo.com/658648202.
- Stovall, Preston. 2020. "Education as a Public Resource for Addressing American Political Polarization", Civil American, July 23, 2020.
 https://www.philosophersinamerica.com/2020/06/23/education-as-a-public-resource-for-addressing-american-political-polarization/.
- Totanes, Kristine. 2020. "Resilience is Only the Beginning: 3 Ways to Build Antifragile Students". *The English Blog*, December 14, 2020.

http://theenglishblog.com/2020/12/resilience-is-only-the-beginning-3-ways-to-build-antifragile-students/.

Notes on the readings

Instructors should decide which readings to assign prior to the lesson. Suggestions are made below for readings associated with each of the three activities. Jonathan Haidt has collected a number of articles on the influence of social media on mental health and political polarization here:

o https://jonathanhaidt.com/social-media/

Structure of the educational situation

- Begin with a 5-10 minute discussion of a specified topic (social media use and antifragility, understanding artificial intelligence, how social media platforms operate, friendship and bullying, ethics and algorithms)
- In the next five minutes, pair the students up and have them brainstorm ideas about the topic.
- o In the following five minutes, have the students spiral out for further conversation.
- o Finally, in the last 5-10 minutes, have a group discussion about what people learned.
- Let yourself be inspired by the questions that are part of the methodological notes.

Modification of the seminar

Additional stages of spiraling conversation can be introduced if there is time.

Methodological notes

This lesson plan uses activities called *think-pair-share* (originally owed to Frank Lyman)¹ and *spiraling conversation*. In a think-pair-share activity, students first spend a few minutes thinking to themselves about a question posed by the instructor. They then spend a few minutes talking about the question with another student. Finally, they share the results of that conversation with the class. In a spiraling conversation, intermediate steps are interposed between pairing and sharing. At each step, the students "spiral" outward (either clockwise or counter-clockwise) to pair with other students. Audio-visual materials can also be used for presenting the topic.

Below we provide an overview of suitable topics including questions for discussion.

Social Media Use and Antifragility

- What is the differences between a fragile student, a robust student, and an antifragile student?
- What are some methods for developing antifragility in students? How might those methods be employed by educators?
- What role do parents play in helping young people develop antifragility? What role for educators?
- How might social media use harm, and how might it help, the development of antifragility?
- o In what ways might an antifragile pedagogy be risky? How might those risks be avoided or addressed?

¹ Lyman, Frank. 1981. "The Responsive Classroom Discussion: The Inclusion of All Students." In Audrey Spring Anderson, ed., *Mainstreaming Digest*. College Park, MD: University of Maryland College of Education.

Understanding Artificial Intelligence

- o What do you mean by artificial intelligence?
- o How does artificial intelligence affect your daily life?
- o What risks does artificial intelligence have for society?
- o How can we protect ourselves from the dangers of artificial intelligence?
- o How much decision power should artificial intelligence have?

Friendship and Bullying

- O What can social media sites do to stop cyberbullying?
- o What does friendship mean to you?
- Do social media improve our relationships with others or weaken them?
- In what is cyberbullying worse and more dangerous than verbal humiliation and physical bullying?
- o What tools are used in cyberbullying?

Ethics and Algorithms

- What is the principle role of social networking algorithms? What are the advantages? What are the negative consequences of our growing dependence on social media?
- o How can we not be manipulated by social media?
- Who or what do you think should be held accountable for harms generated by algorithms?
- o What could we do to make technology more ethical?

Conclusion

The instructor and students together summarize the lessons learned and reflect on their significance. Students provide feedback to the instructor. The instructor provides students with other interesting materials and tips on the topic.