**Storyline: "Ethics in AI - Part I: Responsibility in AI "**

Students will first consider the possible damage and dilemmas that can occur from an ethical perspective given the knowledge they have gained concerning AI from previous classes. They will discuss the different concerns that could arise and who should be held accountable for these dilemmas should they occur (the creator or user). They will then be taught the common ethical concerns of AI and hypothesize creatively on solutions for these concerns. They will relate their brainstormed solutions on these concerns to the "5 Pillars of AI Trust" as described by IBM as a responsible manner of adopting AI to minimize these concerns. Then, students will be introduced to 3 different real-world AI dilemmas and consider how it could have been prevented and who is responsible for the dilemma. Lastly, students will consider the ethics of AI replacing the work or jobs of humans and if they could ever be intelligent enough to fully simulate human art and culture.

**Elicit: "What Damage Can Irresponsible AI Cause?"**

How will I engage students and elicit their ideas?

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| **Description** | **Teacher Moves** | **Student Moves** | **Resources** |
| Estimated Duration: 10 minutes    Description: Students will hypothesize on what ethical concerns could arise given the nature of AI and the data that it handles and has access to. Furthermore, they will discuss who should have the responsibility of keeping AI in check and managing its use. | * Facilitate discussion between students * Make clarifications for any misunderstanding * Help any students having issues providing answers within the Teams Notebook * Remind students of the functions of AI and make references to the database and processing and how these could maybe be misused | * Participate in the discussion of each question * Answer the respective questions in their Teams notebook * Consider material from past presentations and follow along with explanation or examples given by the teacher | * [IBM Source on AI Ethics](https://www.ibm.com/topics/ai-ethics?utm_medium=OSocial&utm_source=Youtube&utm_content=SFPWW&utm_id=YTDescription-101-What-is-AI-Ethics-LH-AI-Ethics-Guide) * [Blog Discussing Responsibility in AI Decisions](https://ai4.io/blog/2020/04/20/who-will-be-responsible-for-the-decisions-of-ai-applications/) * [Article on Who is Responsible for AI](https://medium.com/codex/who-is-responsible-for-ai-aa73c8399b78) |

**Develop: "What are the Ethical Concerns of AI?"**

How will I get students to explore, explain, and develop ideas?

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| **Description** | **Teacher Moves** | **Student Moves** | **Resources** |
| Estimated Duration: 20 minutes    Description: Students will learn more about the exact ethical concerns of AI and then propose their own solutions to these issues, being as creative as they would like. Then, they will learn about the "5 Pillars of Trust in AI" and relate these to the solutions that they made. | * Facilitate discussion between students   + Discuss question in orange on the slides * Make clarifications for any misunderstanding * Help any students having issues providing answers within the Teams Notebook * Go through each ethical concern about AI and give examples when necessary * Assist students in brainstorming of possible solutions to these concerns and encourage them to be creative * Discuss the "5 Pillars of Trust in AI" and facilitate a discussion where students relate their solutions to these | * Participate in the discussion of each question * Answer the respective questions in their Teams notebook * Think of creative solutions to the concerns of AI * Follow along with examples and explanations given by the teacher | * [IBM Source on AI Ethics](https://www.ibm.com/topics/ai-ethics?utm_medium=OSocial&utm_source=Youtube&utm_content=SFPWW&utm_id=YTDescription-101-What-is-AI-Ethics-LH-AI-Ethics-Guide) * [Information on Data Lineage](https://www.ibm.com/topics/data-lineage#:~:text=Data%20lineage%20is%20the%20process,destination%20within%20the%20data%20pipeline.) * [Information on AI Governance and Factsheets](https://dataplatform.cloud.ibm.com/docs/content/wsj/catalog/get-started-aigov.html?audience=wdp) * [Examples of Ethical Dilemmas in AI](https://www.unesco.org/en/artificial-intelligence/recommendation-ethics/cases) * [What are Countries Currently Doing Towards AI Ethics?](https://www.euronews.com/next/2023/05/03/which-countries-are-trying-to-regulate-artificial-intelligence) |

**Deploy: "Real World Ethical Dilemmas"**

How will I get students to use and apply their ideas to what they’ve learned?

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| **Description** | **Teacher Moves** | **Student Moves** | **Resources** |
| Estimated Duration: 20 minutes    Description: The objective of this activity is to for students to be presented with 3 real-world dilemmas that occurred with AI and discuss what party was at fault and how these dilemmas may have been prevented considering the "5 Pillars of Trust in AI". | * Facilitate discussion between students * Make clarifications for any misunderstanding * Help any students having issues providing answers within the Teams Notebook * Introduce each real-world dilemma to students and provide them with more information if necessary (included in resources) | * Participate in the discussion of each real-world dilemma * Answer the respective questions in their Teams notebook * Refer back to the "5 Pillars of Trust in AI" when appropriate and consider different perspectives of each dilemma | * [More information on the Medical Records Leak](https://www.pcmag.com/news/report-ai-company-leaks-over-25m-medical-records) * [More Information on Offensive Chatbot (Tay)](https://medium.com/mobilenewslab/what-are-some-ethical-considerations-that-chatbots-raise-and-how-can-those-be-best-be-addressed-7f7fed23557) * [More information on Tesla Automobile Crash](https://www.theguardian.com/technology/2022/dec/22/tesla-crash-full-self-driving-mode-san-francisco) |

**Refine: "Looking into the Future of Human and AI Interaction"**

How will I get students to extend, elaborate, and change their ideas based on what we now understand?

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| **Description** | **Teacher Moves** | **Student Moves** | **Resources** |
| Estimated Duration: 10 minutes    Description: Students will consider the limitations of AI and if they think it will ever be able to replace or perfectly replicate the work of humans. Then they will consider the ethics of such a thing if possible such as AI taking human jobs relating it back to the previously discussed concerns. | * Facilitate discussion between students * Make clarifications for any misunderstanding * Help any students having issues providing answers within the Teams Notebook * Encourage students to reference previous material in the slides and previous reflections/conclusions they reached * Given students examples of AI art or example the difference between AI generated work and AI assistance | * Participate in the discussion of each question * Answer the respective questions in their Teams notebook * Follow along with any examples shown to them by the teacher * Make references to previous material discuss and the Ethical Concerns of AI | * [IBM Source on AI Ethics](https://www.ibm.com/topics/ai-ethics?utm_medium=OSocial&utm_source=Youtube&utm_content=SFPWW&utm_id=YTDescription-101-What-is-AI-Ethics-LH-AI-Ethics-Guide) * [Article about AI Art](https://www.theguardian.com/artanddesign/2023/jan/23/its-the-opposite-of-art-why-illustrators-are-furious-about-ai) * [AI Art Generator](https://openart.ai/discovery) * [Article about AI Taking Human Jobs](https://www.bbc.com/worklife/article/20230418-ai-anxiety-artificial-intelligence-replace-jobs) |