

Storyline: "Ethics in AI - Part II: Perspective and Diversity"

Students will first consider the benefits of diversity and varying perspectives in the field of AI and consider how this might be beneficial when creating a new product or ideate solutions as part of a team. Then students will learn more about the "diversity crisis" in AI and the issue with bias in AI due to the lack of sufficient data for underrepresented groups. Students will learn about specific applications of AI where this can lead to detrimental consequences and then hypothesize about how to solve this issue. They will then be introduced to the 3 Basic Ethic Principles and relate these to 2 different approaches on how to implement/establish AI ethics as a whole. Afterwards they will reflect on these approaches and consider what changes should be made to these principles or methods. Lastly, the students will learn about the "Medici Effect" and how diversity can actually assist in generating a solution and how different perspectives can improve innovation and problem solving. They will complete a small comic strip activity with a group and reflect on how the outcome of each of their comic strips differed compared to what they had originally planned and how everyone's own perspective and ideas shaped a story that them as an individual could not create on their own.

Elicit: "What are the Benefits of Diversity in AI?"

How will I engage students and elicit their ideas?

Description	Teacher Moves	Student Moves	Resources
Estimated Duration: 10 minutes Description: Students will discuss the benefits diversity has on the field of Artificial Intelligence and how diversity leads to multiple perspectives that can provide insight into problems and solutions that would be impossible without them.	<ul style="list-style-type: none">• Facilitate discussion between students• Make clarifications for any misunderstanding• Help any students having issues providing answers within the Teams Notebook• Encourage students to think about how people's backgrounds and experiences contribute to their perspective and how that is linked to having a diverse team	<ul style="list-style-type: none">• Participate in the discussion of each question• Answer the respective questions in their Teams notebook• Consider material from past presentations• Consider their own background and perspective and the perspectives of those around them• Consider the problem-solving advantage of being able to approach issues from multiple perspectives and relate it back to the field of AI	<ul style="list-style-type: none">• The Importance of Diversity in AI• The AI "Diversity Crisis"• Why Diversity in AI is Important

Develop: "What is the "Diversity Crisis" in AI?" and "Establishing Ethics in AI"

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

Description	Teacher Moves	Student Moves	Resources
<p>Estimated Duration: 25 minutes</p> <p>Description: Students will learn about the importance of diversity as it pertains to AI and especially how diversity is important in data collection to avoid the introduction of bias into algorithms. Then, students will learn about the 3 Basic Principles of Ethics and the 2 Approaches of Establishing Ethics in AI. They will also answer questions about these topics at the bottom of the respective slides.</p>	<ul style="list-style-type: none">• Facilitate discussion between students• Make clarifications for any misunderstanding• Help any students having issues providing answers within the Teams Notebook• Discuss the various examples of how a lack of diversity can introduce bias and elaborate if there are any misunderstandings	<ul style="list-style-type: none">• Participate in the discussion of each question• Answer the respective questions in their Teams notebook• Follow along with examples and explanations given by the teacher• Answer the questions listed on the slides pertaining to each topic	<ul style="list-style-type: none">• The Importance of Diversity in AI• The AI "Diversity Crisis"• Why Diversity in AI is Important• IBM Ethics (How to Establish AI Ethics)• The Belmont Report (3 Principles of AI Ethics)

Deploy: "Understanding the Benefits of Diversity: The Medici Effect Comic Strip"

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

Description	Teacher Moves	Student Moves	Resources
<p>Estimated Duration: 15 minutes</p> <p>Description: The objective of this activity is for students to complete a comic strip with 3-4 student groups where they will not communicate (as to highlight their own unique perspectives without influence). They will each fill out a single panel of their own comic strip and then pass the comic clockwise in their group with each panel being filled out by another member, telling a story without words or dialogue. They will then reflect on these stories in the Refine section.</p>	<ul style="list-style-type: none">• Facilitate discussion between students• Make clarifications for any misunderstanding• Help any students having issues providing answers within the Teams Notebook• Place students into groups• Provide students with the proper materials to complete the activity• Make sure students are not communicating or writing words in their comics as to ensure their unique perspectives are unaffected	<ul style="list-style-type: none">• Participate in the discussion of each real-world dilemma• Answer the respective questions in their Teams notebook• Follow the directions of the exercise and do not communicate or include words in their comics• Fill out the comic panels with their own unique ideas and drawings• Be respectful of everyone's perspective and ideas	<ul style="list-style-type: none">• The Medici Effect

Refine: "Reflecting on The Medici Effect"

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

Description	Teacher Moves	Student Moves	Resources
<p>Estimated Duration: 10 minutes</p> <p>Description: Students will then take a look at the comic strips that were created in the Deploy activity and reflect on how the story turned out versus how they expected it to continue with their original drawing. Students will discuss their drawings with each other and how each of their stories changed and whether they could have imagined this story own their own versus having multiple perspectives contribute to it.</p>	<ul style="list-style-type: none">• 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• Encourage students to discuss the intended stories of other members in their group to get a sense of how their perspective differs from others.	<ul style="list-style-type: none">• 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 previously discussed material and the Ethical Concerns of AI• Talk to other students about their stories and compare their differing perspectives and understand how each one had an effect on each other's stories	<ul style="list-style-type: none">• The Medici Effect