

Ethical, Social, and Economic Impacts of AI within the Workforce

Digital Tool(s)/Classroom Resource(s) Name(s) and URL(s):

[Ethical and Social Concerns Related to AI's Impact on the Workforce](#)

[Economic Concerns Related to AI's Impact on the Workforce](#)

Overview:

This lesson plan aims to explore the ethical, social, and economic impacts of AI within the workforce. Students will analyze AI's influence on job creation, displacement, and reshaping of the labor market, alongside its ethical and social implications. By the end of the lesson, students will have a nuanced understanding of how AI is transforming the workforce and the associated challenges and opportunities.

Primary Course of Study Content Standard(s):

Career Preparedness

CTE21.WBL.CP.11 Analyze the effects of current technologies on culture, society, economy, environment, and politics, and predict possible future innovations.

QuantHub Skill:

[A guide to entering an AI-enhanced workforce](#)

Approximate Duration:

1 class period (90 minutes)

Materials and Resources:

Printed or projected handouts of the learning resources

Handouts of the case studies

Lesson Rubric

Scavenger Hunts in QuantHub Upskill

[Scavenger Hunt: Economic concerns related to AI's impact on the workforce](#)

[Scavenger Hunt: Ethical and Social Concerns Related to AI's Impact on the Workforce](#)

[QuantHub Skill: A guide to entering an AI-enhanced workforce](#)

Background/Preparation:

Students should have basic knowledge of Artificial Intelligence and its applications.

Vocabulary Definitions:

- Artificial Intelligence (AI): Computers or machines designed to think and make decisions like humans.
- Operational Disturbances: Problems that occur when something interrupts normal work or activities.



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- **Inequality:** When things are not equal or fair for everyone.
- **Bias:** An unfair preference for or against something or someone.
- **Discrimination:** Treating people differently or unfairly based on things like their race, age, or gender.
- **Data Privacy:** Keeping personal or important information safe and secret.
- **Workforce Reskilling:** Teaching workers new skills so they can do different jobs.
- **Job Displacement:** When people lose their jobs because their work is replaced by machines or new methods.
- **Economic Disparity:** A big difference in wealth and income between different people or groups.
- **Regulatory Compliance:** Following rules and laws, especially in business.

Key Concepts:

- **AI's Impact on Jobs:** Sometimes when AI is used in jobs, it can take over some tasks, leaving fewer jobs for people. This can make it harder for some people to find work.
- **Humans and AI Working Together:** It's important to use both AI and people's ideas, especially for jobs like hiring where understanding people is key.
- **Fairness in AI:** AI should be checked often to make sure it's not being unfair to certain groups of people.
- **AI and Economic Disparity:** When AI is used more in jobs, people who do simpler tasks might find it harder to get work. This can make the gap between rich and poor bigger.
- **AI Costs:** Using AI can be expensive, especially for small companies.
- **Privacy with AI:** In jobs like healthcare, keeping people's information private is really important.
- **How AI Changes Industries:** AI can make work faster and better in many industries, creating new types of jobs and changing old ones. But this also means people might need to learn new skills to keep up with changes.

Learning Objectives:

Identify Ethical Concerns Related to AI's Impact on the Workforce.

Identify Social Concerns Related to AI's Impact on the Workforce.

Identify Economic Concerns Related to AI's Impact on the Workforce.

Before/Engage (20 min):

Begin with a class discussion to activate prior knowledge about AI.

Introduce the topic and present key questions that the lesson will address.

1. Introduction to the Lesson:

Today, we're going to explore an exciting and important topic: the impact of Artificial Intelligence, or AI, on our workforce. AI isn't just about robots; it's about computer systems that can do tasks that usually need human intelligence. This includes things like understanding human speech, competing in strategic games like chess, and even driving cars.



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2. Presenting Key Questions:

As we dive into this topic, there are some important questions we need to think about. These questions will guide our exploration and discussions today and in our next class. Let's keep these in mind as we learn more about AI.

- *What is AI and How is it Used in Workplaces?*

Example responses:

"AI is like computers doing stuff that humans normally do, I guess. Around here, I think some stores might be using AI for things like self-checkout or managing inventory."

What are the Benefits and Challenges of AI in the Workforce?

"One good thing could be that AI makes some jobs easier or faster, like in retail or customer service. But in our area, if AI starts doing jobs people do now, there might not be enough other jobs for everyone."

"Also, if you need skills to work with AI and there's no training available, that's a big problem."

- *How Does AI Affect Jobs and Skills?*

Example Responses:

"I think AI could change the kind of jobs we have. Maybe there'll be fewer jobs in things like store cashier roles, but more in tech support or AI maintenance."

"I feel like we would need to learn more about technology, maybe even programming or something, to work with AI. But schools here don't really offer much of that."

What are the Ethical Considerations of AI?

"It doesn't seem fair if AI is used in hiring and it doesn't understand people from different backgrounds. What if it's biased?"

"And what about privacy? If AI is collecting our data all the time, who's making sure it's not used in the wrong way?"

3. Read the QuantHub learning resources on this topic:

[Ethical and Social Concerns Related to AI's Impact on the Workforce](#)

And/or

[Economic Concerns Related to AI's Impact on the Workforce](#)

4. Class Discussion:

Do you think AI will create more jobs than it displaces? Why or why not?

Example Responses:

"I think AI might take over simple jobs, but it could also create new kinds of jobs we haven't seen yet."

"AI might replace jobs, but people will still need to manage and improve AI, so there might be different kinds of work."



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5. Set the Stage for Group Work:

Explain the importance of understanding both an employee's and employer's viewpoint to get a holistic view of AI's impact.

During/Explore/Explain Phase (40 min):

Group Work:

Divide the class into groups, each focusing on one aspect: ethical, social, or economic impacts. Each group will use the provided case studies to reflect on their assigned topic. Encourage students to discuss and note down key points and real-world examples. Each group should present their findings to the class.

Ethical Group:

Title: "Responsibility and Empathy in AI Recruitment"

XYZ Corporation, a multinational company, implemented an AI system for recruitment to streamline hiring. The AI was designed to analyze resumes and conduct initial interviews. Initially, it increased the hiring process's efficiency, shortlisting candidates rapidly based on specific criteria.

However, issues arose when a highly qualified candidate, Sarah, was rejected because she took a career break for family reasons, a factor the AI couldn't empathize with or understand.

Additionally, John, a department manager, faced criticism when an AI-approved hire underperformed, raising questions about responsibility.

Question: "Identify and discuss potential ethical dilemmas AI presents in the workplace."

Possible Answers:

"AI could make decisions without understanding human feelings."

"If AI is making choices, who is responsible if something goes wrong?"

Social Group:

Title: "AI in Retail: Adapting to New Ways of Working"

A retail chain introduced AI for inventory management and customer interaction. While the AI streamlined tasks, employees like Emma felt the loss of human interaction, missing the camaraderie with colleagues in routine tasks. Furthermore, some employees, like Mark, a seasoned salesperson, faced challenges adapting to the new technology. Mark needed to learn how to interpret AI-generated sales reports and customer analytics, a skill he had never needed before.

Question: "How might AI impact workplace dynamics and employee well-being?"

Possible Answers:

"AI might make some jobs easier, but people could miss working with other people."

"Some workers might need to learn new skills to work with AI."

Economic Group:

Title: "AI and Job Dynamics in a Logistics Company"

FastTrack Logistics, a shipping and logistics company, implemented AI systems to automate sorting and tracking packages. This technology significantly sped up operations, leading to higher profits and more efficient service. However, this advancement came with a downside.



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Many employees, like Tom, who had spent years mastering the sorting process, found their jobs at risk. The AI could sort packages faster and with fewer errors than humans. This raised ethical questions about the future of employment in the face of such efficient AI and how companies should balance technological advancement with employee welfare.

Question: "What are the potential economic advantages and disadvantages of AI in the workforce?"

Possible Answers:

"AI could make companies more money by doing tasks faster."

"Some jobs might not be needed anymore if AI can do them."

After/Elaborate/Evaluate Phase (10 min):

Skill Assessment and Reflection:

Discussion Question: "Having learned about the various impacts of AI, how do you perceive your future in an AI-enhanced workforce?"

Possible Answers:

"It's kind of exciting to think about new technology, but I'm also a bit worried about needing to learn a lot of tech stuff."

"I feel like there will be cool new jobs, but I'm not sure what they will be like."

Assessment Strategy (15 min):

Evaluate students through their participation in discussions, group work quality, and presentation content. See Rubric.

This rubric can be adjusted for the number of points you want to assign to each section and the specific behaviors or outcomes you expect from your students. Remember to provide clear descriptions for each level of achievement so that students know what is expected of them and how they can improve.

Acceleration/Intervention:

For advanced students: Assign a project to develop a proposal for integrating AI ethically into a specific industry.

For students needing support: Provide guided worksheets with specific questions to help focus their research.

This lesson plan aligns with the ALEX template and provides a comprehensive framework for exploring the impacts of AI in the workforce. It's designed to engage students in critical thinking and practical application of their learning.



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AI Impact on Workforce Lesson Rubric

Participation in Discussions (20 Points)

Active Contributor (16-20 Points): Consistently contributes thoughtful comments, engages with peers, and demonstrates a clear understanding of AI's impact.

Engaged Participant (11-15 Points): Regularly contributes to discussions and engages with the material.

Occasional Contributor (6-10 Points): Participates but may not show a deep understanding of the material.

Limited Participation (1-5 Points): Rarely participates and does not engage with discussion topics.

Group Work Quality (20 Points)

Exemplary Teamwork (16-20 Points): Collaborates effectively, contributes equally, and the group presents a comprehensive analysis of the assigned topic.

Strong Teamwork (11-15 Points): Works well with the group and contributes to most of the work.

Adequate Teamwork (6-10 Points): Participates in group work but contribution is uneven.

Minimal Teamwork (1-5 Points): Does not actively engage with the group or contribute meaningfully to the work.

Presentation Content (20 Points)

Outstanding Presentation (16-20 Points): Provides a clear, detailed, and well-organized presentation with in-depth analysis.

Good Presentation (11-15 Points): Delivers a clear presentation with a good level of analysis.

Fair Presentation (6-10 Points): Presents basic information but lacks depth or clarity.

Poor Presentation (1-5 Points): The presentation is incomplete, unclear, or poorly organized.

Application of Understanding (Scavenger Hunts) (20 Points)

Student completed both scavenger hunts (20 Points)

Student completed one scavenger hunt (10 Points)

Student completed no scavenger hunts (0 Points)

Overall Score: ____ / 80

