

# Worksheet #5 All Parts S1E11: "Exploring AI for Personalized Learning"

**Objective**: Students will explore how AI tools can create personalized learning experiences by adjusting content, resources, and feedback based on their individual strengths and weaknesses. They will reflect on how AI helps tailor learning paths to their needs.

# Part 1: Understanding Personalized Learning with AI

- 1. **Introduction to AI Learning Platforms**: Before you begin, familiarize yourself with an AI-based learning platform such as Khan Academy, Duolingo, IXL, or any other AI-powered educational app. These platforms often adjust the difficulty of the material based on your answers and progress.
- 2. **Choose a Platform**: Select an AI-powered platform that offers personalized learning paths. If possible, choose one that you haven't used much before. Some suggestions:
  - Khan Academy for personalized learning in subjects like math, science,
    and humanities.
  - o **Duolingo** for personalized language learning.
  - IXL for adaptive practice in math, language arts, science, or social studies.



#### Task:

• Write down the name of the platform you're using and the subject or topic you are working on (ex. Math on Khan Academy, Spanish on Duolingo, etc.).

#### **Reflection:**

• What do you already know about this subject or topic? What areas do you think will be challenging?

## Part 2: Engaging with the AI-Powered Learning Platform

1. **Complete a Learning Session**: Engage with the platform by completing a series of lessons or activities. Pay attention to how the AI adjusts the difficulty of the material as you progress.

## **Example Activities:**

- Solve math problems on Khan Academy and notice how the questions change in difficulty based on your performance.
- Practice language lessons on Duolingo and observe if the AI gives you easier or harder questions depending on your answers.

#### Task:

- Write down 3-5 examples of how the platform adapted to your learning.
  - Did it repeat a concept you struggled with?
  - o Did it suggest new resources or provide hints after a wrong answer?
  - o Did it increase the difficulty after you answered correctly?



#### Reflection:

• How did the AI adjust the material based on your responses? Did you feel that the content was personalized to your learning style?

#### Part 3: Feedback from AI

1. **Analyze AI Feedback**: As you engage with the learning platform, you'll likely receive feedback after completing questions or activities. This feedback might include hints, explanations, or recommendations for further study.

#### Task:

- Write down the specific feedback you received from the AI after completing a task.
  - o Did the AI give you hints when you got a question wrong?
  - Did it suggest extra resources to help you improve?

#### Reflection:

- How helpful was the feedback? Did it help you understand your mistakes or point you to useful resources?
- In what ways was the feedback different from what a teacher or peer might give you?



### Part 4: Analyzing Strengths and Weaknesses

1. **AI-Generated Insights**: After completing the learning session, reflect on the strengths and weaknesses the AI platform identified. Many platforms provide reports or insights into your performance.

#### Task:

- Write down the areas where the AI suggested you need improvement and the areas where it highlighted your strengths.
  - o Which topics or types of questions did you excel at?
  - o Which areas did the AI recommend more practice in?

#### **Reflection:**

- Do you agree with the AI's assessment of your strengths and weaknesses? Why or why not?
- How accurate do you think the AI was in understanding your learning progress?



## **Part 5: Final Reflection and Discussion**

#### Task:

• Write a paragraph summarizing how the AI personalized your learning experience. Include your thoughts on the following:

## **Questions to Consider:**

- In what ways did the platform make learning easier or more challenging for you?
- Did the AI keep you engaged by adjusting the difficulty level?
- How might personalized learning with AI help students in the future, especially those who need extra help or want to move at a faster pace?



#### **Teacher's Notes:**

- Encourage students to think about the benefits of AI in personalizing education to fit individual needs and how that compares to traditional teaching methods.
- Discuss the limitations of AI in understanding deeper nuances of a student's learning journey, such as emotional challenges or motivation levels.
- Highlight how students can use AI tools as a complement to teacher-led learning and not as a replacement for human interaction.

This worksheet helps students explore the ways in which AI adapts learning content to individual needs, allowing them to reflect on how these tools can make their educational experience more engaging and tailored to their abilities.