

# DAIVERSE LEARNING ACTIVITY



## **Bridging the Digital Divide: Elevating Vocational Students' Portfolio Work with Digital Tools**

**AUTHOR**

**Age Range:** 18+ (Final year of environmental protection technician students)

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**Duration:** 2 months

## **Objective**

This learning scenario focuses on integrating AI-powered tools to support the portfolio development of final-year vocational students, helping them improve their digital literacy and collaborate effectively using cloud-based platforms. Through AI, students will be better prepared for their final portfolio defense, narrowing the digital divide and equipping them with modern skills for their future careers.

## **Key Objectives**

- Deepen students' digital literacy.
- Incorporate AI into their project work and portfolios meaningfully.
- Prepare students for collaborative, cloud-based work environments.
- Equip students for their final portfolio defense.

## **Main Steps of the Activity**

### 1. Starting with Schoolai Tutor Chatbot

- o **Task:** Students begin by using the Schoolai tutor chatbot to guide them through their portfolio progress. This chatbot acts as a tutor, asking reflective questions about how far they've come in developing their portfolio and providing suggestions for improvement.
- o **Goal:** Track and scaffold student progress while boosting self-assessment and reflection skills.

### 2. Presentation Development with Gamma

- o **Task:** Using **Gamma**, an AI-powered tool for presentations, students create a structured and professional foundation for their portfolio defense. This will involve creating slides that summarize their research process, findings, and outcomes.
- o **Goal:** Prepare students to present their portfolio in a clear, concise, and visually appealing manner.

### 3. AI-Generated Images to Enhance Research

- o **Task:** Using **Tengr.ai** and **DeepAI**, students will generate visuals that align with the themes of their research (such as environmental protection challenges, solutions, or innovations). These AI-generated images will complement the data presented in their portfolios.
- o **Goal:** Enhance the creative aspect of the portfolio with tailored visuals that make the research more engaging and accessible.

### 4. Illustrating Research with Napkin

- o **Task:** Students will utilize **Napkin**, an AI tool for generating illustrations, to create diagrams or visual summaries that illustrate how their findings align with their hypothesis. These visual aids will help them better explain complex concepts during their oral defense.
- o **Goal:** Strengthen students' ability to visually communicate their research process and findings.

#### 5. Mock Defense Preparation

- o **Task:** Students will engage in a **mock defense exam** using **Schoolai**, which will simulate the types of questions they might face in their actual portfolio defense. The AI tutor will time the responses and provide real-time feedback on how well they manage to answer the questions, helping them improve articulation and time management.
- o **Goal:** Prepare students for the real defense by improving their confidence, articulation, and ability to manage their time under pressure.

#### 6. Peer and Expert Evaluation

- o **Task:** After the AI-powered mock exam, students will participate in a **mock oral defense** in front of their peers and two expert teachers. This will be timed and structured as the final defense to provide realistic practice.
- o **Goal:** Offer students the opportunity to receive live feedback, gain insights from their peers, and practice handling the pressure of formal presentations.

### Inclusion and Differentiation

This scenario addresses **inclusion** by targeting students who haven't had formal IT lessons in the past three years of their studies, giving them the opportunity to develop digital skills through hands-on, AI-enhanced learning experiences. It also fosters **differentiation** by allowing students to work at their own pace with AI tools that adapt to their needs, ensuring that both IT and non-IT students are supported in building portfolios aligned with their interests and strengths.

### Assessment and Feedback

- **Formative Feedback:** Ongoing feedback from **Schoolai tutor chatbot** as students develop their portfolios.
- **Summative Assessment:** A mock oral defense exam, where students will be timed and evaluated on their presentation skills, clarity of research, and ability to handle questions from peers and teachers.
- **Peer Review:** Feedback from classmates after the mock oral defense session, allowing for collaborative reflection and improvement.

### Additional Tips and Comments

- This scenario can be adapted for students in various vocational fields beyond environmental protection.
- Emphasis on reducing the digital divide by incorporating digital tools that make the portfolio creation process more accessible to students without an IT background. -