# **Simulation activity**

**Simulation Exercise Title:** Improving VET curriculum through data-driven insights

**Objective:** The aim is for the learner to simulate a real-world scenario by using a data-driven approach to identify, analyze, and solve curriculum-related issues within VET context.

**Background:** *You are part of a curriculum development team at a VET institution that offers courses in “Renewable Energy Technologies”. Recent feedback from students, instructors, and industry partners suggests that the curriculum is outdated and does not fully prepare students for the current job market. Additionally, student achievement in key areas such as solar panel installation and energy efficiency has been below expectations.*

**Data Provided**

1. **UNDERSTAND THE PROBLEM**

**Task:** Summarise the key issues facing the Renewable Technologies curriculum based on the additional data provided below:

* **Student Achievement Data:** Based on recent assessments, only 60% of students pass the solar-panel installation certification exam on the first attempt.
* **Student Feedback Survey:** Students’ feedback demonstrates a difficulty in understanding the practical aspects of solar panel installation and energy efficiency.
* **Instructor feedback:** Instructors believe that the course content is way too theoretical, lacking hands-on feedback.
* **Industry Partner feedback:** According to industry partners, graduates are not well-versed in the latest installation technologies and regulations, making them less competitive in the labour market.
1. **DATA ANALYSIS**

**Task:** Review additional data to get deeper information and insights. Then analyze them to identify trends, gaps and areas for improvement in the curriculum.

* Over the last three years, pass rates for solar panel installation have dropped by approximately 10%, while the energy efficiency ymodule has consistently low engagement.
* Other leading institutions, with similar VET programs, have proceeded with updating their curricula, to include new technologies, hands-on workshops and partnerships with energy firms for internships.

**Task:** *Your task is to use a data-driven approach to review the curriculum, identify the issues, and recommend evidence-based improvements. You will be provided with various data sources to help you make informed decisions.*

1. **PROPOSE CURRICULUM CHANGES**

**Task:** Using the insights from the two previous stages (data analysis), make three specific recommendations for improving the curriculum, identifying the underlying problems. Make sure that your changes must be evidence-based and align with student needs, emerging trends and industry expectations

1. **PRESENTATION OF YOUR RECOMMENDATIONS TO THE STAKEHOLDERS**

**Task:** Present your curriculum recommendations to industry partners, instructors, students and any other relevant stakeholder, in a clear and convincing way. Mention: the identified problems, the data supporting your findings and your proposed solutions.

**Guidelines**

1. **Read the scenario provided and examine the data related to student performace, feedback and industry insights.**
2. **Complete each step outlined in the activity, by following the instructions. Analyse data, identify issues in the existing curriculum, propose improvements and communicate your recommendations.**

**Deliverables:**

**By the end of this activity, you must have filled out this document with the required information.**