

## 'AI-Driven Personalized Project-Based Learning Model'

The project-based learning model, combined with personalized learning using AI agents, aims to foster core programmer competencies. Powered by AI Agents and Personalized Learning: AI acts as a personal assistant, analyzing data, providing individualized recommendations, and supporting learning based on each student's potential and interests.

### Input



#### Principle

Focuses on creating learning experiences where learners take the role of constructing knowledge themselves

#### Objective

To develop a learning model that promotes the fundamental competencies of programmers

#### Content

The course content is about computer programming

### Learning Process

#### Step 1 Preparation

Orientation, AI Agent demonstration, group assignments, and competency testing



#### Step 2 The 6 Step Learning Process

##### Sparking Ideas:

Define project topics from the given problem, with AI agents providing guidance and motivation

##### Planning for Success:

Plan the work and assign roles. AI agents help create a timeline and work structure

##### Execution:

Build the project. AI agents provide guidance, review code, answer questions, and recommend resources

##### Gaining Experience:

Evaluate the results, receive feedback for improvement, and make adjustments

##### Communicating the Concepts:

Present the work and demonstrate the program, practicing communication and teamwork skills

##### Summarizing the Achievements:

Summarize the project results and prepare a report

#### Step 3 Conclusion

Instructors and students collaboratively summarize knowledge, exchange ideas, and assess competencies

### Outcome Programming Competencies

**Knowledge:** Understanding of the principles and theories necessary for programming

**Personal Attributes:** Personal qualities conducive to work and collaboration with others

**Skills:** Ability to put ideas into practice and solve problems

