STRENGTHENING HIGHER EDUCATION CAPACITY THROUGH AI-BASED LESSON PLANNING TRAINING FOR TEACHERS

PRINCIPLES 2:
A COMMITMENT TO BUILDING CAPACITY IN HIGHER EDUCATION SYSTEMS ACROSS THE WORLD.

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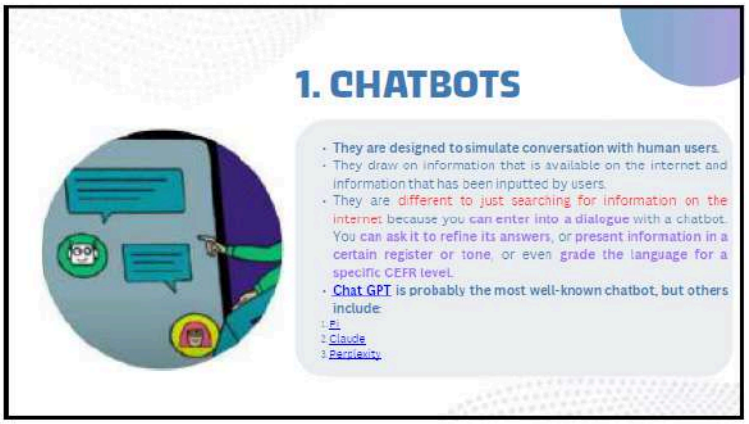
BACKGROUND OF THE ACTIVITY

The advancement of Artificial Intelligence (AI) has reshaped many aspects of education, particularly in learning design and instructional planning. Despite this rapid development, many teachers still face challenges in utilizing AI technology effectively to support teaching and learning processes. Lesson planning remains a time-consuming task, and teachers often struggle to design innovative, engaging, and differentiated learning experiences

Recognizing this challenge, President University through its Elementary Teacher Education Study Program initiated the Workshop "Designing Lesson Plan Using AI" to enhance teachers' pedagogical and technological competencies. The workshop aimed to equip teachers with practical skills in using AI—especially ChatGPT—to design structured, contextual, and adaptive lesson plans. This initiative directly supports higher education capacity building by strengthening the quality of teacher training, instructional methods, and long-term learning innovation within the education ecosystem



PROGRESS OF THE ACTIVITY

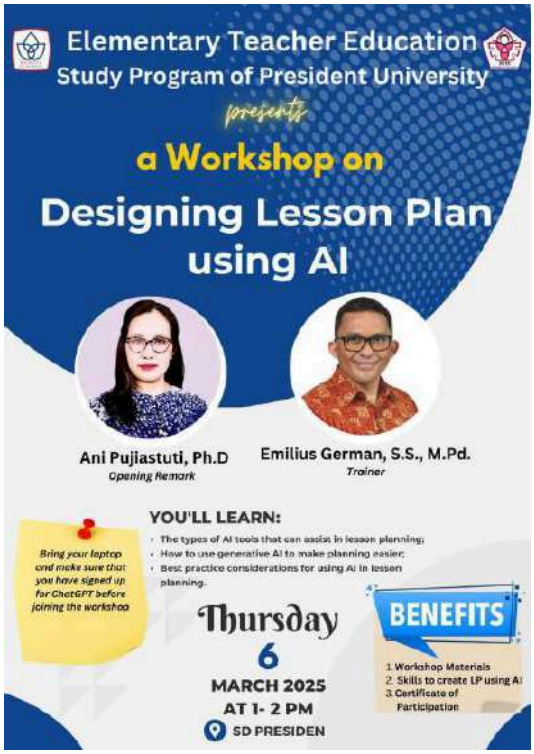
The workshop was conducted on Thursday, March 6th, 2025, from 13.00 to 14.30 WIB at SD Presiden. The activity involved:

- Opening session by the Head of the PGSD Study Program,
- Main presentation on AI in education by the invited trainer, Emilius German, S.S., M.Pd,
- Hands-on practice session, where teachers directly designed lesson plans using AI tools (ChatGPT),
- Interactive discussion and reflection session, and
- Closing and documentation.

The material covered:

- Introduction to Generative AI,
- Types of AI tools for education (chatbots, single-purpose tools, all-in-one lesson planning tools, embedded AI),
- Prompt writing strategies for lesson planning,
- Practical examples of AI-generated lesson plans aligned with curriculum standards

All teachers of President Elementary School (SD Presiden) participated actively, engaging in direct practice using laptops and guided prompts. The workshop applied a learning-by-doing approach, ensuring that participants not only understood AI concepts but also developed real lesson plans using AI during the session.



OUTPUTS OF THE ACTIVITY

The key outputs of this UNAI-related activity are as follows:

- Teachers acquired practical skills in utilizing AI (ChatGPT) for lesson planning.
- Increased efficiency and creativity in preparing learning materials.
- Enhanced digital pedagogical competence among elementary school teachers.
- Introduction of innovative instructional design approaches based on AI support.
- Strengthened collaboration between President University and school education institutions.
- Contribution to the long-term strengthening of the higher education system, starting from teacher quality improvement.

This activity directly supports sustainable capacity development in education by upgrading human resources at the foundational level.

FUTURE ACTIVITIES

To ensure the sustainability and broader impact of this capacity-building initiative, the following future activities are recommended:

- Development of advanced AI-based pedagogy workshops (assessment design, adaptive learning, student analytics).
- Expansion of the program to other schools and teacher communities.
- Integration of AI-based lesson planning into teacher certification and training programs.
- Continuous monitoring of teaching innovation implementation post-training.
- Development of AI-enhanced learning modules for use in higher education teacher preparation programs.

These future plans will deepen the impact of AI integration in education and strengthen institutional capacity in a sustainable manner.