

## **Pedagogy Strategy To Foster Creativity And Innovation In The Product Design Process**

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### **Abstract**

This study concentrated on the pedagogical strategy to foster creativity and innovation among the science and technology students at the UiTM Pulau Pinang Branch. 46 degree-seeking students from the Faculty of Mechanical Engineering made up the sample for this study. They are required to invent technology-based products or services as part of the ENT600 entrepreneurship course. The case study collected data during the product design process. The method used to generate ideas was based on the product design process. Students learn about entrepreneurship and develop their entrepreneurial abilities through creating technology-based products and services. This promotes an understanding of technology-based entrepreneurship that blends theoretical and real-world perspectives. For the course, students are required to complete practical project-based assignments that involve developing cutting-edge technology products and services. Presentations, group projects, case studies, and lectures are some of the teaching methods used. The product design process improves students' ability to think critically and values the impact on their comprehension of how to address problems by designing for problem-solving, improving, altering, and changing through questioning to design solutions.

**Keywords:** product design process, pedagogy, technology products, teaching methods

### PEDAGOGY STRATEGY TO FOSTER CREATIVITY AND INNOVATION IN THE PRODUCT DESIGN PROCESS

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This study concentrated on the pedagogical strategy to foster creativity and innovation among the science and technology students at the UiTM Pulau Pinang Branch. 46 degree-seeking students from the Faculty of Mechanical Engineering made up the sample for this study. They are required to invent technology-based products or services as part of the ENT600 entrepreneurship course. In order to solve complicated problems, engineering students must be able to think critically and rationally (Rotherham & Willingham, 2009). The case study collected data during the product design process. The method used to generate ideas was based on the product design process.

#### APPLICATION

Students learn about entrepreneurship and develop their entrepreneurial abilities through creating technology-based products and services. This promotes understanding of technology-based entrepreneurship that blends theoretical and real-world perspectives.

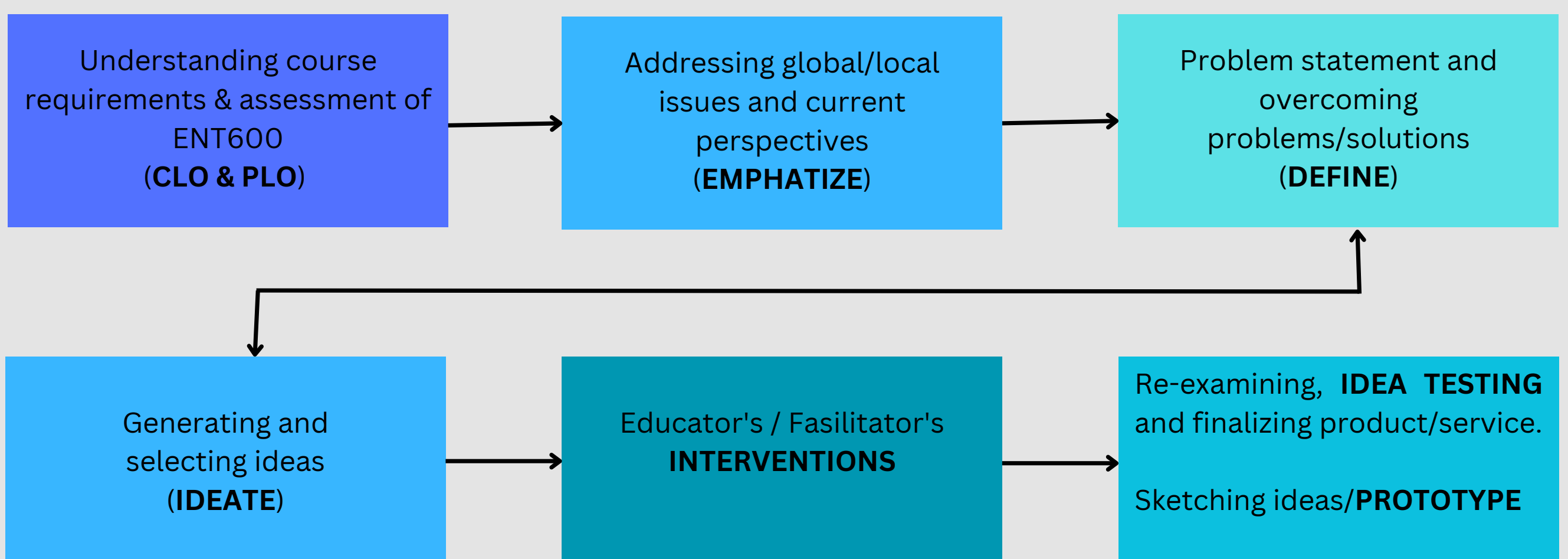
For the course, students are required to complete practical project-based assignments that involve developing cutting-edge technology products and services. Presentations, group projects, case studies, and lectures are some of the teaching methods used.

#### NOVELTY

Innovative learning procedures have an impact on the ideal learner's attributes. Therefore, planning for educational innovation in the classroom is necessary to guarantee that learning objectives are met (Seechaliao, 2017).

Product design process improve students' ability to think critically and values the impact on their comprehension of how to address problems by designing for problem solving, improving, altering, and changing through questioning in an effort to design solutions.

#### ENT600 PRODUCT DESIGN PROCESS



Reference:

Rotherham, A. J., & Willingham, D. (2009). To work, the 21st century skills movement will require keen attention to curriculum, teacher quality, and assessment. *Educational Leadership*, 9(1), 15-20.  
 Seechaliao, T. (2017). Instructional Strategies to Support Creativity and Innovation in Education. *Journal of Education and Learning*, 6(4), 201-208.

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Sekian, terima kasih.

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Saya yang menjalankan amanah,

*Setuju.*

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