

The Use of Scaffolding Approach to Enhance Students' Performance in

Food Technology Senior Project

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Overview

Food Technology Senior Project is the discipline that mainly deals with the research and report in the field of food science and technology according to research methodology under supervision of an advisor.

Traditional style for Food Technology Senior Project aims to make independent researcher. However, it is quite difficult for students who do not have the appropriate laboratory and research skills. Students may face some problems and struggle to survive especially with the technique, assay and equipment used. Although supervisor can help solving the problems but it is time consumed. Thus, new strategies to enhance the student performance are needed.

Scaffolding approach can be one of the way to be used for this purpose. Scaffolding in an educational context is teaching techniques or tools that provide a supporting framework for student learning. Wood et al. (1976) defined it as a way for providing help or support to students based on their needs. The support is gradually removed as learner ability increases. Scaffolding is also theoretically described as a process in which students are given support until they can apply new skills and strategies independently (Rosenshine & Meister, 1992; Hardjito, 2010).

Objective

To use the scaffolding approach to enhance students' research performance in Food Technology Senior Project.

Activity

Supporting team

- 5 PhD students : Teaching Assistant (Tutor/Mentor)
- Supervisor: Coach

Student

- 10 students: A pair project (5 projects)

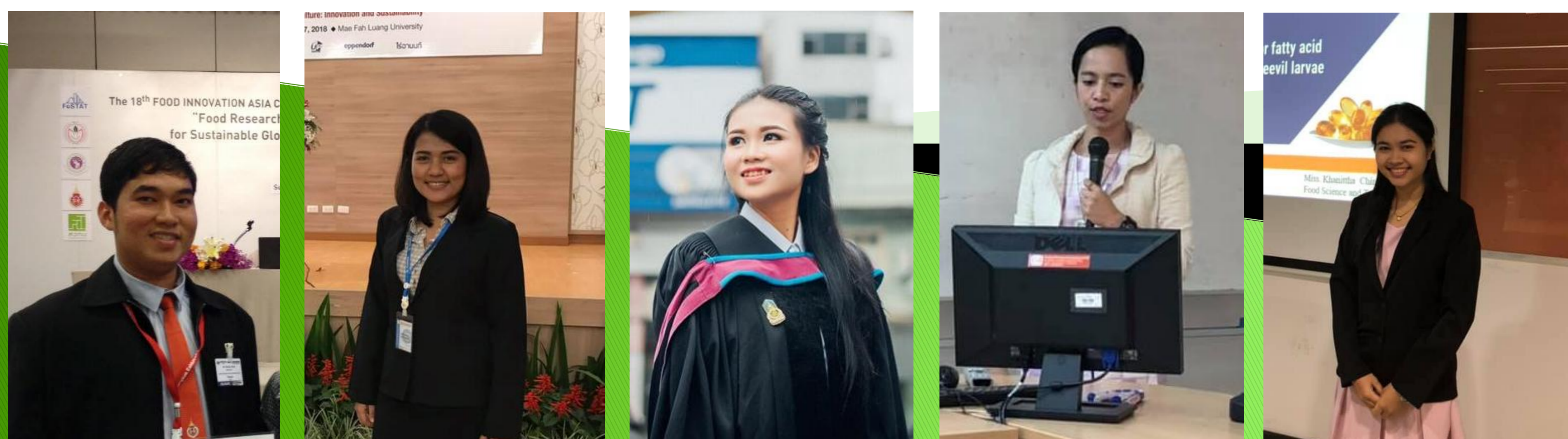
Approach

- 1 project : 1 TA

- Students work with TA
- Group discussion with TA and supervisor
- Project evaluation and feedback by TA and supervisor

Outcome

- Feel free to learn with TA
- Get more confident
- Get more understanding and learning
- Finish the project on time
- Get the accuracy/precision results
- Improve the quality of research proposal and final report



Impact

The scaffolding approach is appropriate practice to engage students in their learning in Food Technology Senior Project.

References

- Hardjito, D. (2010). The use of scaffolding approach to enhance students' engagement in learning structural analysis. *International Education Studies*, 3(1), 130-135.
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- Wood, D. J., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry*, 17(2), 89-100.