

# Description and feedback of collaborative learning using Microsoft OneNote for Malaysian university students.

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**ABSTRACT** – Collaborative learning (CL) is an approach that promotes working together in a group in the teaching and learning process. However, it is time consuming as it involves many face to face discussions. Therefore, Microsoft OneNote(MON) is chosen as a platform for CL in this study to reduce group discussion time and increase effectiveness of CL thus, increase student knowledge in the using of MON for future application. The feedback received from students suggest that OneNote could be an effective platform for CL among Malaysian university students.

## 1. INTRODUCTION

Collaborative learning is an educational approach of teaching and learning which involves group of students solving problems and sharing idea together. In situations where people work together in a group, it suggests a way of dealing with people without neglecting the individual abilities and contributions to the group. Collaboration allows sharing of authority and acknowledgement of responsibility among members of the group, for further groups' action [1]. It also gives students and opportunity to engage in discussions and take responsibility of their own learning. By applying CL especially in completing an assignment, or problem based learning, students develop a good social support system, diversity of understanding, and in the same time students are able to develop a good learning communities among them through CL experience [2-3].

However, CL involves a lot of group discussion and planning. Face to face meeting is time consuming and adjusting each students timetable for a discussion is quite difficult especially for university students. As new technologies developed, it is important for lecturers to be able to create a flexible sharing platform to enhance collaborative learning among the students. To date, students and lecturers have been using Yammer, Google Drive, Skype, Vvew and Wiki spaces, to name a few application for interactive classroom collaboration. Some of this application require students to be online in order to update task, and offer no collaboration space which can include teacher's comments and monitoring, and

individual space for private comments from teachers. Yammer for example, is more like a social network where interaction between students and lecturer can be done but monitoring is a hassle to be done for each group. Therefore, in this study lecturer introduce Microsoft OneNote as a platform for collaborative learning to create an effective CL.

Microsoft OneNote is a part of the Office suite that is provided for each Malaysian university students for free. Microsoft OneNote is describe as "a digital notebook that is assessable online of offline that provides a private and mutual place for all your notes and information, and could be easily managed and shared with others effectively" [3]. The significant of being able to put all the notes and information from all members of the collaborative learning are immediately apparent for producing an effective CL [4]. Group members are able to keep a group record of the activity in their own account, where in the same time, any member of the group can edit or add to the notebook. Changes are visible to all members and this type of platform allows information and record to be updated real time for other member's acknowledgement and further actions.

In this study, collaborative learning using Microsoft OneNote application among 3<sup>rd</sup> year students of Universiti Teknikal Malaysia Melaka in completing project based learning (PBL) for the subject of Air Distribution System is described, and the feedback is discussed.

## 2. DESCRIPTION

In the Microsoft OneNote, there are three main spaces which are student notebooks, content library, collaboration space. The student notebook is an individual space that shared between the lecturer and each student individually. Lecturer can view all students individual space while students can only view their own. This allow students to make private notes, feedbacks, and reports under teacher supervision. The content library is a read-only space where teachers can share handouts with their students without having to worry that the specific information is edited by third party. This space also

allows teacher to make any announcement to all students. The main space used in our study in this paper, is the collaboration space. This space is a notebook for every student in the class to share, and collaborate. Any editing in this space could be tracked. This feature is important for collaborative learning because it allows other group members to identify the changes made in the collaboration space.

The project based learning for this collaborative learning is an assignment that has to be completed in 6 weeks' time. 29 students are grouped into 6 group of 4 to 5 members and a leader is appointed among team members. The PBL involved measurement of air quality for a specific space, for each group, in the university campus. Planning and findings of each group member is updated on the Microsoft OneNote collaboration space for other group member's acknowledgement. The final findings will be compiled in a report to be submitted at the end of the 6th week.

In this study, in order to accomplish the PBL, teacher form few sections in the collaboration space for group intro, group progress, and equipment schedule. For the group intro section, a page is given for each group to describe briefly about their project and their group members. Using this platform, each leader could distribute task to each member and they can update the space from their own PC in the same time. Some tasks doesn't require long discussion so this could shorten the time to prepare their report as all the works are compile in the same space without having to meet face to face.

In the group progress section, each group is given a page and they updated their schedule in the page given. Other members could view if there are any changes in the schedule and tracked back the person in charge for the changes. Example of space section and pages can be seen in the Figure 1 below.

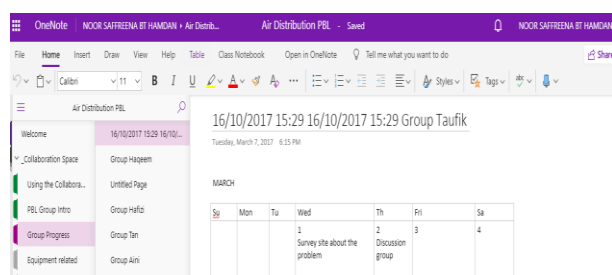


Figure 1 Microsoft OneNote layout

### 3. FEEDBACK

A feedback form is distributed among the 29 students that used Microsoft OneNote for Air Distribution System PBL after they completed the task. The question in the feedback form is compile in Table 1. From the feedback form, students describe their experience in using OneNote in PBL as awesome and a refreshing experience but a bit confusing at first as they are not used to the application. This can be understood as 73% of the students has almost zero knowledge about OneNote before the PBL. Some of them feel easier to access information from other group members when using OneNote and helped them to monitor and plan better for further group actions. With the using of OneNote in the PBL, 81% of the students has increase

their knowledge on the application. All the students agree that OneNote has helped them to do the PBL effectively as a group. They also suggest to continue the system for future assignment as it helps better cooperation among group members.

Table 1 Feedback Question

Feedback Question	Type of answer
Describe Experience of using OneNote for PBL	Paragraph
Rate knowledge of OneNote before PBL	Scale
Rate knowledge of OneNote after PBL	Scale
Does OneNote contribute to accomplish PBL effectively	Yes/No
Suggestion to improve CL in PBL	Paragraph

### 4. CONCLUSION

The using of OneNote in collaborative learning especially in completing a project based learning is found to be a very good platform in order to have an effective group works. Students find it as a refreshing experience and has help them to gain new knowledge to be used in the working area with their colleagues. As Microsoft account is available for each student in Malaysian university, it is suggested to be used for all assignment that involve collaborative learning in order to promote 21<sup>st</sup> century classroom in Malaysian university.

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### REFERENCES

- [1] Marjan L., Seyed M. Ghodsi. (2012). Benefits of collaborative learning. *Procedia-Social and Behavioral Sciences*, 31, 486-490
- [2] Law, Queenie & W. Y. Chung, Joanne & C. C. Leung, Lawrence & K. S. Wong, Thomas. (2017). Perceptions of Collaborative Learning in Enhancing Undergraduate Education Students' Engagement in Teaching and Learning English. *US-China Education Review A*. 7(2) 89-100.
- [3] Noh, M. A. C., & Yusuf, S. A. M. (2018). Collaborative Learning Technique within Higher Learning Education Students. *Creative Education*, 9, 2367- 2375.
- [4] Microsoft. (2016). Basic tasks in OneNote 2016. Retrieved July 5, 2019, <https://support.office.com/en-us/article/basic-tasks-in-onenote-2016-for-windows-2eee07df-9f05-4d5f-9806-afcadb2d80b9>
- [5] Turner, J. (2011). Using Microsoft OneNote for Collaborative Vocabulary Notebooks in the Academic English Classroom.