



Using white boards to engage students with employability skills

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Introduction

The Executive Summary of the Malaysian Education Blueprint 2015-2025 (Higher Education) indicated that even though Malaysia has made significant gains in risen global recognition, employers report that graduates lack the critical thinking, communication skills, and the language proficiency (especially in English) that are essential for success in the 21st century. (Ministry of Higher Education Malaysia, 2015). However, higher education institutions can help improve the employability skills among their students through effective teaching delivery, curriculum, and assessments (Abd Majid et al., 2020).

Key words – meaningful student engagement, employability skills, peer learning

Aim

In Malaysian national high school classrooms, most students had a boring approach of just memorizing facts for all subjects, are not taught presentation skills and not exposed to current world events. At the university level, lecturers usually have no record of students' comprehension of subjects at both an individual and even class level until tests and quizzes are implemented. This is a challenge since lecturers cannot assume everyone has the same type and level of understanding of different subjects. It will be a good practical hands-on approach to integrate the innovative use of white boards in the classrooms to teach and test students on the course knowledge and expose them to presentation skills, which in turn will increase their engagement. In the end, students are taking charge of their own learning, which makes learning more meaningful and impactful to them as a lifelong learning process.



Background

Unlike American students (based on my teaching experience at a U.S. state university), Asian students tend to be more reserved and not demonstrate their knowledge, ask and answer questions posed by the lecturer publicly for fear of being perceived as disrespectful to their lecturer or attention-seeking by their peers. To overcome this and the issue of employability, I wanted to integrate not only the use of white board, but also expose students to presentations skills. This study intends to identify the impact of the innovative use of white boards with markers and dusters in class as part of a peer learning experience and meaningful student engagement, especially in communication and presentation, to help develop students' employability (soft) skills. Also, students should take charge of their learning. It will be good if classes are not only teacher oriented, but student-teacher oriented where there is interaction for students with their lecturer and peers. This way, everyone is exposed to different perspectives and can learn from each other, which is something our world needs today.

Literature Review

In considering using white boards to engage students with employability skills, it is necessary to consider some of the challenges facing contemporary higher education and how different white boards are used. During Covid, the use of a digital white board greatly assisted in creating a classroom atmosphere while online as shared by Mendez-Reguera and Lopez (2021). The usage of interactive white boards also assists as a tool to motivate and engage student learners with learning difficulties and disabilities (Mead, 2012). It is interesting to note that Morgan (2010) wrote how even as young as elementary that students are finding interactive white boards engaging and teachers use it to provide instructions. However, the effectiveness of active learning through technology needs to be examined (Prince, 2004). Though there is availability of various technologies that provides more flexibility in delivering course content (such as Blackboard), but these technologies do not necessarily engage all students. In addition, keep in mind that activities go hand in hand with course material and not fully replace face to face lectures (Massingham & Herrington, 2006). It is interesting to note that Norman and Nelesen (2016) did not use a high-tech white board, but rather use small white boards since research shows that some technologies detract from learning. Also, what tool and/or technology tool is used is not as important as how (pedagogy) the tool and/or technology is being used (Sharples, 2019). In terms of formative assessment to gauge students' comprehension and participation throughout the semester, Greene (2024) shared that clipboards and white boards assisted in that manner.



I try to increase student motivation and engagement (Samarawickrema & Cleary, 2021), especially in circumstances where “chalk and talk” teaching is no longer the norm for today’s young generation of fast pace students and may prompt boredom. I innovated a practical hands-on approach to integrate the use of white boards in class as part of a peer learning experience and meaningful student engagement. According to Mettetal, G. (2012), data collection such as assessment results and students’ feedback in the subject evaluations are measures that enable researchers to investigate both qualitative and quantitative empirical premises. This study intends to identify the impact of the innovative use of white boards in class as part of a peer learning experience and meaningful student engagement, especially in communication and presentation, to help develop students' employability (soft) skills.

Methods

The subjects selected for this study are HIST 1023 U.S. History to 1877, HIST 1033 U.S. History since 1877, HIST 3013 Intellectual History of the Modern West and MUSC 1033 American Popular Music. These subjects are the subjects assigned to me for the Spring semesters and they consist of 70% continuous assessments and 30% final assessment. I wanted to integrate the innovative use of white boards in the classrooms to teach and test students on the course knowledge and expose them to presentation skills, which in turn will increase their engagement. Also, I applied the method in all four subjects to see if different subject matter will yield different results. Below is the step-by-step guide of what I did:

Innovation conducted

Use of White Boards

- **Step 1** – Post discussion questions and assigned students into random groups to answer the questions
For example: a) Among the 10 U.S. Amendments, which one do you think is the most important and why?
- **Step 2** – Assign a board to each group and get each student to write their answers on the white boards
- **Step 3** - Everyone gets to share and add on to other groups. Below are screenshots of the students and their answers on the white boards. Please refer to Figure 1 and 2.

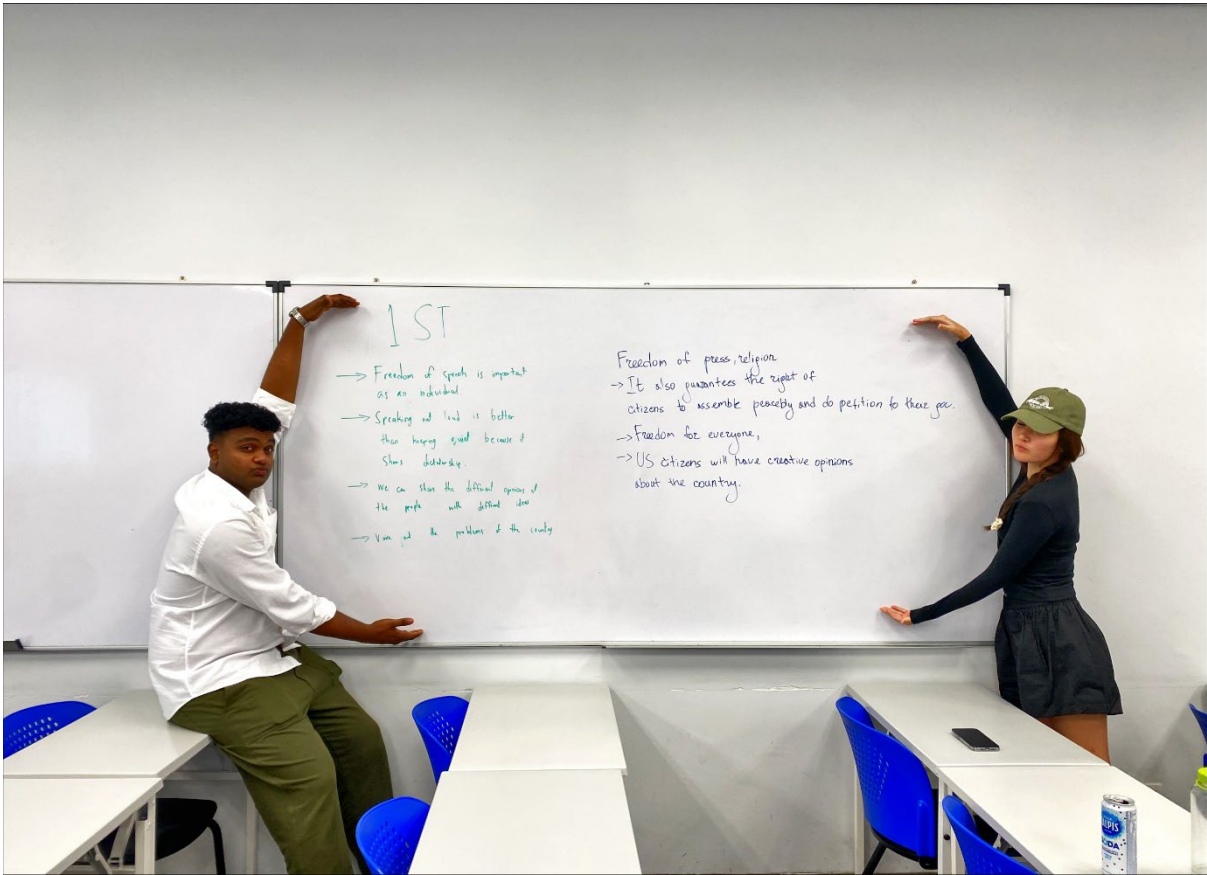


Figure 1



Figure 2



How does the innovation address the learning outcome/s?

Before learning about the event, students come out with their own answers, then learn from classmates' different perspectives and finally learning the meaning behind the American carnage that happened surrounding U.S. statues.

Data collection was done by comparing assessment results (Spring 2022 and Spring 2023 semesters) and students' feedback in the subject evaluation from several semesters in the ADTP at Sunway University. The two semesters were chosen because they are both the recent long semesters and it is to analyze if there is an impact in a year when the innovation was introduced in Spring 2022. The four subjects consist of 70% continuous assessments and 30% final assessment. The analysis was done on the mean scores of the course assessments, final examinations and final grades as well as the students' feedback in the subject evaluation.

Findings

Based on the analysis and comparison of the Spring 2022 and Spring 2023 average (mean scores out of 100%) on the course assessments, final examinations and final grades for all four subjects, there was an increase across the board on all these means scores for all four subjects as shown in Figures 3-6.

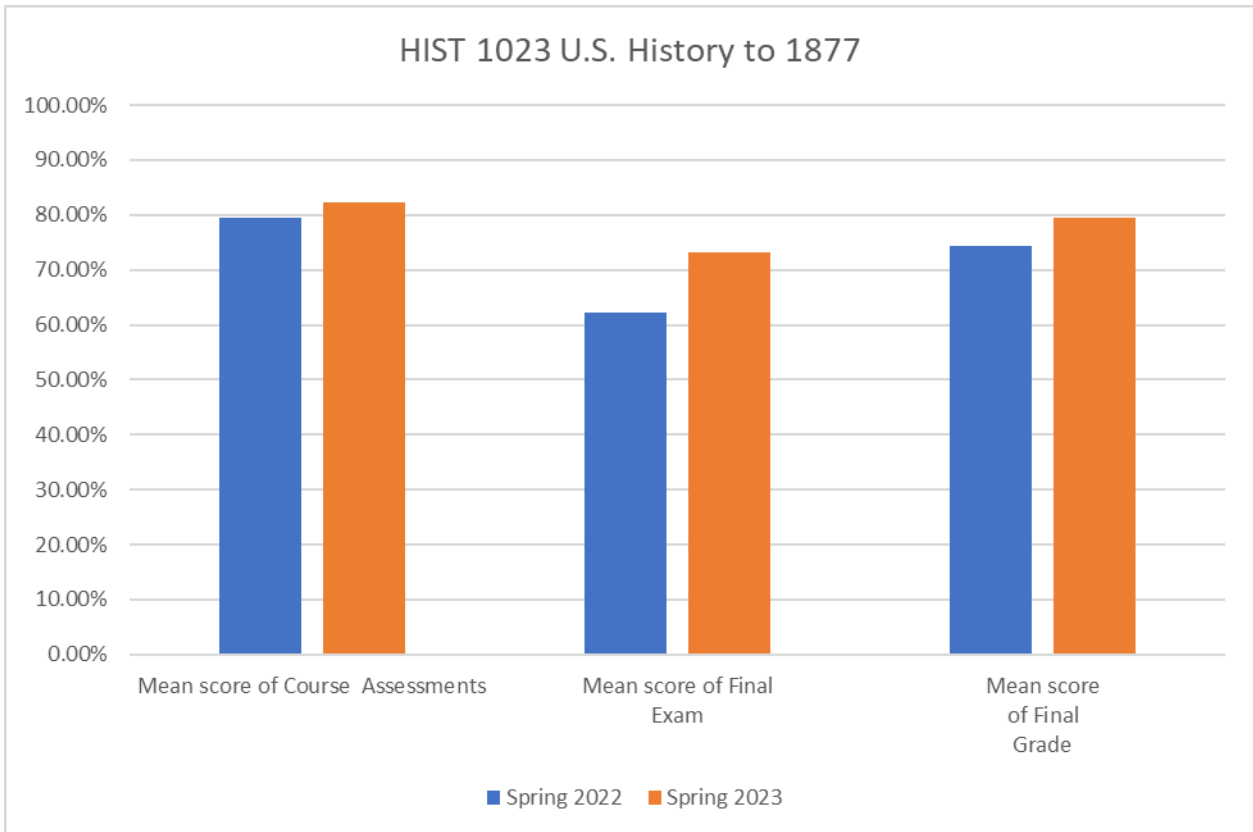


Figure 3

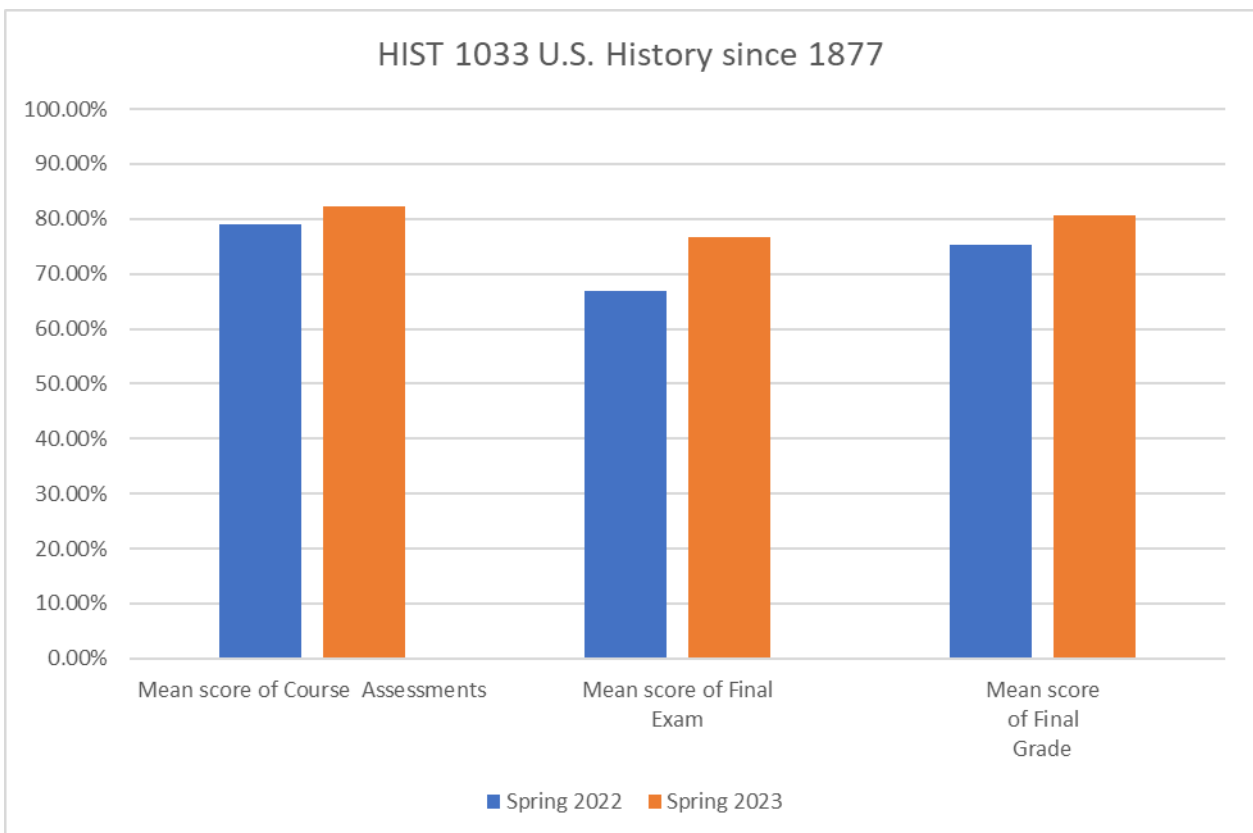


Figure 4

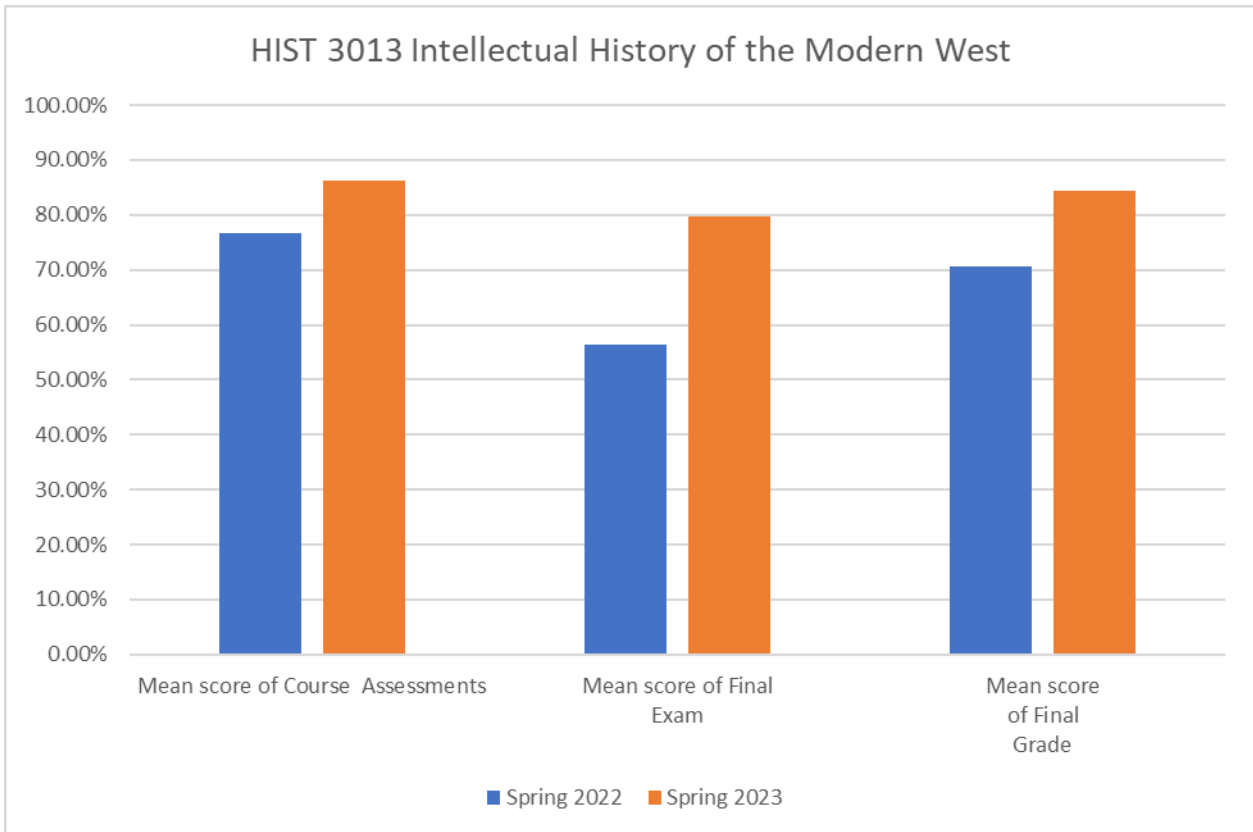


Figure 5

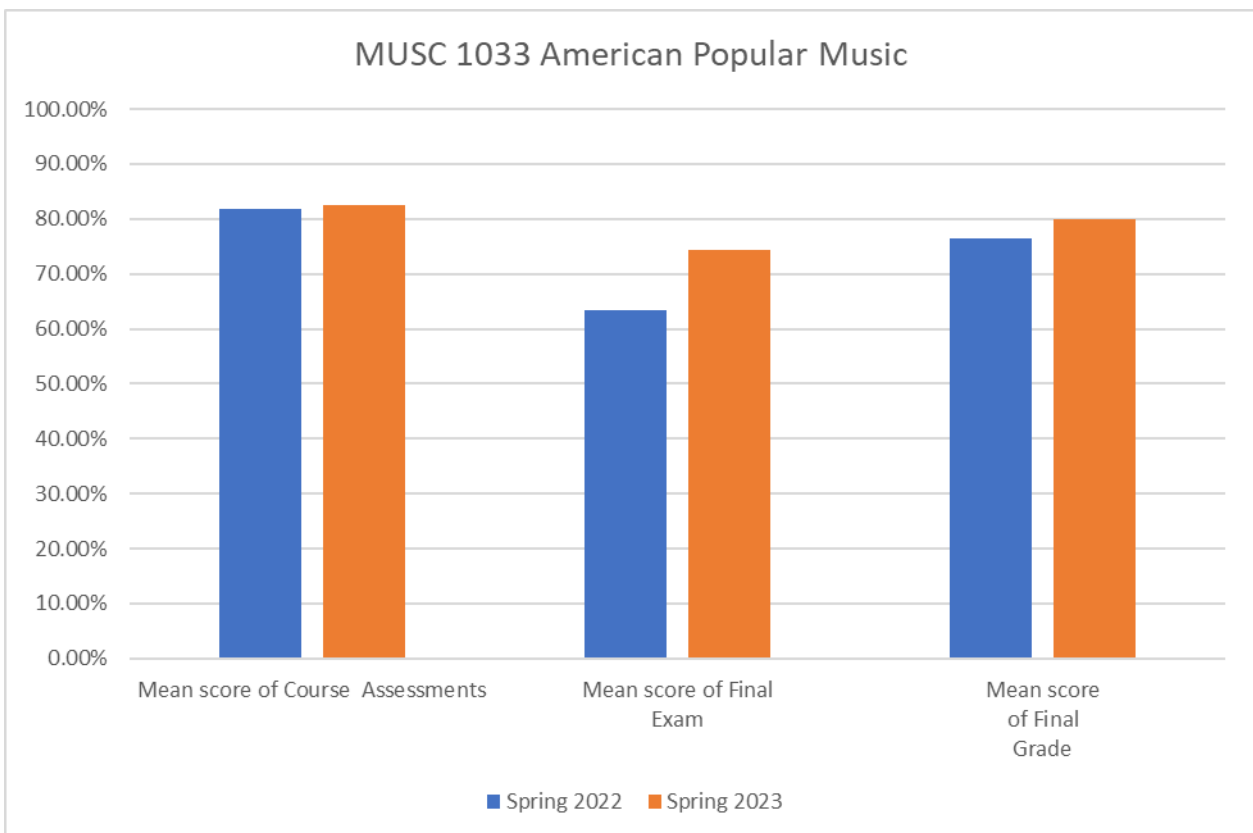


Figure 6



Based on the various assessment methods implemented in these subjects, students have consistently achieved above the 70% competency for course assessments and final grade in both semesters. To test if the white boards innovation is the only reason for these positive changes, in other semesters, I did not use this method in the earlier part of the semester. The results for the earlier assessments were not as good as when the innovative usage of white boards was used. In reflection, for anyone who wishes to use this method, do keep in mind that the number of students and class time matters. The number of students for these classes are 5 to 30 students and I plan the time according to the number of students. If there are more students, I lessen the elaboration that is asked of the students.

Some of the feedback from students' subject evaluations

HIST 1023

- Class collaborations we have on the whiteboards made the class more fun and educational.
- Gave me more insights to today's societal and political issues. I've learned a lot about how America came to be.
- Overall, the lecturer performed a great job in engaging students with the use of videos, images, and discussions.
- The discussion activities help a lot especially for students who have difficulties to express their thoughts and what they have learnt.
- Ms. Jaime has a way of teaching that allows students to take their time and understand the scenarios given with each chapter
- The aspects that I found beneficial was when the lecturer drew correlations between the events that had happened in the past and how it made the people avoid the same issues from arising in the future.
- I enjoyed the group discussion activity during class.
- The teacher's discussion questions make me understand certain parts of the topic and really makes me think. This subject stimulates my critical thinking.
- Group discussions helped me to think out of the box and understand better.
- Great at involving students into discussions and lessons as much as possible.

HIST 1033

- The group discussion part was so helpful as we were given chances to discuss and coming up with ideas about certain topics.



- The positives are that we engage in group discussions, which is better than listening to the lecturer explain for 1 hour and 30 minutes on end. The group discussions allow us to interact with other students as well.
- Fruitful and motivational class. Also, the assignments are unique, interesting, and fun.

HIST 3013:

- The lecturer made students engage in debates to help us think.
- It was really engaging. Intellectually-stimulating.
- Love the group discussions and blended learning (recent news searching). Learnt a lot.

MUSC 1033:

- I found the class very stimulating and 'hands on' in a way. Getting us involved during class times. Group discussions helped me to think out of the box.
- I think it was her ability to compare the older things in our subject, like if we were learning about Elvis Presley, she would find a way to relate that to artists of our generation so we'd be able to understand fully.
- I think classes were fun since we mostly learn theory during class, so doing something practical like that would be a great way for students to express creativity and passion towards music.
- The lecturer is very engaging with her students in class, and also keeps us awake by conducting group work.

Based on the students' feedback from the subject evaluations on the semesters since implementing the innovation of whiteboard usage, the students indicated a deep understanding of the topics. They also shared that it allowed them to learn more about the current state of the U.S. Besides that, students state that the class collaboration we have on the whiteboards encouraged peer learning, made the class more fun, engaging and educational.

Conclusion

Using whiteboards as one of the tools to engage students in peer learning, it allows students to freely share their opinions among classmates as well as to learn from classmates with different perspectives and leading them to learn the meaning behind the topics in the subjects. From the diversity of subjects where the innovation of the usage of white boards, students not only gain additional knowledge but also develop competencies in workplace



soft skills such as communications skills, creativity, data literacy, cultural intelligence and diversity. These skills and competencies are useful in any future workplace. In the upcoming semesters, I would like to build further on this approach by including more current events.

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