*Corresponding Author's Email: chye.ing@curtin.edu.my
Proceedings of the International Academic Conference on Teaching, Learning and Education
Vol. 1, Issue. 1, 2024, pp. 32-44
DOI: https://doi.org/10.33422/tleconf.v1i1.296

ISSN: 3030-0614 online

Diamond Scientific Publishing

Enhance Learning of Presentation Skills Through Interactive Peer Observation, Feedback and Reflection

Chye Ing Lim*, Philip Wharrie, Bridgid Lai Fui Chin and Wei Kitt Wong

Curtin University, Malaysia

Abstract

Communication through oral presentation is an important graduate attribute for engineering programme accredited by the Washington Accord. However, it is usually taught as an integral part of the programme with limited contact hour. This project intends to improve the effectiveness of learning presentation skills, and to cultivate resilient students who learn through interactive peer observation, peer-to-peer feedback, and self-reflection practice (POPTPFSR). These practices were conducted during the tutorial session after theories on effective presentation were delivered during a lecture in Professional Engineering Practice unit. Students were paired up to do a 5-min impromptu presentation, where the peers observed, provided quantitative and qualitative feedback to them using the marking rubric provided. Students reflected on their learning experience through writing of reflective journal after the session. The same group of students repeated the POPTPFSR practice during a 15-min group presentation assessment session. Surveys were conducted among the student (n=19) using a Likert-scale-based questionnaires after the lecture, tutorial and presentation assessment session to compare their learning outcomes after each session. Observation and results of the study showed that not only the students' presentation skills improved through the learning process, but they also become more confidence and resilient in accepting feedback. It can be concluded that POPTPFSR is an effective pedagogy in teaching presentation skills and support students to achieve higher level learning objectives in cognitive domain.

Keywords: Soft Skills, Presentation, Peer-To-Peer Feedback, Reflection, Resilient learner.

1. Introduction

1.1 Background

Communication skills, especially the ability to conduct effective presentation, is very important to engineers. Engineering professional bodies like The Engineering Institute of Technology (EIT) and The Institute of Electrical and Electronics Engineers (IEEE) acknowledge that the success of an engineering career largely relates to the ability of an engineer to clearly transfer complex ideas, to persuade and engage audience through words (Bosavage, 2019). It is perceived that communication skills should be treated to be just as important as technical knowledge (Foster, 2020). Study by Wu et al. (2023) shows that verbal and visual communication skills have positive impact towards the employability of engineering graduates, and the ability of these graduates to avoid cultural conflict in transnational work environment. The focus of communication skill is said to be beyond language skill. It is an integration of effective listening skills, interpersonal skills, adaptive skills and the confidence level in expressing ideas (Mehra, 2013). Under the Washington Accord, the accreditation standards of engineering programmes identify a list of graduate attributes that need to be achieved. One of the graduate attributes, is the ability to communicate effectively with the engineering community and with the society at large, including making effective presentations (Alam & Kootsookos, 2021).

Despite the significance of communication skills, and the efforts to integrate the teaching and learning of communication skills in engineering programmes, research indicates that engineers are often found to be lacking in their ability communicate effectively to meet the job requirements and industry's expectations. There is a need to improve the education of communication skills for engineering students, to address the gap between what is being taught and the demands encountered in industry (de Souza Almeida, 2019; Riemer, 2007). Bosavage (2019) suggested that a reason that could possibly lead to this disparity is the mismatch between what constitutes strong communication skills in professional engineering settings from what is taught or expected in classroom settings. The authors also proposed that technical assessment shall be designed to help students achieve those desired communication skills.

Another challenge is that communication skills like presentation skills are usually taught as an integral part of an engineering programme with limited contact hour, and it raises a question of how to enhance learning of presentation skills in such a limited time. In this teaching research project, the authors intend to improve the teaching of presentation skills among final year Bachelor of Mechanical Engineering students at Curtin University, through the MCEN4010 Professional Engineering Practice unit.

In this unit, students learn soft skills such as presentation skills, interview skills, negotiation, leadership, professional ethics etc. to better prepare themselves for real-world working environment. In current teaching arrangement, presentation skills are taught through a one-hour lecture session, after which the students will be assessed in group presentations during another two-hour session, and feedback on their performance will be given by the tutors.

The issues with current teaching approach in MCEN 4010 unit, and in teaching communication skills to engineering students in general, are: -

- It is challenging to make sure students learn effectively on the topic, which has a wide spectrum of elements within limited contact hours.
- The conventional teaching arrangement of lecture – assessment – tutor's feedback is less effective and less engaging. Students do not have the opportunity to learn through

an iterative process of practise, receiving feedback and improve, before being assessed.

- Feedback on the student's presentation is only provided by the tutors, and there is a lack of involvement and participation from other students as audience. There is no opportunity for students to 'listen to the audience' and 'think from the audience's perspectives', which is one of the reasons of mismatch of audience's expectations and the presentation delivered.

This teaching research project aims to examine student's learning experience and the effectiveness of integrated approach of interactive peer observation, feedback, and reflection in teaching presentation skills to engineering students.

1.2 Literature Review

Literature review shows that peer observation, feedback and reflection are important processes in improving teaching in general, and this could also be applied in learning presentation skills for students.

Tenenberg (2016) applied an interpretive-phenomenological analysis and showed evidence of how learning arises among educators in higher education by watching a peer in practice. Eveyik and dinç (2021) also found that learning through a reciprocal peer observation in teaching (POT) has significant benefits to the instructors. Peer observation allows observers to watch from a third-party perspective and learn from other's strengths and weaknesses. Through the process, the observers pick up new techniques and strategies in delivering an effective presentation and learn to avoid mistakes made by others.

Scientific studies revealed that human learns through observation and the learning-related transmission of empathy is stronger when observing human rather than computer demonstrators (Zhou et al., 2024). Learning through peer observation creates feeling of empathy and allows students to understand how the audience would feel and react to the way the presentation is delivered. This could possibly help to address the issue of mismatch between industry audience's expectation and the content communicated by engineer via oral presentation, as the presenter has better developed empathy towards their industry audience in the future.

Reciprocal peer observation requires the process of providing feedback to the peers after observing them. Feedback is a powerful tool that enhances learning, motivates, and improve student's engagement (Carvalho et al., 2021; Yang et al., 2021). It could be coming from various stakeholders including teachers, peers, parents etc. Feedback addresses the gap between the actual performance and intended performance, as well as the remediation to close the gap by alternative approach (Hattie & Timperley, 2007). While most studies verified the effectiveness of feedback provided by the teachers in supporting student's learning, it is worth investigating the impact if feedback is received from peers, who act as a diverse group of audience in learning presentation skills.

Reflection is a learning tool that involves meaningful self-examination (Yu, 2023). Through reflection practices, one develops self-awareness of his/ her strengths and weaknesses. It also promotes critical thinking to identify area of improvement. Reflection has been proven to be an effective tool in teaching and learning various subject matters e.g., a structured model of reflection was used to enable midwives to become reflective practitioners and ultimately increase self-awareness, self-identity and personal growth (Wain, 2017); in art classes, reflective questions help students to formulate their voice and empowering students to create artwork that connects to their authentic experiences (Tackett, 2021). In this context, teaching

presentation skills using reflection practice could allow students to make cognitive construction on their own presentation experience and on the observation of their peers, to the theories learned in the lecture.

While peer observation, feedback and reflection are proven to be effective tools in improving student's learning, the application of these tools in teaching presentation skills, is seldom investigated. There is a gap to evaluate if an integrated approach of structured, interactive peer observation, peer-to-peer assessment, feedback and reflection in teaching presentation skills would enhance the effectiveness of students' learning.

2. Methodology

Figure 1: Methodology Flowchart

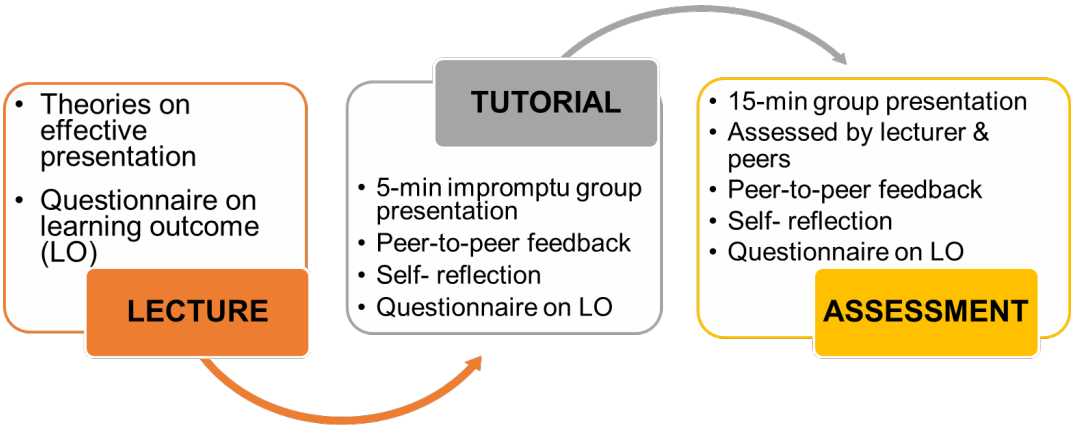


Figure 1 illustrates the methodology applied in this study. Firstly, a one-hour lecture on the theories of effective presentation was conducted among students of MCEN4010 Professional Engineering Practice (n = 19). During the lecture, students was also briefed about the marking rubric of their group presentation, which was based on the criteria of effective presentation. After the lecture, students answered a Likert-scale based questionnaire to share their opinions on the learning experience and learning outcomes through the lecture.

Secondly, another two-hour tutorial session was conducted, where students in a team of 2 to 3 persons were asked to deliver a 5-min impromptu presentation on light topics assigned i.e. *How to live to 100, How to survive with RM50 for a week etc. Each team* was given 30 minutes to plan and prepare for the presentation. During the presentation, all the peers in class observed the presentation, and provided quantitative and qualitative feedback through an online form using the marking rubric as indicated in Table 1. This feedback collected was shared with the students.

After all the presentations were delivered, an interactive debrief session (about 30 minutes) was facilitated by the instructor, where the students had the opportunities to share their thoughts. Students were also required to do a self-reflection based on 3 guiding questions i.e.,

- *Which is the best team presentation in your opinion? Give reasons for your choice.*
- *Who is the best presenter? Discuss three attributes of his/ her presentation.*
- *How would you rate your own/ your team's presentation? Discuss how you could further improve it.*

Table 1: Marking Rubric for Instructor and Peer Assessment

Criteria	Weight	Rating	Marking Rubric / Rating Guideline
Planning: Structure i.e., Introduction, Topic Statement, Context & Conclusion	20%	5=20% 4=16% 3=12% 2= 8% 1=4%	5 – The presentation is well structured, covered all elements of presentation and easy to be followed by the audience 4 - The presentation is well structured, easy to be followed by the audience, but some elements of presentation are missing 3 – The presentation is somewhat structured, some elements of presentation are missing 2 – The presentation covers some elements of presentation, but the structure is hard to be followed by audience 1 – The presentation is not prepared, not organised, and most elements of presentation are missing
Content: Quality, comprehensiveness, and relevance of content. Understanding on the topic.	30%	5=30% 4=24% 3=18% 2=12% 1=6%	5 – The contents are comprehensive, well-referenced and relevant to the topic. The team well-researched on the topic and clearly understand the subject matter. 4 - The contents are well-referenced and relevant to the topic, but some contexts are missing. The team research on the topic and understands the subject matter. 3 – The contents are relevant but not well-referenced. Some contexts are missing. The team understands the topic fairly. 2 – The contents are brief and somewhat relevant. The team does not seem to understand the topic well. 1 – The contents are not relevant and out of topic.
Visual: Quality of Visual Aids	20%	5=20% 4=16% 3=12% 2= 8% 1=4%	5 – Well prepared. Clear, interesting, engaging and effectively support the presentation. 4 – Well prepared. Clear and support the presentation. 3 – Support the presentation but quality of visual could be improved for clarity (e.g., font, figures and tables, graphics etc.) 2 – Visual aid prepared but does not support the presentation well/ distract the presentation. 1 – No visual aid/ visual aid is not supportive at all.
Delivery: Clarity, Pace, audience engagement & Timing	20%	5=20% 4=16% 3=12% 2= 8% 1=4%	5 – The tone is clear and well-paced. The team makes efforts to engage the audience. There is eye contact with the audience. The presentation is delivered within allocated time. 4 - The tone is clear and well-paced. The presentation is delivered within allocated time. There are some efforts to engage the audience. 3 – The tone is fairly clear. The presentation is slightly over/ under time. There are some efforts to engage the audience. 2 – The tone is not clear/ too fast for some parts of the presentation. There are no efforts to engage the audience. The presentation is too long/ too short. 1 – The tone is not clear for the entire presentation. There are no efforts to engage the audience. Timing is not observed.
Teamwork: Team	10%	5=10% 4=8%	5 – Excellent teamwork from team presentation and cohesiveness. Presentation is well-rehearsed, clear and equal distribution of roles

Criteria	Weight	Rating	Marking Rubric / Rating Guideline
cohesiveness in presentation and Q&A		3=6% 2=4% 1=2%	and responsibility. 4 – Good teamwork from team presentation and cohesiveness. Presentation is rehearsed, some efforts in distribution of roles and responsibility. 3 – Fair teamwork from team presentation and cohesiveness. Presentation is rehearsed, roles and responsibility are not evenly distributed. 2 – Loose teamwork from team presentation and cohesiveness. Presentation is not well- rehearsed; roles and responsibility are not evenly distributed. 1 – There is no evidence of teamwork at all.
	100%		

Student's opinion on the learning process in the tutorial was collected through another survey with Likert-scale-based questions after the tutorial. Thirdly, in another two-hour session, students were assessed in 15-minute group presentations by the instructors (contributed to 15% of the unit assessment) and their peers (contributed to 5% of the unit assessment). Every student rated the presentation of other teams as an audience, using the same marking rubric. The average marks given by these audiences will contribute to the presentation assessment of each team. The feedback from peers and instructor was shared with the students.

After the group presentation, every team will again reflect on their performance. Each team was required to submit a 500 words reflective writing based on their learning experience identify areas of improvement. The reflection contributes to another 5% of their overall unit assessment. Lastly, the third survey was conducted using another set of questionnaires after presentation assessment session to compare their learning outcomes after each session, and collection students' opinion on the teaching pedagogy of interactive peer observation, feedback, and reflection, as compared to conventional lecture and assessment.

Ethics approval on human research was received prior to data collection process. The purpose of the study and teaching pedagogy were explained to the students to obtain their consent prior to the study. Food vouchers were provided to encourage students' participation in the study.

3. Results and Discussion

Questionnaires collected after the lecture, tutorial, and presentation assessment session among the participating students (n = 19) were designed in such way that students provided feedback on their learning experience using Likert scale of 1-5, where 1 indicates 'strongly disagree', 2 indicates 'disagree', 3 indicates 'not sure', 4 indicates 'agree' and 5 indicates 'strongly agree'.

Table 2 shows the compilation of responses collected from the questionnaires. The responses showed that the lecture was informative and useful in providing students with sufficient knowledge on the requirements and expectations of a good presentation (Q1), providing insights on mistakes to be avoided in a presentation (Q2), helpful in preparation for the short presentation during the tutorial (Q6), and supporting them to provide feedback to their peers (Q7). However, the lecture session was perceived to be relatively less interactive as compared to the tutorial session.

Comparing the similar questions asked after the lecture and the tutorial (Q3 & Q8, Table 2), students have stronger agreement that the tutorial session allowed them to discuss and receive feedback on issues they had in delivering a presentation in the class (87% strongly agreed and 13% agreed), compared to the lecture session (29% strongly agreed and 71% agreed). The interactive peer observation, peer-to-peer feedback and self-reflection carried out during the tutorial session also helped students in identifying their strengths and weaknesses in delivering a presentation (Q4 vs. Q9) compared to the lecture as illustrated in Figure 2.

Figure 2: Students' Realisation of Their Strengths and Weakness After the Class

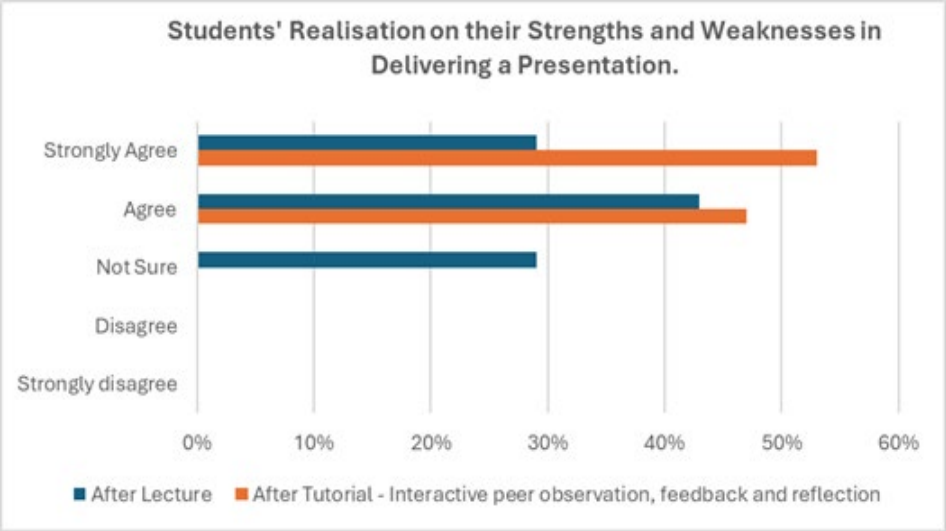


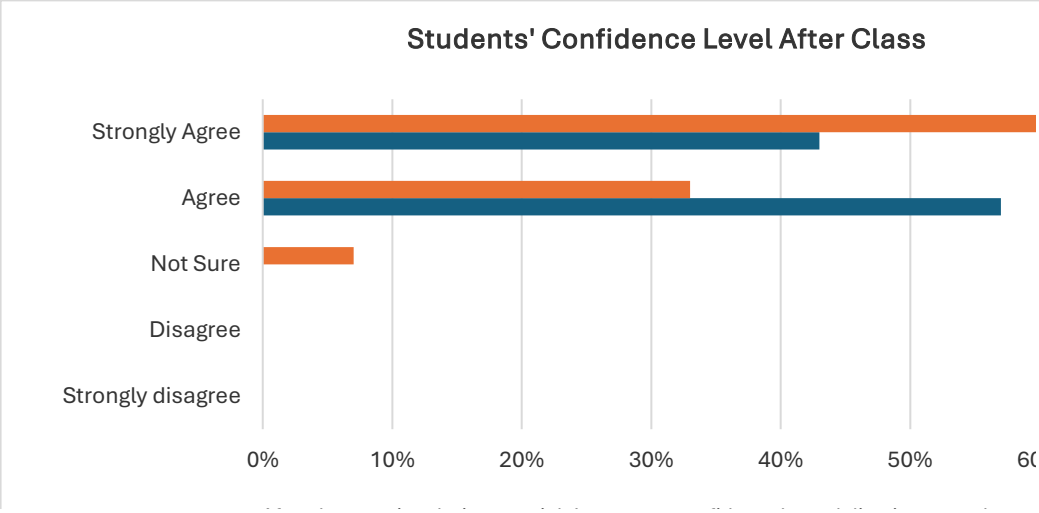
Table 2: Responses collected from the questionnaires

No	Questions	Strongly disagree	Disagree	Not Sure	Agree	Strongly Agree
After Lecture						
Q1.	The lecture provides me sufficient information on the requirements and expectations of a good presentation.	0%	0%	0%	14%	86%
Q2.	The lecture provides me insights on mistakes to be avoided in a presentation	0%	0%	0%	29%	71%
Q3.	During the lecture, I have an opportunity to discuss and receive feedback on issues I have in delivering a presentation.	0%	0%	0%	71%	29%
Q4.	After the lecture, I realise about my strengths and weaknesses in delivering a presentation.	0%	0%	29%	43%	29%
Q5.	After the lecture, I am more confident about delivering a good presentation.	0%	0%	0%	57%	43%
After Tutorial						
Q6.	The presentation skills that I learned in the lecture helps in preparing for the short presentation during the tutorial.	0%	0%	0%	27%	73%
Q7.	I am aware about the requirements and expectations of a good presentation and is able to give feedback to my peers on their presentation.	0%	0%	7%	33%	60%
Q8.	During the tutorial, I have an opportunity to discuss and receive feedback on issues I have in delivering a presentation.	0%	0%	0%	13%	87%

Q9.	After the tutorial, I realise about my strengths and weaknesses in delivering a presentation.	0%	0%	0%	47%	53%
Q10.	The feedback given by my peers during the tutorial is useful to improve weaknesses in my presentation.	0%	0%	13%	53%	33%
Q11.	I learned presentation skills from my peers as I observe them in delivering the presentation.	0%	0%	0%	53%	47%
Q12.	I learned about factors to be avoided in a presentation as I observe my peers delivering the presentation.	0%	0%	0%	53%	47%
Q13.	After the practice during tutorial, I am more confident about delivering a good presentation.	0%	0%	7%	33%	60%
After Group Presentation Assessment						
Q14.	Our group is well aware of the marking rubric and is well-prepared for the presentation.	0%	0%	0%	56%	44%
Q15.	I understand clearly about the requirements stated on the marking rubric.	0%	0%	0%	56%	44%
Q16.	Observing and assessing the presentations of other groups help me to learn about how audience perceive a good presentation.	0%	0%	0%	11%	89%
Q17.	I learned about positive attributes of group presentation from my peers as I observe other groups delivering their presentation.	0%	0%	0%	28%	72%
Q18.	I learned about factors to be avoided in a group presentation as I observe my peers delivering their presentation.	0%	0%	0%	39%	61%
Q19.	Discussing and writing the reflection on group presentation enhance my learning in presentation skills.	0%	0%	0%	39%	61%
					No	**Yes**
Q20.	Would you recommend the same learning format to be applied for MCEN4010 in the coming semester?	-	-	-	0%	100%

Students' confidence level in delivering a good presentation strengthen generally after the interactive session during tutorial compared to the lecture i.e., 60% vs 43% strongly agreed as shown in Figure 3. However, interestingly, some students (7%) had doubts on their presentation skills after the actual practice during the tutorial session. The reason could be, the students started to be aware of their weaknesses, and realised the actual effectiveness of their presentation through feedback received from the audience, which was not matching their plan and expectations. Overcoming these weaknesses and self-doubt is an important process of learning, and it could be supported by knowing what is wrong, and reflection on the strategies to improve.

Figure 3: Students' Confidence Level After Class



The process of observing presentation delivered by their peers mindfully and conducting the peer-to-peer assessment was said to be helpful in student's learning. 47% of the students strongly agreed and 53% agreed that they learned presentation skills from their peers, including factors to be avoided in a presentation as they observed them delivering the presentations (Q11 & Q12).

Responses on Q16-Q18 showed that when the students had a second chance to observe their peers and assessed them during the group presentation, the learning was further enhanced. There was a higher level of agreement as 89% of the students strongly agreed that observing and assessing the presentations of other groups helps them to learn about how audience perceive a good presentation. 72% of the students also strongly agreed that they learned about positive attributes of group presentation from their peers through observation and peer assessment, and 61% strongly agreed that they learned about factors to be avoided in a group presentation through this process. None of the students disagreed or was unsure about the effectiveness of peer observation and peer assessment in supporting their learning of presentation skills. Students commented that observing the peers helped them to *'identify things I did not initially consider, like using demonstrations to enhance audience engagement'; 'Peer observation provided the most realistic review from the perspective of audience at same level. Students can understand their own strength and weaknesses very well.'*

Figure 4 illustrates a summary of responses gathered from participants on how effective the feedback from peers and self-reflection practice contributed to their learning of presentation skills. While most students strongly agreed/ agreed that feedback from their peers helped to improve their presentation, 13% students were unsure if the feedback was useful. The reasons behind this could be observed from the qualitative opinion collected in the questionnaires. Some students were concerned if the feedback and assessment could be bias towards their friends, or too lenient to the peers, simply because they could feel guilty of giving poor feedback. Students also have doubts about the competency of their peers, and the quality of feedback and assessment that they provided. Observation on the feedback provided by some students showed that these concerns were valid as some feedback was too brief that it did not provide constructive suggestions e.g. *'ok', 'nice', 'can be improved'*.

On the positive side, students shared that *'The comment and feedback changed my presentation method differently from the previous one. And it helped to build more confidence'; 'Being able to see and hear feedback about a peer's presentation allows for one*

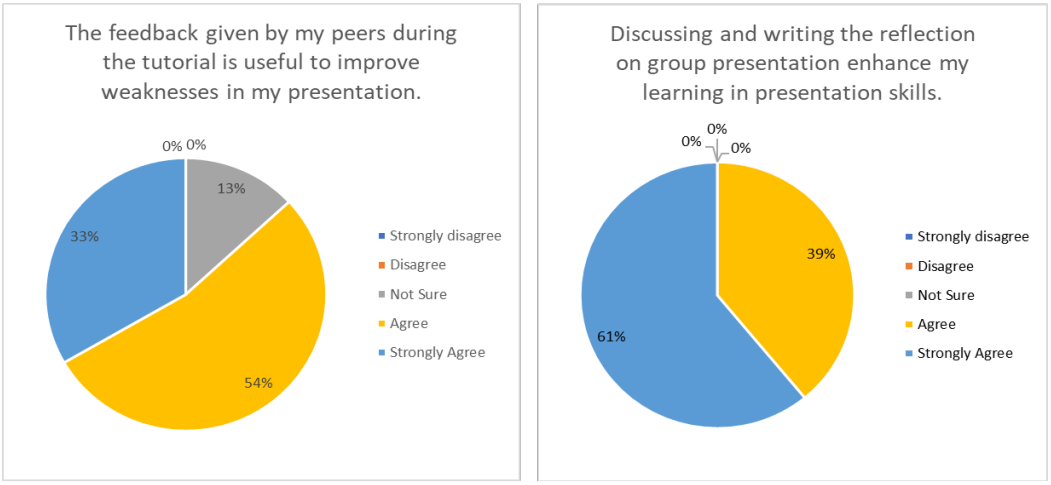
to self-reflect if they have or do not have the good attributes that the audience expected.' There was some quality feedback received from the peers that clearly narrated the positive and negative elements of a presentation, hence helping the presenters to improve. E.g. '*The group delivered their content really well. The pair proved to be well prepared as their flow was smooth. Their voice projection was loud enough and engaging with the audience. The visual aids provided were clear and contributed to the engagement. Overall, it was a nice presentation.'; and 'Student A's voice was loud enough that engaged the crowd. Student B has a lower voice and less engaging. The content was statistical and factual however this was too much and didn't feel relatable as the presentation went on.'*

Students also agreed that reflecting and writing about their learning experience in enhanced their learning. The reflection journals received were of good quality, where the students compared their performance against the elements of effective presentation, identified their weaknesses honestly, as well as drafted plan on how it could be improved.

Overall, this innovative approach of integrating interactive peer-observation, peer-to-peer feedback and self-reflection in teaching presentation skills is effective in enhancing students learning. The method received 100% agreement from all students as an effective pedagogy to learn presentation skills. Students commented that the class *'makes them more confidence to present in front of people'*, *'prepares the students for real-life engineering environment',* and *the interactive practical experience makes the learning experience more memorable and enjoyable'*; *'This method is definitely effective and should be applied in future so that classes could be interactive and interesting.'*

It was observed that students improved their presentation skills throughout the learning process, earned better understanding on the factors of effective presentations from the audiences' perspectives. The teaching approach also promotes active participation of students in the class as there were tasks assigned to them to provide feedback to their peers. Providing feedback gave students the opportunity to express their thoughts verbally and the learning is enhanced as they provided input to their peers. The process engaged all students in the learning process, promote inclusivity and build sense of belonging among students compared to the traditional approach.

Figure 4: Students' Learning from Feedback and Reflection



Besides, the learning process also cultivated resilient students who were opened to feedback and criticism, acknowledged their weaknesses as opportunity of improvement. Students become more confident, appreciated feedback, and accepted it with positive mindset.

Students learned to support each other in this learning process, by providing meaningful feedback to their peers.

The pedagogy could be further improved by training students to provide quality feedback to their peers prior to the tutorial session. Simple guideline such as the Sandwich method could be given with examples. Student could provide feedback by first complimenting on the positive elements of the presentation, followed by offering constructive suggestion on what could be improve and how it could be improved, and ending with words of encouragement. Besides, some students also suggested that showing examples of presentation by communication professionals could help set the standards of good presentations. This could be included in part of the lecture content. There were also suggestions that individual presentation, instead of group presentation to be conducted so that each student would have longer time to present. The feasibility of implementing this, however, will depends on the number of students, time and resources available.

4. Conclusion

Presentation is a vital communication skill that needs to be mastered by engineers to meet the demands and challenges in the industry. The conventional teaching method of lecture followed by assessment and feedback is lacking in providing a more engaging learning experience. Most importantly, it is less effective for engineering students to learn presentation skills in the limited contact hour. This study introduces the integration of interactive peer observation, peer-to-peer feedback and self-reflection methodology in the process of teaching presentation skills to engineering students. The project was implemented in the unit of Professional Engineering Practice among 19 Mechanical engineering students. Besides a lecture on effective presentation skills, the students went through interactive peer observation, peer-to-peer feedback and self-reflection processes during a tutorial session as well as during the presentation assessment session. Survey was conducted after the lecture, tutorial and the assessment session to measure the effectiveness of the learning process.

From the results of the survey and observation of students' performance in the class, it can be concluded that the integrated interactive peer observation, peer-to-peer feedback and self-reflection process works as an effective pedagogy in addressing several challenges of teaching presentation skills to engineering students. Observing and providing feedback to their peers allows students to grasp the concept of effective presentations in limited learning contact hour, as students experienced observing their peers from the audience's perspectives, and hence create empathy towards the audience's needs and expectations. The feedback and self-reflection process also help the students to mirror their own performance, and hence enhance the understanding on the theories, which later translate into practice i.e. the preparation and delivery of a better presentation. Although some improvements are still needed to further refine the pedagogy, especially in guiding students to provide effective feedback to their peers, it can be concluded that the pedagogy is effective in enhancing students' learning of presentation skills and achieving higher level learning objectives in the cognitive domain.

Acknowledgment

This paper is an output of a research project funded by Curtin Malaysia Teaching Innovation Project (CMTIP) grant. The project has also been approved by the Human Research Ethics Office, Curtin University with approval number: HRE2023-0575. The authors appreciate Office of Learning and Teaching, Curtin University Malaysia for supporting continuous

improvement in learning and teaching practices. They would also like to thank all students in MCEN4010 for their active participation in the research project.

References

Alam, F., & Kootsookos, A. (2021). *Engineering education: accreditation & graduate global mobility*. CRC Press.

Bosavage, J. D. (2019). Why Communications Skills Are Critical To Engineers Being able to clearly share ideas with others is an important quality in a leader. *IEEE Spectrum*. https://spectrum.ieee.org/

Carvalho, C., Santos, N. N., António, R., & Martins, D. S. M. (2021). Supporting students' engagement with teachers' feedback: the role of students' school identification. *Educational Psychology*, *41*(7), 863-882. https://doi.org/10.1080/01443410.2020.1849564

de Souza Almeida, L. M. (2019). *Understanding Industry's Expectations of Engineering Communication Skills* ProQuest Dissertations Publishing].

Eveyik, E., & dinç, C. (2021). Learning through a reciprocal peer observation experience: Perspectives of EFL instructors and professional development unit head at a private university. In.

Foster, I. (2020). *The importance of communication skills for engineers*. EIT Engineering Institute of Technology. https://www.eit.edu.au/

Hattie, J., & Timperley, H. (2007). The Power of Feedback. *Review of educational research*, *77*(1), 81-112. https://doi.org/10.3102/003465430298487

Mehra, D. (2013). Communication Skills for Enhanced Employability of Engineers: A review of literature. *The Confluence Journal (E-Journal)*, *3*, 70-76.

Riemer, M. (2007). Communication Skills for the 21st Century Engineer. *Global Journal of Engineering Education*, *11*, 89.

Tackett, A. (2021). Pandemic Reflections: Cultivating Authentic Learning Through Reflection in Art Class. *Art education (Reston)*, *74*(6), 33-36. https://doi.org/10.1080/00043125.2021.1954472

Tenenberg, J. D. (2016). Learning through observing peers in practice. *Studies in Higher Education*, *41*, 756 - 773.

Wain, A. (2017). Learning through reflection. *British journal of midwifery*, *25*(10), 662-666. https://doi.org/10.12968/bjom.2017.25.10.662

Wu, Y., Xu, L., & Philbin, S. P. (2023). Evaluating the Role of the Communication Skills of Engineering Students on Employability According to the Outcome-Based Education (OBE) Theory. *Sustainability (Basel, Switzerland)*, *15*(12), 9711. https://doi.org/10.3390/su15129711

Yang, L., Chiu, M. M., & Yan, Z. (2021). The power of teacher feedback in affecting student learning and achievement: insights from students' perspective. *Educational Psychology*, *41*(7), 821-824. https://doi.org/10.1080/01443410.2021.1964855

Yu. (2023). The Role Of Reflection In Learning. https://www.ool.co.uk/blog/the-role-of-reflection-in-learning/

Zhou, Y., Han, S., Kang, P., Tobler, P., & Hein, G. (2024). The social transmission of empathy relies on observational reinforcement learning. *Proceedings of the National Academy of Sciences of the United States of America*, *121*, e2313073121. https://doi.org/10.1073/pnas.2313073121