

Is My Scientific Presentation Intelligible and Convincing?: Role of Peer Feedback to Fill the Gap with Your International Audience

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Abstract

Currently English is by far the predominant language used in international scientific conferences, and having engaging, intelligible, yet convincing presentation skills are vital for the accurate understanding of new findings. This study examines the effectiveness of peer feedback to foster effective scientific presentation skills among international science major students who use English as their second or foreign language. In order to evaluate their presentations the major criterion of content, slides, delivery, and performance are examined. The result demonstrates that the majority of speakers value and appreciate peer feedback though only about half of them successfully overcome their weaknesses in their final presentations. Additionally, major gaps are observed between evaluations of both sides on speakers' final performances. This paper proposes multiple peer feedback processes along with adjustment of its quality to your own teaching context to encourage narrowing the gap between both parties.

Introduction

1. Research Background

1.1 Scientific Presentation Skills

Having engaging, informative, yet intelligible presentation skills are essential to promote new ideas to a wider community. Science is particularly hard to present because not every audience shares the full understanding of all scientific concepts, background information, discoveries, technical terms, or linguistic skills to instantly follow the story. In many cases, the gap between a speaker and the audience can be huge in the amount of scientific knowledge, understanding of a particular subject, as well as presentation skills to communicate the subject. Effective scientific presentations need to fill this gap to ensure that the audience shares the exact same understanding of the new scientific findings that are being presented.

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English has become a language of science (Zanders & Macleod, 2010). All speakers need to modify their English for presentation purposes in order to achieve maximum communication with your listeners (Zanders & Macleod, 2010). Thus conducting a presentation using English is a challenging task for many people who learnt it as a second (ESL) or a foreign (EFL) language. These students need to pay extra attention to its word use, grammar, delivery, and the performance that can be very different from your own mother tongue. The delivery of presentations are also hard for people who learnt English as their first language since its ultimate goal is to make every single audience understand your new ideas without causing any misunderstandings. These proficient students use different varieties of Englishes that may not be familiar with other students in terms of pronunciation, lexicon, and syntax (McKay & Bokhorst-Heng, 2008).

Participants of international scientific conferences also share gaps in their scientific knowledge since each of them specialize in one research field and not everyone has the full understanding of each scientific idea, technical term, or background information. Due to all these reasons, scientific presentations using English really is a challenging task for almost everyone. However, without making presentations at officially recognized conferences, your scientific findings and ideas will not be disseminated to society or recognized among peers, thus everyone would lose out. The acquisition of effective yet intelligible scientific presentation skills therefore is the vital gateway, which all scientists and science students need to go through.

In order to properly convey the latest scientific findings using intelligible English, this paper investigates the role of peer feedback, which must function to fill the gap with your international audience. If all scientists and science students need to equip themselves with convincing and intelligible presentation skills for the unexpected varieties and the numbers of international audiences, the best way is to develop the skills in classroom practices using the perspectives of your international peers. The peers who are from diverse linguistic and cultural backgrounds can offer speakers practical ideas to become more intelligible during the peer feedback processes.

1.2 Peer feedback and Peer Assessment

Speech and presentation activities often use a process approach where speakers revise their performances several times before their final performance and receive feedback from instructors and peers (Vaughan, Saito, & Saito, 2015). According to Hattie & Timperley (2007), books can provide information to clarify ideas and peer feedback can offer alternative strategies, which are going to be the consequence of performance. Peer feedback process takes the form of new instruction rather than informing simply about correctness through affective processes, such as increasing effort,

motivation, and engagement (Kulhavy, 1977 cited by Hattie & Timperley, 2007). The purpose of peer feedback thus needs to provide specific comments in relation to the task or process of learning that fills the gap between what is understood and what is aimed to be understood (Sadler, 1989 cited by Hattie & Timperley, 2007).

Peer assessment often forms the part of peer feedback process because it provides richer feedback, promoting self-regulated learning and considered as a beneficial tool for the learner development (De Grez, Valcke, & Roozen, 2012 cited by Vaughan et al, 2015). Topping (1998) defines peer assessment 'as an arrangement in which individuals consider the amount, level, value, worth, quality, or success of the products or outcomes of learning of peers of similar states'. All of these indicate that scientific presentation learning needs to include audience's perspectives as much as possible to complete.

In terms of peer assessment reliability, many empirical research papers have already demonstrated instructors themselves are not completely free from bias when evaluating students (Lumley & McNamara, 1995 cited by Vaughan et al, 2015). Additionally, Falchikov and Goldfinch (2000) found that on average, peer marks agreed with teacher marks which convinces this is a valid tool to raise learners' performances. Peer assessment affects motivation while reducing some of the rating responsibilities of teachers (Okuda & Otsu, 2010). Brown adds that peer assessment not only give learners an important sense of responsibility for their fellow students' progress, but also forces them to concentrate on the skills during their own presentations (Brown, 1998, p.67 cited by Okuda & Otsu, 2010). This means that students learn to perform well during giving feedback through reflecting essential criterion to cover for their work.

2. Research Purpose

The actual contribution of peer feedback to speakers' final performances or the gap between speakers' self-evaluations and peer evaluations are still not fully understood. Solutions need to be found to further encourage successful scientific presentations in order to reduce misunderstandings or miscommunications between speakers and the listeners of diverse linguistic and cultural backgrounds. This paper examines the effectiveness of peer feedback to improve scientific presentation skills from these perspectives with a mixture of multilingual science-major students.

3. Research Plan

3.1 Targeted Learners and Assignments

The study was done in a required course of Technical English 1 Fall Semester (TE1F) with

thirty-five Global Thirty (G30) students in the Department of Life and Environmental Sciences, Tsukuba University. The students are from diverse linguistic and cultural backgrounds who study specialized subjects, such as molecular biology or environmental chemistry using English. In TE1F, students learn about the way to make effective scientific presentations throughout the semester (see Appendix 1). TE1F assignments include two to four presentations in front of small groups of their classmates, and one final presentation in front of all classmates including instructors. Thus all learners have at least more than two times to get peer feedback before their final presentations. It means they know exactly what skills to improve or adjust their work to make their final presentations successful. TE1F consists of thirty five students and the data was collected in this number using peer feedback sheets and a self-evaluation sheet after presentation practices (see Appendix 2a,2b).

3.2 Research Hypotheses

As discussed earlier, there are mainly two challenges in scientific presentations.

Challenge 1. Engage and convince scientific findings to your audience

Challenge 2. Inform your scientific findings using intelligible English

In order to promote perfect understandings of science, developing intelligible scientific presentation competency to meet your international audiences' expectations is what TE1F students first need to achieve. To meet the requirement of this aim, the quality of peer feedback needs to be investigated in this particular context and find out the best use of it in classroom practices. For this study, two hypotheses were tested.

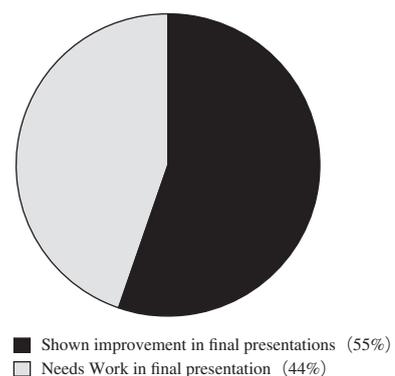
Hypothesis 1. Peer feedback is an effective method to improve speakers' performance.

Hypothesis 2. Speakers weaknesses are improved from both perspectives.

4. Results

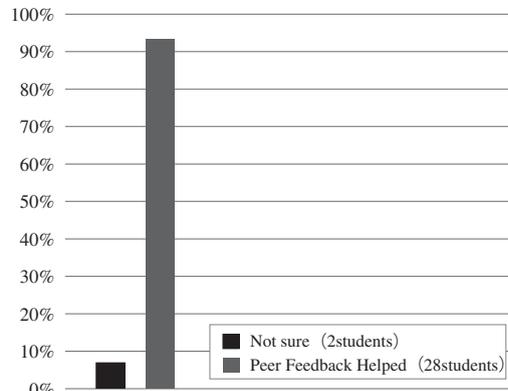
The data was collected from all listeners after each presentation (see Appendix 3). This first figure shows the amount of improvement speakers could make in the final after getting peer feedback multiple times. The result demonstrated that fifty-five percent of the speakers' weaknesses improved and forty-four percent did not show improvement.

Fig.1 Is peer feedback really effective for speakers' improvement?



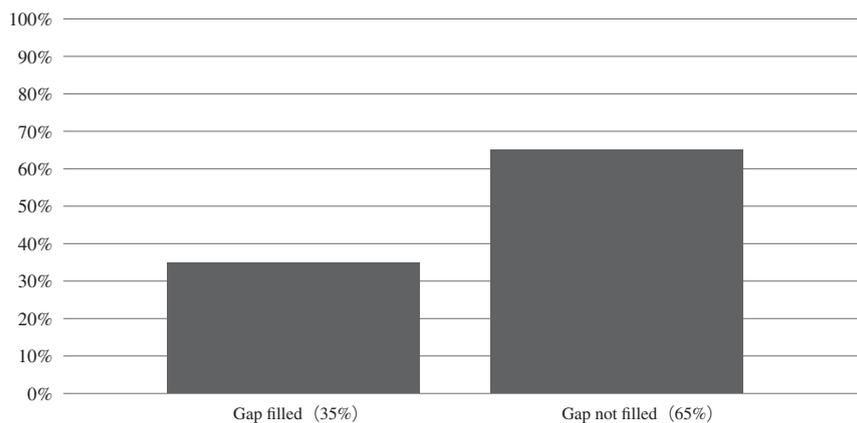
This second question was posed to all speakers after their final presentations as a reflective question. The result showed that twenty-eight students thought peer feedback helped to improve their final presentations. However two students did not clearly mention about it although they talked about their weaknesses and strengths. No one said peer feedback was of no use.

Fig.2 Did peer feedback help you to improve your final performance?



As for the first hypothesis, the above two results clearly demonstrate that speakers feel an improvement using peer feedback, despite not being able to completely overcome their weaknesses. These results suggest that speakers' evaluation of peer feedback and the actual improvement of their performances have a huge perception gap. The gap of perceptions between speakers and the audience came out to be high even after multiple rounds of peer feedback. These results demonstrate that peer feedback does not necessarily maximize the quality of speakers' performances although speakers know exactly what items they are required to improve beforehand and appreciate the feedback .

Fig.3 Have speakers' weaknesses shown improvement from both parties?



This last figure shows the actual improvement of speakers' weaknesses from their first peer feedback completed multiple times. This opportunity allows speakers to show their effort of improvement thus opinions of both groups were expected to match with each other. In other words, the gap between speakers and the audience are supposed to be filled from multiple presentation practices. But this final research showed that speakers and listeners did not perceive and share the

same amount of weaknesses in final. From the audience's view, sixty-five percent of the weaknesses still did not improve in final presentations although thirty-five percent showed improvement. To conclude, peer feedback for multiple times do not fill the gap between speakers and the audience. Then what are additional factors we need to consider in this process to make peer feedback more effective?

5. Discussion

5.1 Peer Feedback Quality and Sensitivity

As shown in results, none of the speakers could perfectly overcome their weaknesses given by their listeners. In order to understand this mechanism, the quality of given feedback, as well as speakers' willingness to use the feedback has to be further analyzed. The fostering successful presentations requires the effort of both parties but eventually, speakers hold the key for their own success. Listeners benefit themselves from providing feedback since the process also engages and enhances their learning outcomes, criteria, and standards (Price, O'Donovan & Rust, 2007). But the willingness to accept and learn from feedback is also another key factor for the speakers' improvement.

Peer feedback contributes to some extent through eliminating discrepancy between speakers' current status and their learning goals. Both parties are expected to become more committed to learn, more self-regulated, engaged, and give confidence to learn more during its process (Hattie & Timperley, 2007). Speakers' positive transformation only happens when they do not resist learning from feedback, accepting them, and revising their work accordingly. According to Ginkel et al (2017), high-feedback sensitive students developed more desired presentations (such as eye contact and length of introduction in a presentation) through tactful non-confrontational feedback compared to direct and frank feedback. Future studies need to be done specifically on this relationship between feedback quality and sensitivity to promote revisions.

5.2 Some Other Factors to Consider

Over the course of this study looking at peer feedback with international students multiple times, a number of factors to make it more effective have become evident. According to Colthorpe et al (2014), unlike academics and instructor's feedback, the benefit of peer feedback is by using students' perspectives to refer to their own ideas and personal experiences. As students give feedback multiple times, the quality of feedback becomes more detailed in content (Colthorpe et al, 2014). The trend was also shown in this study (see Appendix 3 and 4). Ginkei et al (2017) adds that the quality of feedback could also be considered as an essential factor which can impact improving

presentation skills. The impact of feedback, which directly links to your own progress needs to be studied further in the context of ESL/EFL classroom settings.

Shute (2008) found that the extent to which speakers appreciate feedback and actively use it depends on factors like the authority of the feedback provider and trust between peer students who provide and receive feedback. Thus if trust lacks between peer students and the feedback, this can be one factor of appreciation and use of feedback to show different improvements (Ginkei et al, 2017). Vaughan et al (2015) however, demonstrated in his study that there was no evidence that the degree of friendship influenced peer assessment. In order to make the most of peer feedback for quality presentations, possible meta-cognitive factors like the peer feedback effects of levels of closeness also needs to be considered depends on the characteristics of your students.

Speakers' improvement depends heavily on whether they can critically see their performances from the audience's perspectives and evaluate their work firsthand. Any modification of your work begins from how the peer feedback was given and how you receive these words. Critical self-judgement plays the central part for the improvement of any life-long work (Boud & Falchikov, 2006). Feedback which have low level of threat to self-esteem allows more attention to be paid by speakers (Hattie & Timperley, 2007). Speakers need to overcome these psychological challenges in order to fill the gap between listeners as much as possible and encourage themselves to achieve perfect understandings with their international audiences.

Conclusion

In order to achieve success in international scientific conferences, intelligible, informative, and convincing presentation skills are vital for all science students especially in light of an audience from diverse linguistic and cultural backgrounds. International classmates have potential to play an important part in providing judgement and feedback from a different perspective. This study was conducted to see if peer feedback helps international science major students to improve their weaknesses in their scientific presentations using English. The result showed that the majority of speakers valued peer feedback although only half of them could improve their weaknesses. Additionally, the perception of weaknesses was greatly different in speakers' final presentations, suggesting that this huge perception gap is shared between both parties. The paper proposes the number of feedback as well as the adjustment of its quality depending on the context of each class to foster effective presentation skills for all learners.

Acknowledgement

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Appendix 1.

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TE1F

Technical English 1 Fall Course Requirements

Assignments & Deadlines:

1. Revision of final papers ASAP
2. Slide submissions (20%)
3. Oral presentation 1: November-December (20%)
4. Oral presentation 2: January-February (40%)
5. Class participation & related assignments (20%)

Important note: Your oral presentation schedules must be fully respected. If you need any changes in your slot, negotiate it with a classmate at least two weeks in advance and report it to your instructors. Any changes or cancellations without prior notice would be considered as an action of violation and your oral presentation mark will be reduced 50%. Assignment scores will also be reduced 5% per a day for late submissions.

Learning goals & Assessment criteria:

- Be able to understand the purposes and implications of oral presentations
- Be able to explain your research in fully understandable ways for the audience.
- Be able to prepare simple and engaging visuals.
- Be able to provide accurate and constructive feedback for improvement.
- Be able to willingly participate in discussions beyond your interests.

Assignment details:

-Revision of final papers

You will receive the marked final papers. Prepare your oral presentation based on the paper.

-Slides submission

Submit your slides according to the schedule.

-Oral presentations

Oral Presentations will be evaluated based on your preparation and performance from peers, instructors and yourself.

-Class participation

Your attendance, participation in the class activities, assignment submittals, and discussion participation are all included in this part.

Other important matters:

1. Attend our class

Be punctual. Your attendance will be checked each class and considered as a factor in deciding your final grade. If your attendance is less than sixty percent of all classes, you will automatically fail this course.

2. Check Manaba as often as possible.

-class handouts

-videos

-other notifications

3. You will automatically fail to make the grade when you

-copy assignments from others / commit plagiarism

-do not submit assignments

-do not attend classes/ have few attendances

4. Check the library resources

Alley, M. (2013). *The Craft of Scientific Presentations. Critical Steps to Succeed and Critical Errors to Avoid*. Springer New York.

Hoffmann, A. H. (2014). *Scientific Writing and Communication. Papers, Proposals, and Presentations*. Second edition. Oxford University Press. NY.

Zanders, E. & Macleod, L. (2010). *Presentation Skills for Scientists. A Practical Guide with DVD-ROM*. Cambridge University Press. UK.

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Some of your assignments may be anonymously used for our future research. Our research interests are 'Critical reflection in intercultural collaborative learning settings'. Those who cannot agree with allowing the use of your assignments for research, please tell us in person. We will respect your privacy as well as your right of veto.

Appendix 3.

Table 1. Is peer feedback really effective for the speakers' improvement?
 -Feedback items with more than two peers are listed below.
 -Ones in bold face are items which speakers did not show improvement.
 (A: Content/ B: Slides/ C: Delivery and Performance)

Student no./ Nationality	Given Peer Feedback	Final Peer Feedback	Improvement
1./ USA	1. C: Speaks monotonously(3) 2. A: Explain some specific terms(2); B: Statistical data needed(2)	1. B: Enlarge fonts(7) 2. A: More research-based data needed(4); C: Reduce fillers like 'umm'(4)	+2 improved <u>-1 needs work</u> +1
4./ Indonesia	1. C: Lack of eye contact(2)	1. C: More eye contact(3) 2. B: Fonts are too small(2); Add introduction(2); Objectives not included(2); C: Slight mumble when talking fast(2); Nervous(2)	<u>+/-0 improved</u> 0
5./ France	1. B: Too much text(3) 2. A: Give more background /introduction to topic(2); C: Talk too fast(2)	1. C: Too fast(10) 2. B: Fonts are too small(6) 3. B: Graph is too small(4) 4. B: Wordy(3)	+1 improved <u>-2 needs work</u> -1
6./ USA/ Japan	1. B: Text size too small(5) 2. C: Speak louder(4) 3. A: Add more details(3)	1. C: Speak more clearly/Speak up(6) 2. A: Use data(3); Too broad(3); B: Enlarge fonts(3); C: Be more enthusiastic/ Passionate(3); Intonation(3)	0 improved <u>-3 needs work</u> -3
7./ USA/ Japan	1. B: Unattractive slides(2); Add more pictures(2); C: Lack of passion(2)	1. C: More confidence/nervous(5) 2. C: More eye contact(4) 3. B: Figures are hard to read(3) 4. A: Many jargons(2); More supporting research necessary(2); Improve your discussion(2)	+3 improved <u>0 needs work</u> +3
8./ Germany	1. A: Simplify introduction(3) 2. A: Complicated(2); B: Difficult graphs(2)	1. B: Text too small(7) 2. B: Small graphs(6) 3. C: Time management(3) 4. B: Add more information on slides(2); Use darker colors(2)	+2 improved <u>-1 needs work</u> -1
9./ Thailand	1. C: Voice is too soft(8) 2. C: Be more prepared(2); Monotonous voice(2); Nervous(2)	1. A: Explain more(6) 2. C: Tone of voice/speak louder(5) 3. A: Add introduction(3); Needs better link between points(3); B: Figures are small(3); C: Be more expressive(3); Be more enthusiastic/ passionate(3)	+2 improved <u>-2 needs work</u> 0

10./ USA/Japan	1. C: Need more eye contact(2)	1. A: Add some successful examples/usage of IPS(5) 2. B: Words and figures are small(3); C: Improve eye contact(3) 3. A: Add more data to support claims(2); C: Show more passion/enthusiasm(2)	+1 improved <u>0 needs work</u> +1
11./ Indonesia	1. C: Talk too fast(9) 2. B: Turn off the auto-switch of slides(2); Some slides are wordy(2)	1. C: Talk too fast(24) 2. B: Enlarge font size(4) 3. C: Slides are overloaded with text(2); Time management(2)	+1 improved <u>-2 needs work</u> -1
12./ Indonesia	1. A: Technical difficulties broke the flow(2); B: Too many words in some slides(2); C: Lack of eye contact(2)	1. B: Too crowded with information(9) 2. B: Figures/Tables were hard to see(5) 3. B: Add more colors(2); Information is not readable(2); Lack of engaging pictures(2); C: Nervous(2)	+2 improved <u>-1 needs work</u> +1
13./ Indonesia	1. B: Use bigger fonts(4); C: Be more confident(4) 2. C: Lack of time management(2)	1. B: Text size too small(12) 2. C: More eye contact(5) 3. A: Aim unclear(2); B: Improve photos/images(2); C: More gestures(2); Engage more with the audience(2); Speak up(2); Talk more enthusiastically(2); Add intonation(2)	+2 improved <u>-1 needs work</u> -1
14./ Viet Nam	1. A: Too complicated(4) 2. A: Some technical terms are hard to understand(3) 3. B: Words are too small(2); Graphs have small text(2)	1. B: Text is too small(13) 2. B: Too wordy(7) 3. B: Include your name in your first slide(3) 4. B: Figures are small(3)	+2 improved <u>-1 needs work</u> +1
15./ Viet Nam	1. B: Font size small(2); C: Speak louder(2)	1. C: Time management(12) 2. C: Slow down(5) 3. B: Enlarge text(4) 4. C: Maintain eye contact(3) 5. A: A lot of data but little significance toward data(2); Consuming a lot of time in some slides(2); C: Relax/nervous(2)	+1 improved <u>-1 needs work</u> 0
16./ Indonesia	1. Words are a bit small to read(3)	1. B: Too much texts(6) 2. C: Fast(4) 3. A: Include summary(3)	+1: improved +1
17./ India	1. Give definitions of technical terms(2)	1. B: Add summary/conclusion(3) 2. A: Expand your topic/claims(2); B: Add references(2)	+1: improved +1

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18./ Philippines	<ol style="list-style-type: none"> A: Need clear explanations(3); B: The design and style need improvement(3); Too colorful(3) A: Too complicated(2) 	<ol style="list-style-type: none"> B: Too much colors(5); Text too small/much to read(5) A: State your objectives(4); Confusing explanations(4) A: Use more research-based evidence(3); C: Use more voice tone(3) A: Explain terminology(2); Introductory part is too long(2); Unclear conclusion(2); C:More eye contact(2) 	<p>+1 improved <u>-3 need work</u> -2</p>
19./ USA/Japan	<ol style="list-style-type: none"> B: A lot of text(5) C: Talk louder(3) A: Blurred pictures(2); B: The table at the beginning was small and not presented(2) 	<ol style="list-style-type: none"> B: Use bigger fonts(5) A: More supporting information/ case studies/ data needed(3); C: Speak more slowly(3); Avoid saying fillers like “uhm”(3); Nervous(3) 	<p>+3 improved <u>+3</u></p>
20./ Indonesia	<ol style="list-style-type: none"> C: Monotone(3) 	<ol style="list-style-type: none"> B: Text too small in some slides(5) B: Add sources(2); Graphs too small(2); C: Maintain eye contact(2); Work on transitions(2) 	<p>+1 improved <u>0 needs work</u> +1</p>
22./ Indonesia	<ol style="list-style-type: none"> C: Nervous(4) A: Objectives not mentioned(3); B: Font size too small(3) A: Focus more on solutions(2); C: Do not read slides(2); More eye contact(2); Talk louder(2) 	<ol style="list-style-type: none"> C: Microphone too close(5) A: More evidence/details needed(4); B: Graphs too small(4) B: Make sure to have readable texts in your pictures(3); C: Vary your tone(3) A: Need more support and connections between main points(2); Goals unclear(2); Give positive questions to the audience(2); C: Speak clearly(2) 	<p>+4 improved <u>-3 needs work</u> +1</p>
23./ Indonesia	<ol style="list-style-type: none"> C: Do not read from your notes(4) B: Add more pictures and graphs(3); C:Nervous/be more confident(3); Make eye contact(3) A: Explain technical terms(2); B: Add more pictures and graphs(2); Texts are hard to read(2); C: Speak louder(2) 	<ol style="list-style-type: none"> C: Maintain more eye contact(8) B: Less words on slides(6) C: Work on intonation(3); Do not read off slides(3) A: More data necessary(2); B: Enlarge some pictures(2); Use bigger fonts(2); C: Nervous/ relax(2) 	<p>+4 improved <u>-4 needs work</u> 0</p>
24./ Philippines	<ol style="list-style-type: none"> B: Enlarge texts(6) A: Add more details(3) B: Color contrast between text and background(2); C: Speak louder(2); Short(2) 	<ol style="list-style-type: none"> A: Needs hard data to support points(12) B: Some text was small(5); C: Fast(5) A: Explain more(3); B: Pictures/ diagrams were hard to see(3) 	<p>+2 improved <u>-2 needs work</u> 0</p>

25./ Philippines	1. B: Too much text(3) 2. C: The balance of slides was inconsistent(you sometimes flashed through slides or spend too much time on one)(2); C: No eye-contact(2); Some words are not well-spoken(2)	1. B: Too much text(12) 2. C: Too fast(8) 3. A: More supporting/hard data needed(6)	+3 improved <u>-1 needs work</u> +2
26./ Philippines	1. C: Speaks too fast(3)	1. C: Speak slower(3) 2. A: Connect ideas/ Link main points(2); B: Add more visuals(2); Less words on each slide(2); Speak louder(2); Relax(2)	0 improved <u>-1 needs work</u> -1
27./ Thailand	1. A: Use less jargon(4) 2. A: Explain the topic more simply(3); Lots of difficult concepts(3) 3. B: Too much slides(2); Some images small(2); C: Speak louder(2)	1. C: Time management(5) 2. A: Difficult information(3); B:Packed information in some slides(3) 3. A:Some concepts require more explanations(2); B: Some figures are small(2); C:Fast(2)	+2 improved <u>-4 need work</u> -2
28./ Philippines	1. C: Some grammatical mistakes during the talk(2) 2. C: Too fast(2)	1. A:Give more details(5) 2. A: Improve objectives(3) 3. A: too many ideas(2); The topic is too general(2); Use more references(2); Explain some vocabulary(2); B: Slides flipped on its own(2); Small fonts(2); Too much animation(2); C: Hard to hear words from microphone(2)	<u>+2: improved</u> +2
29./ Indonesia	1. B: Some fonts/ diagrams are a bit small(2)	1. B: Enlarge text(11) 2. B: Too wordy/crowded(5) 3. C: Time management(4) 4. B: Enlarge figures(3); C: Talk slowly(3)	+0 improved <u>-1 needs work</u> -1
30./ Indonesia	N/A: Not enough feedback given	1. B: Some words are small(4) 2. A: Add any conflicts/ pros and cons(3); C: Soft voice/ louder/ Use a microphone(3) 3. C: Improve eye contact(2)	
32./ Russia	1. A: Difficult to understand the topic who have less knowledge(3) B: Some slides are too crowded(3) 2. A: Some technical terms should be explained more(2); Explain the topic from the broad perspective(2); Explain the conclusion more(2)	1. B: Too much information/ Details/complicated (9) 2. A:Complex/ Difficult(4); Need to explain well(4) 3. Jargon use/Define technical terms(3)	<u>-3: needs work</u> -3

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34./ Korea	<ol style="list-style-type: none"> 1. B: Need more statistical data(3); C: Monotone voice(3) 2. A: Need more natural flow(2); B: Use more pictures(2); C: Speak too slowly(2); Speak more loudly(2); Memorize your talk(2) 	<ol style="list-style-type: none"> 1. A: More data necessary(5); B: Too much text(5) 2. B: Enlarge some text(4) 3. A: Add explanations to some slides(3) 4. A: Use more research(2); Show your objectives(2) 	<p>+6 improved -1 needs work <hr/>+5</p>
35./ Japan	<ol style="list-style-type: none"> 1. C: Speak louder(3) 2. C: Make eye contact(2) 	<ol style="list-style-type: none"> 1. C: Maintain eye contact(8); Prepare more/practice more(8) 2. A: Add data(5); C: Be more confident(5); Speak louder(5) 3. C: Time management(4) 4. C: Speak faster(3) 5. A: Clarify objectives(2); Explain more smoothly(2) 	<p>0 improved -2 need work <hr/>-2</p>
Total improved Total needs work			<p>+53.5(55%) -43.5 (44%)</p>

Appendix 4.

Table 2. Have Speakers Weaknesses Shown Improvement from Both Parties?
 -Differences of perceiving weaknesses between speakers and listeners-

Student no./ Nationality	Listeners' Final Peer Feedback	Speakers' Final Self-Evaluation	Gap not filled (%)
1./ USA	1. B: Enlarge fonts(7) 2. A: More research-based data needed(4); 3. C: Reduce fillers like 'umm'(4)	<ul style="list-style-type: none"> Nervous/ Unable to clearly explain things not fast Could not fit a lot of info in Need to get higher quality information and less quantity 	$\frac{+1 \text{ Perceived} - 2 \text{ Not Perceived}}{-1 \text{ Gap not filled}} (50\%)$
4./ Indonesia	1. C: More eye contact(3) 2. B: Fonts are too small(2); Add introduction(2); Objectives not included(2); C: Slight mumble when talking fast(2); Nervous(2)	<ul style="list-style-type: none"> Lack of introduction Maintain the time Not to talk too fast 	$\frac{+2 \text{ Perceived} - 4 \text{ Not Perceived}}{-2 \text{ Gap not filled}} (50\%)$
5./ France	1. C: Too fast(10) 2. B: Fonts are too small(6) 3. B: Graph is too small(4) B: Wordy(3)	<ul style="list-style-type: none"> Managing time Stress management Make the aim of my presentation clear in my introduction Amount of text on the slides 	$\frac{+1 \text{ Perceived} - 3 \text{ Not Perceived}}{-2 \text{ Gap not filled}} (25\%)$
6./ USA/ Japan	1. C: Speak more clearly/Speak up(6) 2. A: Use data(3); Too broad(3); B: Enlarge fonts(3); C: Be more enthusiastic/ Passionate(3); Intonation(3)	<ul style="list-style-type: none"> Nervous Speak more smoothly Could not add details on production methods due to time Unable to have louder voice 	$\frac{+1 \text{ Perceived} - 5 \text{ Not perceived}}{-4 \text{ Gap not filled}} (17\%)$
7./ USA/ Japan	1. C: More confidence/nervous(5) 2. C: More eye contact(4) 3. B: Figures are hard to read(3) 4. A: Many jargons(2); More supporting research necessary(2); Improve your discussion(2)	<ul style="list-style-type: none"> Difficult to transition from one slide to another Present all the info that I practiced Need to improve my ability to explain topic to audience More actual scientific research/cases and data 	$\frac{+1 \text{ Perceived} - 5 \text{ Not perceived}}{-4 \text{ Gap not filled}} (17\%)$
8./ Germany	1. B: Text too small(7) 2. B: Small graphs(6) 3. C: Time management(3) 4. B: Add more information on slides(2); Use darker colors(2)	<ul style="list-style-type: none"> My presentation was difficult to understand Difficult to explain everything in just 10 minutes Skipped some important bits Need to sympathize with the audience Need to plan accordingly to the guidelines Plan the presentation better by preparing it in detail Need to get more feedback 	$0 \text{ Gap not filled} (0\%)$

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9./ Thailand	<ol style="list-style-type: none"> 1. A: Explain more(6) 2. C: Tone of voice/speak louder(5) 3. A: Add introduction(3); Needs better link between points(3); B: Figures are small(3); C: Be more expressive(3); Be more enthusiastic/ passionate(3) 	<ul style="list-style-type: none"> • Need to improve connection between ideas • Nervousness 	<p>+1 Perceived</p> <hr/> <p>-6 Not perceived</p> <hr/> <p>-5 Gap not filled (11%)</p>
10./ USA/Japan	<ol style="list-style-type: none"> 1. A: Add some successful examples/usage of IPS(5) 2. B: Words and figures are small(3); C: Improve eye contact(3) <p>A: Add more data to support claims(2); C: Show more passion/ enthusiasm(2)</p>	<ul style="list-style-type: none"> • Time control was a bit difficult • Talk a bit clearer (due to time control) 	<p>0 Gap not filled (0%)</p>
11./ Indonesia	<ol style="list-style-type: none"> 1. C: Talk too fast(24) 2. B: Enlarge font size(4) 3. C: Slides are overloaded with text(2); Time management(2) 	<ul style="list-style-type: none"> • Speaking too fast • Need to reduce my anxiety 	<p>+1 Perceived</p> <hr/> <p>-3 Not perceived</p> <hr/> <p>-2 Gap not filled (25%)</p>
12./ Indonesia	<ol style="list-style-type: none"> 1. B: Too crowded with information(9) 2. B: Figures/Tables were hard to see(5) 3. B: Add more colors(2); Information is not readable(2); Lack of engaging pictures(2); C: Nervous(2) 	<ul style="list-style-type: none"> • Difficult in overcoming nervousness • Need to improve the way I pronounce words 	<p>+1 Perceived</p> <hr/> <p>-5 Not perceived</p> <hr/> <p>-4 Gap not filled (16%)</p>
13./ Indonesia	<ol style="list-style-type: none"> 1. B: Text size too small(12) 2. C: More eye contact(5) 3. A: Aim unclear(2); B: Improve photos/images(2); C: More gestures(2); Engage more with the audience(2); Speak up(2); Talk more enthusiastically(2); Add intonation(2) 	<ul style="list-style-type: none"> • I haven't reach wide information in the topic I chose • Need to make more eye contact • Need to provide more backgrounds(data) • Need to attract attention of the audience 	<p>+1 Perceived</p> <hr/> <p>-8 Not perceived</p> <hr/> <p>-7 Gap not filled (8%)</p>
14./ Viet Nam	<ol style="list-style-type: none"> 1. B: Text is too small(13) 2. B: Too wordy(7) 3. B: Include your name in your first slide(3) 4. B: Figures are small(3) 	<ul style="list-style-type: none"> • Too nervous • So many pauses, mistakes • Less body languages • My pronunciation, talk • Slides should be prepared better 	<p>0 Gap not filled (0%)</p>
15./ Viet Nam	<ol style="list-style-type: none"> 1. C: Time management(12) 2. C: Slow down(5) 3. B: Enlarge text(4) 4. C: Maintain eye contact(3) 5. A: A lot of data but little significance toward data(2); Consuming a lot of time in some slides(2); C: Relax/nervous(2) 	<ul style="list-style-type: none"> • Time management • Confidence • Problems with eye contact 	<p>+3 Perceived</p> <hr/> <p>-4 Not perceived</p> <hr/> <p>-1 Gap not filled (57%)</p>

16./ Indonesia	<ol style="list-style-type: none"> 1. B: Too much texts(6) 2. C: Fast(4) 3. A: Include summary(3) 	<ul style="list-style-type: none"> • Difficult to talk slowly • Nervous/Confidence • Should have gone into more details • Organize slides • Text from my slide is too small 	<p>+2 Perceived -1 Not perceived +1 Gap not filled (67%)</p>
17./ India	<ol style="list-style-type: none"> 1. B: Add summary/ conclusion(3) 2. A: Expand your topic/claims(2); B: Add references(2) 	<ul style="list-style-type: none"> • Add more content 	<p>+1 Perceived -2 Not perceived -1 Gap not filled (34%)</p>
18./ Philippines	<ol style="list-style-type: none"> 1. B: Too much colors(5); Text too small/much to read(5) 2. A: State your objectives(4); Confusing explanations(4) 3. A: Use more research-based evidence(3); C: Use more voice tone(3) 4. A: Explain terminology(2); Introductory part is too long(2); Unclear conclusion(2); C:More eye contact(2) 	<ul style="list-style-type: none"> • Nervous • Keep on repeating • Confidence and organization still need to be improved • Need to look at the audience more 	<p>+1 Perceived -9 Not perceived -8 Gap not filled (9%)</p>
19./ USA/Japan	<ol style="list-style-type: none"> 1. B: Use bigger fonts(5) 2. A: More supporting information/ case studies/ data needed(3); C: Speak more slowly(3); Avoid saying fillers like “uhm”(3); Nervous(3) 	<ul style="list-style-type: none"> • Nervous • Talking volume, speed, eye contact, explanations did not go as planned • Calming my nerves in front of a large audience • Keep track of time • Present on a more specific topic • Have a clear objective 	<p>+2 Perceived -3 Not Perceived -1 Gap not filled (40%)</p>
20./ Indonesia	<ol style="list-style-type: none"> 1. B: Text too small in some slides(5) 2. B: Add sources(2); Graphs too small(2); C: Maintain eye contact(2); Work on transitions(2) 	<ul style="list-style-type: none"> • Nervous • Too many things that I memorized rather than understanding about the context 	<p>0 Gap not filled (0%)</p>
22./ Indonesia	<ol style="list-style-type: none"> 1. C: Microphone too close(5) 2. A: More evidence/details needed(4); B: Graphs too small(4) 3. B: Make sure to have readable texts in your pictures(3); C: Vary your tone(3) 4. A: Need more support and connections between main points(2); Goals unclear(2); Give positive questions to the audience(2); C: Speak clearly(2) 	<ul style="list-style-type: none"> • Difficult to remove my anxiety • Choose the right word to explain something • Confidence 	<p>0 Gap not filled (0%)</p>

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23./ Indonesia	<ol style="list-style-type: none"> 1. C: Maintain more eye contact(8) 2. B: Less words on slides(6) 3. C: Work on intonation(3); Do not read off slides(3) 4. A: More data necessary(2); B: Enlarge some pictures(2); Use bigger fonts(2); C: Nervous/ relax(2) 	<ul style="list-style-type: none"> • Less reading to notes • Explaining • Slides 	<p>+2 Perceived</p> <hr/> <p>-1 Not perceived</p> <hr/> <p>-1 Gap not filled</p> <p>(67%)</p>
24./ Philippines	<ol style="list-style-type: none"> 1. A: Needs hard data to support points(12) 2. B: Some text was small(5); C: Fast(5) 3. A: Explain more(3); B: Pictures/ diagrams were hard to see(3) 	<ul style="list-style-type: none"> • Hard for me to maintain eye contact and interaction with my audience • Add more data to support my claims 	<p>+1 Perceived</p> <hr/> <p>-4 Not perceived</p> <hr/> <p>-3 Gap not filled</p> <p>(20%)</p>
25./ Philippines	<ol style="list-style-type: none"> 1. B: Too much text(12) 2. C: Too fast(8) 3. A: More supporting/hard data needed(6) 	<ul style="list-style-type: none"> • Time management • Lessen my nervous 	<p>0 Gap not filled</p> <p>(0%)</p>
26./ Philippines	<ol style="list-style-type: none"> 1. C: Speak slower(3) 2. A: Connect ideas/ Link main points(2); B: Add more visuals(2); Less words on each slide(2); Speak louder(2); Relax(2) 	<ul style="list-style-type: none"> • Spoke too fast • Nervous • I didn't use enough transition words • Use microphone next time 	<p>+4 Perceived</p> <hr/> <p>-2 Not perceived</p> <hr/> <p>+2 Gap not filled</p> <p>(67%)</p>
27./ Thailand	<ol style="list-style-type: none"> 1. C: Time management(5) 2. A: Difficult information(3); B:Packed information in some slides(3) 3. A:Some concepts require more explanations(2); B: Some figures are small(2); C:Fast(2) 	<ul style="list-style-type: none"> • My topic is too specific to the audience • Practice more to make my presentation smoothly • Time control is still my challenge 	<p>+2 Perceived</p> <hr/> <p>-4 Not perceived</p> <hr/> <p>-2 Gap not filled</p> <p>(33%)</p>
28./ Philippines	<ol style="list-style-type: none"> 1. A:Give more details(5) 2. A: Improve objectives(3) 3. A: too many ideas(2); The topic is too general(2); Use more references(2); Explain some vocabulary(2); B: Slides flipped on its own(2); Small fonts(2); Too much animation(2); C: Hard to hear words from microphone(2) 	<ul style="list-style-type: none"> • Need to improve the content of my presentation • Objectives must be clearer • My conclusion was not well-connected to the objectives • Put titles on my slides 	<p>+1 Perceived</p> <hr/> <p>-9 Not perceived</p> <hr/> <p>-8 Gap not filled</p> <p>(9%)</p>
29./ Indonesia	<ol style="list-style-type: none"> 1. B: Enlarge text(11) 2. B: Too wordy/crowded(5) 3. C: Time management(4) 4. B: Enlarge figures(3); C: Talk slowly(3) 	<ul style="list-style-type: none"> • There should be summary and conclusion which need to be stated • Time management • Slide management 	<p>+1 Perceived</p> <hr/> <p>-4 Not perceived</p> <hr/> <p>-3 Gap not filled</p> <p>(20%)</p>
30./ Indonesia	<ol style="list-style-type: none"> 1. B: Some words are small(4) 2. A: Add any conflicts/ pros and cons(3); C: Soft voice/ louder/ Use a microphone(3) 3. C: Improve eye contact(2) 	<ul style="list-style-type: none"> • Talked too fast • Can explain more specifically • Add more content • Talk slower • Make my slides clearer and understandable 	<p>+2 Perceived</p> <hr/> <p>-2 Not perceived</p> <hr/> <p>0 Gap not filled</p> <p>(0%)</p>

32./ Russia	<ol style="list-style-type: none"> 1. B: Too much information/Details/complicated(9) 2. A:Complex/Difficult(4); Need to explain well(4) 3. Jargon use/Define technical terms(3) 	<ul style="list-style-type: none"> • Difficult to balance essential background explanation and main topic explanation • State main topic more clearly • Put references in the bottom of every slide 	<p style="text-align: center;">+3 Perceived -1 Not perceived +2 Gap not filled (75%)</p>
34./ Korea	<ol style="list-style-type: none"> 1. A: More data necessary(5); B: Too much text(5) 2. B: Enlarge some text(4) 3. A: Add explanations to some slides(3) <p>A: Use more research(2); Show your objectives(2)</p>	<ul style="list-style-type: none"> • Too short • Need to talk with confidence 	<p style="text-align: center;">0 Gap not filled (0%)</p>
35./ Japan	<ol style="list-style-type: none"> 1. C: Maintain eye contact(8); Prepare more/practice more(8) 2. A: Add data(5); C: Be more confident(5); Speak louder(5) 3. C: Time management(4) 4. C: Speak faster(3) 5. A: Clarify objectives(2); Explain more smoothly(2) 	<ul style="list-style-type: none"> • Includes scientific terms a lot • I should give a presentation about my major related, but gave a try on something I was unfamiliar with so I get stuck and forget what to say afterwards 	<p style="text-align: center;">0 Gap not filled (0%)</p>