

From Conferences and Seminars to University Classrooms: Using Redesigned Academic Poster Presentations to Deepen and Assess Student Learning and Understanding

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Abstract

The purpose of this research project was to explore the use of Redesigned Academic Poster Presentations to deepen and assess students learning in university classrooms. The format of academic poster presentations, with their focus on presenting academic research multiple times to small audiences, was maintained but changes were made to the design and processes involved in creating academic poster presentations to adapt them for classroom use and to enhance the learning experiences for the presenters and for the audience. In other words, the format was redesigned to include greater emphasis on learning, on creativity, and on assessment. Based on the quantitative and qualitative data (including online surveys, student interviews, classroom observations, students written work, and a thematic content analysis), the findings indicate that using Redesigned Poster Presentations increased students understanding of the course content, improved students' communication skills and confidence, and was an effective approach to assessing students learning. Issues with the validity of the peer feedback and the small sample size were identified and recommendations are offered to adapt and improve the approach in future for university classrooms in Korea and Japan.

From Conferences and Seminars to University Classrooms: Using Redesigned Academic Poster Presentations to Deepen and Assess Student Learning and Understanding

Poster presentations deepen students understanding as they require students to clearly explain their ideas, present their research and understanding to others, and to help their audiences to learn. We have all sat through uninteresting or poorly designed PowerPoint presentations at seminars or in classrooms and left at the end asking “what was that about? What did I learn over the previous hour?” We have also experienced presenters who either read their PowerPoint slides to the audience or who do not seem very sure of the content they are trying to deliver. PowerPoints have become so overused in university settings by professors and students that PowerPoints have become a cliché and lost their “*power*” to communicate their points. In contrast, academic poster presentations, which are usually given at academic conferences and seminars, offer a more creative approach to engage the presenters and the audience in academic topics. This is especially the case in Korean universities where Redesigned Poster Presentations can help address a number of issues facing university students. While this paper mainly focuses on Korean contexts, many of the issues and solutions are relevant and informative for university classrooms in Japan as well.

First of all, learning approaches in Korean universities generally focus on the quantity rather than the quality of students learning (OECD, 2009; 2014). Learning can often be passive, teacher centered, and based on memorization, leaving students with a

superficial rather than a deep understanding of their area of study. While there are examples of quality learning and quality teaching, these do not reflect the majority of students' experiences. For pre-service teachers especially (the participants in this paper), students study different learning approaches and theories but they do not have the opportunity to learn using these approaches (Shin, 2012). In other words, there is little 'learning by doing' and as a result, pre-service teachers are unlikely to implement student centred learning approaches in the classroom effectively.

Second, current assessment techniques are often overused, unfair, or ineffective. Many students dislike PowerPoint presentation assignments and group projects because it is too often the case that some students do all the work while other students do little or none (Nilson, 2010). Since everyone in the group receives the same grade for the presentation or product, it can be too easy for some students to leave all the work to others since they know some of the other students will work harder to compensate (Santrock, 2010). Another common assessment technique is writing an essay or report. While it could be suggested that this method is a more accurate form of assessment (Nation, 2008) it can be unfair when students are writing in English since it then becomes more of a test of students' English writing skills than of their learning and understanding of the content. Students may understand the content very well but may lack the English writing skills to express this understanding clearly or within the time restraints of the assignment.

A third issue is the impact of culture on students' learning styles (Santrock, 2010; Vieluf et al, 2012; Della Chiesa et al, 2012; Nisbett, 2004). Students from collectivist, East Asian countries can be shy and find it difficult to speak in public. There can be a lot of societal pressure to conform and students who stand out can be afraid of losing face or of being judged by others (Yang & Huang, 2008).

A fourth issue, common in universities around the world, is the relative ineffectiveness of lectures and presentations as a learning approach. There is evidence (Nilson, 2010; Brown et al, 2014) that students usually pay attention to the first 5-10 minutes of a lecture, after which they enter a more passive state, refocusing their attention on the lecture 5-10 minutes at the end. In other words, students only engage with the content at the beginning and at the end of the lecture and generally do not pay attention to what is said during the middle. Research also shows that the amount of information students remember after a lecture declines sharply from 80% immediately after the lecture to 20% four weeks later (Oakley, 2014). While an inspiring professor or more interactive lectures can change these results and promote more positive and effective learning outcomes (Nilson, 2010), not all students experience lectures which engage them regularly. Given the similarities between lectures and presentations, student presentations may not be a very effective learning experience for the presenter's peers, especially when they are overused or the presenters are not provided with the adequate support or training.

The final issue concerns the weaknesses and limitations of presentations and PowerPoint as a learning tool and assessment approach. Nilson (2010) identifies 7 main weakness or potential problems:

- 1. giving presentations can be time consuming and use up a lot of valuable class time, which leaves less time for other learning activities.** Including one activity in a course always means some other activity is left out.
- 2. Students who have not yet given a presentation are often thinking or worried about their own presentation rather than focusing on the presentations of their classmates.** For students who have already given a presentation, they may feel their work and learning has already finished and so pay little attention to their classmates' work. This is especially the case when students do not have to do anything as audience members; when they are not required to do any peer feedback or peer assessment.
- 3. PowerPoints are overused in universities,** which may lead to a lack of engagement from the presenters and from their classmates.
- 4. Students usually only have one chance or opportunity on each course to give a presentation.** This can lead to the situation where the students just memorize all the content and repeat this information during the presentation instead of developing a deep understanding of the content. Since they are only giving one presentation, they may feel it is safer and easier to memorize the content rather than being able to explain

the ideas during the class. This also leads to presentations which sound monotonous, overly academic, and lacking in passion and spontaneity. The learning benefits of memorizing information in this way are very questionable (Oakley, 2014; Brown et al, 2014; Cavanagh, 2011) and 21st Century Learning should be about promoting deep and long lasting learning rather than simply memorizing information, of constructing understanding rather than copying it (OECD, 2010).

- 5. Presentations can suffer from a lack of interaction.** Due to time constraints, students may only have a few minutes to ask questions after the presentation and this should really be where both the presenters and audience are able to discuss the ideas and enhance their understanding. In other words, the time after a presentation can be where the real learning happens but it is often only a few minutes long or very few questions are asked.
- 6. It can be more difficult to accurately assess PowerPoint presentations.** Because PowerPoint presentations take more class time, students are often required to present in groups (3-4 students). This makes it easier for some students to potentially hide behind the work of others. Larger groups can also allow individual students with less time to develop their presentation skills.
- 7. While PowerPoints can be customized and enhanced, the program lacks creativity.** Some PowerPoints can be highly visual and imaginative but too often they are more formulaic and generic. The layout of standard PowerPoints which

includes text and bullet points can encourage presenters to become too dependent on the PowerPoint itself, and the PowerPoint, rather than the presenter, becomes the main focus. Imagine TedTalks with PowerPoints....it would become a sharing of ppt files rather than a sharing of ideas.

Academic poster presentations, on the other hand, are normally used by professors and researchers in academic contexts such as seminars and conferences but they are not commonly used in university classrooms as a teaching or learning activity. Therefore, this research project aims to explore the impact of moving poster presentations from conferences and seminars into the classroom where they can become a learning activity which enhances students understanding of the course content.

What are Poster Presentations?

At most academic conferences and seminars guest speakers will present their research or talk about a topic to a large audience for 40 minutes to one hour. The presentation or lecture is only given once, most of the time is taken up with the speaker talking, and the audience is large. PowerPoint or other presentation software are often used to support the lecture or talk. In contrast, poster presentations also take place at academic conferences but the format and purpose is different. Presenters explain the main ideas and findings of their research to smaller audiences on one static poster. The presentation usually lasts ten to fifteen minutes and it is given several times to individuals or groups of people

instead of a large audience. These small audiences also change regularly as people walk from poster presentation to poster presentation listening to different speakers and learning about different ideas. Imagine an art gallery where people can move from exhibit to exhibit and at each one an expert explains the main points or features of the exhibit to them but instead of a painting, an academic poster is the focus instead.

There are several benefits of using poster presentations as a learning approach in university classrooms (Nilson, 2010):

- 1. Poster presentations are more interactive.** It is easier for members of the audience to ask questions since the sizes of the audiences are smaller and so they may feel less social pressure or anxiety (Santrock, 2010). It is also easier because the audience is much closer physically to both the presenter and to the poster itself. This interactivity works the other way too since a close proximity to the audience members makes it easier for the presenter to interact with them and have more intimate and personal interactions.



Figure 1.1. Students giving poster presentations in class about education in different countries

- 2. Poster presentations develop students' presentation skills and confidence because they give their presentation several times rather than just once.**

Repeatedly giving the same presentation with different audiences enhances students speaking fluency and communication skills. It also allows students to better organize and explain their ideas as they deliver multiple consecutive presentations.

- 3. The poster scaffolds students learning.** Students can use the poster to help organize and support their presentation. Since all of the main ideas are contained on just one static poster, it does not dominate a presentation in the way that presentation software can and so there remains a strong focus on the presenter(s) and on explaining their ideas or research clearly.

- 4. Poster presentations do not employ any digital technology and so technical issues or problems are avoided.** It also means they can be used in countries where access to technology may be limited.

- 5. Poster presentations provide opportunities for students to develop their research skills.** Students have to research their chosen topic and then create one poster which reflects the main ideas, findings, or conclusions of their research.

- 6. Poster presentations help students develop their understanding of the content.** Students are interacting with the content when giving their presentations several times and they are also explaining and teaching their ideas to others. Teaching something to others is one of the best ways to learn and to understand it (OECD, 2010).

7. Poster presentations are shorter than lectures and so it is easier to hold and keep the audience's attention, which leads to deeper learning for the other students.

8. The audience members are more active participants in a poster presentation.

While not required at academic conferences and seminars, in classroom situations students should either evaluate the presentations of the other students by completing a peer assessment rubric or taking notes and summarizing the main ideas of the presentations in the form of a written report. Instead of listening passively to a PowerPoint presentation, the audience are actively engaged.

9. Poster presentations save time. Whereas research based academic presentations can often take between 20 and 40 minutes for each presentation, poster presentations take between 8-15 minutes (every classroom minute is valuable). In addition, several pairs or groups can present at the same time since they are presenting to small audiences which are repeatedly changing. This means half the class can present in one 40-minute class and the other half can present in the following class. All the students can complete their presentations in 2 classes rather than potentially 10 classes, saving 80% more class time to either discuss the ideas further or to do other learning activities to help students learn. The time saved also means the presenting groups can be smaller (2 instead of 4 students), which makes it easier to assess each student's individual effort as well as providing the students with more opportunities to develop their presentation skills.

Poster presentations are recognized at academic conferences and seminars as an effective way to present and share research and ideas but I suggest they should also be recognized as a learning approach by educators in university classrooms. For students there is less standing on stage presenting ideas to the audience and more standing off stage with the audience helping them to understand.

What are Redesigned Poster Presentations?

Redesigned Poster Presentations share many of the features and benefits of academic poster presentations used in conferences and in classrooms but there are differences in their design and in the processes involved to enhance learning for students. Redesigned Poster Presentations are more creative, promote deeper learning, and are a flexible assessment tool. Unlike traditional poster presentations, they are highly visual. Instead of text, students draw the main ideas and key content on the poster. This prevents students from just reading the information on the poster and instead forces them to verbally explain the main ideas. It also encourages students to make connections between the content and their drawings. In other words, drawing the content rather than writing promotes more creativity, more thinking and more presenting. In addition, Redesigned Poster Presentations can assess either understanding of the content or presentation skills, depending on how the design of the approach. Teachers can choose to focus on assessing content knowledge or presentation skills, depending on what they deem important for that particular assignment. For content, students submit a written script before giving their visual presentations and for presentation

skills, the other students in the class complete peer feedback reports. Finally, an often overlooked factor in the classroom is the enjoyment factor. For most students drawing is a lot of fun; drawing and presenting their ideas can add another level of enjoyment to an activity or assignment both for the presenters and for the audience. With Redesigned Poster Presentations, the pencil can be mightier than the keyboard. Of course, a valid question which a teacher may ask is ‘how can students visually present all of the content on one poster?’ The answer is that they don’t! Students only draw the main ideas and supporting details. They add the rest of the content by explaining their drawings/ideas so the drawings act as a scaffold to support the students presentation skills. One issue with creativity is that students are often told to ‘think outside the box’ without any idea of how to do this or what information to include. Not only is this phrase overused but it is often plain wrong. Total creative freedom can constrain rather than promote creativity. However, sometimes we need boxes; thinking within a box (thinking within limits or guidelines) can foster more creative thinking (in the case of Redesigned Poster Presentations the box is a poster). As Ron Beghetto, the creator of the 4C model of creativity said, "I have a real problem with 'thinking outside the box' because in reality we need to think creatively inside many boxes” (Beghetto, 2013). The name ‘Re**DESIGN**ed Poster Presentations’ was also chosen for the increased emphasis on design and visual features in this approach. For a more detailed explanation of Redesigned Poster Presentations, please read pages 15-19 of this paper).

The research project aimed to explore whether Redesigned Poster Presentations can be an alternative learning and assessment approach to more traditional forms of presentations. More specifically, the project sought to answer the following 3 questions:

- 1. What impact did Redesigned Poster Presentations have on students understanding of the course content?**
- 2. What impact did Redesigned Poster Presentations have on student's communication skills?**
- 3. Are Redesigned Poster Presentations an effective way of assessing students learning and understanding?**

Introduction to the Study

The Participants

18 Korean university students took part in the research project. Of these, 16 students responded to the post course online survey (6 male, 10 female). Almost half the students were 20 years old, and the other students were aged between 19 and 25. All the students were pre-service teachers majoring in English Education (13), Computer Science Education (2), or Social Science Education (1). As can be the case in any class, students' level of English, background knowledge, and educational experiences varied. Only 2 students had given a poster presentation in university before (in another class taught by the researcher).

The Study

The research project was designed to explore the use of academic poster presentations as a learning approach for university students. By creating poster presentations, students would be able to quickly and easily share their research and their understanding with their classmates.

Changes were made to the design and processes involved in creating an academic poster Presentation to adapt it for classroom use and to enhance the learning experiences for the presenters and for the audience (referred to in this paper as *Redesigned Poster Presentations*).

First, instead of presenting individually as is often the case at conferences and seminars, students worked collaboratively in pairs to research their chosen educational topic and to create and present this research to others in the form of a poster presentation. This allows students to develop their collaborative skills and to scaffold and support each other's learning (OECD, 2010).

Second, the design of the posters was changed. Instead of including large amounts of text on the posters, students had to visually represent their research and ideas by drawing them on the poster, by attaching printed images, or by using a combination of these resources. Text was allowed but only in the form of a title, headings, or key words. Visually representing academic and educational ideas can be challenging but it was hoped that doing so would make the activity more creative and enjoyable for the students as well

as promote deeper learning. Students would have to think about and reflect on how to draw their educational and academic ideas so that they would be clear and easy to understand for their audiences, encouraging greater interaction and more connections with the content and hence leading to deeper learning (OECD, 2010).

Third, students had to complete two versions of the poster presentation, each of which used different forms of assessment. The first assessment method focused mainly on students' understanding of the course content and the second assessment method focused mainly on students' presentation skills. In the first poster presentation assignment, students researched their topic and wrote a script or report outlining the main features and ideas of their topic and how to apply the topic in the classroom. This allowed students to combine their understanding of theory and practice. The report was assessed by the professor and accounted for 80% of the grade, with the remaining 20% coming from peer assessments of students' presentation and poster. In the second poster presentation assignment, students did not have to write a script. Instead, 80% of grade came from peer assessments of their presentation and poster and they were awarded 20% for completing two feedback reports which provided the other presenters with feedback related to their presentation as well as suggestions for improving their presentation skills in future. Therefore, for both assignments, both the presenters and the audience were actively involved in learning from and with each other. Students were provided with a poster presentation handbook early on in the course explaining what a poster presentation is and offering guidance on how to give

an effective presentation. Rubrics and a peer assessment report were provided in both assignments to guide students' assessments and feedback. Each pair were given a large poster and drawing materials on which to draw and represent their ideas.

Additional learning benefits of Redesigned Poster Presentations in the classroom

As well as the benefits of conventional academic poster presentations in seminars and conferences mentioned earlier, there are some additional learning benefits of Redesigned Poster Presentations:

- 1. They are student centered.** While academic poster presentations are usually designed and given by an individual expert, the Redesigned Poster Presentations are created and presented by students. They allow students to engage with the content and to share and demonstrate their understanding of that content with other students.
- 2. They scaffold students learning and development.** Korean students can find giving presentations challenging. Cultural influences mean it is not always easy for them to stand in front of others and be the focus of attention (Nisbett, 2004). They may also feel more pressure and anxiety since they may not have had the practice or opportunities to develop their presentation skills or their English speaking skills (Shin, 2012). The poster can act as a scaffold so that they can develop their presentation skills and language skills and try to overcome any cultural barriers. The visual images act as a prompt or guide to help the students stay focused and to remind them of the

key ideas and points. They do not become overly dependent on the poster and just read the information as so often happens in a PowerPoint presentation. Instead, the poster acts like a scaffold should and remains there in the background to support students' learning if they need it. The poster also promotes the learning of the audience since the images and visuals can make the content and the ideas easier to communicate and comprehend.

- 3. They develop students' collaborative skills.** Whereas poster presentations are usually given by an individual, for Redesigned Poster Presentations students work in pairs to create and present their ideas and so collaborate together to manage the workload, share and revise ideas, and to support each other.
- 4. They develop students' assessment and peer feedback skills.** Students are provided with rubrics when assessing the work of others. This teaches them the features that they should include when designing and giving their own presentations and also helps them to accurately assess the work of others. In addition, the peer feedback reports help them to provide accurate feedback to others to enhance and improve their learning in future. The rubric and additional questions help support the feedback process for students so that they can develop these important skills.
- 5. The highly visual nature of the Redesigned Poster Presentations helps students to actively construct their learning and understanding.** Students use the images on the poster as prompts and actively construct their understanding of the topics as

they are explaining them (OECD, 2010). Instead of reading from a script or reading from PowerPoint slides, the image can act as a foundation around which students can construct their understanding, making it easier to reincorporate this new learning into their prior knowledge or long term memory. The connections made between the images and the content also make it easier to recall the relevant information later.

- 6. The highly visual nature of the Redesigned Poster Presentations develops students' creativity.** Students have to come up with engaging and appealing visual representations of the content and their ideas to help the audience understand the topic. This kind of activity would appeal to both visual and kinesthetic learners. Since both of the students are responsible for designing the poster, the process also promotes a more hands on, learning by doing approach, which can make learning more fun and enjoyable as well as more motivating since students can feel more ownership of both the process and the product.
- 7. The idea is a simple one and so is easy for pre-service teachers to grasp and implement.** Most students have experiences of creating posters for events or for projects at school. By combining the collaborative and playful aspects of such past activities with the focus and organization of academic poster presentations from conferences/seminars, students can more easily enhance their own teaching and learning skills as well as share their ideas and learning with others. With appropriate scaffolding and guidelines, the approach is easy to implement and easy to understand.

8. Pre-service teachers deepen their pedagogical knowledge and skills by learning through an approach instead of learning about an approach. On many teacher training programs teachers may learn about different theories and learning approaches but have little practical experience of applying them in real classroom situations (Shin, 2012). Where direct teaching experiences are limited or not available (In Korea students have 6 weeks of observation and teaching in schools), it is vital that students have successful learning experiences involving different learning approaches in university so that they develop the understanding and competencies required to introduce them in their own classrooms (Ertmer & Ottenbreit-Leftwich, 2010). By providing students with the opportunity to successfully design, create, and present their posters, students develop the pedagogical understanding and skills to use the approach with their own future students. Therefore, it becomes a way not only to demonstrate their own learning at university but also a way to enhance the learning of their own students in their future classrooms. Poster presentations are a tool used by experts to teach others but they also have great potential as an educational tool for students who are learning to become expert teachers.

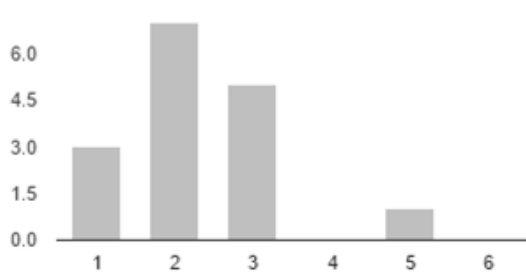
Data Methods and Results

The research project used a mixed methods approach. Both quantitative and qualitative data instruments were used. First, an online post course survey was used to

collect data about students learning experiences. The survey collected a mixture of quantitative and qualitative data. Students completed a multiple choice Likert scale when responding to the online survey, where 1 = strongly agree and 6 = strongly disagree. A Likert scale of 6 was used to encourage students to take a position or opinion on each statement since with Likert scales of 5 students can often default to the neutral 3 option (Cohen et al, 2007). Open questions were also included at the end of the survey. An online survey was chosen as it is easier to complete, easier to administer, and allows students space to write as much as they want when answering the open questions (Cohen et al, 2007). 16 out of 18 students responded to the post course online survey and 14 of out 18 students answered the written questions on this survey. The average number of responses to the written questions was 13. A one hour semi structured interview with one student was used to collect more qualitative data. This format was chosen over an open interview due to time constraints (most of the participants left the university immediately after the course finished). The majority of the interview questions were taken from the post course survey and further questions were asked which helped to delve deeper and expand on the students' ideas and opinions. The interview was transcribed to allow for closer examination of the data as well the identification of major themes, points and issues (see Appendix C). Observations from the presentations, the scripts/reports, the posters, and the peer feedback forms and comments also provided valuable data about the students learning experiences during the research project.

Results and Findings

I believe poster presentations are an effective way to learn.



Writing a script for poster presentation improved my understanding of the topic.

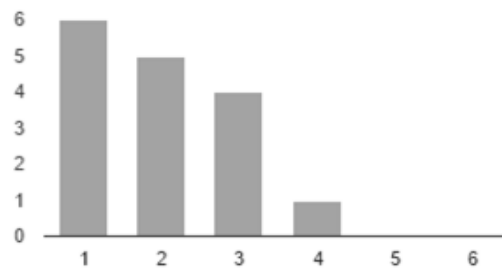


Figure 2.1. (left) Students who agreed poster presentation are an effective way to learn; (right) students who agreed writing a script improved their understanding of the topic.

Statements	1	2	3	4	5	6
I enjoyed giving poster presentations in class.	25 %	31 %	38 %	6%	0%	0 %
I believe poster presentations are an effective way to learn.	19 %	44 %	31 %	0%	6%	0 %
My language skills improved from doing the poster presentations.	13 %	31 %	44 %	6%	0%	0 %
Poster presentations are an effective way to assess learning.	19 %	24 %	45 %	0%	13 %	0 %
I am going to use poster presentations to teach my students in my class in future.	31 %	38 %	25 %	6%	0%	0 %
Writing a script for poster presentation I improved my understanding of the topic.	38 %	31 %	25 %	6%	0%	0 %
Writing a script is not important for the poster presentation	25 %	25 %	13 %	6%	19 %	1 3 %
I learned a lot from listening to the poster presentations of my classmates.	19 %	31 %	44 %	6%	0%	0 %
I prefer doing poster presentations instead of giving PowerPoint presentations in front of the whole class.	19 %	38 %	25 %	6%	13 %	0 %
More professors should use student generated poster presentations in their classrooms.	25 %	31 %	31 %	13 %	0%	0 %

Figure 2.2. Main results from the post course online survey

What impact did Redesigned Poster Presentations have on students understanding of the course content?

The data collected showed that using Redesigned Poster Presentations had positive outcomes for students learning and understanding. The majority of the students enjoyed giving poster presentations in class (94%¹) and believed that poster presentations are an effective way to learn (94%²). 38% of students responded that giving poster presentations was their favourite activity on the course. All of the students who responded in writing on the survey (64%) felt that poster presentations developed their understanding of their topic.

"I researched my topic and organized for long time. Also as making poster, I tried to think how I can make poster more creatively. During this, activities like these make me develop a good understanding." (Student E, age 23)

"To be able to speak in front of others, I should be professional about the topic. I learned a lot about the topic and talked a lot with my partners." (Student P, age 21)

"To make a poster, students should understand the topic well, and do a research of related pictures. It helped us understand the topic easily while looking for pictures and more information." (Student M, age 21)

"In my experience, researching and explaining about something helped me to understand information more easily than just sitting on my chair." (Student J, age 24)

The interview data also found positive impacts for the students understanding:

¹ 25% Strongly Agree/31% Agree/38% Slightly Agree

² 19% Strongly Agree/44% Agree/31% Slightly Agree

"We have to make it into a vivid image so we have to understand the topic well. I had to make the sentence into a picture so I had to understand the topic and the contents well in order to make it....I had to choose the important parts. I could focus on the main parts, on the main ideas...I have to make the result or my understanding into a real product." (Student S, Interview)

"We researched some benefits and the examples....We googled multidisciplinary lessons and there were a lot of examples....I didn't know much about Canadian multiculturalism so it was very helpful to learn about as well." (Student S, Interview)

Students also felt that their understanding and learning improved a lot from listening to the poster presentations of their classmates (94%³).

What impact did Redesigned Poster Presentations have on students' communication skills?

Poster presentations improved students' English language skills and presentation skills. The majority of students felt that giving poster presentations improved their language skills (88%⁴).

"We have collaboration and communicate each other with my classmates and we have fun to make poster." (Student C, age 20)

³ 19% Strongly Agree/31% Agree/44% Slightly Agree

⁴ 13% Strongly Agree/31% Agree/44% Slightly Agree

"It helped me to practice speaking. It gave practice time and it was all about student centered activity." (Student P, age 21)

44% of students felt that the greatest learning benefit of poster presentations was the development of their presentation skills.

"Using various methods to present ideas can make students become interested in learning." (Student M, age 21)

"I could improve my communication skills! I tried to present effectively. I practiced a lot." (Student E, age 23)

"It made me feel becoming an expert about other country. And I was interested in telling a story about the country for audience." (Student B, age 21)

"After the poster presentation, I had an opportunity to express my opinion about the 5Cs to other students for new activity in the class. Then, I could speak more fluently and better than not only before but also the poster presentation. Speech over and over again helps me to reorganize information and choose better words or presentation for audience." (Student J, age 24)

My language skills improved from doing poster presentations.

I prefer doing poster presentations than giving PowerPoint presentations.

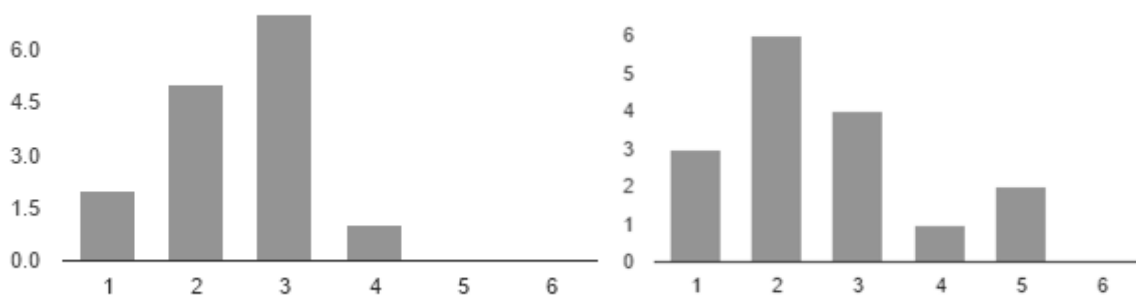


Figure 2.3. Results from the post course online survey

The interviewee supported the comments from the online survey:

"(Poster presentations are) helpful because we become better as we practice more and more. We had 3 chances before so at first it was difficult but then it became better and better...As we could practice a lot, we could be....better presenters. We could think...we could easily... think and organize things. Now I am going to do this and now I am going to do this. I know the order so I can do it more easily the next time and improve my presentation skills and contents of my speech." (Student S, Interview)

Two revealing results from the survey relate to the use of PowerPoint and the effects of poster presentations on students' confidence. Most students agreed that they prefer doing poster presentations instead of giving PowerPoint presentations in front of the whole class (81%⁵), with 19% disagreeing. As one student explained:

"At a close distance, speaking in English for someone was a new experience unlike the PowerPoint presentation in front of many people. With the close distance, I could how much audience were following me and choose what the tone, the speed or the words are proper." (Student J, age 24)

In addition, a quarter of the written responses referred to developing their confidence as one of the main learning benefits of doing poster presentations:

⁵ 19% Strongly Agree/38% Agree/25% Slightly Agree

"My writing and speaking abilities were improved and I gained more confidence of speaking in front of others." (Student O, age 21)

"I prepared well and spoke a draft with a confidence attitude." (Student A, age 21)

The interviewee expressed similar sentiments:

"I think poster presentation is better (than PowerPoint presentations) because we can have better understanding of the topic and the content while we draw or make it into a visual project...The audience is small (so) it is less stressful...Korean are less likely to express their ideas when they are in front of (an audience).They find it difficult to express their ideas when they are in group or in a huge group, a big group. In my case, my partner became better and better as we practiced so we practiced more she became a better performer." (Student S, Interview)

In addition, she also described the benefits of the poster presentation on her writing skills, her growing awareness of audience, and her motivation:

"when writing we know that I will be presenting it to others so maybe when we can write better, we can try to be a better writer because I have to publish it to others. I didn't know that it was important to use easier expressions before. I used some complicated words, big words before in my essays but then I learned that it is better to use easier or simple words....what I had accomplished can be shown to others so I feel more rewarding and I can share my ideas and I can also see other peoples work at the

same time so I think that is more helpful... I think it motivates students." (Student S, Interview)

Are Redesigned Poster Presentations an effective way of assessing students learning and understanding?

Students perceived giving poster presentations as an effective way to assess their learning (68%⁶). According to one student:

"Poster presentations will be a good option to assess the students' performance.

However, the term and chance should be limited. I think once a semester will be good."

(Student N, age 24)

Two different assessment methods were compared. For the first poster presentation, students researched their topic and then submitted a written script or outline of their planned poster presentation, accounting for 80% of the assignment. This included a short introduction explaining the context, the main ideas of their topic, and how to apply those ideas in practice. The outline had to be at least 500 words and students wrote it collaboratively. The remaining 20% was calculated from the peer feedback assessment reports written by their classmates. The second poster presentation did not include a script.

Instead, students worked together to research their topic and design their poster. The assessment was student centered and based on the peer feedback rubrics completed by their

⁶ 19% Strongly Agree/24% Agree/45% Slightly Agree

classmates. The remaining 20% was based on completing the peer feedback reports where students wrote constructive comments on the posters which they evaluated. The students being assessed did not see the grades awarded to them by the other students. This decision was taken because many students expressed a lot of concern about grading fairly if their classmates knew who was responsible for their grade.

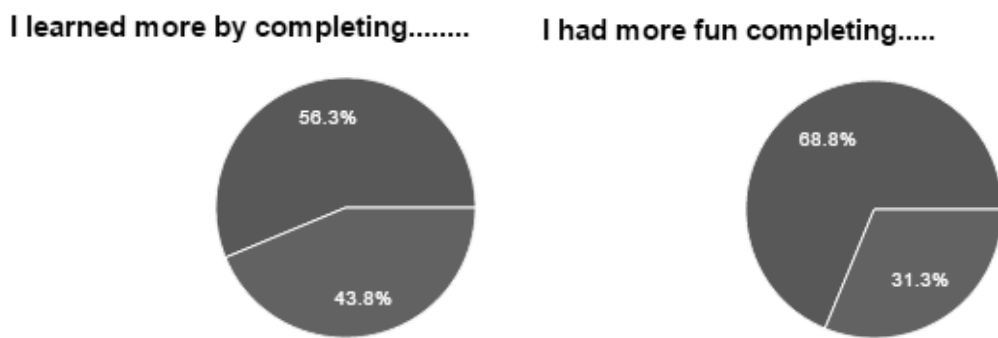


Figure 2.4. (left) Just over half the students learned more by writing a script before creating their poster; (right) most students had more fun completing the second poster presentation which did not include writing a script.

The results on which method was more effective for assessing learning were mixed. 44% of students felt they learned more by completing poster presentation 1, with 56% choosing poster presentation 2. Similarly, 44% of students felt that poster presentation 1 was a more accurate and valid for of assessment compared to 56% for poster presentation 2. However, 69% of students felt they had more fun completing poster presentation 2. Therefore, while students see value in both methods of assessment, they enjoyed more doing poster presentation 2, probably because writing the script was challenging and time consuming for some students. However, it may also be the case that they enjoyed doing the

second poster presentation more because they were more familiar with the process and format of the approach. More data is required to better understand these results. From an instructor perspective based on the products of the assignments (the script/outline and the peer feedback reports) and from observations made during the presentations, both assessment methods have value. The script made it easier to assess the students understanding of the topic and to grade the assignment more accurately and fairly using a rubric. Writing a script beforehand meant students presentations were organized and focused, although some students memorized the script instead of giving a more natural, spontaneous, and constructive presentation. As one student wrote:

(The professor) "wanted us to do it naturally, but frankly it is really hard to speak without script. In the first poster presentation, I memorized all the script. In the second one, I didn't write a script but just organized my thoughts and tried to do it naturally. But speaking without script was really hard...to make clear sentences immediately is not easy! I need more practice!!" (Student P, age 21)

Almost all the students wrote more than the 500-word limit and produced writing of a very high quality. The second poster presentations were also of a high quality, although this may be because students had practice from the previous assignment.

Discussion

What impact did Redesigned Poster Presentations have on students understanding of the topic?

The data shows that creating and giving poster presentations had positive impacts on students understanding of the content, resulting in deeper learning. How was this achieved? One of the biggest benefits of poster presentations is the greater interaction with the content. It is well known that the best way to learn something is to teach it to someone else. Students had lots of opportunities to do this since they gave multiple presentations in one session or class. In addition, the strong visual design of the posters also promoted more interaction with the content and encouraged students to think creatively about the topic and their ideas, leading to more connections and hence deeper learning. The images also helped scaffold students learning and acted as anchors to keep students focused on the essential ideas and hence on the important content.

The poster presentations also facilitated greater audience engagement and interaction. Instead of listening passively to a lecture, students were engaged in a dialogue with the presenters and being up close helped the audience connect and interact with the presenters and the content. The audience were also able to visit various presentations and so were exposed to more ideas and topics. Being part of an active, movable audience means students are less focused on thinking about or practicing their own presentations as can be the case with regular PowerPoint presentations; instead they are more actively engaged in listening to and interacting with other students' presentations.

Finally, the script also promoted more interaction and deeper learning. Students had to demonstrate their research and understanding in written form. Students were encouraged to write scripts which were clear, easy to understand, and well organized and so writing the script helped students prepare for their presentation, ensure the ideas and content were clearly explained and well organized, and provided evidence of students learning. In essence, the script was another scaffold on which students developed their ideas and understanding so that they could teach it to others clearly.

What impact did Redesigned Poster Presentations have on students' communication skills?

Giving poster presentations developed students' English language skills and presentation skills, which was evident from the class observations and from the comments students wrote on the online survey. Since students give their presentations 3-4 times instead of only once as with a regular presentation, they have more opportunities to practice these skills and they can improve each presentation as they progress. For example, giving multiple presentations can help students build their speaking fluency, explain their ideas clearly, and engage with their audiences. Students also get practice in answering questions about their topic from the audience, something which can be difficult to do even for experienced presenters. Giving multiple presentations helps students develop into experts not only on their topic but also as presenters. It provides the opportunities, practice, and

experiences students need to improve their presentation, speaking, and teaching skills. The visual poster acts as a scaffold to support their learning and development.



Figure 3.1. Students presenting and explaining their ideas

Students can also learn from the presentations of the students, both when they observe a variety of presentations and when they are writing feedback for the other students. This helps them to identify what works and what does not work, and to learn from both the strengths and weakness of others. They also receive feedback from their classmates, which provides suggestions on how they can improve their presentation skills in future.

An unintended positive result from the research project was the improvement in some students' level of confidence. As mentioned before, Asian students can feel more shy and anxious about presenting in public (Santrock, 2010), which can interfere with their learning and performance. In addition, passive and teacher centered learning approaches do not provide students with the space and support they need to grow and develop into confident learners or confident teachers (Vieluf et al, 2012; OECD, 209; 2010). There are several

possible factors which could explain this development. It may be that having many opportunities presenting their ideas prompted this growth in confidence. It may also be that it was easier for students to present their ideas in front of smaller audiences (2-6 people) than in front of a large class. Since the presentations were shorter, students may also have felt less pressure under the spotlight and had time for short breaks between the presentations to recompose themselves and to refocus their energies. The poster presentations were also designed so that students were required to share the presentation time or content covered 50/50. With larger presentation groups, it can be easier for students lacking in confidence to hide or to let the other group members do the talking (Nilson, 2010). Sharing the presentation time between two students may have given shy students the space and opportunity to build their confidence. A final explanation may be the posters themselves. The visuals, created by the students themselves, can scaffold their presentation without overshadowing it. When needed, the visual prompts are there to help students whose nerves and anxiety might be getting the better of them. The lack of text also helps prevent students from merely reading from the poster, as can happen with a PowerPoint presentation. It could also be the case that a combination of these factors was responsible for the development of students' confidence. With a smaller stage and a smaller audience it can be easier for one student to shine and be a star.

Are Redesigned Poster Presentations an effective way of assessing students learning and understanding?

Students perceived poster presentations as an effective way to assess learning, although the results were roughly split between those who preferred writing a script and those who preferred only peer feedback on their performances. Less than 50% of the students preferred a method of assessment involving a written script and peer feedback (assignment method 1) while the rest of the students preferred being assessed by the peers (assessment method 2). This is interesting since despite the increased workload from writing a script, many students still perceived it as a valid approach to assessing their learning. There may be several reasons for this. Since the script is assessed by the professor, these students may prefer an expert to assess their written work in combination with their classmates' assessments of their presentations. This assessment approach may also have acted as a learning approach for students since according to their written comments on the survey writing the script helped them to prepare for their presentation, organize their ideas, and interact with the content. Assessing a script may also be fairer because assessing one performance of a group presentation, as is usually the case, puts a lot of pressure on students to execute that performance perfectly. As most people have experienced, a lot of things can go wrong on the day of a presentation including technical issues, nerves, or a lack of preparation. Writing a script means students are not only more prepared and have a better understanding of the content but also that everything is not resting on a one off performance. If things do go wrong with their presentation, they still can potentially achieve 80% of their

grade based on their written work. In addition, multiple presentations provide students with several chances to get things right, rather than just one. If they make a mistake, they have the opportunity to learn from it and implement changes in their next presentation. For instructors, the scripts mean students understanding can be more accurately assessed using a rubric. Finally, Korean students are under huge pressure to score the highest grade possible and at this university, like most others in Korea, grades were allocated on a curved grading system. In such a competitive learning environment, students may fear, rightly or wrongly, that their peers may give them a bad grade so that those other students may receive a higher grade. Therefore, students may see grades from a professor as being more accurate and fair than a peer grading system.

On the negative side, some students wrote that writing the scripts was too time-consuming. It also encouraged some students to memorize their presentations which may cause the presentation to sound less natural or engaging. This may not be as bad as it sounds though as it is very common for presenters, including expert speakers, to prepare a lot in advance and in some cases to memorize every word in order to ensure their presentations are professional and effective. Steve Jobs for example, famous for his presentations and speeches, started preparing for his presentations months in advance.

Overall, writing a script is a valid assessment approach of students understanding while also acting as a learning approach to promote students understanding and presentation skills. In the second poster presentation the lack of script may have facilitated students' presentation

skills and encouraged more natural and authentic explanations. Without writing a script the students may have relied on the poster and used it to organize and scaffold their learning.

Less memorizing would mean more building and constructing their answers and explanations in the moment, using the poster and visuals as a place to support and hang their developing understanding. With repeated practice this understanding would become deeper and more complete.

Peer assessment also has benefits for students learning by developing their feedback skills. The written comments confirm that students enjoyed helping others to learn. More students preferred this form of assessment since it was less time consuming and easier to complete. The rubric also scaffolded students' assessments and guided them towards understanding the features of a good presentation and how to accurately grade the work of others. However, in class observations show that some weaker presentations received a higher grade from some of their peers when compared to the professor's non graded assessment. Considering a rubric was used there should be little discrepancy between the two. Perhaps students graded the work of classmates who were friends more favorably than was justified. It may also be the case that some students were unfamiliar with peer assessments or poster presentations and so awarded higher grades. Discrepancies and differences will always exist in assessments of this type but more training and practice for students would keep these to a minimum. On the positive side, presentations were assessed by 3 or 4 different pairs and so averages of the assessments would lead to more accurate

grades. In addition, the peer assessments focused more on students' presentation skills rather than their understanding of the content.

Therefore, both assessment methods have implications on what is assessed and what learning is being promoted. The main aim of the first assessment is to assess students' understanding while the main aim of the second assessment is to assess students' presentation skills. Assessment methods for Redesigned Poster Presentations are flexible and so instructors can choose different approaches depending on what learning they wish to assess and what learning they wish to foster. Perhaps a combination of assessment methods like on this research project would allow students to experience different ways of assessing others as well as different ways of learning and developing their skills.

Findings and Recommendations

Based on the data and learning outcomes of the research project, the following 7 recommendations are suggested to enhance the use of Redesigned Poster Presentations in university classrooms:

- 1. If possible, provide a small low stakes Redesigned Poster Presentation at the beginning of the course.** This would allow students to become familiar with the format and processes as well as providing practice for skills which Korean students may have little experience of such as giving accurate feedback, using rubrics, or giving multiple presentations (only 13% of students in the class had given a poster

presentation before in a previous class taught by the researcher). This could then act as a foundation on which students build their understanding and skills later in the course.

2. Provide multiple opportunities for students to give Redesigned Poster Presentations during the course so that they can practice and develop their skills.

Students are not always used to giving presentations, writing scripts or assessing the work of others. Therefore, students may need multiple opportunities to do poster presentations so that they can have the space and time to practice these key skills.

3. Change the design of the poster Presentation to reflect the main focus or aim (assessment of content, assessment of writing skills, or assessment of presentation skills).

The script can be used to assess students understanding or their research skills. Alternatively, it could be used to assess students' academic writing.

Since the organization and style of the current script are almost identical to an academic essay, it could be adapted to evaluate longer pieces of writing. Another alternative is to require students to take notes and focus on the content of the presentations rather than on the presenter's skills and to write a report or summary of the main ideas to demonstrate the presenters understanding or their own understanding of the content. The simplicity of poster presentations means they are a highly flexible tool for learning and for assessing learning.

4. Introduce Redesigned Poster Presentations in Japanese university classrooms.

Just as no two students are the same, no two education systems are the same either. However, schools and universities in Japan and Korea share many of the same features and challenges (OECD, 2009; 2010; 2014). Therefore, it would be interesting to explore whether using Redesigned Poster Presentations in Japanese classrooms would produce very similar or very different results and whether this approach would successfully address some of challenges common to both countries (teacher centred classrooms, lack of opportunities to develop academic presentation skills and writing skills, fear of making mistakes, teaching to the test, etc.) (Hyland, 2009; OCED, 2010).

- 5. For more academic classes/subjects or for students with high levels of English, students could create a text based poster similar to the academic poster presentations used in academic conferences and seminars.** This usually involves students conducting research or experiments and summaries their methods, findings, and conclusions. Otherwise for regular classes the visual design approach is effective as it promotes creativity, connections, engagement, and a sense of ownership.
- 6. Give the approach greater authenticity, meaning, and purpose by requiring students to present their posters to more authentic, real world audiences** (Patton, 2008). The poster presentations could be given in a conference room or exhibition space on campus. Audience members could include students from other education classes, professors, or people from the local community such as high school teachers, pupils, parents, or professional speakers/business leaders. Presenting to real

audiences motivates students and adds value and purpose to their learning.

- 7. Use 21st Century tools to promote 21st Century Learning by creating a Redesigned Digital Poster Presentation.** These digital posters presentations could be in the form of an online narrated slideshow, a pdf or Google Doc containing text, images, links, or other media, an animated narrated video, an educational video, or other formats. The potential of digital poster presentations is fostering interaction and sharing. Students can post questions online, interact with the content and with each other, share ideas and resources, and scaffold each other's learning. However, interaction online is not guaranteed to happen. It must be supported through the design of the tasks. It is also more time consuming as students will need more time to interact and collaborate when creating their digital poster if the tools used are new to them. There is also a danger in replacing an old technology (paper poster) with a new one (digital product) without significant learning benefits. Digital poster presentations may complicate the process and hinder rather than enhance learning. The beauty and power of Redesigned Poster Presentations lie in their simplicity. Nonetheless, digital poster presentations have great potential if the appropriate learning approach can be designed. A balance needs to be found so that the right tool is used for the right purpose or situation.

Conclusion

Redesigned Poster Presentations have positive impacts on students understanding of the course content and on their language and communication skills while simultaneously proving to be a flexible tool for assessment and for learning. They help address some of the

important educational issues in university classrooms by providing students with an approach to learning which is active, collaborative, creative, and student centered. Students have multiple opportunities to present and so have multiple opportunities to learn and to share that learning with their peers. Importantly, students develop their confidence and hence the belief that they can stand tall in front others and that they have something meaningful to say. The strong visual aspect of the posters encourages students to creatively demonstrate their learning and to interact and connect with the content in engaging ways. The poster also scaffolds students' learning and provides them with the support they need to successfully teach others about their topic while developing their communication skills.

Given the similarities in Korean and Japanese educational environments, more research needs to be done to explore if Redesigned Poster Presentations can help address some of the common issues mentioned above. Also, more research should be done to focus on a variety of poster presentation approaches to explore which ones are most effective for different kinds of learning and how different features can be combined to enhance the accuracy and validity of the assessment approaches. This flexibility to easily Redesign Poster Presentations or combine different features make them a powerful learning tool for instructors and their simplicity makes them a powerful learning tool for students which they can easily grasp and use to help themselves and to help others to learn. Academic poster presentations are currently used primarily for conferences and seminars. However I believe they were also be applied in academic classrooms to share ideas, to deepen students

understanding of those ideas and to provide pre-service teachers with a fun and engaging learning tool they can use in their own classrooms. In a world where everything is becoming digitized, Redesigned Poster Presentations offer a more old school hands on approach to learning. They provide a connection to the kinds of learning students experienced in elementary school where posters were a creative window on which students drew their understanding of the world and explained to others how to look through. Redesigned Poster Presentations are not a throwback to the past or a rejection of technology. They are just an old tool used in new ways and for different purposes to enhance learning, understanding, collaboration, communication, creativity and participation; which is exactly what 21st Century Learning is all about.

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List of Features

Figure 1.1. Class photographs of students

Figure 2.1. Results from Google post course online survey on efficiency and understanding

Figure 2.2. Main results from Google post course online survey

Figure 2.3. Results from the Google post course online survey on language skills and

PowerPoints

Figure 2.4. Results from the Google post course online survey on learning and enjoyment

Figure 3.1. Class photographs of students

Appendix A: Example of Post Course Online Survey

Writing a script for poster presentation 1 improved my understanding of the topic.

1 2 3 4 5 6

Strongly Agree Strong Disagree

Writing a script is not important for the poster presentation.

1 2 3 4 5 6

Strongly Agree Strong Disagree

I learned a lot from listening to the poster presentations of my classmates.

1 2 3 4 5 6

Strongly Agree Strong Disagree

I prefer doing poster presentations instead of giving powerpoint presentations to the whole class.

1 2 3 4 5 6

Strongly Agree Strong Disagree

I learned more by completing.....

- Poster Presentation 1
- Poster Presentation 2

I had more fun completing.....

- Poster Presentation 1
- Poster Presentation 2

Which assessment method for the poster presentations is more accurate and valid?

- Poster Presentation 1 - Assessment based on written script + peer grading (80%/20%)
- Poster Presentation 2 - Assessment based on classmates rubrics + completing assessment form (80%/20%)

More professors should use poster presentations in their classrooms.

1 2 3 4 5 6

Strongly Agree Strong Disagree

Appendix B: Peer Poster Presentation Rubric

C r i t e r i a	Poor (0)	Fair (10)	Good (20)	Excellent (30)
C o v e r a g e	No one reform is addressed substantially in the project.	At least 1 of the reforms is addressed substantially in the project. That is, the target audience of the project is left with a good understanding of the key points of the reform.	At least 1 of the reforms is addressed substantially in the project. That is, the target audience of the project is left with a good understanding of the key points of the reform. In addition, the other reforms were at least minimally addressed in the project. That is, the target audience of the project is well informed on at least 1 point for each reform.	All of the reforms were addressed substantially in the project. That is, the target audience of the project is left with a good understanding of the key points of each reform.
V i s u a l M e d i a	The poster is unclear and confusing. The presenters did not spend a lot of time or effort creating their poster. In addition, the presenters did not refer to their poster during the presentation.	The poster is visually appealing. The poster helped you to understand some of the ideas of the presentation but not every part of the poster was clear or explained fully.	The poster is visually appealing. The poster helps you to understand most of the ideas of the presentation. The presenters frequently used their poster to help scaffold their presentation. The images are interesting and appropriate.	The poster is highly visual and creative. The poster helps you to understand all of the main ideas/key points. The presenters used the poster very effectively to scaffold their presentation. All the images are interesting and appropriate.
P r e s e n t a t i o n S k i l l s	The presenters did not present their topic clearly. They spoke too fast and one speaker dominated the presentation. The presentation was disorganized.	The presenters presented their topic well but sometimes the presentation was disorganized or they spoke too fast or their voice was too low.	The presenters presented their topic very well. They usually spoke at a good pace and maintained frequent eye contact with the audience. Their voices were usually clear and both speakers shared the presentation speaking time.	The presenters presented their topic very well. They almost always spoke at a good pace and maintained frequent eye contact. Their voices were almost always clear and both speakers shared the presentation speaking time equally.

R es p o ns e to Q u es ti o ns	The presenters were unable to respond to the audience's questions.	The presenters were able to respond to at least one of the questions but not all of the questions.	The presenters were able to respond to most of the questions and displayed a good understanding of their topic.	The presenters were able to respond to all of the questions and displayed a very good understanding of their topic. The questions were answered sufficiently.
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Please note that this rubric is based on that of Jonathan Tomkin, (University of Illinois), as developed for his course on Sustainability.

TOTAL SCORE: Add up all the points from the rubric (20 points for Good, 30 points for excellent, etc.)

TOTAL SCORE:

Your Name:

Names of Presenters:

Your Feedback: Helping your classmates to Learn. Please answer the following questions:

What were the strengths of the presentation? What did you like about it? What did the presenters do well? Mention at least 3 features/skills.

1.

2.

3.

How could the presentation be better next time? What advice do you have for improving a quality or feature of the presentation? (focus on the 2 biggest issues, not every tiny issue). Write them here and offer two or three suggestions to the presenters about how they can improve these features or qualities in future.

Appendix C: Transcription of the Interview

R = Researcher S = Student

R: On this course, 21st Century Learning, what activity did you enjoy the most?

S: I enjoyed making poster presentation. I enjoyed making poster presentation because we had to help each other and my partner was great and we could...am...help each other's and we could...we could make a synergy effect. Synergy effect. That was great.

R: Are you referring to both poster presentations or just one of them?

S: Just one of them. Because..its...I like the idea of poster presentation but it's a pair work so the partner influences. I just like the idea of poster presentation. If I was doing it alone I would think negative part because I can control all of the situation but when doing it with other people I have to consider his or her situation so that's kind of variables.

R: And which activity did you enjoy the least on this course?

S: I enjoyed most of the projects and I don't think there were any bad ones. I enjoyed myself.

R: In your experience, from this semester, what were the learning benefits for you of doing the poster presentations? What did you learn?

S: It was great because we could learn others words at the same time because when we write alone we would only learn about our things but when we share with others then we can learn ideas easily and effectively in a short time so I think that helped me a lot.

R: Why was it easy and effective?

S: Because it was presented in a poster. There is drawings or pictures so we can easily understand the topics and the main ideas. As the person really reads or tells me about the situation, this is something like this, so they explains what the contents so when I read other articles so I have to think I have to make the information come to my brain but they help me understand those parts when we are doing a presentation so I think that is helpful.

R: Have you given a poster presentation before? Before this class?

S: Maybe in elementary school or middle school.

R: A long time ago.

S: Yes, a long time ago.

R: What did you do?

S: We just draw a poster and we just explained it. It was...it was kind of different with this one. We explained and we described about the poster...what is the meaning of this poster, the meaning of this poster. It is different.

R: How is it different?

S: We first write a script and then we make it into a picture.....a poster. But the thing I did in my elementary school we just draw the picture first and then explained it.

R: What was the most difficult or challenging part for you of doing the poster presentation?

S: It wasn't really challenging for me about the poster presentation because I like drawing and I also enjoy writing so doing both of them can make it come to and.....combining those things together...it was ok, it's not about the poster presentation itself.

R: Did you feel it was very time consuming?

S: No. It was OK. I could draw the poster in one hour or in the class. I could finish and painting those things in a short time so it wasn't really time consuming.

R: And how long did the script take you to do?

S: I had to gather some ideas. The second one was watching a video and then making it into a script and the first one I had to write a script so it was kinda different and the second one took less time because I had to just see, I just had to.....how do I say.....gather the information in the video so that was easy.

R: For the first poster presentation on creativity where you wrote a script, did you develop a good understanding of your topic from doing the presentation?

S: Yes. I had to make the sentence into a picture so I had to understand the topic and the contents well in order to make it and I had to choose the main parts of the essay in order to.....because I cannot draw every single sentence into the...into the poster so I had to choose the important parts. I could focus on the main parts, on the main ideas.

R: And did you also develop a good understanding of your topic from the second poster presentation?

S: Yes. Because it is not only about watching the video. I have to make the results...or my understanding into a real product so I had to understand and I had to read the transcript (of the video) and that made me... helped me to understand the topic.

S: How much research did you do for the first poster presentation?

R: No, it wasn't that much. I had to just look for some other festivals of other countries like Yuali festival...because of the contents. It didn't take much time to research.

S: Where did you get your ideas for the script? For the poster presentation?

S: Am, we brainstormed together, we thought about the main points and then about the explaining...the explanation we researched some benefits and the examples of those words like so multiculturalism maybe or what is the class?...combining the class into one.....?

R: Multidisciplinary?

S: Yeah. Multidisciplinary. Yeah. We had to see the examples of multidisciplinary lessons.

R: Where did you see those examples?

S: In Google. We googled multidisciplinary lessons and there were a lot of examples so we can combine math and English at the same time...like those examples, we could learn those.

R: So writing the script and preparing the poster expanded your understanding of the topic?

S: Yes.

R: Which poster presentation did you prefer, the first one where you had to write a script or the second one where you watched the video and then created a poster?

S: The second one was easier because I don't have to write my script but I like both of them because I also like writing. The second one takes less time so that was...if I had to choose one then I would prefer to do the second one because it takes less time.

R: Which poster presentation was better for your learning? Which one did you learn more from doing? Which one developed your understanding of the topic more?

S: I cannot choose one. They both work a lot. I didn't know much about Canadian multi....multiculturalism so it was very helpful to learn about as well.

R: Which process did you prefer? Did you prefer the writing and making the poster or watching the video and making the poster? If you were given a choice about, not the topic, if you remove the topics and just do the process, which one do you prefer?

S: When learning I think writing the script and then making the poster is more beneficial for the students. That's more for students. The second one takes less time. I enjoyed that.

R: Do you think poster presentations are a good way to teach academic writing skills? So for the first poster presentation, where you had to write a script, do you think it is a good way to teach students how to write an essay?

S: It is similar to other things like we can present our ideas to others so they can be helpful and when writing we know that I will be presenting it to others so maybe when we can write better, we can try to be a better writer because I have to publish it to others. So I think that can be helpful, that can motivate students.

R: And did you learn anything else? About organizing of the essay? Writing an introduction? Did you find that useful for your writing?

S: I wrote the script first and then I made it into a poster so when writing the script I did not think about making the poster. I wrote normal essay and then I made it into a poster.

R: But do think that was good practice for your writing? Writing the script?

S: Yeah! Of course! Writing the script was helpful. Yeah.

R: Do you see a lot of similarities between the script for the poster and a regular, a normal academic essay?

S: I think they are similar.

R: How similar?

S: Well students...well for me I didn't think much about making poster presentation. I didn't think much about presenting it to others. I just thought about the idea...the topic and I just wrote a normal essay and then we made it into a poster. We choose some main ideas of the essay and made it into a poster.

R: So if you were given a choice, would you prefer to write a normal essay and give that to the professor or would you prefer to write an essay and perform it as a poster presentation?

S: I think performing a poster presentation is helpful because what I had accomplished can be shown to others so I feel more rewarding and I can share my ideas and I can also see other peoples work at the same time so I think that is more helpful.

R: So did you work harder at your script or at your essay because you knew it would become a poster? Were you more motivated to write a good script?

S: I think it is kind of theoretical. I think it motivates students. Yeah, it can motivate students but in real....in my case I didn't think much about the poster presentation. I just wrote a normal essay and then made it into a poster.

R: Now. We have done that question. Ah, we can ask it just in case? Do you think poster presentations are a good way to develop a deep understanding of a topic?

S: Yeah. Of course. We have to make it into a vivid image so we have to understand the topic well. We have to understand the important parts of the essay.

R: Now. Here is an interesting question. In your opinion, what are the benefits of a poster presentation over or instead of a normal power point presentation?

S: When we are doing a poster presentation we actually make something. We draw pictures or we write something on the poster and we are doing it with our hands like we actually move when we...we act and we kind of work with our body but when doing a presentation with PowerPoints we just use our hands to google or Google images and we don't actually draw or do things so....

R: What is the advantage of doing the things physically?

S: We can learn in real experience. We can learn by really performing it. We can learn by actually doing it like when we draw, we think about it and the real examples so you understand the topic better I think.

R: So by drawing on a poster it encourages you to think more deeply about the ideas and how to express them?

S: Yes.

R: Are there any other advantages? For example, if a professor gave you a choice; you can do a PowerPoint presentation on this topic or you can do a poster presentation, which one would you choose?

S: But I like drawing so I enjoy doing poster presentation but it might be different to other students. Some students found difficult, they said `ah, I am not good at drawing` and I think it is very challenging. When doing a PowerPoint presentation, we can google images and we can use those images. They are already made. Those pictures...am.... You don't have to put a lot of efforts and making those things so maybe it might take less time. I enjoy drawing. It is my personal....personal preference.

R: And which one is better for learning?

S: As I mentioned before, I think poster presentation is better because we can have better understanding of the topic and the content while we draw or make it into a visual project.

R: A lot of professors use PowerPoints in their class. Do you think they are effective? As in, not the professors using the PowerPoints but the students giving a presentation with PowerPoints? Are these effective for students?

S: Yeah because it is not only performing by saying or showing the script but we actually show the pictures of those things on a big screen so students can easily understand the topic. Student can deliver his speech or his ideas clearly with those images and some effects...animation effects of the PowerPoint so students can understand better and they can give a better speech.

R: What about your experience of presenting to many students at the same time, on the same day? So in a PowerPoint presentation you normally give a presentation to the whole class and then people might ask you questions. In the poster presentation, you present to one group, and then another group comes and you present to them and then another group comes. Which one do you think is better?

S: In that case I think poster presentation is better....is helpful because we become better as we practice more and more. We had 3 chances before so at first it was difficult but then it became better and better.

R: So that is my next question; how did the poster presentation improve or develop your presentation skills?

S: As we could practice a lot, we could be.... better presenters. We could think...we could easily... think and organize things. Now I am going to do this and now I am going to do this. I know the order so I can do it more easily the next time and improve my presentation skills and contents of my speech.

R: And do you think you were less nervous to present to a small group than to a bigger class?

S: Yes, because the audience is small. Even though I make mistakes they understand and we can talk about it in person to person. `Sorry I made a mistake` and they say `its ok`. It is less stressful. But when there are many

audiences we cannot talk to each other well. We can...we actually can but it doesn't really happen in real situations.

R: Do you think the poster presentations was more interactive than a normal PowerPoint presentation?

S: Yes, because you were close to each other and we can talk and we can...even though while I was performing they can ask some questions. 'What is this picture?' and we can talk about it.

R: Why doesn't that happen in a normal PowerPoint presentation?

S: Because there are many audiences and especially Korean are less likely to express their ideas when they are in front of (an audience). You know some people like to do those things but some people feel awkward or some people feel pessimistic so they find it difficult to express their ideas when they are in group or in a huge group, a big group. In my case, my partner became better and better as we practiced so we practiced more she became a better performer and it might make people think 'oh, she did a lot of work'.

R: OK. Next question. As a teacher, do you plan to use poster presentations in your classroom?

S: Yes, I would like to use the poster presentations because it is...it helps students to develop their understanding of the contents. It is enjoyable to students who like drawing or doing presentations.

R: And which one would you most likely use, presentation 1 which is with a script or presentation 2 with the video?

S: I think both are meaningful. I don't think it is necessary to choose one. I think they are both meaningful.

R: So finally, please summarize your main thoughts and ideas on using poster presentations as a learning tool?

S: I think poster presentation is a very effective way to learn and present ideas because we can do many things at the same time. We can write the script, we can draw the pictures, we can present our ideas to others and we can get feedback from other students and I think those are very helpful. Yeah, so it motivates students a lot.

R: Why does it motivate students?

S: We can interact with other people, other students, so that can be motivating.

R: What are the advantages of a poster presentation over a PowerPoint presentation?

S: We can actually draw something, we can make the product by ourselves, we actually draw, we actually write something on the paper, we can perform those things, we do the actions so I think that can help us understand the topic and the contents well.

R: Are there any more advantages?

S: We can practice a lot as we were given a lot of time so we could become better performers as we practice, as we perform so it is helpful. We could improve our presentation skills.

R: What are the disadvantages of poster presentations in comparison to a PowerPoint?

S: The audience is small. I think that is the only disadvantage as the audience is small. It would be nice if there were 5 or 6 audiences. We had only 2 or 3 people at the same time so it would have been nice if there were 5 or 6?

R: Did working on poster presentation help you with your writing skills?

S: It wasn't in this case but if I perform it next time I can think about that, I can show it to others so I should make it more easy...I should write more easy, I should express my ideas in more easier way using easier words or easier expressions.

R: Why did you not do that before?

S: Because I didn't really consider about giving presentation to others. It was my first time. Next time I will think about that.

R: So if you did poster presentations regularly on other courses do you think it would improve your writing skills?

S: Yes, maybe I can express in better ways....in easier ways. More people can understand what I am saying.

R: Why is that important?

S: I didn't know that it was important to use easier expressions before. I used some complicated words, big words before in my essays but then I learned that it is better to use easier or simple words.

R: And did you learn that because of the poster presentation?

S: It is not only about this project but from your class I learned it is better to write using easier words. It also helps because...this poster presentation also helps because we think about presenting it to others then we should learn, we should use easier words so I think I should write more clearly in order to present our ideas.

R: What did you think of the peer assessment of poster presentation number 2? So in poster presentation number 2 60% was based on the feedback of your peers. Do you think that was a good idea?

S: Some of my friends we have discussed about it and we thought it wasn't a good idea because the percentage was too high. Like if the peer assessment is 20% or 30%, it is OK but as students grade each other and it is the relative scoring system so in order to get a better score I have to...the students have to give less score. Some people might find flaws about the project. And it also has to do with a lot of the personal characters. I thought when I gave a score to others I could see their efforts and they are all my classmates and even though their presentation wasn't perfect I thought it was worth giving a good score and that was my case but when I found out the result other people didn't thought so. They kind of graded in a more harsher way. It was kind of...it made think a lot. And people told me that 'you shouldn't give full score to others in order for you to get a better score. They told me so so I found out that is the case, that is really true from this experience I learned it. It is very difficult. Also students don't judge the script. They don't really think about the script. I think the script is more reliable. Only judging the whole project by peer assessment is very risky. I think using peer assessment is ok but I think it should be low.

R: It is a challenge. I agree. Well thank you very much for your time and your help. Your answers were very interesting!