The Video Method in Economic Seminars------Hendrik Wolff

The Problem:

I am teaching the Seminar ECON460, "Environmental Economics". In this seminar, I have a communication challenge, where there is little interaction between students and the professor. This may be due to the large share of foreign language students. I found that "live presentations" are often of such low quality, (not the content but the delivery of the material) that other students cannot understand the material. This was a waste of class time.

As a professor, I need to remove the barriers that impede performance, and build an inclusive culture in which each class member contributes based upon his/her unique strengths. Our teaching systems must be geared to maximizing the ability of each student.

The Solution:

I have implemented student generated "video presentations" as a substitute to the traditional "live presentation" in seminars. These video presentations have many advantages for students:
- Compared to life presentations, video presentations reduce student's apprehension.
- Students can film the presentations as many times, making improvements to their techniques.
- Other students watching receive a much better experience because the content shown is the best version of the video presentation.
- No class time is wasted because now a) students better understand the material and b) videos are shorter than life presentations.
- Instructors can pre-watch the presentations to prepare class discussions.
- Instructors can re-watch the presentations to facilitate evaluations.

How to Implement Video Presentations?

Setting up a group video presentation for the students involves the following simple steps;
1. **Explain to the students how to make the videos**. We had a SFU media consultant come in during the first week of class to give basic tips on how to make their video presentations clear and interesting to watch. Students were encouraged to use their smartphones to film. Editing is done via iMovie (or similar).
2. **Provide Grading Instructions**
   a. **Provide a grading rubric** to give students clear instructions on how their work is marked.
   b. **Provide peer evaluation** form to be handed in at the end of course.
3. **The first assignment** was to make a short 30 second video in which students present themselves to the class. This is to get students familiar with the process of filming and editing their movies as well as allow them to experiment with some video techniques.
4. **Do's and don'ts**: After each group had the opportunity to present their first video, the class discussed the pros and cons of all the presentations in an inclusive environment.
5. **Group presentations:** Students are now equipped with the skills needed to deliver 5-10 min presentations. At the end of each video presentation we open the floor for questions.
6. **Repeat do's and don'ts**
7. **Peer evaluation** to be completed by students assessing the contributions of each group member. This limits free ridership and does not have to directly impact students grades, unless a serious problem is discovered.

Hendrik_wolff@sfu.ca : For further background information, sample videos, grading rubrics, do's and don'ts, peer evaluation forms, see the project summary at: http://www.sfu.ca/istld/tldg/grants/current-projects/fass/G0188.html

SFU

Title of project: The Video Method: Empowering and Controlling Learning Environments in a Predominantly EAL (English as an Additional Language) Classroom

Principal applicant:
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Collaborator:
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Position: Graduate Student
Faculty: Arts and Social Sciences
Department: Economics

Part I – Report project findings

a) *Summary of your data, analysis and findings from your observational data of the quality of the discussions during the video presentations. (Pie Chart)*

The research assistant was present on days in which the class presented their videos. Each group presented 3 videos and the RA was present for 2 presentations from each group over a 5-class sample. The RA took data on a) who was speaking b) whether they asked a question c) made a comment or followed up with discussions and d) noted whether the individuals had presented that day. From these observations, it was found that on average 50% of the class was engaged with the discussions that followed video presentations. It was found that 30% of the discussions consisted of questions, 30% consisted of direct response to questions and the remaining 40% was devoted to follow up discussions or general comments. Questions were generally directed towards the group who had presented and it was found that 70% of the questions were answered by the students presenting, 20% by other students and 10% were answered by the professor. In addition, the professor stepped in and rephrased student's questions when they could not clearly communicate their point to allow the conversation to continue. The professor asked questions 40% of the time and commented on discussion topics 60% of the time and did so to further develop concepts. Over the 5-class sample it was found that a couple of students consistently contributed to the discussion. However, since different groups presented and had a detailed understanding of certain topics, we found that there was overall a satisfactory participation from the whole class.

b) *Summary of instructor reflections on how in class discussions differed from prior discussion in prior courses where live presentations were given.*

In previous classes, mostly the English language speakers participated in group discussions. With the use of the video technique we have found that by reducing the language barriers it creates an inclusive environment where students feel more comfortable voicing their opinions. We see that

much more of the class is participating compared with other iterations of this course that the instructor gave at a previous university in the United States. One result that he liked was being able to pre-watch the video content the night before the presentation. Pre-watching the night before helped to prepare for the class since the instructor can assess the students' knowledge of the topic and then can actively prepare the lecture around the material they had difficulty with. This also allowed the instructor to prepare remarks and give comments directly after the presentations.

c) *Summary of data, analysis and findings from the pre and post survey related to changes in students' confidence, feelings of connection, future plans and the extent to which they connect these changes to the video presentations.*

Table 1: Confidence Presenting in English: Pre and Post Survey

Survey Time	Student Survey				
Pre	1. On a scale from 1 (very unconfident) to 5 (very confident): How comfortable are you giving a presentation in English in a seminar?				
	1	2	3	4	5
	5%	**25%**	35%	15%	20%
Post	2. To what extent has doing video presentations in this class made you more confident about doing LIVE presentations in English in other classes? (1- much less confident) (5- much more confident)				
	1	2	3	4	5
	0%	0%	56%	**33%**	11%

We performed a survey at the beginning of the semester (labeled as "Pre") and one survey after the semester ended (labeled as "Post"). Table 1 summarizes the results regarding how comfortable/confident students feel presenting in English. From the pre survey, 30% of students were uncomfortable or very uncomfortable (category 1 & 2) giving live presentations in English. However, upon completion of this course, 33% of students surveyed say they are now "more" confident at giving live presentations in other classes and 11% stated that they were much more comfortable presenting in English.

Table 2: Friendship Development: From Working on Video Presentations

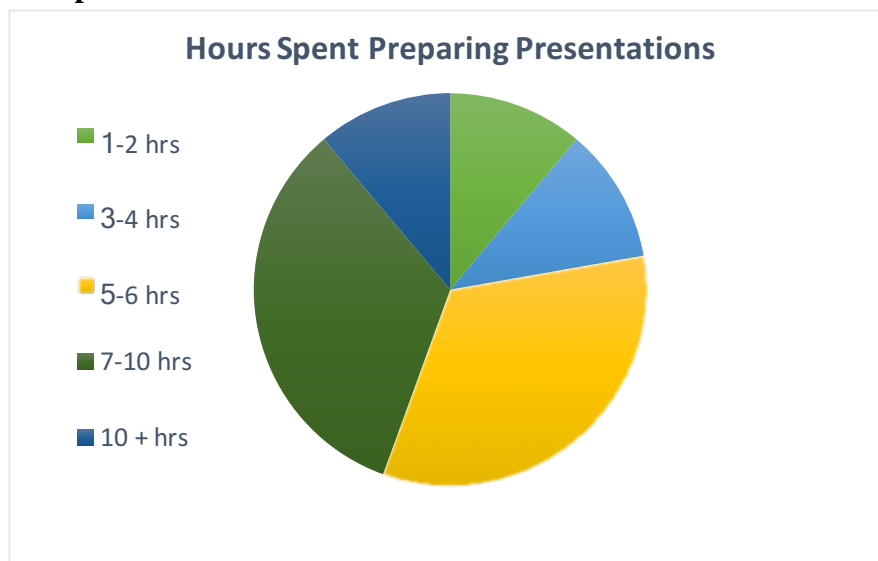|					
Post	3. Did you develop better relationships with your video group members because you had worked together (compared if you had been working alone on presentations)? (1-much better) (5-no difference)				
	1	2	3	4	5
	67%	33%	0%	0%	0%

From Table 2 we see that students value working in group settings, as 67% said they had developed "much better" friendships as a result of working together on the video presentations. The remaining 33% claimed to have developed "better" friendships as a result of working together on the video presentations. The sense of connection and friendship allows students to feel comfortable giving presentations.

Table 3: Development of Interview Skills

Pre	4. On a scale from 1 (not likely) to 5 (very likely): Thinking about your English language Skills: How likely is it that you do well in the interviews and place your first professional job in an English-speaking company?				
	1	2	3	4	5
	0%	**37%**	26%	11%	21%
post	5. How comfortable do you think you would be DOING AN INTERVIEW at an English-speaking company or organization? (1-Not comfortable) (5- very comfortable)				
	1	2	3	4	5
	0%	22%	22%	11%	**44%**

From Table 3 we observe that students have gained valuable presentation skills that they can directly use during the interview process when applying for jobs. We note however, that the shift in pre to post survey (while on average increasing), is not an statistical significant increase, due to the widespread distribution of answers.

Graph 1:

Hours Spent Preparing Presentations
- 1-2 hrs
- 3-4 hrs
- 5-6 hrs
- 7-10 hrs
- 10 + hrs

Finally, Graph 1 displays the amount of time that one student put in to prepare a video. Most students answered that they invested around 5 to 6 hours for one video presentation. This implies that three students working together put in on average 15-18 student hours into one 10-minute-long video.

d) *Summary of data, analysis and findings from the post- survey of students' perceptions of whether the video presentation method improved their learning.*
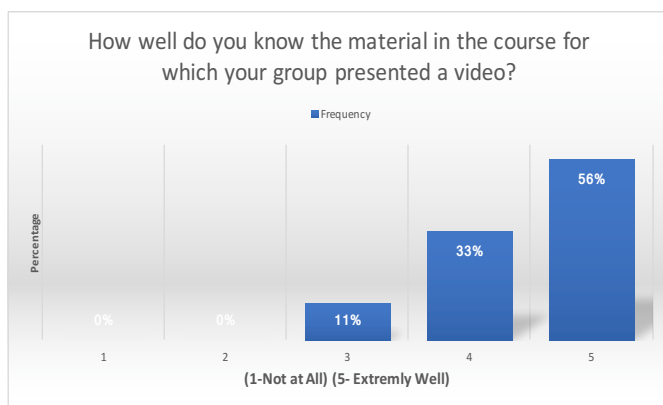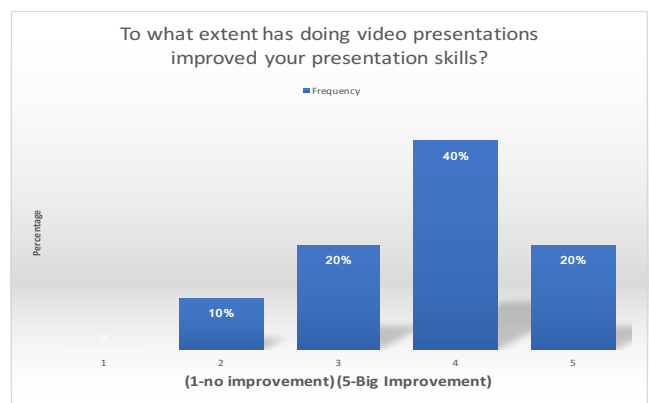
Figure 1

How well do you know the material in the course for which your group presented a video?

■ Frequency

0%	0%	11%	33%	56%
1	2	3	4	5

(1-Not at All) (5- Extremly Well)

Figure 2

To what extent has doing video presentations improved your presentation skills?

■ Frequency

	10%	20%	40%	20%
1	2	3	4	5

(1-no improvement) (5-Big Improvement)

From Figure 1 we can see that Students have a good understanding of the material in which they present. They spend a significant amount of time learning this material and expose themselves to life examples which help them better understand and absorb concepts. From Figure 2, 60% of students gave a response of 4 or 5, indicating that they have seen a significant improvement in their presentation skills as a result of the video presentations.

e) *Summary of data, analysis and findings from exam data related to student learning on topics covered in video presentations they conducted compared to topics covered in video presentations they watched compared to topics that were not covered in the video presentations at all.*

Student Learning Outcomes

	CONTENET OF		
	Own Video Presentation	**Other Students Video Presentations**	**Not Presented in Any Video**
AVERAGE GRADE	93%	83%	78%

The results in the above table come from our analysis of final exam data. The data represents a weighted average of students' scores on material in which the student presented material on, material that other students in the class presented and additional exam material that was not addressed in the video presentations. From these results, we can see that students score substantially higher on material in which they are assigned to present. This result is not surprising, since students spend a significant amount of time learning and preparing material for their videos. As seen in our previous analysis they spend approximately 15-18 student hours per assignment (Graph 1). In addition, exam material covering content from video presentations was not as difficult, so it is not surprising that students scored lower on material not presented in the video presentations.

f) *Discussion of your **conclusions** regarding the effectiveness of the video presentation method.*

In conclusion, the implementation of the video method was successful. The extent to which the video technique improved learning outcomes will be discussed on the following three dimensions: a) How it impacted student learning b) How it helped to achieve the instructors learning objectives c) How it improved the classroom dynamic:

How it helped students:
a) Video presentations **reduced student's apprehension** towards class presentations. One student said in the survey; *"I think the video presentation is more useful than live presentations, because it can reduce students' stress and make them feel more comfortable"*. The typical nervousness of EAL speakers before and during live presentations does not occur with video presentations.
b) Students stated that they were more comfortable since it allowed them to **repeat their presentation** until they had a well-polished result.
c) Video presentations were much **easier to understand** since students included a number of presentation techniques (such as including subtitles, PowerPoint slides, graphs and life

examples from SFU campus): *"Video presentations allow me to reflect visually on theory, which makes material more clear and interesting"*.

d) Students **develop presentation skills** that directly transfer to the skills they need to be successful in a working environment that is becoming ever more digital.

e) One great feature of having video presentations is that students can re-watch the videos when **preparing for exams**, *"We did a significant amount of research when making the video presentations, and we can watch it over again at home"*.

How it helped the instructor:

a) Video presentations **reduced class time**, since material presented was clear, concise and to the point. We found that the content of a traditional 10-minute live presentation could be easily and effectively delivered in a 5-minute video presentation.

b) **Marking** can be done at the convenience of the grader, and content can be re-watched.

c) Students sent their videos the night prior allowing the instructor to **pre-watch** them, which is not possible with live presentation. Pre-watching the night before helped the instructor to prepare for the class since the instructor can assess the students' knowledge of the topic and then can actively prepare the lecture around the material they had difficulty with. This also allowed the instructor to prepare remarks and give comments directly after the presentations.

How it helped the class atmosphere:

a) Students valued the **social aspect** that they got from doing these presentations and found it fun to learn the course material in groups. Working in groups helped the students, especially when members of complementary skills collaborated. For example, one student being good with the video/editing and others well in presenting. When asked what they gained from the use of video presentations one student answered *"Social interaction, learning to collaborate more effectively with others, which I think is missing from economics courses in general"*.

b) In addition, groups were required to provide a handout summarizing their presentation which students found useful for learning the material.

c) Because well done videos stimulated discussions, we found that the use of video presentations did **increase participation**.

d) Students were given the opportunity to do either a live presentation or video presentation on the final day. Five out of six groups chose to do a video presentation which shows how students value this technique.

Concluding remarks: We are not the first to implement this video technique. However, we are to our knowledge the first to use the video presentation technique at SFU to address the challenges of integrating an increasing number of international students to the seminar format. The video presentation technique allowed for every student to contribute his or her unique perspective to the overall quality of the seminar and we hope that others will incorporate this technique to solve similar challenges.

Part II – Implications and dissemination

1. *Changes in my teaching:*
Have you changed anything (or plan to change anything) in your teaching of particular courses or in general, because of your experiences in conducting this project? Please provide examples.

It would be nice to have the opportunity to repeat the video presentation technique where the course is taught twice in the same semester. We could then set up a treatment and control study where one iteration uses video and the other uses live presentations. In addition, it would be interesting to test the video presentation technique on a larger class size. For this to be realistic in would be necessary to limit the presentations to a maximum of 5 minutes to accommodate more students. Finally, we have developed a) a grading rubric (adopted from Shearer, 2016) and peer evaluation form to be handed out at the start of class. This will be implemented in the next iteration of this course. (Please see appendix for details on the grading rubric that we have developed). These forms will help to provide students with a more structured grading form and better incentives to work together in teams.

2. *Sharing findings with my colleagues:*
We asked that you share information about your project with close colleagues either in a formal or informal way. How did you share your findings with colleagues?

The project has been discussed with the department chair and its outcomes were discussed at a faculty meeting. We have prepared an executive summary with a link to a short video highlighting some of the students work which can be shared by email to interested faculty members.

3. *Impact of the project on my activities:*
Have you become involved in other activities or projects (e.g., departmental committees, curriculum projects, other grant projects) because of your experience in conducting this project?

As a result of this project Hendrik feels more connected with the student body and has been asked to be consultant for the FASS (Faculty of Applied Social Sciences). This work will explore the ways in which SFU can increase student numbers through an outreach program aimed to students in the United States.

4. *Future dissemination plans*
Do you have plans for future dissemination of your project?

We plan to share the executive summary and short video highlighting student projects by email to faculty in the Economics department and to others interested in our results.

6. *Students involved*
If this project was implemented in a particular course(s), please list the course(s), semester(s) and approximate number of students in the Table below:

Course	Semester	Approximate number of students
Econ 460	Fall 2016	■ 0-30 ☐ 30-100 ☐ 100+

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Appendix

	Unsatisfactory	Satisfactory	Good	Very Good	Excellent	
Clarity of message (intent, structure, relevancy of content)	It is not clear what the presentation is about, the ideas do not flow or are not relevant to the topic.	The topic is clearer, the ideas have some linkages and relevancy.	The topic is clear, however the ideas do not always flow or are relevant.	The topic is clear and most of the ideas flow logically and coherently.	The presentation is well focused, ideas are presented logically and coherently.	/40
Verbal language skills (word choice, sentence construction tone, pace and volume)	Basic use of language skills: Inappropriate word choice, little variety in tone, pace or volume.	Adequate use of language skills: Some variety in word choice, some variety in tone, pace and volume.	Competent use of language skills: Use of appropriate word choice, adequate variety in tone, pace and volume.	Good use of language skills: Word choice supports speech well, engaging variety in tone, pace and volume.	Superior use of language skills: Exceptional word choice, superior variety in tone, pace or volume.	/30
Use of the video technique	Use of the video format diminishes impact of speech.	Basic competence in the use of video allows for communication of speech.	Competence and confidence in the use of video allow for effective communication of speech.	Competence and confidence in the use of video allow for **very** effective communication of speech.	Competence and confidence in the use of video allow for excellent communication of speech.	/20
Print-out						/10

Table adopted based on work by Maoluff & Shearer (2016).

GROUP PRESENTATION PEER EVALUATION

Name: _____

PEER EVALUATION RUBRIC

Criterion	4	3	2	1
Effort	Extraordinary effort demonstrated; produced additional resources for the group	Competent, but not extraordinary; fully prepared; completed all agreed tasks	Minimal effort; minimal preparation; superficial knowledge of resources	No effort shown; little or no evidence of preparation
Attitude	Exceptionally positive and constructive; encouraged other group members	Positive; supportive; mostly constructive and upbeat	Neither encouraging nor discouraging; disinterested in the work of others	Disparaging; negative, withdrawn or belligerent; absent
Communication	Shared many ideas; encouraged all group members to share their ideas; listened attentively to others	Freely shared ideas; listened to others; considered other people's ideas	Shared ideas when encouraged; allowed sharing by all group members; listened to others; considered other people's ideas	Did not share ideas; watched but did not contribute to discussions; did not show consideration for others
Contribution	Outstanding contribution; above-and-beyond; work was excellent in form and substance; a leader who contributed a lot of effort	Good quality work; few revisions or additions were necessary; a strong group member who worked hard	Poor quality work; substantive errors; much revision and editing was required; a satisfactory group member who did what was required	Poor quality; little, if any, contribution to group goals; let other group members do the work

Please evaluate the work of each member of your group, including yourself, using the rubric above. Be sure to include each group member's name, circle the appropriate number on the scale for each criterion, and write any additional comments in the space below the scale.

	Group Member: _____	Group Member: _____	Group Member: _____	Myself: _____
Effort	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1
Attitude	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1
Communication	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1
Contribution	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1
Please write any additional comments about each group member's contribution in this space.				

Additional comments about the distribution of work in your group, or any problems encountered:

_____

_____

_____

_____

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Works Cited

Malouff, J. M., & Shearer, J. J. (2016). How to Set Up Assignments for Students to Give Oral
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