



### Intervention Overview



### Using Technology for Feedback

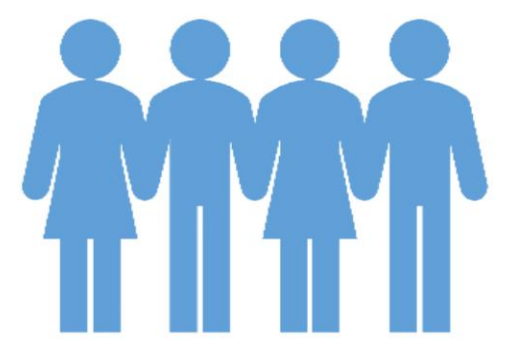
This intervention aims to support UWL's Graduate Attributes and offer a transformational educational experience\* by developing students' presentation skills using video, peer review and feedback. Target Group: Level 5 students studying Human Factors in Aviation.

Professional and creative  
Thoughtful and proactive  
Globally aware and resilient




\* UWL Achievement 2023

### Context for intervention




### Employability Inclusion & Diversity



- Airline & Airport Management students aspire to industry careers with leadership roles.
- 65% of these students are female and around 60% of the total are BAME students.
- These two groups are underrepresented in an industry which acknowledges this and is acting to address this along with our support.
- This intervention is aimed at building self-efficacy, self-belief and transferable skills to help improve the employability of all our students in their chosen careers.

UWL Annual Report on Equality & Diversity November 2018

### Applied Concepts




### 4 Principles Of Andragogy (Knowles 1984)

- Adults need to be involved in the planning and evaluation of their instruction.
- Experience (including mistakes) provides the basis for the learning activities.
- Adults are most interested in learning subjects that have immediate relevance and impact to their job or personal life.
- Adult learning is problem-centered rather than content-oriented.

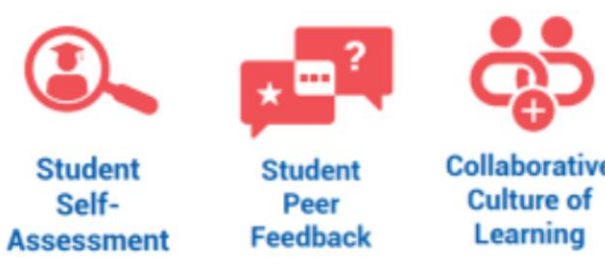
**Classroom Assessment Techniques – CAT**

Classroom Assessment Techniques are formative evaluation methods that serve two purposes. They can help you to assess the degree to which your students understand the course content and they can provide you with information about the effectiveness of your own teaching methods. (Haugen 1999)

### Formative Assessment




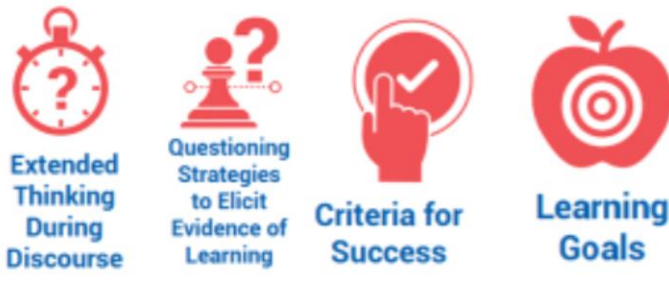
Using a formative assessment approach the following areas can be developed:



- Student self-assessment to encourage reflective learning and metacognition
- Student peer feedback – this is also an important management skill learning how to provide constructive and appropriate feedback
- A collaborative culture and safe learning environment – it's okay to make mistakes

Brown & Knight (2012)


### Objectives

- Encouraging students to think outside simply attending the lectures & seminars and self-learn
- Encouraging students to engage with the learning materials and seek more knowledge
- Tuning students into what good looks and sounds like?
- Align the above to the stated Module Learning Outcomes

Metacognition  
Niedwiecki, A. (2012)

### Method & Instruments




This research was conducted using a mixed methodology: Quantitative (questionnaires & student grades) and Qualitative (student feedback & comments). Using the following 6 instruments:

- Students' assessed group presentations are video recorded (this can be done using an iPad or even a phone)
- The video recording can be instantly uploaded to Panopto (UWL Replay) for viewing & sharing
- The following week all videos are viewed in class
- Students self and peer assess their work in a classroom setting with feedback from the lecturer
- Using Poll Everywhere on their phones and the same marking criteria as the lecturer, students will self and peer grade their work
- The results are shared instantly in class importantly, the final grade is awarded by the lecturer, not the students.

Cresswell et al (2017)

### Timeline




**April 2018 – 2<sup>nd</sup> Semester**

- Test of concept/ Pilot study carried out
- Student presentations videoed
- Peer review marking using Poll Everywhere conducted
- Ironed out technical issues and gauged student feedback

**April 2019 – 2<sup>nd</sup> Semester**

- Last year's student presentations shown to this year's. Demonstrating what good/ poor looks like and the weighting of the assessment criteria required for their own work
- Poll Everywhere used to peer grade
- Results & feedback shared with students



### Privacy & Safeguarding




- Students are given the option to present "off camera" without penalty or loss of marks
- Students must consent to be videoed and for it to be used in class for feedback and educational purposes only and can opt out
- The videos are available on UWL Replay, but only students registered on that Module can access and view them
- From over 70 students videoed there have been no complaints or issues raised. Most students appreciate the learning benefits from the videos (see Student Feedback)

UWL Safeguarding Vulnerable Adults Policy May 2017  
UWL Student Privacy Notice May 2018

### Group Presentation Videos

### Self & Peer Assessment




### Sample of Student Peer Marking using Poll Everywhere

Presentation style - Total of 30 points available	Sources used - Total of 10 points available	Quality of reference materials - Total of 10 points available
1 - 9 points: 51%	1 to 3 points: 13%	1 to 3 points: 50%
10 to 19 points: 47%	4 to 6 points: 58%	4 to 6 points: 44%
20 to 30 points: 47%	7 to 10 points: 12%	7 to 10 points: 44%

Content of presentation - Total of 40 points available	Group functioning - Total of 10 points available
1 - 9 points: 25%	1 to 3 points: 9%
10 to 19 points: 37%	4 to 6 points: 21%
20 to 29 points: 25%	7 to 10 points: 74%
30 to 40 points: 25%	

15 Student Group Presentations were videoed, viewed in seminars by the students and peer graded in class. This provided immediate feedback and group benchmarking. Plus the opportunity to review individual presentation styles & skills, with feedback and advice for improvements in the future.

### Student Feedback



**Have you watched your Group Presentation Video?**

Yes: 78%  
No: 22%

**Ignoring the video & audio quality (sorry) did you find it useful to see and hear yourself?**

Yes: 97%  
No: 3%


**Would you like individual feedback on your presentation skills based on the video?**

Yes: 62%  
No: 38%

36 Students took part in a survey to gather feedback on this method of assessment. The results were very positive. Verbal feedback (not captured here) was complimentary too.

Note: Video audio recording quality was poor.

### Evaluation of intervention



Being videoed, having this shared and viewed with other students raises standards, professionalism, creativity and team work across the module.


Viewing previous year student presentations develops constructive criticism and self-reflection skills. It also helps deepen subject knowledge by seeing subject matter presented in different ways.

By choosing their own presentation case studies students felt involved in the planning and evaluation of their module (Knowles 1984)

The subject matter, in this instance air accident investigations requires cultural and sensitive understanding. We all make mistakes; it's how you learn from them that's important.

Developing strong and confident presentation skills is a life-long investment, especially for those planning to go into management positions. Students agree that seeing themselves on video definitely helps.

### Limitations & Challenges



Having the right equipment is a must. If you use an iPad or phone the sound recording quality can sometimes be poor especially in big rooms. An external microphone could be used.


Using the Panopto App to upload videos directly into UWL Replay is good and it works most of the time well. As a back up you can upload saved videos, but the files can be large.

Being familiar with the use, creation and design of the different types of survey and report building in Poll Everywhere is essential especially in live settings such as lectures & seminars.

The main limitation from this intervention is that the Graduate Outcomes Report for these students will only be available in the 2022 making it hard to measure and thus an area for further study.

Ullah & Wilson (2007), Wright et al (2013)

### Conclusion & Recommendations



Using this CAT intervention (Haugen 1999) has helped me gauge, refine and improve (from last to this year) my own teaching effectiveness in a positive way.

In assessment, the ability to view, pause or rewind a student video presentation is useful. It provides a fair and transparent method which can also be viewed and assessed by second markers in their own time.


Preparing students with strong presentation skills helps meet the needs of students wishing to enter into airline and airport management roles.

Once the technical elements are mastered, then this intervention can be easily replicated.

Overall this Module Assessment receives high satisfaction and positive feedback from students.

There is almost no literature on the use of Poll Everywhere for peer marking or evaluation in this way, so it may be an area for further research.

### References & Appendices



Take a photo of this QR Code to see a Word Document with a list of references and supporting materials

