

### 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 Equity & 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 & Bright (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  
Metcalfe & Shimamura (2014)

### 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 class room 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.

Crosswell et al (2023)

### Timeline



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

- End of concept? Peer study learned just
- Student presentations, videos
- Peer learner marking using Poll Everywhere
- Completion
- Initial and final class and group student feedback

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

- Last year's student presentations, shared to the 'top 5' (highlighting what good jobs look like and the weighting of the assessment criteria required for their own work)
- Self-reflections used to set goals
- 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

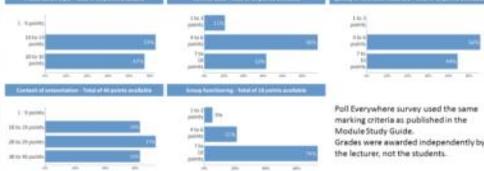
### Group Presentation Videos




### Self & Peer Assessment

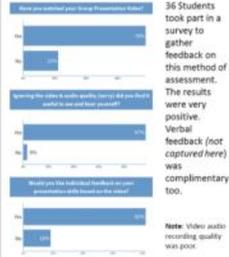


### Sample of Student Peer Marking using Poll Everywhere



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

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 good.

### 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.

John & 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.



# Workshop Agenda & Objectives



## Using Technology for Feedback

### Introduction, Agenda & Objectives

1. Academic Intervention Overview  
*Approx. 10 to 15 minutes*
2. Individual & Group Exercise – watch a video and peer grade it using Poll Everywhere – *Approx. 15 to 20 minutes*
3. Review using technology for feedback, methodology Question & Answers – *Approx. 5 to 10 minutes*

*Total time approx. 35 to 45 minutes*

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**Professional and creative**  
**Thoughtful and proactive**  
**Globally aware and resilient**



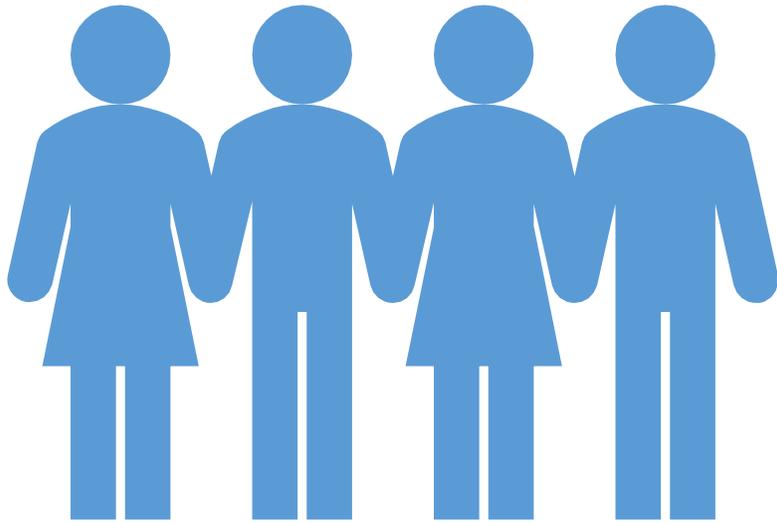
Poll Everywhere



\* UWL Achievement 2023

# Employability

## Context for intervention



- 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.

# Applied Concepts



## 4 Principles Of Andragogy Knowles (1984)

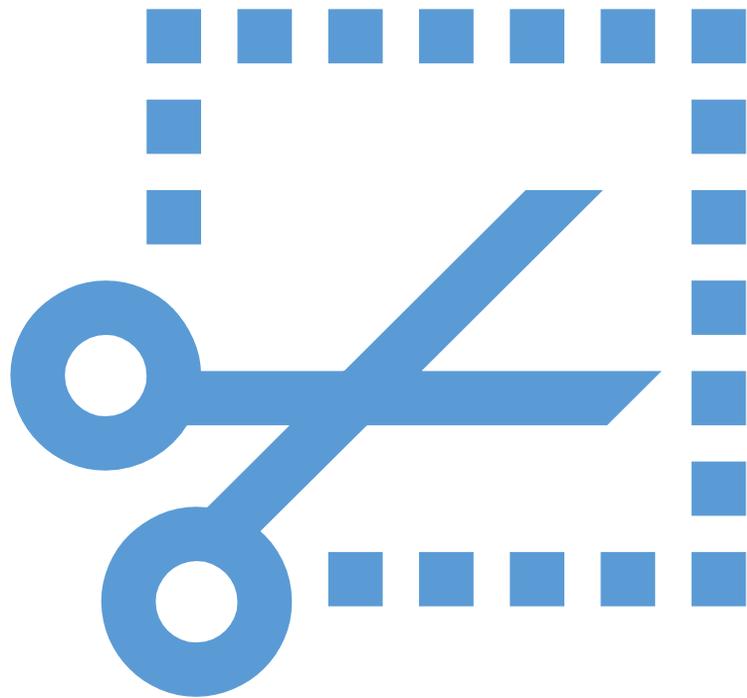
1. Adults need to be **involved** in the planning and evaluation of their instruction.
2. Experience (**including mistakes**) provides the basis for the learning activities.
3. Adults are most interested in learning subjects that have immediate **relevance** and impact to their job or personal life.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

## Classroom Assessment Techniques – CAT Haugen (1999)

Classroom Assessment Techniques are **formative evaluation methods** that serve two purposes.

1. They can help you to assess the degree to which your students **understand the course content**
2. They can provide you with **information about the effectiveness of your own teaching methods.**

# Formative Assessment



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



**Student  
Self-  
Assessment**



**Student  
Peer  
Feedback**



**Collaborative  
Culture of  
Learning**

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

# Objectives



**Extended  
Thinking  
During  
Discourse**



**Questioning  
Strategies  
to Elicit  
Evidence of  
Learning**



**Criteria for  
Success**



**Learning  
Goals**

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



**Metacognition**

Niedwiecki, A. (2012)

# Method & Instruments



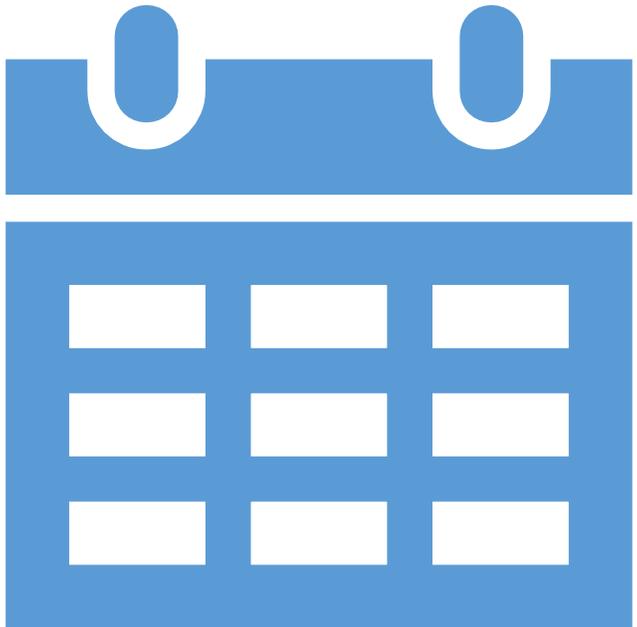
Poll Everywhere



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

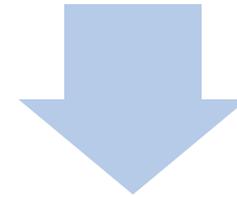
1. Students' assessed group presentations are **video recorded** (this can be done using an iPad or even a phone)
2. The video recording can be instantly uploaded to Panopto (**UWL Replay**) for viewing & sharing
3. The following week all videos are **viewed in class**
4. Students **self and peer assess**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

# 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

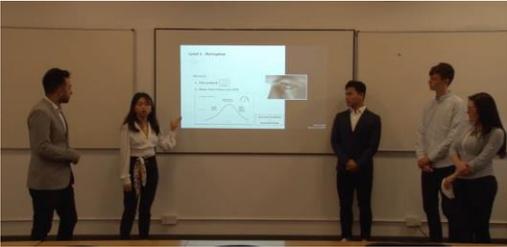


- Students are given the option to present “off camera” without penalty or loss of marks
- Students must consent to be videoed and for it to be used in class for feedback and educational purposes only and can opt out
- The videos are available on UWL Replay, but only students registered on that Module 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



Click to add	STRUCTURE & TIMING (PRESENTATION)	DELIVERY (INDIVIDUAL)	NON-VERBAL SKILLS
<b>BAND 4</b> 8 - 10	The flow of the presentation is completely logical and each stage is clearly defined. There is a clear purpose to the information and the presenter(s) does not linger too long on any stage. The timing is accurate.	The presentation/performance is very well-paced. Occasional reference to notes/cue cards may be needed but the delivery is natural and uninterrupted. It is audible at all times with no strain on the audience.	The presenter appears very confident and relaxed. Excellent eye contact throughout.
<b>BAND 3</b> 5 - 7	There is a logic to the presentation and the purpose of each section is defined to a good degree. The presenter(s) may linger slightly too long on a particular section or sections. The timing is generally accurate.	The presentation/performance is paced well and there is occasional reference to notes/cue cards but delivery is mostly natural. It is audible with no strain on the audience.	Generally relaxed with some hint of nervousness and confident throughout. Good eye contact with the audience.
<b>BAND 2</b> 3 - 4	There is some sense of logic to the presentation. Sections may be fairly well-defined but presenter(s) may spend too long discussing some sections. The timing may be moderately too short or too long.	The presentation/performance is paced quite well with occasional hesitation and there is some reliance on notes/cue cards but delivery is somewhat natural. It is largely audible but the audience may struggle to hear the occasional word.	Some nervousness is evident but may become more relaxed and confident as the presentation progresses. The nervousness may partially obscure meaning.
<b>BAND 1</b> 1 - 2	The logic of the presentation is unclear and the individual sections may be confused, repetitive or irrelevant. The time spent on sections will be patchy and perhaps inappropriately long or short. The timing of the overall presentation will be noticeably too long or too short.	The presenter is rather hesitant and there may be over-reliance on notes/cue cards or the presentation may be read from a script. There may be some issues with clarity of speech and some parts of the presentation may be difficult to hear.	Does not always maintain eye contact with the audience and nervousness often leads to hesitation and obscures meaning.
<b>BAND 0</b> 0	Task not completed	Task not completed	Task not completed
Out of:	10	10	10



Poll Everywhere



Student Self-Assessment



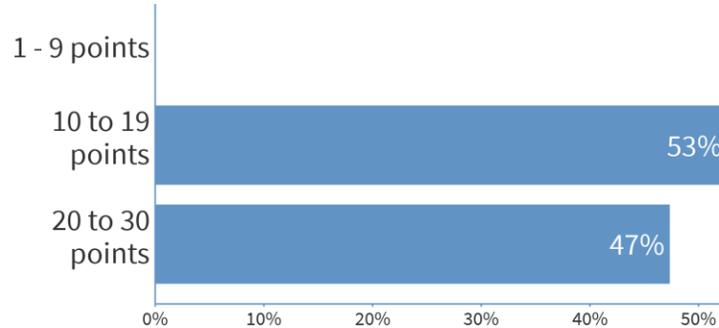
Student Peer Feedback



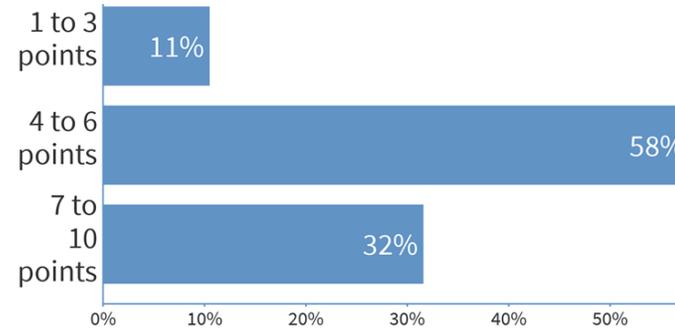
Collaborative Culture of Learning

# Sample of Student Peer Marking using Poll Everywhere

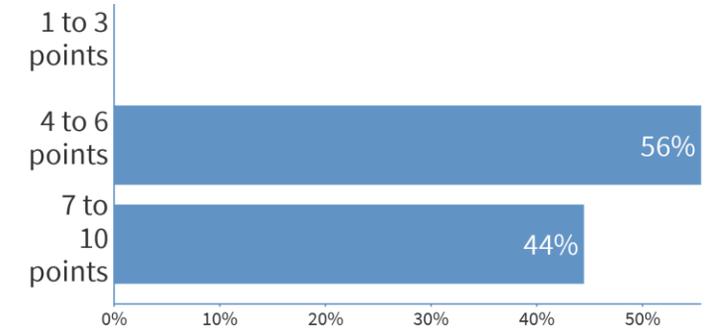
Presentation style - Total of 30 points available



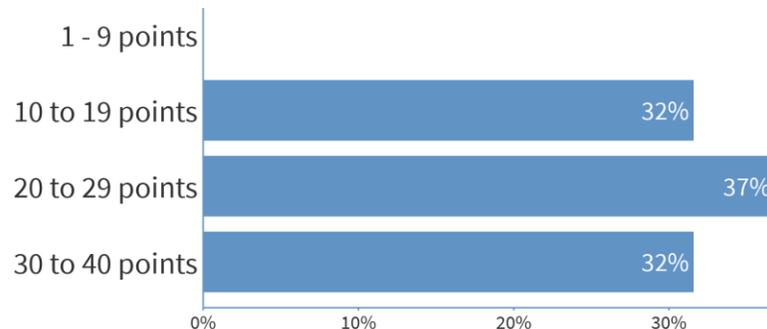
Sources used - Total of 10 points available



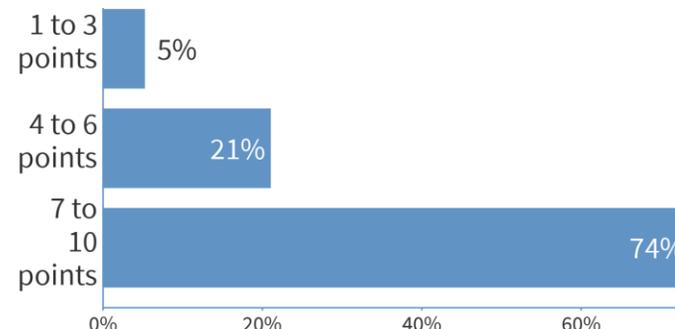
Quality of reference materials - Total of 10 points available



Content of presentation - Total of 40 points available



Group functioning - Total of 10 points available



Poll Everywhere survey used the same marking criteria as published in the Module Study Guide. Grades were awarded independently by the lecturer, not the students.



Poll Everywhere

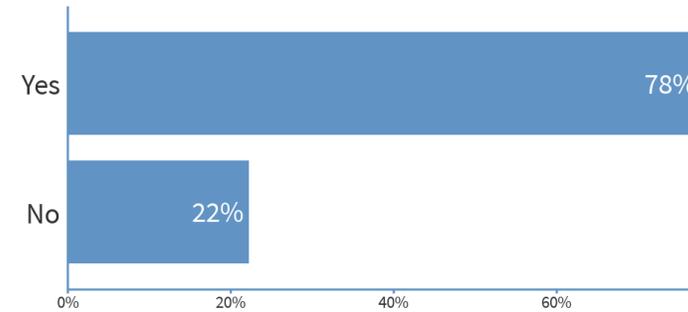
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# Student Feedback

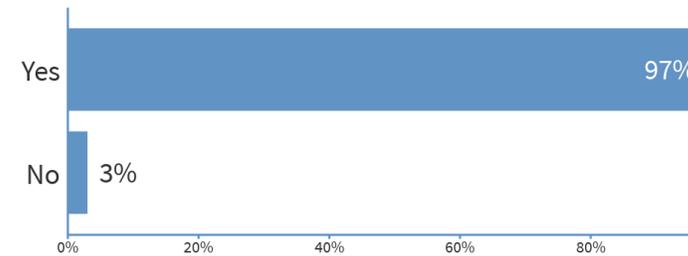


Poll Everywhere

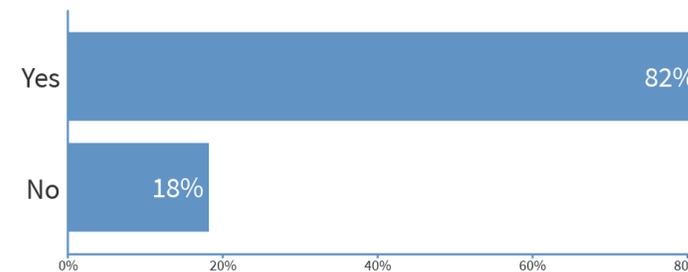
Have you watched your Group Presentation Video?



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



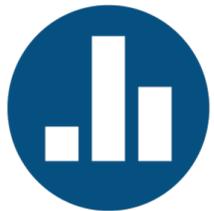
Would you like individual feedback on your presentation skills based on the video?



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.

# Limitations & Challenges



Poll Everywhere



GRADUATE  
OUTCOMES

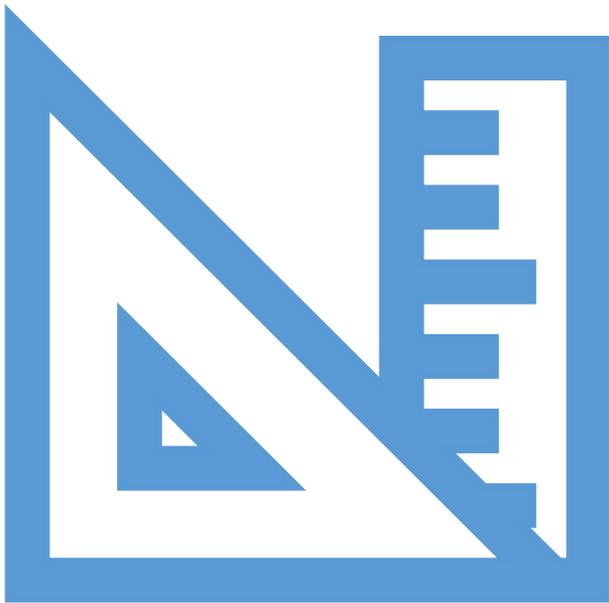
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# Evaluation of intervention



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

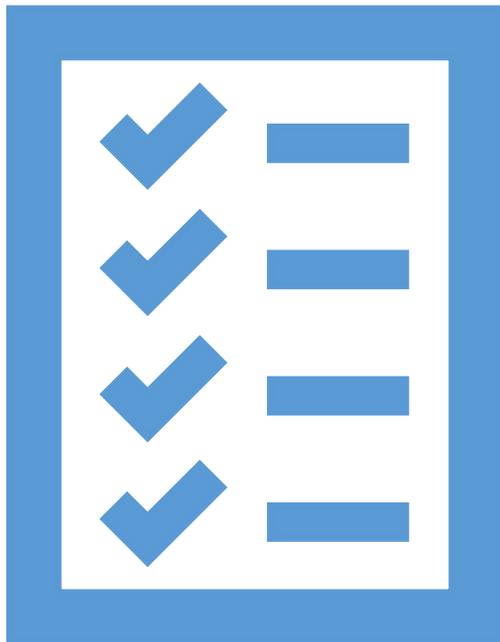
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The subject matter, in this instance air accident investigations requires cultural and sensitive understanding. We all make mistakes; it's how you learn from them that's important.

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# Conclusion & Recommendations



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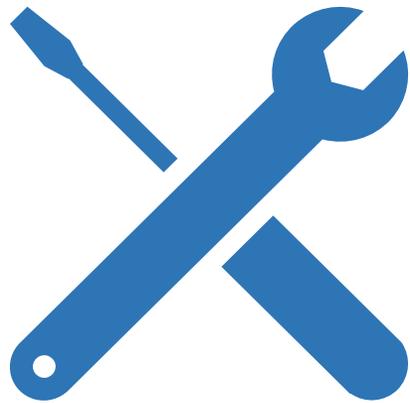
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Do it yourself?



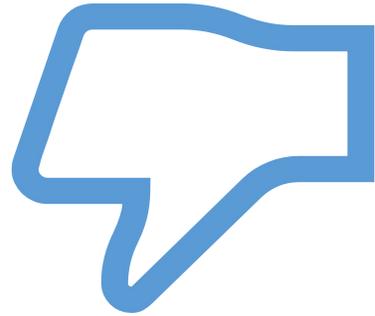
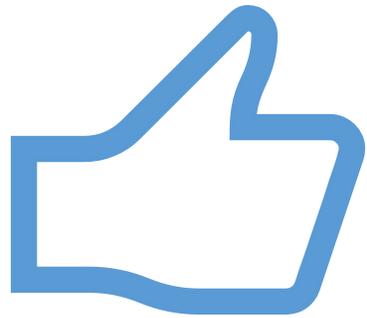
## Hardware



## Software



What do you think?



Would you like to try it?



Ask the people sitting around  
you



# Poll Everywhere

<p><b>Presentation style - Total of 30 points available</b> You can respond once</p> <p><input type="radio"/> 1 - 9 points</p> <p><input type="radio"/> 10 to 19 points</p> <p><input type="radio"/> 20 to 30 points</p>	<p><b>Content of presentation - Total of 40 points available</b> You can respond once</p> <p><input type="radio"/> 1 - 9 points</p> <p><input type="radio"/> 10 to 19 points</p> <p><input type="radio"/> 20 to 29 points</p> <p><input type="radio"/> 30 to 40 points</p>	<p><b>Quality of reference materials - Total of 15 points available</b> You can respond once</p> <p><input type="radio"/> 1 to 5 points</p> <p><input type="radio"/> 6 to 10 points</p> <p><input type="radio"/> 11 to 15 points</p>	<p><b>Sources used - Total of 15 points available</b> You can respond once</p> <p><input type="radio"/> 1 to 5 points</p> <p><input type="radio"/> 6 to 10 points</p> <p><input type="radio"/> 11 to 15 points</p>
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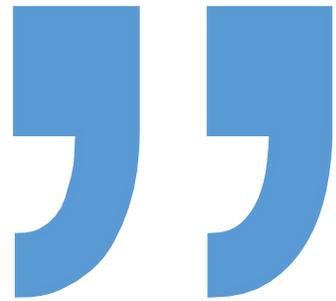
[pollev.com/jamesgoodman](https://pollev.com/jamesgoodman)



Thank you

Any Questions?

# References & Appendices



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

