



**Welcome to:
Virtual Stratified Medicine Lab –
intro to basic lab skills.**

Wednesday 24th June 10:30-11:30



Questions can be asked in the chat pane



The webinar will be recorded and available afterwards with the option of captions



Remember to mute your microphone and turn your video off whilst presenters are speaking



Virtual Stratified Medicine Lab – Intro to basic lab skills.

Designing a virtual lab tour to promote the learning and teaching of Stratified Medicine.

Dr. Sarah Atkinson,
Lecturer in Stratified Medicine, School of Biomedical Sciences, Ulster

Mr. Philip O'Neill (Office for Digital Learning),
PhD Researcher, Faculty of Arts, Humanities and Social Sciences, Ulster

Wednesday 24th June 2020

Context

Identifying Issues

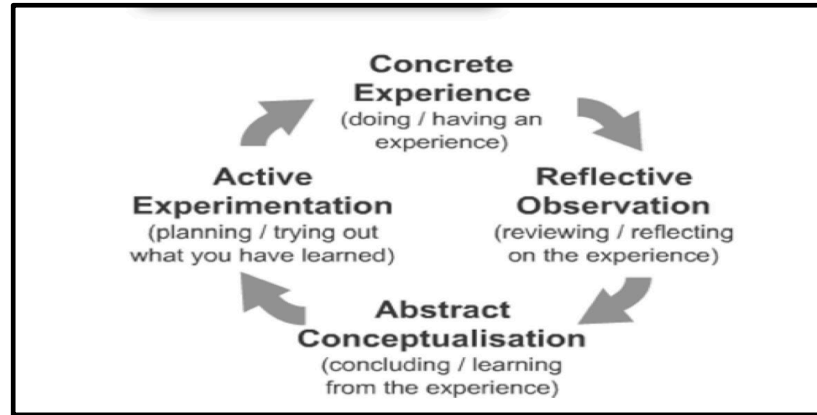


- The MSc Stratified/Personalised Medicine program is a distance learning course
- “The Biosciences are essentially practical and experimental subjects”, “experience and competence in a broad range of appropriate practical techniques and skills relevant to the biosciences” (QAA Subject Benchmark – Biosciences, October 2019)



Rational

Pedagogy



Stages of the Kolb Learning cycle (Kolb, 1984)

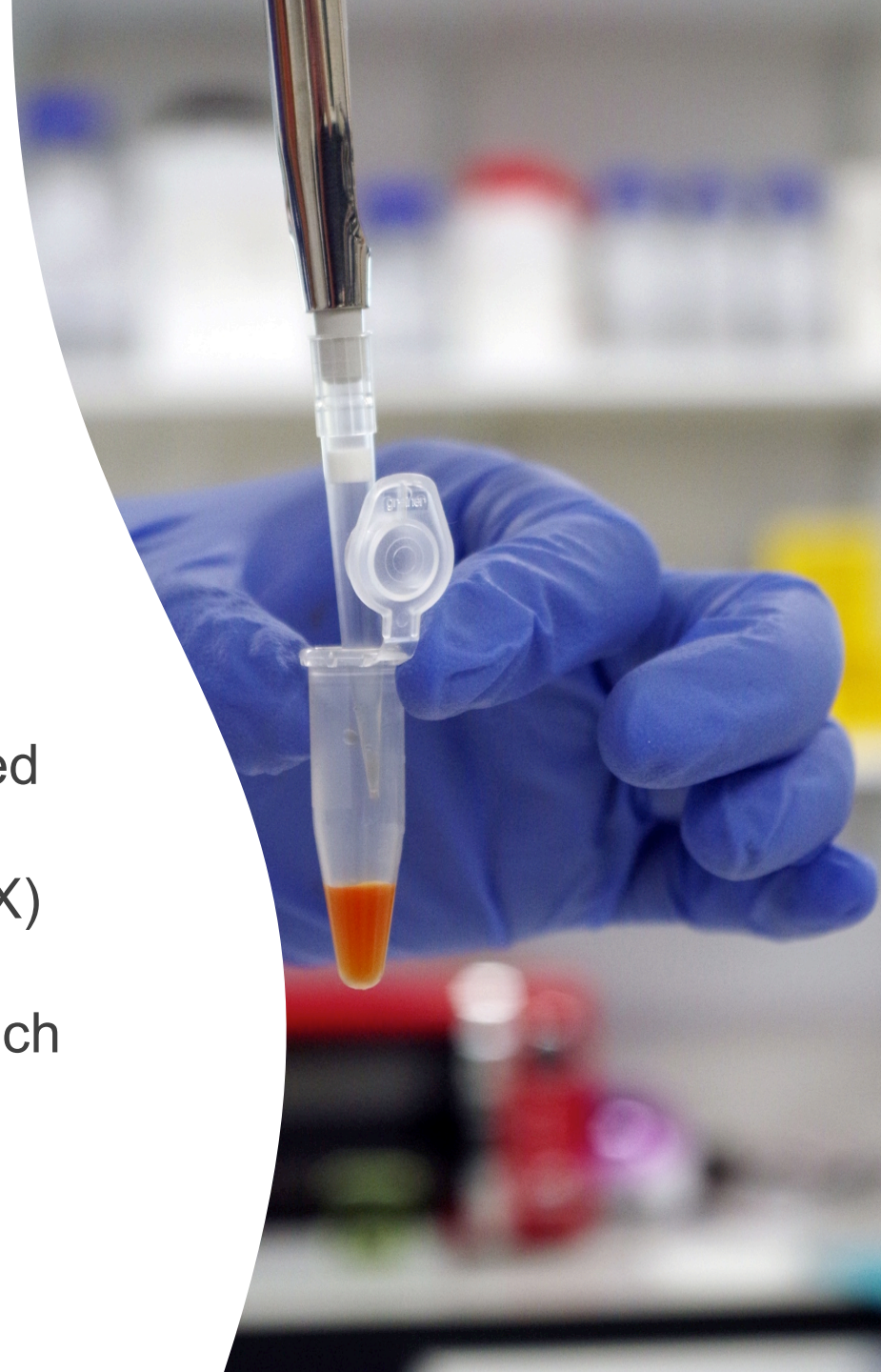
- Use of a practical component reinforces and enhances knowledge and understanding allowing students to develop key skills, which will aid in employability opportunities post-graduation (Lewis, 2014).
- Maldarelli et al (2009) demonstrated that use of videos alone are as useful as performing the lab technique alone when teaching practical skills.

Design Principles

Methodological approach

Office for Digital Learning – Special Project Call:

- [Project away day](#) – develop a design brief
- Project [development cycle](#) kept to 12 weeks
- Project rational/pedagogy aims and objectives established
- Student focused design = Empathic User Experience (UX)
- [ADDIE model](#) ideal framework – outcome-based approach



Virtual Lab Production

A step into the unknown...

- **Teaching team:**
 - Video scripts
 - Working on live set
 - On-Camera!!
- **Designer**
 - 3D or 2D ???
 - Labs = Claustrophobic 3 day shoot
 - 3+ cameras/lights/audio + safety – 1 person
 - Panoramic Photography



Virtual Lab Production

Panoramic Photography – 2014 : DSLR 20+ shots (each location) hand stitched in Photoshop



Virtual Lab Production

Panoramic Photography – 2018: 1 shot, auto stitched, instant preview – all done in iPhone!

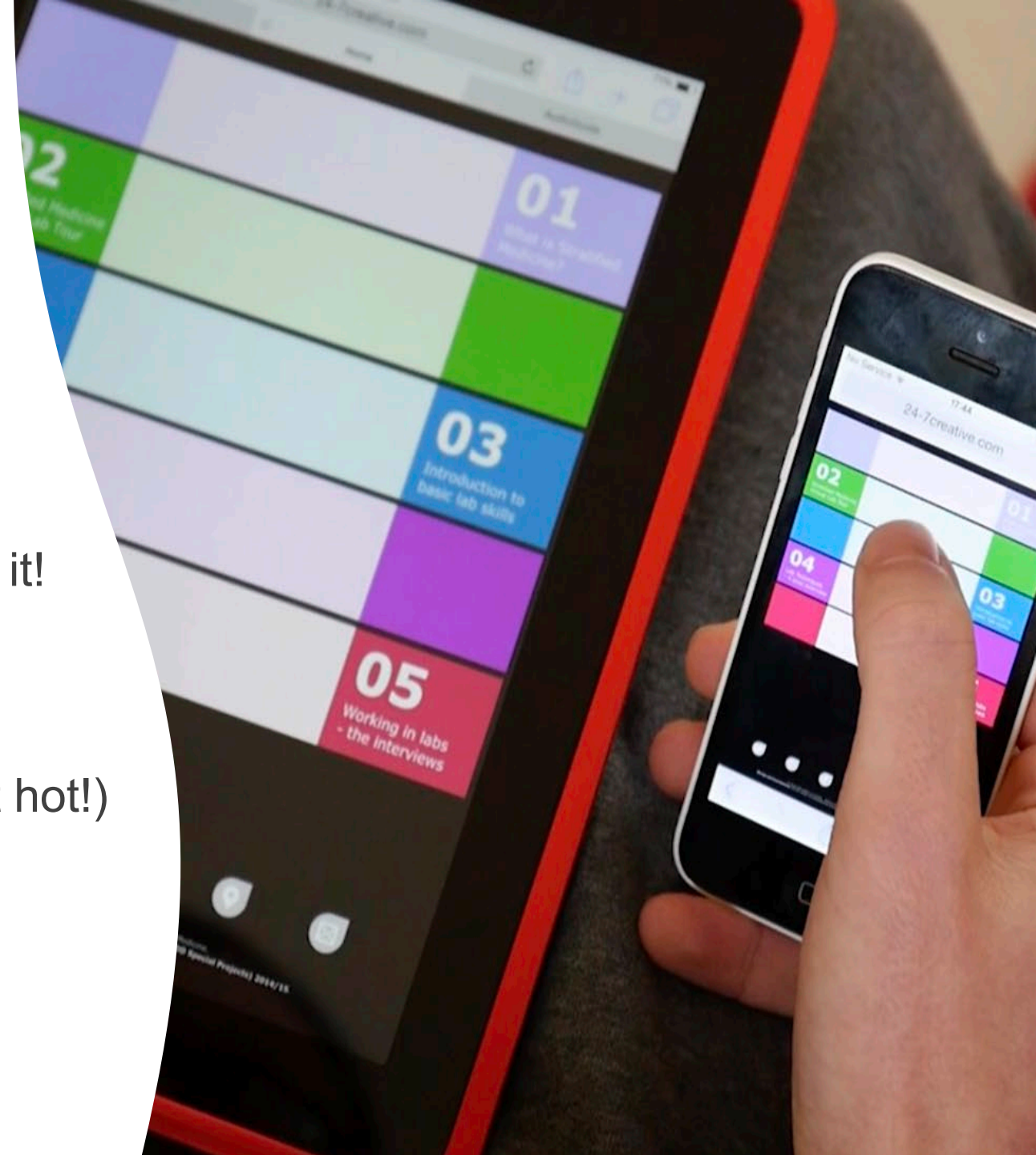


Pantheon Rome 2018

Virtual Lab Production

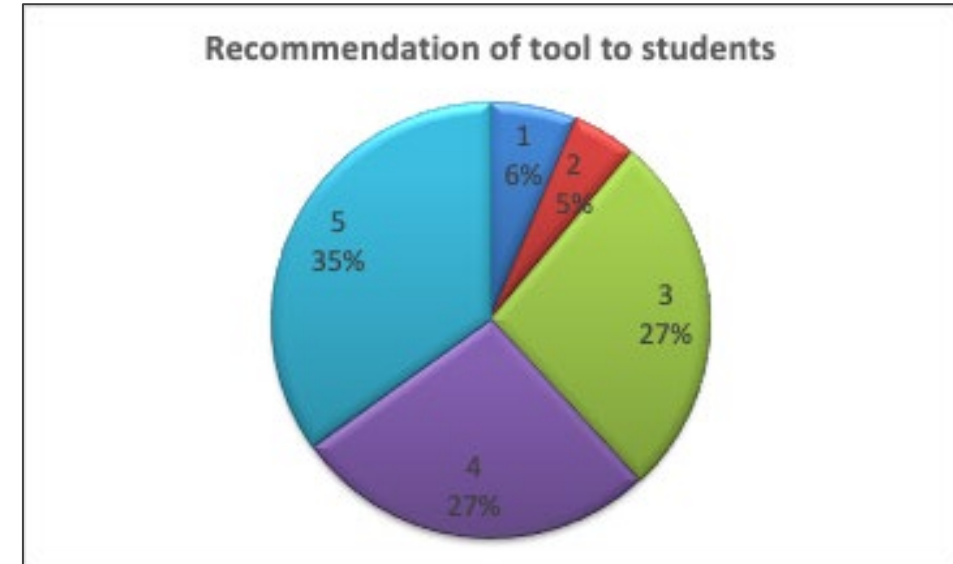
Things I learned during making of...

- Off screen live narration capture
- Multiple camera capture - great for labs
- Students migrate across devices – design it!
- 3D not always needed – Photography!
- **STEM** + **A**rts (design) = **STEAM** (makes it hot!)

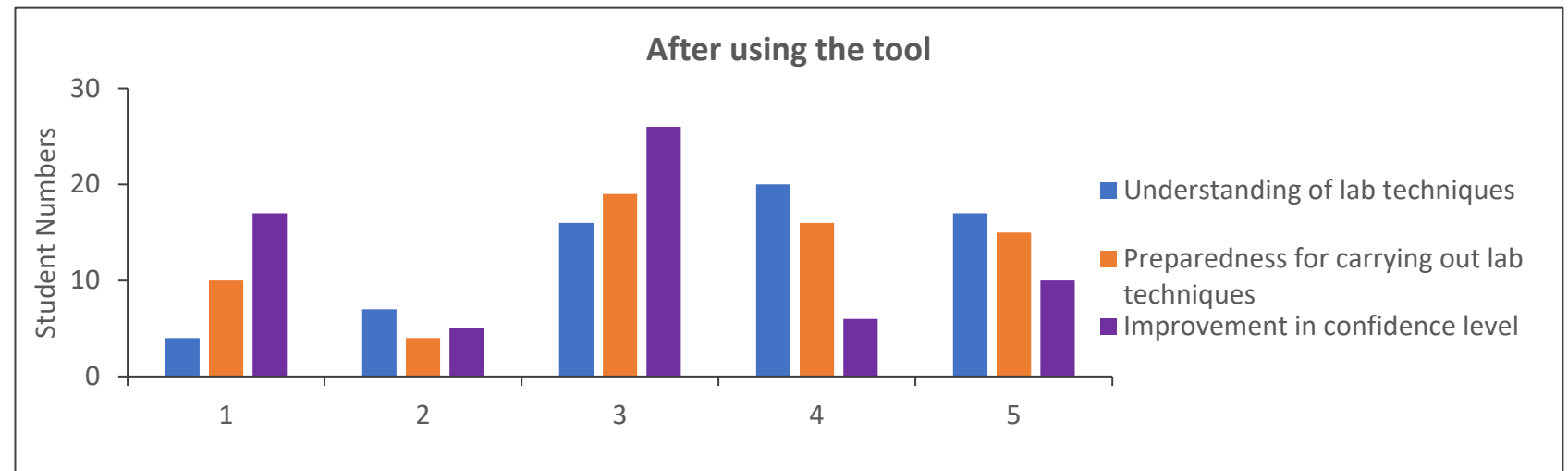


Impact

Postgraduate students

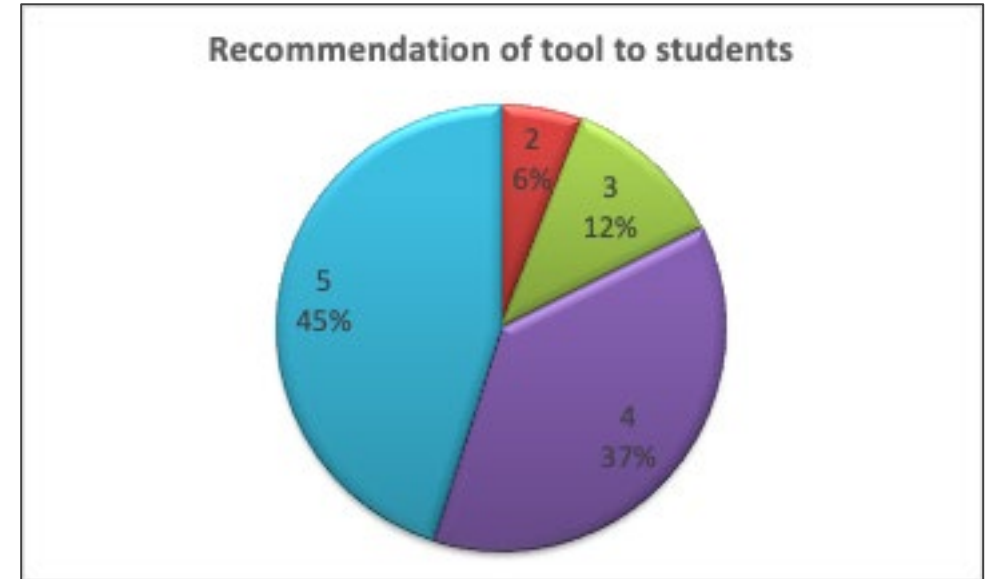


On a scale of:
1 = not useful,
5 = very useful

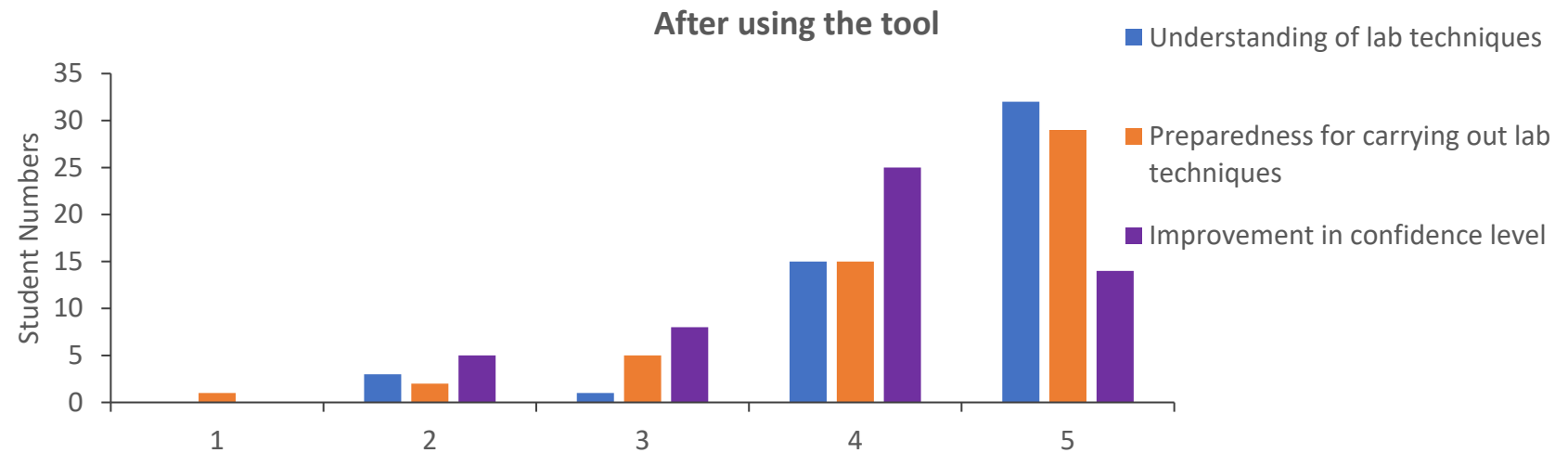


Impact

Undergraduate students

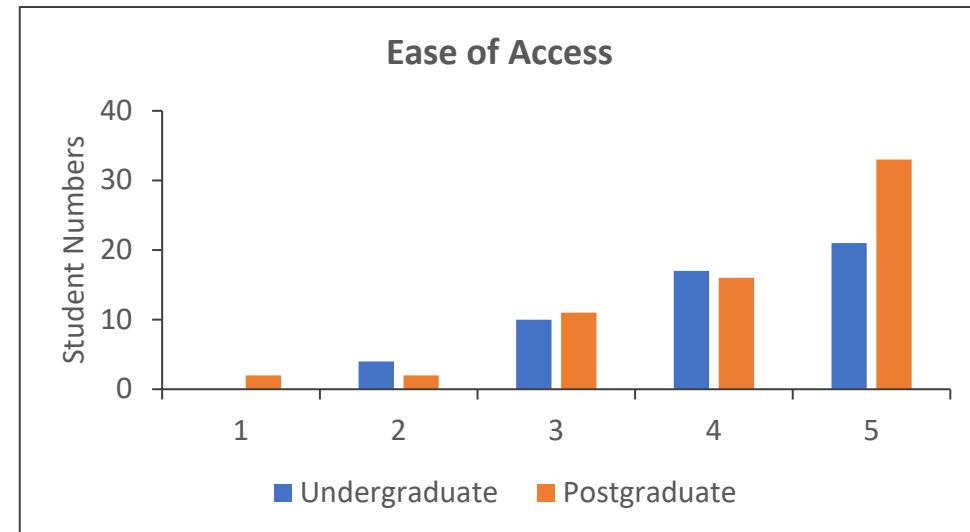
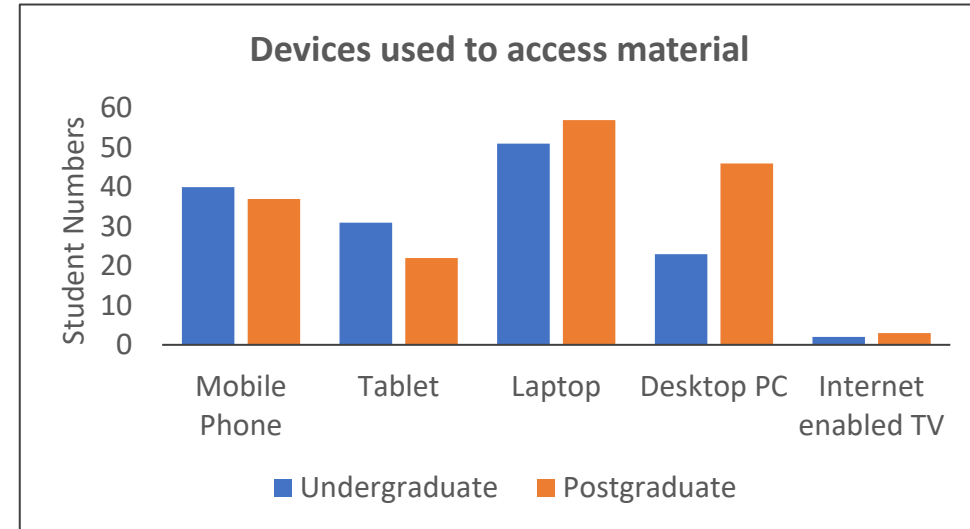
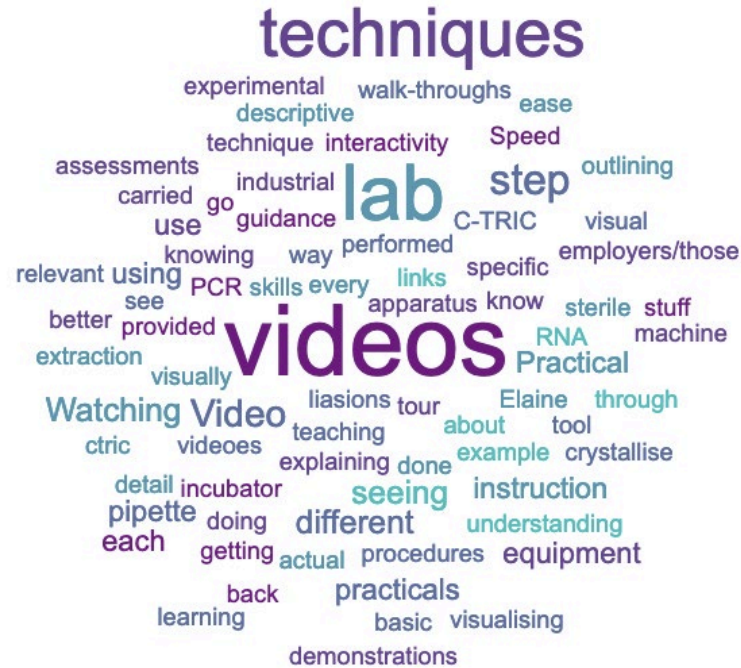
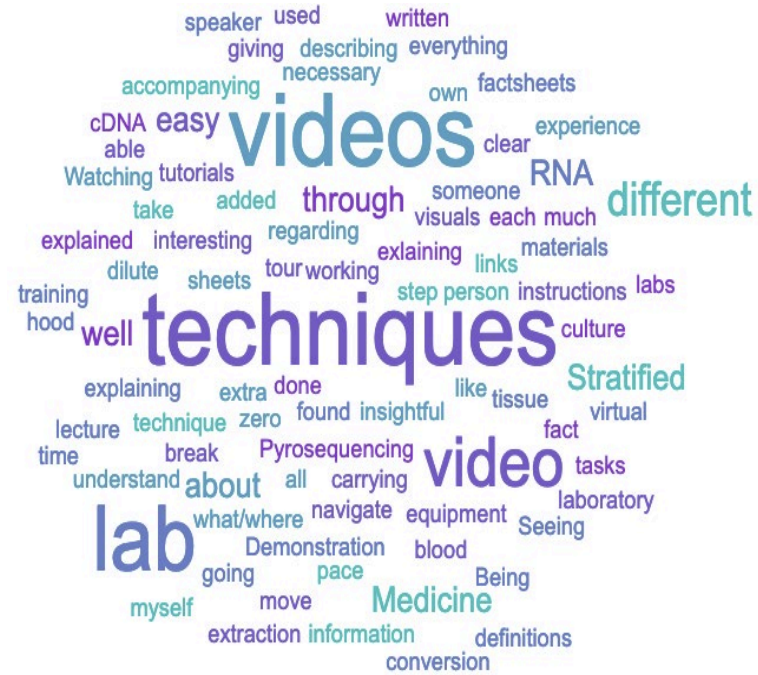


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Impact

Postgraduate (distance learning) vs. Undergraduate (campus based)



Reflective Practice

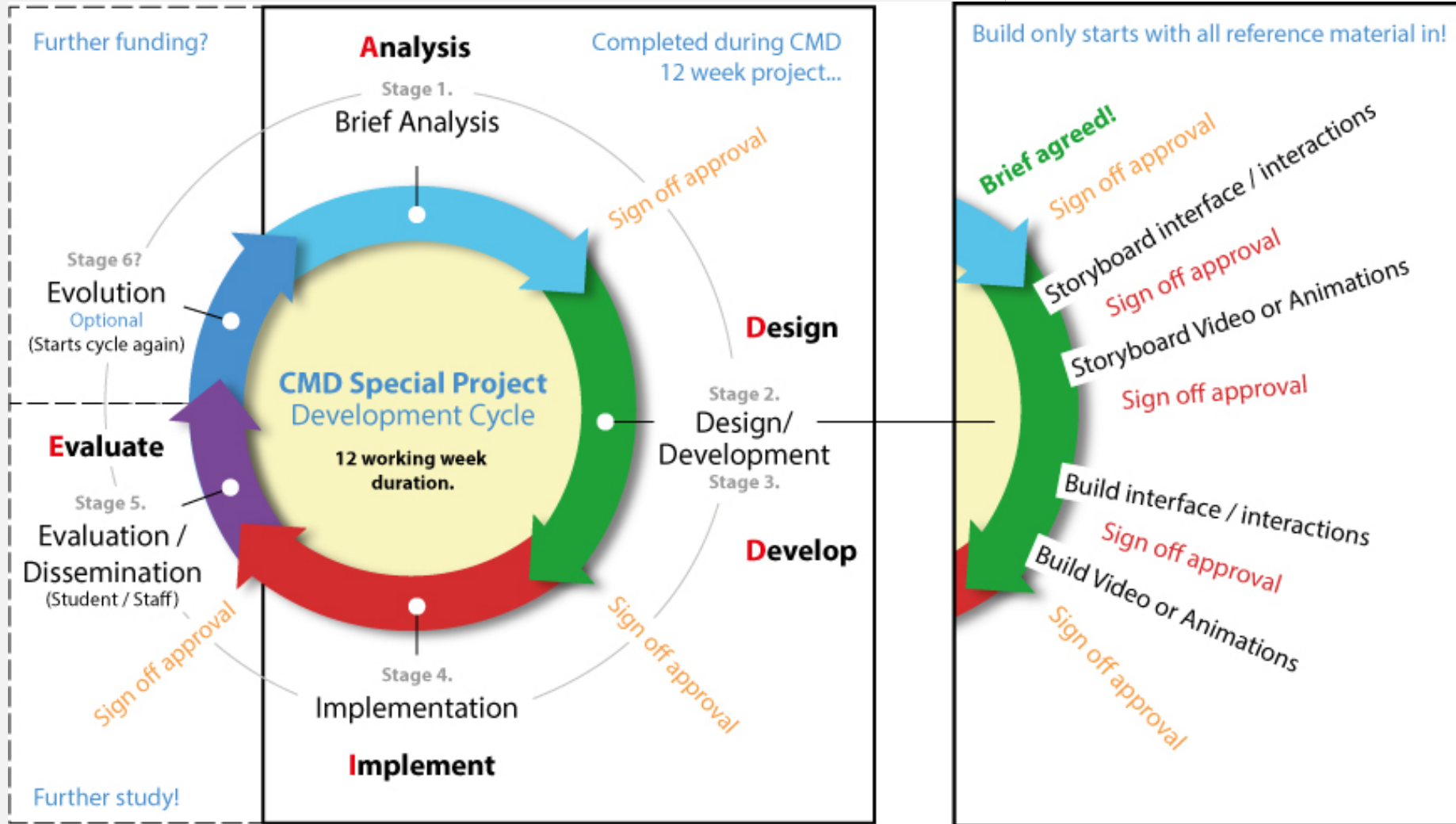


Thank-you

- Any Questions?



Development Cycle



ADDIE

“The goal of education is understanding;
the goal of training is performance”. | Frank Bell

Our projects follow an **ADDIE instructional design model**: with one extra stage to allow projects to evolve.

Analysis - Systematic exploration of the way things are and the way things should be, the difference is the performance gap.

Design - If the analysis identifies a performance gap, the design phase will outline the performance objectives.

Develop - Using the information gathered in the analysis and design phase, the performance solution is created.

Implement - This stage includes delivery of the performance solution.

Evaluate - Measurement of how well the performance or new solution achieved the objectives.