



1. Introduction

FORE 20004 Forensic Casework Examination

- BSc Forensic Science
- Year 2 / Level 5
- Forensic Science Practical labs
- Term 2 (after some practical experience in Term 1 prior to second lockdown)

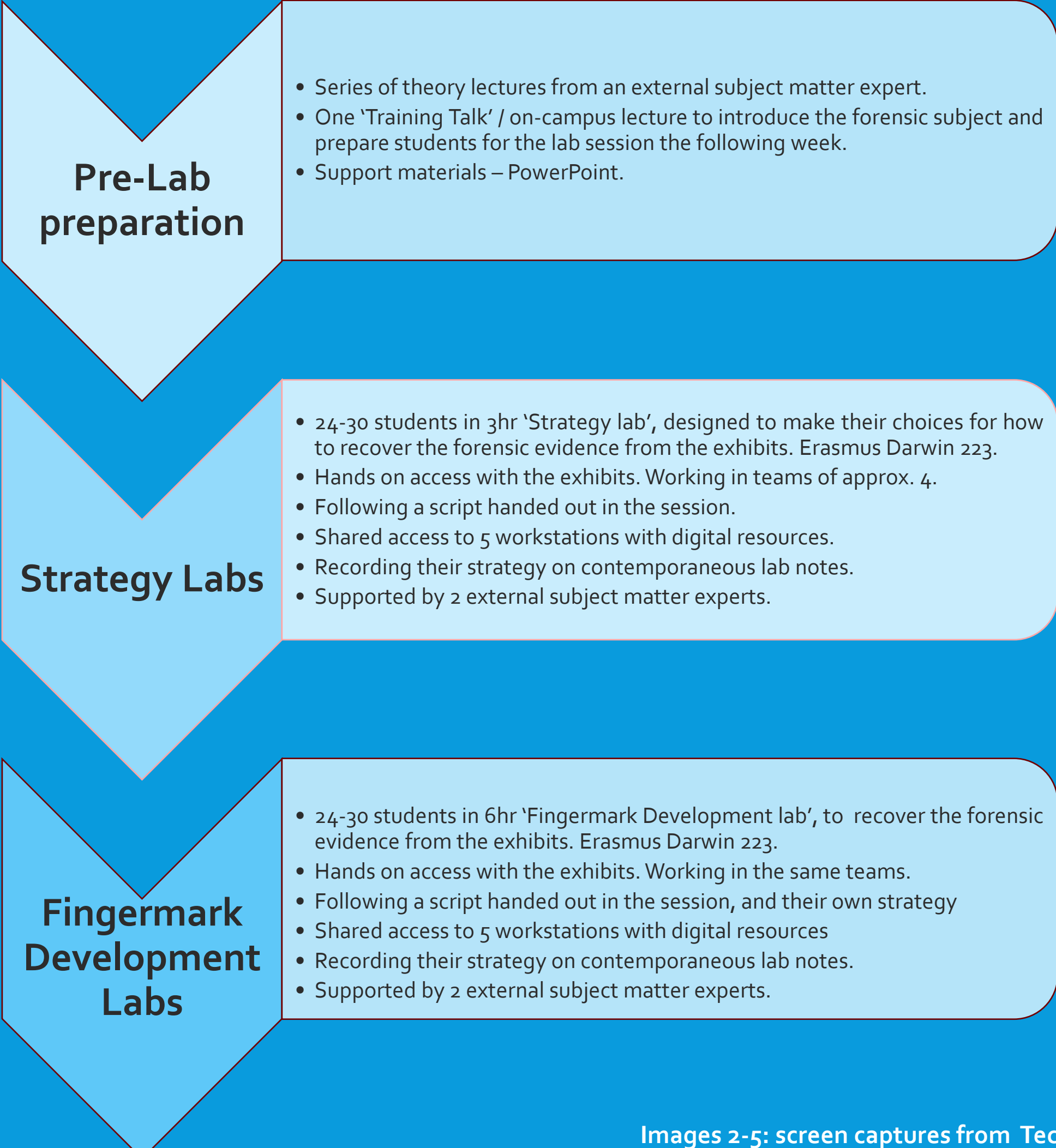


Image 1: Pre-Covid lab sessions

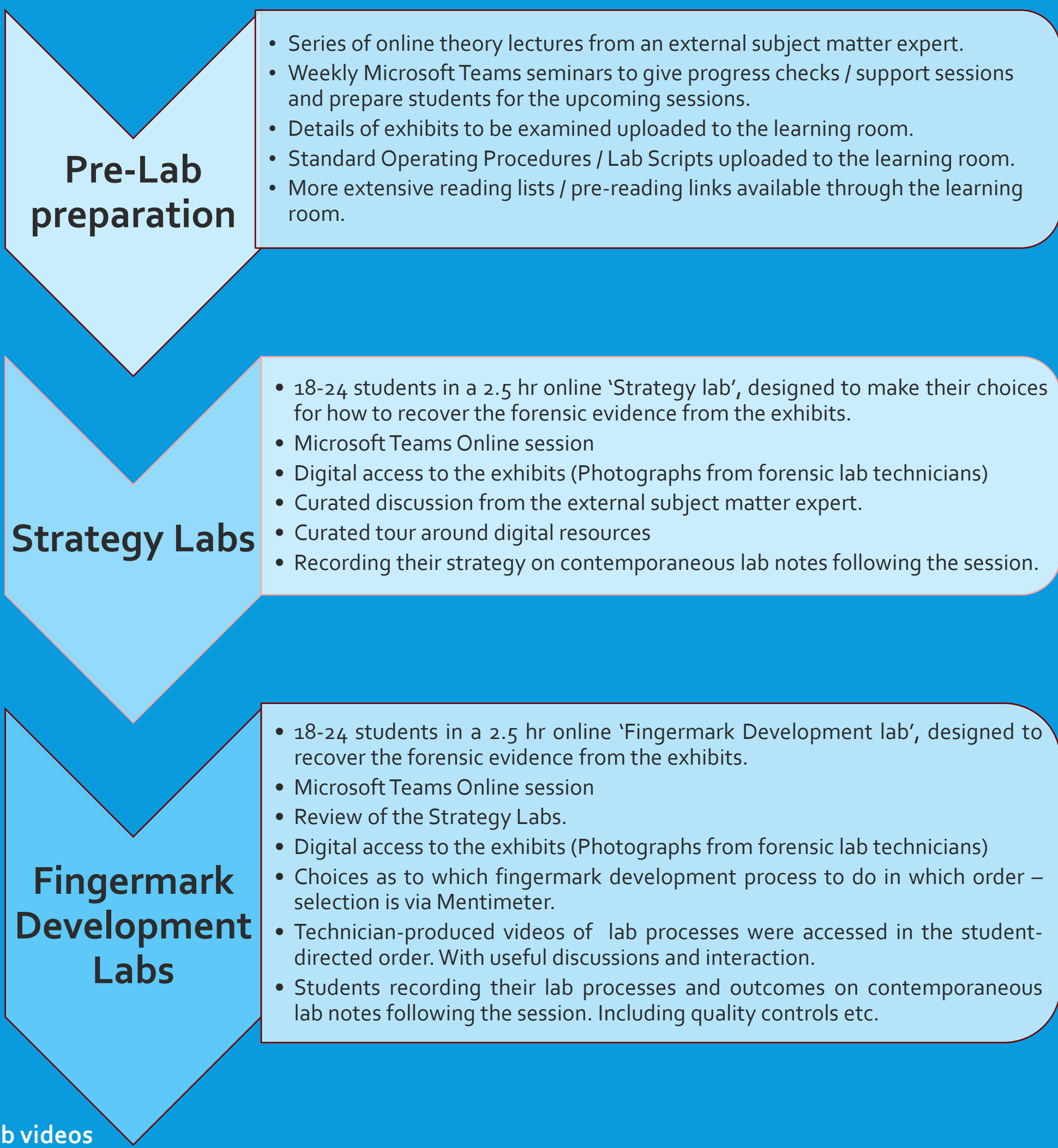
- There can be few teaching experiences that are more ‘hands-on’ than a fingerprint development lab.
- Literally ‘hands-on’, because the lab was about processing crime scene exhibits to see if anyone has left their fingerprints on a bloody knife or on a threatening hand-written note.
- Turning this practical experience into a digital online lab was a challenge, but one that was successfully overcome by teamwork.

2. Methodology

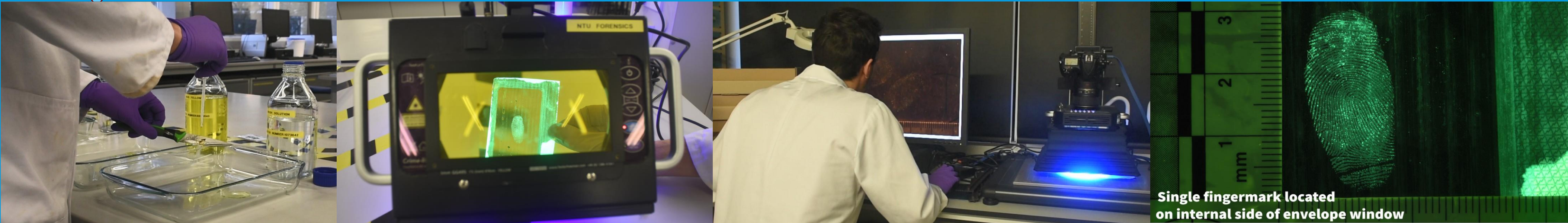
Pre-Covid Processes



Post-Covid Processes



Images 2-5: screen captures from Technician online lab videos

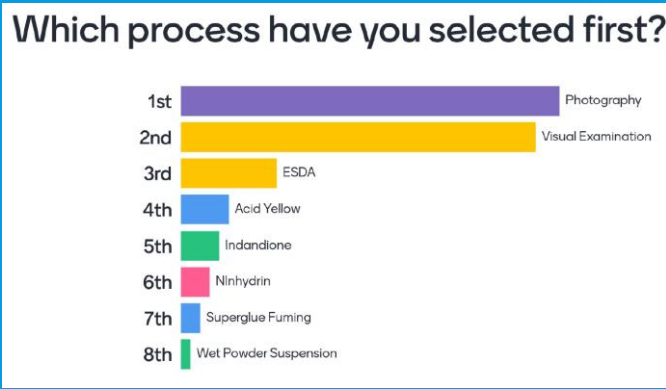
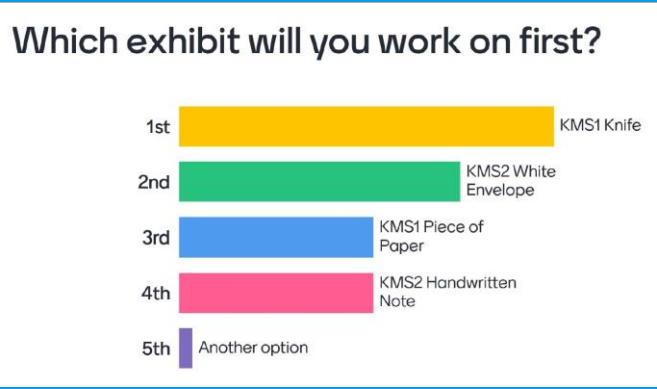


3. Creating the Videos

- Assessments were made of the learning outcomes that the students still needed to achieve, even with lockdown limitations.
- Detailed requirements lists were provided to the technicians, including:
 - Which processes needed to be filmed
 - What exhibits needed to be used
 - What details needed to be included in the videos, such as batch numbers, expiry dates of chemicals, equipment specifications and maintenance records
 - Main stages of processing to be displayed
- Technicians provided prototype videos for approval, minimal changes needed.
- All videos delivered, again only minimal changes needed.
- Technicians delivered excellent, professional-level work.

4. Mentimeter Polling

- Mentimeter was used extensively in the online fingerprint development labs.
- Initially used as a refresher of the strategy labs.
- Students then chose which processes to do in which order
- Microsoft Teams allowed the students to ‘chat’ in response to the votes, such as when they had selected the ‘wrong’ process in the ‘wrong’ sequence.
- ‘Safe way to fail’ and learn from errors, which would have been irretrievable in the ‘real world’.



5. Future practice

- There is no substitute for hands-on experience with experiential learning when performing kinaesthetic tasks – the fingerprint development will / must return in future.
- However...
- Against expectations, some innovations will persist...
- Strategy lab will work better online – bigger group discussion, more engagement, but may be done in a lecture theatre, rather than a lab?
- Mentimeter and Teams widens participation – more students participate than in lectures / labs.
- Attendance was high, approx. 95% across the module, even with the loss of face to face teaching.
- Unsolicited positive feedback from students for the videos and the work from the technicians.
- Online materials will be used as a back-up for teaching in future, essential online supporting materials.

6. Acknowledgements

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 - Dr Kelly Whittingham
 - Aaron Wood
- **NTU Forensic Science Academics:**
 - Emma Rixon
 - Dr Jennifer Miller
 - David Butler
 - Chinyere Williams
 - Fiona Whittaker
 - Kate Jones

7. Equipment

- **Filming:**
 - NIKON D750
 - 360 degree filming:
 - Insta360 ONE R
- **Editing Software:**
 - Adobe Premier Rush
- **Video Distribution between staff:**
 - Microsoft Sharepoint
- **Video Distribution to Students:**
 - Microsoft Teams
 - NOW Module Pages
- **Student Polling:**
 - Mentimeter