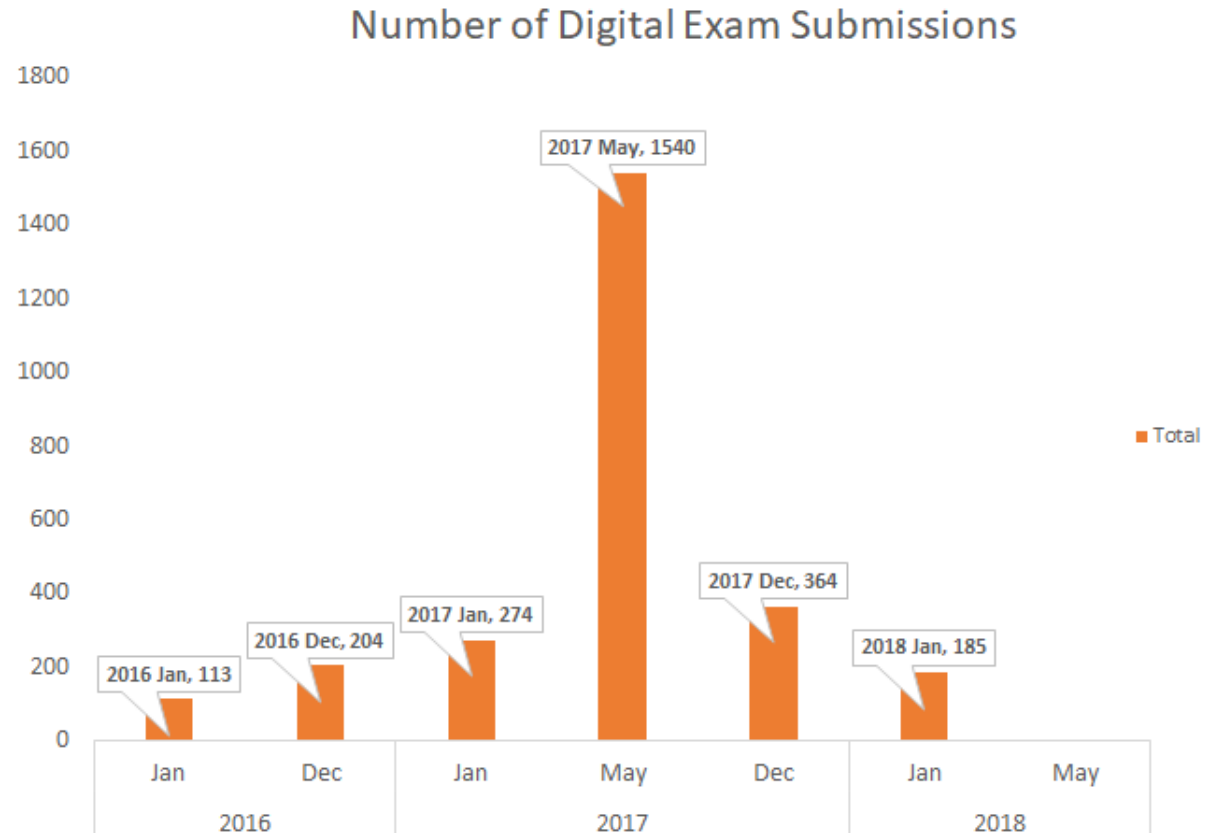
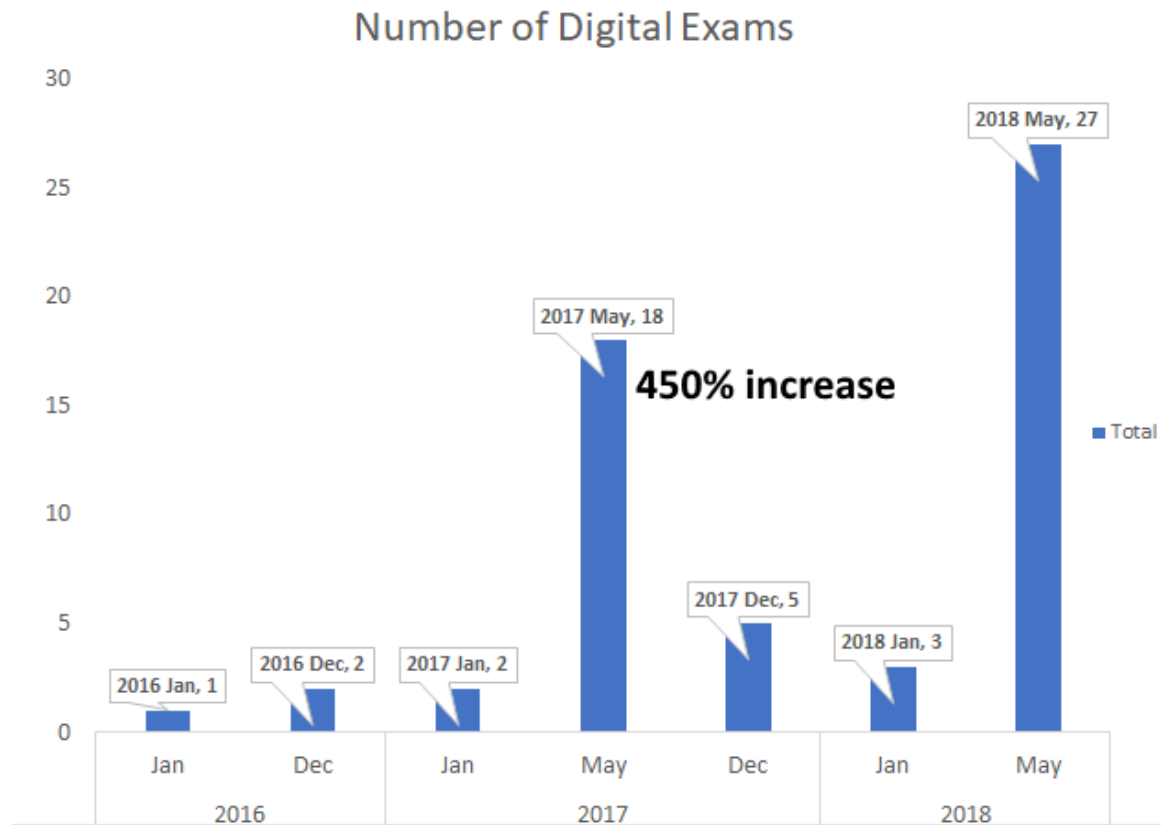


Supporting Digital Exams

Alice La Rooy and Claudia Cox (Brunel University London)

Additionally: Najeeb G. Abdulhamid, Peeyush Chauhan, Babak Rahi

What we've done so far:



Pre-Exam Support - Communications

Email:

Students receive email notifications for their upcoming digital exams

Key information in lectures/ seminars:

Lecturers dedicate time at the end of teaching close to the exam periods to dispense information

New for 2017/8:

Pop-up messages in relevant modules in Blackboard Learn

Pre-Exam Support - Student Preparation

Drop-in Sessions

- All-day practice sessions for students run for 1 week shortly before the exams
- Students can get advice, help setting up their laptops and take a practice exam

Online Material

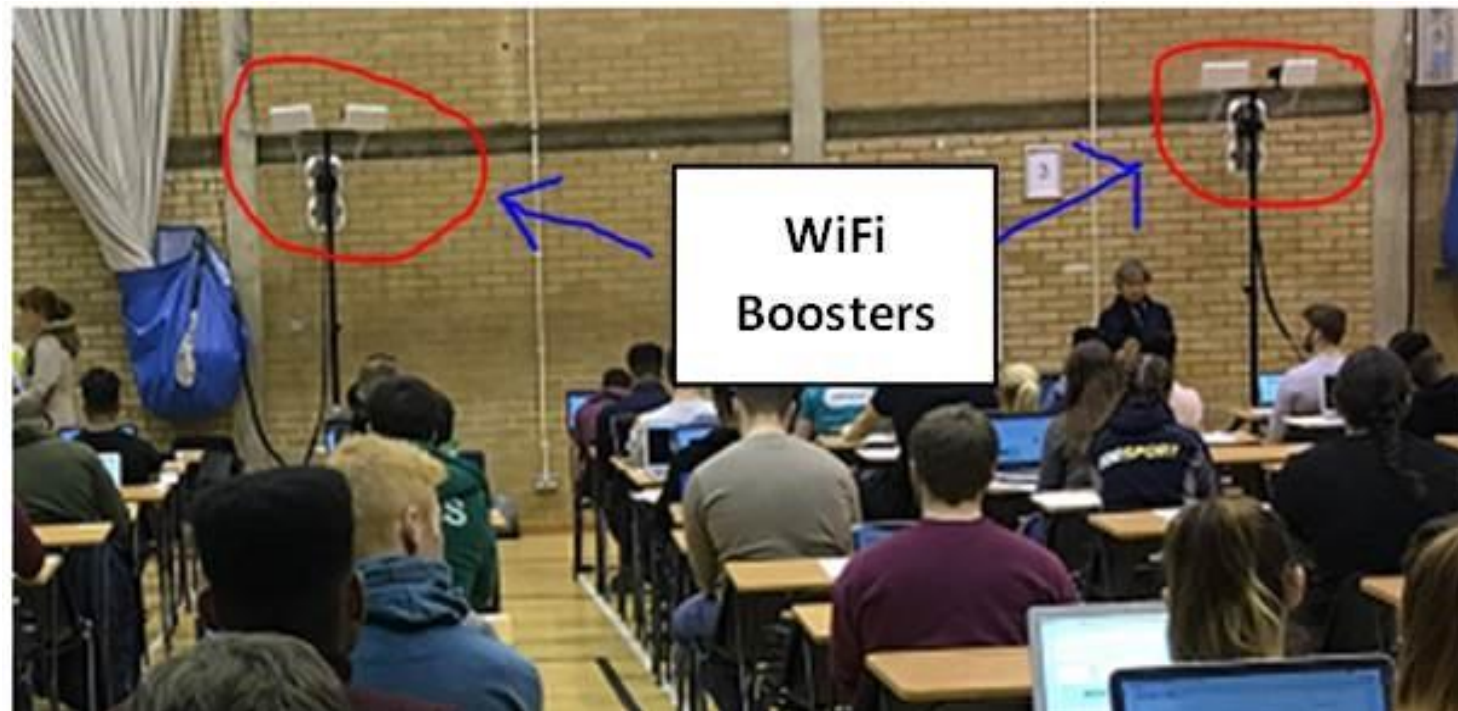
- A dedicated organisation on Blackboard Learn
- Features a user manual, question forum, interactive quiz, laptop maintenance advice and an FAQ section
- A centralised WISEflow help email address

Tech Desk

- Additional tech support

Infrastructure – Power & Wi-Fi

- Super boosted Wi-Fi
- Power supply for 30% of the venue's maximum capacity



Infrastructure – Brunel Devices

Non-BYOD students notify us via a Device Declaration form

Laptops: available at the main examination venue, for non-BYOD students and as contingency for device failure

Desktop PCs: available at alternate examination venues, for non-BYOD students

How many students need a Brunel Device?

On average about 20% (overwhelmingly non-BYOD reasons), but per exam this has ranged anywhere from 0% - 35%

Support During Exams - Infrastructure

Non-BYOD Students

- Provided with a Brunel device (laptop in main venue or desktop PC in alternate venue)

Start-up Instructions

- Simple guidelines which prompt the student to take action once they sit down
- Placed on every desk

Student Associate Learning Technologists (SALTs)

- A team of research students trained in the use of WISEflow
- On hand to provide WISEflow technical support throughout every exam

Support during Exams – Moving to Power

- On average, about 19% of students move to power
- The demand for power increases significantly during 3hr exams, by up to 25%

Support During Exams – Monitoring Flows

The Flow Monitor allows us to:

- View student performance over the course of an examination
- Rapidly pinpoint, address and record any instances of technical issues

List Overview	
Filter	Reset
Filter monitor content	
Show as inactive after 0 minutes	
Participant index	First name(s)
Last name	Deadline for the ...
Latest status up...	Progress
Actions	
112	01/10/2018 4:32 PM
49	10/01/2018 5:17 PM
60	01/10/2018 4:32 PM
70	01/10/2018 4:32 PM
44	01/10/2018 4:32 PM
99	01/10/2018 4:32 PM

Show as inactive after 15 minutes

Participant index	First name(s)	Last name
112		Active
49		Active
60		Inactive

Potential issue?

Support During Exams – Student Experience



Transition/Trust

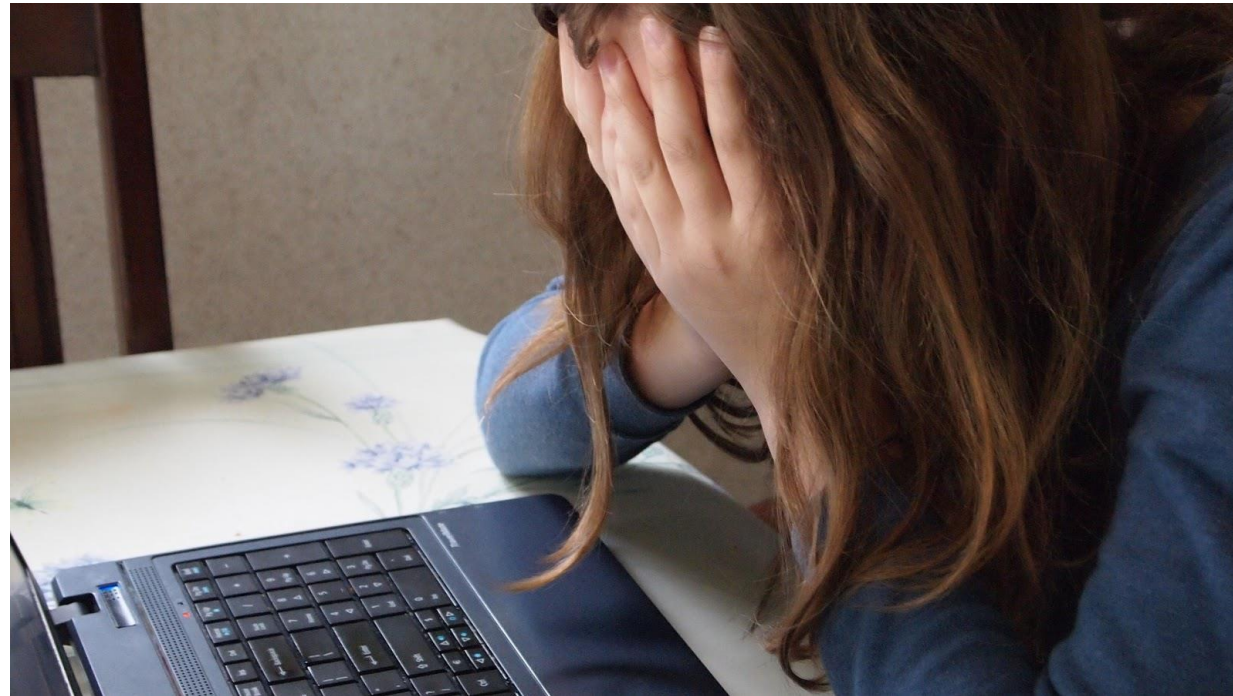


Student Experience



Coordination/Operability

- Communication challenges between SALTs and invigilators
- Changing student seats to charge Laptops



Co-ordinating with other Teams

Timetabling and Examinations

- Organise candidate lists and suitable examination venues
- Manage invigilation

Information Services

- Organise power supplies
- Maintain Brunel devices (e.g. regular software updates)

Ending the Exams

Once the exam's end time is reached, students are no longer able to type or select answers on their exam paper

A second password used by students to submit their answers is announced once the exam has ended

After handing in, students simply close their laptops and leave when instructed (no waiting around for the collection of paper scripts!)

Future Idea: Visual displays for examination announcements

In WISEflow:

Ending the exam: overview of the
Flow Monitor after announcing
the hand-in password

Thanks for listening

We welcome any questions.

For more information about the project:

Visit <http://www.brunel.ac.uk/about/education-innovation/Digital-Assessment-Brunel>

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