Title of Proposal

An Inclusive Approach to Exams as a Response to the Pandemic

Abstract:
In March 2020, within the space of a week, England went into lockdown and Universities had to switch to online delivery of teaching, learning and assessment activities. Exams that traditionally took place in invigilated examination halls were cancelled and staff were left to assess students online. I was the Exams Office and Chair of the Board of Examiners for the year and resolving this for my department was my responsibility. This paper discusses the process of setting up digital exams in the context of a computing department, implementation, challenges and the feedback from both staff and students. This approach was adopted by 13 members of staff and the exams were taken by over a thousand students. The paper closes with how we intend to carry over the lessons learnt from this experience.

Proposal:
Usually, exam setting processes consider reasonable adjustments for students with disabilities by way of additional time, large text, different coloured paper, take home paper, separate room, reader, etc. The pandemic presented different contexts where our exams needed to be inclusive:

- We had several students who had returned to their home countries and would be taking the exams from different time zones.
- We had students who had to share internet connections, computers and study spaces in their homes.
- We had students with informal care responsibilities as a result of the pandemic for instance, in the absence of professional carers.
- We had students who were key workers.
- We had students whose mental health was suffering due to the context.

This inexhaustive list and any existing disabilities meant we needed to identify an approach to the exams that could be taken at a flexible time, with flexible duration and at the same time be fair and rigorous.

Thus, this examination process had a significant impact not only on students with diverse disabilities but also the diverse contexts they took the examinations from as a result of the pandemic.

Based on my previous experience as Academic Lead for Technology Enhanced Learning at Anglia Ruskin University for five years and work with Jisc on Inclusion and Accessibility initiatives, I drew on my knowledge and experience to identify the best approach.

As a Computing Department, staff were familiar with online tests with formative quizzes including those text-based, programming and mathematics. The standard duration for exams in our department are 2hr and 15 minutes with additional time for any students with special arrangements.

The following principles were used to set the new digital exams:
- Each exam was available to take within a window of 48 hours. This made the exam inclusive of students in other countries, had family responsibilities and who would otherwise may not be at the optimum set up to take an exam.
- The duration of each exam was set to be three times the duration that would be required. This not only addressed any special arrangements that would have been in place for students with disabilities but also catered any slow internet connections.
- Exams were broken into smaller components. This met the needs of students who needed to take frequent breaks and also split up the time a student needed to occupy the computer and possibly a room for the duration of the exam at home.

The following measures were taken to enhance academic integrity:
- Exams were a combination of multiple choice and long questions, similar to the traditional paper-based exam format. In the digital exam, staff set a large bank of questions and each student would receive a randomly selected questions with randomised answers. No student would receive the same question at the same time and if students spent time discussing the questions and answered, they would lose their own time and at the end of the time, the answers would automatically be submitted. Once submitted, students could not revisit questions.
- Long questions were set up in open book style.
- For long answers, students have to scan/take photo and upload their working where relevant.
- Vivas were organised for randomly selected students for every module.
- If there was suspicion of academic dishonesty, they were dealt with a separate process.

Mental wellbeing at exams:
- Similar to the incident form at more traditional exam halls, an online problem reporting form was set up so students could report any issues with their computer, internet connection, exam system, and any other extenuating circumstances.
- Exams were never reopened for students but if the student had experienced extenuating circumstances, they were considered at the board of examiners and offered an opportunity to take uncapped resit in the next opportunity.

Managing Student Experience:
- We set up a sample exam for all students to try on a generic subject to understand the format.
- We had student meetings where they could raise any concerns and worries.

Staff Experience:
- This format took significantly additional time to set up. However, majority of the marking was automatic and the questions could be reused in the following years.
- Learning to write open book style questions was a new experience to many. This was managed with individual conversations and support from more experienced staff.

Student Feedback:
While there was initial apprehension due to the uncertainty and the new format of exams, students responded positively to their exam experience. Feedback ranged from how they appreciated being able to choose their personal best time to, reducing the stress they would normally feel in exam halls.

We received just over hundred incident reports. Concerns raised ranged from students being unsure if their answers were saved to technical problems with their internet or computer. Incidents were summarised and considered at the pre-exam board meeting. Majority of the reported concerns from students were dealt with by email, confirming that the examiner had received their responses. Only two students had significant technical problems had to retake the exams in late summer.

Our external examiners commended our approach and staff and students would like this approach to exams continue.

Moving forward:
Our experience was overwhelmingly positive and we have decided to keep our future exams online with some changes. Due to scheduling availability, we have reduced the exam window from 48 hours to 36 hours.

We have had challenges with making the exam questions and answers available for external examiner scrutiny in the same format. We are working out ways of improving this with our technical experts.

As there is limited publication on assessments as a response to the pandemic, I cannot say for certain if similar approaches have been practices elsewhere. This was an approach original to our department, and was used by 13 members of staff and over a thousand students.