Video Feedback – Analysing the Impact on Student Engagement in Functional Skills Maths

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Introduction

The use of videos in education has increased exponentially in recent years, impacted by the advancement of technology and the content now available on platforms such as YouTube. Hamdan, McKnight et al. 2013 also noted that short videos that can are accessible and can be viewed repeatedly are crucial to the success of blended learning. This project took that idea for a group of adult functional skills mathematics learners and implemented video feedback as a key method for delivering individual feedback to learners on a mock exam taken as part of their 18-week course.

Aims

The aim was to give every learner in the group a video that marked their most recent assessment, not only identifying areas of good practice but helping to identify and support areas for development. The focus in the video was on several key areas for each question:

- How the marks were awarded.
- Why marks were not awarded.
- What mathematical key skills were lacking.
- How planning to answer the question would help to achieve a higher mark.

Actions Taken During The Project

A group of adult learners was selected at random to receive video feedback of the marking of their mock assessment. This group consisted of seven learners who each took a mock assessment on the same date, in exam conditions. The exams were then marked, and a video was shared to each individual learner offering feedback as to their exam paper. All learners received their videos at least 72 hours prior to their revision class, where they were invited to ask follow up questions.

To allow a comparison, a second group of four learners were asked to give feedback as well, however their papers were marked using a standard marking process whereby the final answer and the mark awarded is given, with no further information. These marked papers were then returned to learners during a revision class, learners were then given a short time to review the paper before being invited to ask for explanations and further feedback.

All learners were then asked to complete a short survey to give their feedback on the marking and feedback process. This focused on learner perceptions and feeling, learners were given 8 statements and were asked to use a scale of 1 – 10, with 1 being strongly disagree and 10 being strongly agree to record their own feedback and these scores were recorded and analysed.

Outcomes and Impact of The Project

What the project was most interested in discovering was the learner's perceptions as to whether feedback in its current or in the experimental video format was helpful, accessible and understandable. There were several key questions that saw a dramatic increase in average scores between the two groups of learners:

Statement	Average Score from Standard Marking	Average Score from Video Marking	Difference in average score
I have received helpful feedback about my mock exam	1.25	9.71	84.6% increase
I understood the feedback about my mock exam	1.25	9.71	84.6% increase
The format I received feedback in for my mock exam was easy to follow	1	9.86	88.6% increase
The way feedback for my mock exam was given allowed me to process it in my own time	1	9.86	88.6% increase
Feedback on my mock exam makes it clear what I need to do to pass	1	10	90% increase

There were also some comments given by learners, so those from the standard marking group commented that the marking 'Doesn't give a clear or any understanding of where I went wrong' or 'I don't know how to get to the answers'. Whereas learners that received video feedback commented that the feedback was 'Really good - clear instructions - I was able to watch it and rewind the bits I did not understand' and that 'Having Lexy explain it helped me to understand where I lost marks'.

The feedback then impacted on the final revision class and the content of that. With the learners that received standard feedback, almost half the session (90 minutes) was spent reviewing the paper and answering individual questions regarding the award of marks. With the learners that received video feedback, only 10 minutes of the revision class was spent looking back at the paper and the rest of the class was focused on problem solving and maths skill practice that was based on common mistakes made by learners.

What was very clear from the project is that video feedback can be used by teaching staff to highlight common misconceptions and to strengthen the feedback/feed-forward process of the course. The accessibility of this resource and the repetition of engagement with it allowed learners to maximise the feedback.

Benefits to Learners

The benefits to learners of this feedback were identified as, but not limited to, feedback allowed the me, as the tutor to elaborate and support understanding, the feedback was personalised and supportive and allowed me to build better relationships with learners and learners were able to access the feedback at a time when they were ready to receive it. The Covid-19 pandemic has forced us, as an institution, to engage with more digital tools to support the teaching and learning process and digital recorded feedback is just one of those tools available.

Future Actions as a Result of the Project

To adopt a practice within the adult maths department of using self-produced video resources for learners to access.

To produce a collection of 'self-study' videos that all learners can access to enhance their subject knowledge.

To produce a collection of 'best practice' videos for assessments that are undertaken as part of the course.

To give individual learner feedback in videos of no more than 3 minutes per learner.

References

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