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Enhancing
Assessment
Practices

Using Third-Party Platforms for Engagement and Assessment in Large Cohorts

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Description | What was done?

I first taught ACC1002 in 2018/19. The 300+ cohort created logistical issues in teaching space, assessment (room availability and marking) and giving quality, timely feedback. Student evaluations in 2018/19 had feedback scores below 4 and comments sought more feedback. As a first year, first semester module, some students struggled with learning to learn independently, confidence and English language skills, while others seemed disengaged.

In response, I designed a digital engagement initiative based around more extensive use of a digital learning platform - MyLab Accounting (MLA) - implementing change over 2019/20 and 2020/21. Student feedback was sought on an ad hoc basis plus through module evaluations and a case study with Pearson (2020).

Motivation and Aims

Based on the challenges identified above, my initial objectives in this project were to:

1. Meet the logistical challenges of a large cohort while adding value to the student experience
2. Improve feedback as a means of engagement and improvement
3. Build student confidence to study independently
4. Increase motivation and engagement with the course.

With entirely online teaching and assessment in 2020/21, I was also keen to ensure that students felt supported rather than 'abandoned', to build in more flexibility in their engagement reflecting the circumstances, and to have robust online assessment. I added further objectives to:

5. Maintain motivation and engagement in an online setting
6. Increase flexibility for students to engage with the module teaching
7. Ensure online assessment was robust.

Methodology

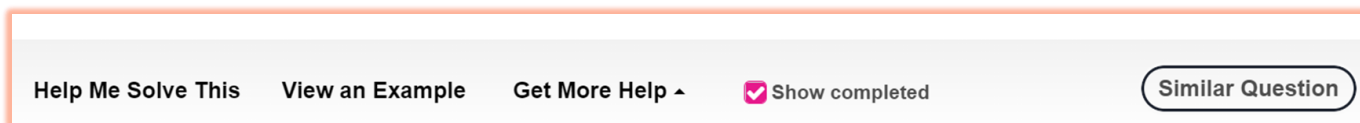
The following changes were made across academic years 2019/20 and 2020/21:

1. **Increased engagement with MLA weekly homework by increasing weight, challenge and scaffolding support**

Rust (2002) cites accounting as a subject which benefits from regular assessment tasks, provided the students are incentivised to complete them and receive regular formative feedback. Previously, students used MLA to complete a basic weekly homework for 10% of module marks, but increasing the weight to 20% encouraged more students to engage. Revised homework included questions with a broader range of difficulty, **building confidence** but also challenging students. Homework requirements were highly structured each week with practice

and assessed questions differentiated by use of MLA in-question help tools. Students received **immediate, automatic feedback** including additional questions - **encouraging independent work** to improve their understanding, and at their own pace. Analytics allowed follow up with students and better informed conversations with them.

Example in-question help tools:



From the case study (Pearson, 2020), 100% of respondents engaged with MLA at least once a week and 86% found MLA helpful or very helpful in building confidence. Module evaluations (2020/21) scored **learning resources (including MLA) 4.6/5** (prior year (PY) 4.4/5), comments include:

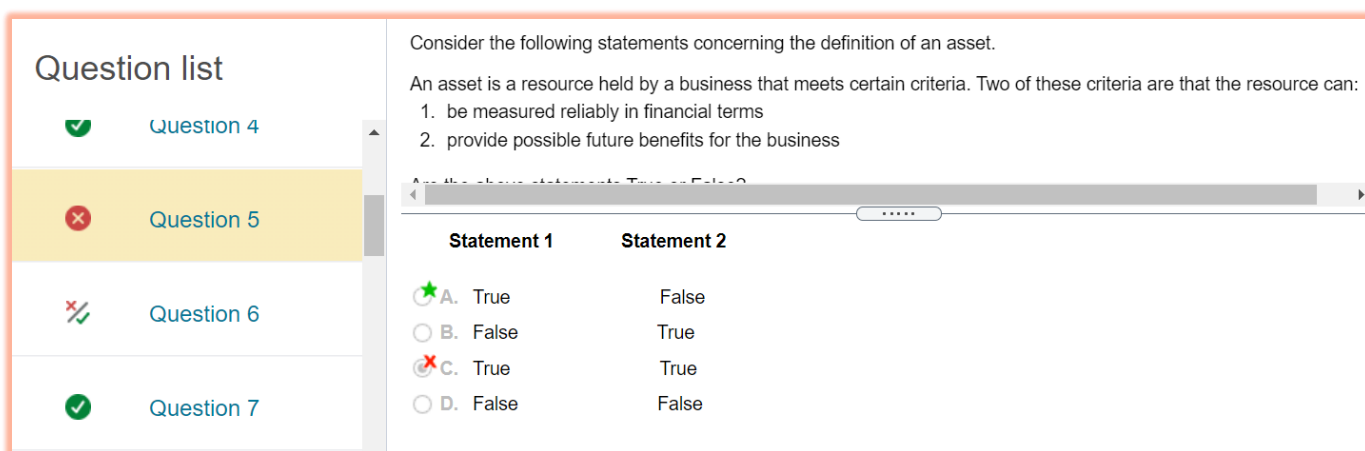
Really great resources in MLA, able to do plenty of practice questions.

MLA feedback was good to help with questions that I didn't understand.

2. **Improved speed and quality of feedback on tests by swapping 3 paper-based tests (30% each) to 1 mid-term test via MLA (30%) and a final test (50%), paper-based in 2019/20 and via MLA in 2020/21.**

New MLA tests include pooled and randomised, algorithmic questions so that **all students sit a different test**. Students received **immediate feedback, including detailed feedback per question**, which remained available for revision: this also drove **quality engagement** in office hours as students came with specific questions. Students appreciated **consistency in assessment style**: they are familiar with this type of assessment having immediate feedback, including detailed feedback per question, which remained available for revision: this also drove quality engagement in office hours as students came with specific done the weekly homework. Finally the **opportunity for cheating (copying) decreased**: because a student is very unlikely to be sat next to someone doing exactly the same test as them.

Example student test feedback:



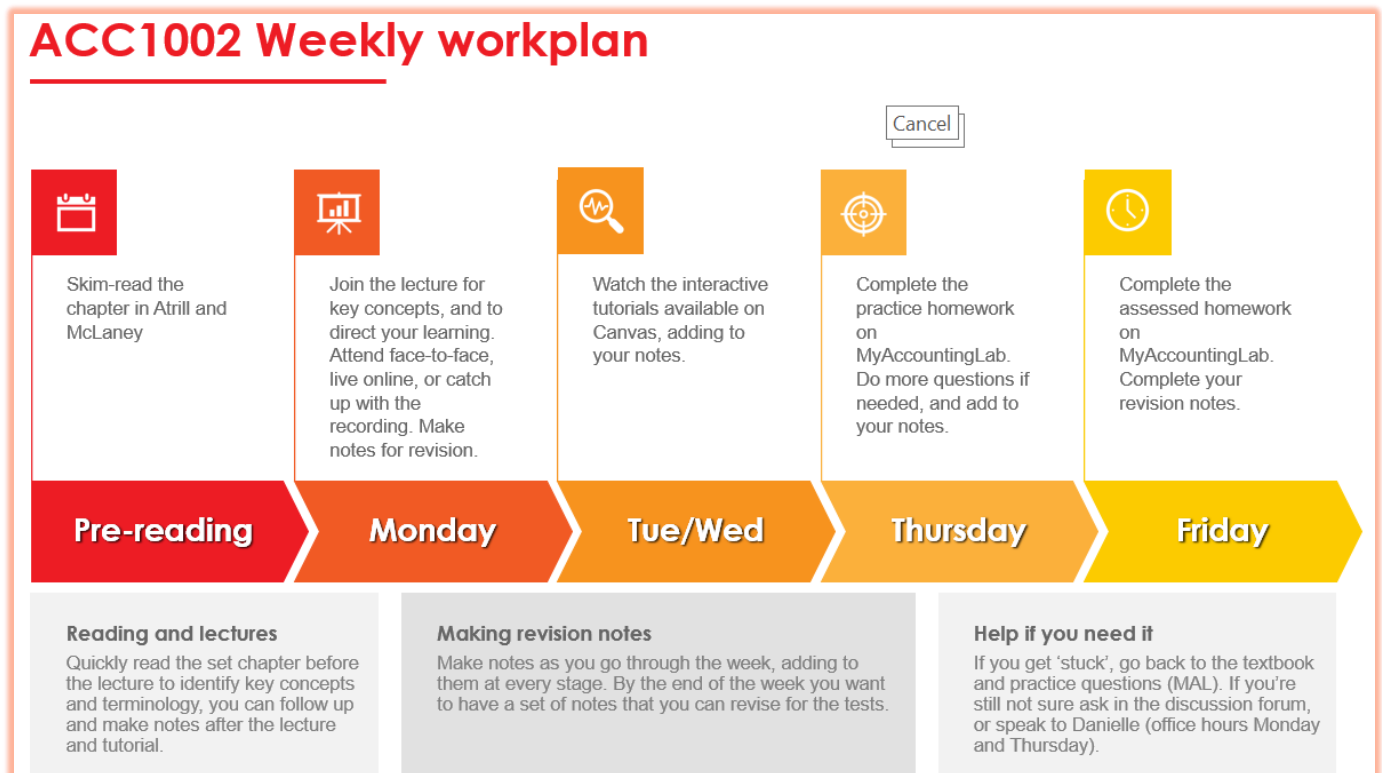
Logistically, conducting tests via MLA eradicated the need for exam hall availability. Time spent setting up the tests was **equivalent to writing a paper-based test**, using a mix of MLA questions that were previously available and unavailable to students, and adjusted question

scores for difficulty (informed by MLA metrics). The external examiner was able to review sample papers in advance. Pearson representatives answered minor technical queries and reviewed the set-up of the tests prior to the first sitting. **Time for marking and communicating scores (substantial with 300+ students) was eradicated.** I also believe that for marking of this type, which is primarily numerical/categorical, system marking is also more effective, especially at scale.

From the case study, 95% of students thought the structured integration of MLA homeworks and class tests supported their engagement. Module evaluation scores on feedback were extremely high in comparison to other accounting modules - students felt that assessment instructions were clear (4.6/5 (PY4.1/5)) fair (4.6/5 (PY4.3/5)) and **feedback prompt (4.7/5 (PY4.3/5)).**

3. Integrated MLA into teaching using recordings and Canvas discussion forum, scaffolding support and engagement.

As a first year, first semester module, I was keen to clarify structure and expectations to minimise ‘transition shock’ on starting university (Noyens et al, 2017), particularly in an online environment. In 2020/21, I introduced short block recordings, including mini ‘tutorials’ demonstrating key concepts linked to MLA questions, and ‘feedbacks’ on the previous week’s MLA homework, working through common queries and questions answered incorrectly based on MLA analytics. Queries were raised through new weekly Canvas discussion forums. Students were given the following ‘workplan’ at the start of the module:



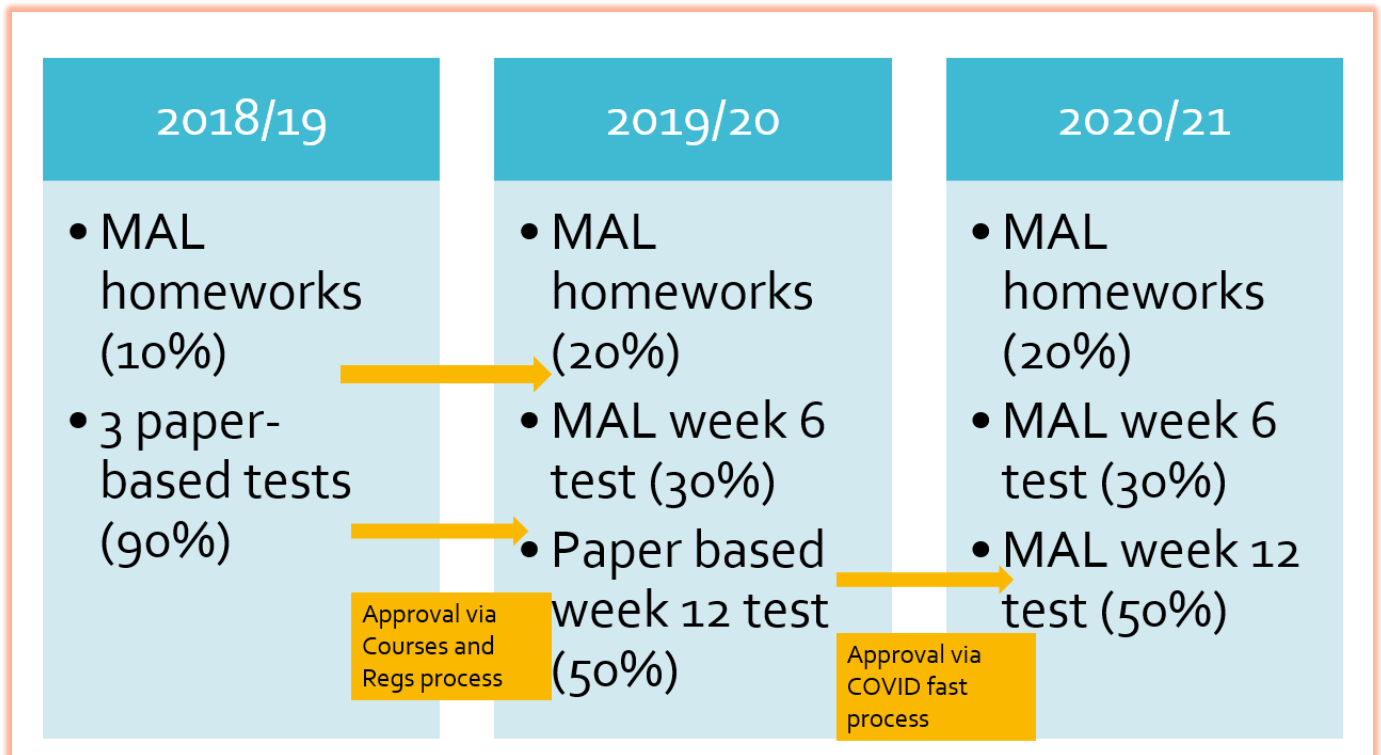
Key benefits included increasing **clarity around structure and expectations** - this helped to **minimise student anxieties** when learning at a distance and to **maintain engagement**. The model of block-sized recordings allowed students **flexibility to manage their own time** while

weekly deadlines kept them on track. Discussion forums offered rapid access to support as these became ‘FAQ’ each week and also minimised the administrative burden of individual student emails with a large cohort. Students commented:

Pre-recorded tutorials were great, was able to do questions at own speed and really understand the theory with great explanations.

Discussion forum on Canvas for each week, was great for everyone to see how difficult problems were solved.

These changes are summarised below:



Literature Review

Embedded above.

Successes | Challenges | Lessons Learned

SUCCESSSES

In addition to the comments above, the case study (Pearson, 2020) identified the following:



Student Comments

I found it the most helpful revision method I've used during my education career and I think it greatly improved how well I understood the subject and made it much easier to learn painlessly

I think my accounting lab worked well in this module because it was numbers based and [automatically] generated more questions [for practice].

I really enjoyed the module and felt that it was a safe space to challenge myself without feeling embarrassed about getting answers wrong and really built my confidence in this module.

It helped me to have a better understanding of what content I learned and what I should pay more attention.

Very helpful to see progress in the subject as the semester went on.



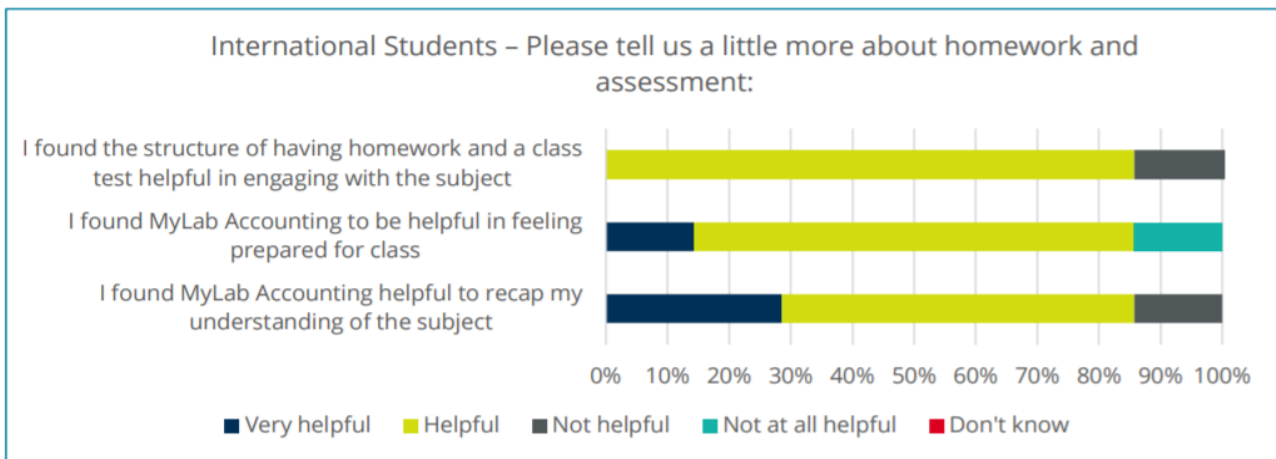
The case study supported my belief that **international students** placed particular value on MLA, including for structure, preparing for class and re-capping understanding:

International Students Survey Results

86% found MyLab Accounting Very helpful or helpful to **recap their understanding of the subject.**

86% found MyLab Accounting Very helpful or helpful to in **feeling prepared for class.**

86% found the structure of having homework and a class test helpful in engaging with the subject.



In addition, students' general comments on MLA were strongly positive, including 93% strongly agreeing or agreeing with the statement: MLA helped me to **make better progress** on this module than I would have done without it.



Student Survey Results

97% of students agreed that MyLab Accounting was easy to access.

95% said they would recommend MyLab Accounting to other students.

93% said they would like similar resources on other modules.

Additional evidence of success comes from module evaluations and to some extent from student results. While it is difficult to disaggregate various effects on student marks, I was pleased to see the **fail rate decrease** between 2019/20 (4.9%) and 2020/21 (3.5%). I believe this is because the vast majority of students kept up with the weekly homework - picking up weekly marks but also preparing continuously for tests. Perhaps relatedly, **the average mark increased** slightly from 61.8% to 63.5% - again I was pleased to see an increase but relieved this wasn't too large, which might have indicated a lack of robustness in the online assessment. This reflected good engagement with homework, test attendance rates, use of discussion fora and scheduled appointments with me, especially after the class tests.

Module evaluation in 2020/21 (after all changes were implemented) was very positive, with the **overall module scoring 4.5 out of a possible 5 (PY 4.2/5)** - a high score for a large cohort module. All aspects scored well, including those cited above, with a slightly lower score on receiving helpful comments on their work (4.2/5) (PY 3.4/5), perhaps reflecting automated vs. personal feedback in other modules. Comments in evaluations were much improved - including very favourable comments on recorded 'tutorials' which many students said they engaged with, sometimes multiple times. **MLA was particularly popular in 2020/21** - they like structured requirements, feedback to show progress and the trove of additional questions and immediate feedback on these.

In summary, this project achieved the objectives set. Moreover, the impact of this project has recently been recognized in two awards:

1. A HE Innovate Award in September 2021 in the category of 'Most Innovative Use of Pearson Digital Courseware and Services', with the citation 'An exemplary use of MyLab Accounting... with huge impact on students and the student experience' (HE Innovate Awards, 2021).
2. A QUB Teaching Award in November 2021 in the category of 'Sustained Excellence', specifically including this project in the citation (QUB Teaching Awards, 2021).

CHALLENGES AND LESSONS LEARNED

Some minor hurdles were experienced. Changes to the weighting and nature of assessment were brought to colleagues as part of our module review process, and then formally approved through the School Education Committee and Courses and Regulations process. This takes some time and needs to be done at specific times in the year - which are easy to miss.

The process of extracting marks from MLA via Excel into our QUB systems is overly manual and requires time and manual checking. Being able to share student scripts with our external

examiner was also problematic, although a work-around was found - this was raised with Pearson reps who are looking into this.

Finally, it is important to stress that there is a need to spend time at the beginning of the course explaining to students the need for MLA, how to register etc. - although much of the detail of this was co-developed with Pearson and made available via Canvas. An investment of time early on in chasing up those who have not registered is beneficial, as is allowing time for student queries.

Scalability and Transferability

The benefits demonstrated above show clear scalability for large cohort modules and also transferability for other module types. Particular benefits will be seen in modules where the subject content has a mathematical/statistical basis or where factual recall is the key learning outcome, especially for students in levels 1 and 2 of undergraduate study - it is less suited for developing higher order discursive and critical evaluation skills.

While this platform is specific to Accounting, increasing numbers of publishers have digital platforms linked to their texts across a wide range of subjects. Examples include Pearson MyLab and Mastering, also Revel for interactive content, McGraw Hill Smart Book/Connect. My advice to colleagues considering using a platform is to engage with relevant reps to see what is offered, how well integrated it is to the relevant textbook, and what options are available for student assessment and feedback. Engage with colleagues and others to see how they use the platform or similar platforms. Most importantly, the decision must rest on how appropriate the platform is for meeting the learning outcomes of the module and your specific objectives for improving your course.

References

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Further Information

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