

eSTeEM final report: How are students using extensions and what is the impact on their success?

**Project Title:** How are students using extensions and what is the impact on their success?

**Keywords:** assessment, supporting students, flexible study, student partnership

**Report authors:** Catherine Halliwell and Cath Brown

**Report submission date:** 11 Nov 2021

**Key staff:** Catherine Halliwell, Associate Lecturer, STEM  
Cath Brown, Student (and current Associate Lecturer, STEM)

**Contact:** catherine.halliwell@open.ac.uk  
cath.brown@open.ac.uk

## **Executive Summary**

The OU is experiencing growth in the number of students studying at high intensity. An institutional priority is supporting such students and this, coupled with anecdotal evidence of increased instances of students making extension requests, prompted our project. Issues around high study intensity have already been observed in some areas (Dobbyn *et al*, 2016, McLachlan *et al*, 2017). Previous studies have reported a link between low performance and catching up activities (Nguyen *et al*, 2018), lower performance of late submissions (McCann *et al*, 2014), and that granting of extensions can lead to unanticipated workload clashes (TEL Design, 2017). The need for deadline mapping across a qualification has been recognized, but more with regard to managing AL workload (Penny 2019) as ALs might tutor on multiple modules in a qualification.

We used a mixed methods approach to investigate how students are using extensions, whether this depended on variables such as module choice, study intensity, qualification, disability, and the impact on success metrics such as TMA scores and module outcomes. The quantitative work focused on students on two qualifications (Q64 Natural Sciences and Q71 Health Sciences) and their data on five 30 credit Level 2 modules within the School of Life, Health and Chemical Sciences (LHCS) which included the required Level 2 study for students on these qualifications. This comprised data from 1009 students on 17J presentations and 1047 on 18J presentations. The qualitative aspect comprised two focus groups involving 12 ALs, and four focus groups involving 23 students

Our key findings were: proportionally there were twice as many extensions granted to disabled students compared to non-disabled; at a module level no clear relationship between study intensity and number of extensions taken; a higher proportion of Q71 (Health Science) students took extensions than Q64 (Natural Science) students; that significant extension requests on TMA 1 can be an indication of struggle; and that on S294 there was a statistically significant negative correlation between length of extensions and OCAS and OES scores. However, on other modules there was no statistically significant correlation, or only a very weak one. It was apparent on all modules that extension requests are not confined to low academic attainers.

The qualitative data from focus groups suggested that in general there was no systematic use of extensions to manage and spread workload – rather that extensions were requested on an ‘immediate need’ basis.

Whilst we were able to complete our analysis of data from 17J and 18J, the correlations shown were not strong enough to enable the development of a meaningful numerical predictive model. However, there is sufficient data to suggest using early extensions as an indicator of struggle. Due to the conditions and temporary changes in assessment since March 2020 due to the COVID pandemic the timing and probably the responses of students in our student focus group were impacted. Despite this our focus groups provided valuable qualitative data that triangulated with our quantitative data.

The impact of this work is in the recommendations made:-

- To respond to TMA 01 extensions with a MILLS intervention, since they can be a sign of struggle
- That the nature of assessment be considered as well as the timing when considering assessment strategies on modules commonly taken together
- That ALs should continue to offer supportive and sympathetic conversations with students when discussing extensions

eSTeEM final report: How are students using extensions and what is the impact on their success?

- That it should be communicated to students that a dialogue with their tutor regarding planning their studies is helpful
- That further work is done on the impact of extensions on disabled students
- That the OU continue to take a flexible approach to extensions as an important aspect of enabling retention

We hope that this project is a demonstration of best practice in student-educator scholarship partnerships.

### **Aims and scope of project**

This project relates to the university's strategic student success priority of supporting flexible study intensity. With high intensity study increasingly common, clashing assessment deadlines are a problem for increasing numbers of students; this also was reflected by anecdotal reports from ALs concerning increasing numbers of extension requests.

The difficulties involved in managing multiple deadlines are particularly apparent when 30 credit modules are involved. Studying concurrent 30 credit modules is not confined to LHCS students; it occurs elsewhere in STEM, for example in Physics and Astronomy, Engineering, Mathematics and Computing. This project focused specifically on Level 2 Life and Health science modules, where all modules were at the time thirty credits; students studying at full time intensity in these disciplines studied four out of SDK228, SXHL288, S294, S295, SK299. The students considered were those on Natural Sciences or Health Sciences qualifications.

The initial research questions were:-

- Whether the number of extension requests a student makes is associated with the number of modules they are studying
- Whether the number of extensions relates to success on the module in terms of grade attained, or pass/fail/defer
- Whether students are actively using extension requests to balance their workload across multiple modules

The first two questions were addressed quantitatively and the third qualitatively.

The aims were to inform the following within life and health sciences:-

- advice given to students proposing to study these modules regarding study intensity
- advice given about more and less suitable combinations of modules
- discussions between ALs and their students concerning the advisability of extensions
- module teams regarding "pinch points" for assessment, allowing for consideration of alteration of the assessment model
- resources and support for students studying at high intensities

And more broadly, to lay foundations for more general study of approaches to support students studying at high intensity, in line with the student success priority of supporting full time and flexible study, and Informing the university's work on different, more innovative or flexible modes of assessment. Note that this work commenced and uses datasets from before the COVID pandemic.

## **Activities**

### **Data gathering**

Our overall approach was to request and use a large dataset showing all logged extensions for students studying any of our selected modules in the years 2017 and 2018. An ethical review and a data protection impact analysis were obtained according to the Open University's code of practice and procedures before embarking on this project to ensure we were collecting only necessary data and that our methods of analysis, data protection and management (including deletion of data at the end of the project) were appropriate. This data was used to test our first two research questions on whether the number of extension requests a student makes is associated with the number of modules they are studying and whether the number of extensions relates to success on the module in terms of grade attained, or pass/fail/defer.

This data would not be able to suggest whether extensions were being used strategically by students to support and manage workload, so to do this we held a number of focus groups. In late 2019 there were two AL-led focus groups and one interview (both online), of ALs asking them to share their experiences of extension requests from students.

We had planned to conduct student-led student focus groups at approximately the same time, however a delay in SRPP approval meant that permissions were only granted in early Spring 2020. At this time the OU had just taken started enacting a series of emergency measures to support students, including some related to granting of extensions, provision of remote 'open-book' exams and cancellation of some final EMAs and we thought that holding focus groups at this time would be compromised and not in the best interests of students. Therefore, focus groups for students were only conducted in early 2021 and on-line, rather than face-to-face.

## **Methodology**

The research used a mixed method approach involving two stages; firstly, structuring the quantitative data to facilitate analysis and secondly exploring student and AL perceptions of requesting and using extensions through synchronous online focus groups.

The data were provided to us from CIRCE, and comprised disability code, qualification, extension length, continuous and final assessment scores for all modules taken by any student registered on at least one of SXHL288, S294, S295, SK299, SDK228 in each of the academic years 17J and 18J.

The initial decision was taken to exclude students not studying either Natural Sciences or Health Sciences; this avoided bringing in very different cohorts of students (such as psychology students studying SDK228 but no others from this set of modules).

The details of other modules students were studying simultaneously were retained to obtain an overall study intensity for each student, but no further details were considered to make the analysis feasible and suitably focused.

A database was produced to facilitate the interrogation of data.

Descriptive statistics were used to obtain summary data. The Pearson product moment correlation coefficient was used to ascertain any linear relationship between extension length and module

continuous, final or overall assessment score; these are interval variables and normality of residuals appeared a reasonable assumption from plots. The chi-squared test for association was used to consider any relationship between numbers of extensions and study intensity, and numbers of extensions and outcomes; this was valid as the variables here were categorical and mutually exclusive, and the data frequencies.

Student participants were recruited by sending an invitation email to 789 students identified as being eligible for contact by the SRPP, of whom 29 volunteered for focus group discussions. Four discussions took place via Adobe Connect, with students approximately split evenly between the groups. The student sample was drawn for us by SRPP in early December 2020. All students had completed at least one of the modules of interest and were still studying with the OU either at level 2 or 3. Discussions were held in January 2021 as this was the first period of relative stability (albeit still potentially a time of high uncertainty and anxiety) for students after rapid changes to assessment in Spring 2020, was well before any exams or EMAs, and was the latest possible date for the investigators to complete planned data gathering. By postponing focus groups we had aimed to avoid the majority of comments being related to immediate COVID situation and recent changes of normal practice regarding extensions.

The focus groups were facilitated by Cath Brown and Charlotte Hancox; Charlotte had studied previously at least one of the modules but as this was a few years previously this was thought not likely to influence discussions. Both were very experienced Adobe Connect users.

Themes for both the student and AL focus groups were:

- Experiences of asking/being asked for extensions (to identify any specific assignments for which there's commonality in extension requests)
  - Whether extensions were agreed or not?
  - Whether other advice or recommendations were received/given?
  - Student's stated reason/ actual reason
  - Specifically explore clashing deadlines
- Response to being granted/granting an extension
  - Whether student used or was given full allowed/agreed time
  - Perceptions of impact on success on that TMA
- Impact on studies
  - Perceived impact on further study in that module
  - Perceived impact on other modules
  - Perceptions of impact on overall success
- Thoughts on any changes needed in university's approach to extensions

For the AL focus groups, twenty ALs were emailed directly, of whom twelve volunteered to take part in the discussions. Two focus groups took place via AC with six ALs in one and five in the other. A phone interview was conducted with one AL who had been unable to attend the focus groups. The ALs were selected because they tutored at least one of the modules of interest; all were known to a certain extent by us, but their perceptions and practice with regard to extensions was not known.

Thematic analysis was undertaken manually on the transcripts from the discussions, and groupings of approximately twenty initial codes were rationalised to four key themes.

## Findings

### Quantitative data

#### Initial overview – numbers of extensions taken

The table shows the numbers and percentages of extensions taken across the five modules in 17J and 18J; these figures are only for students who completed the module. This serves to both give an overview of the scale of the use of extensions, and to examine whether there is an increase in use of extensions between the two academic years, as had been suggested informally.

Presentation	No declared disability	Disabled	Total
No. of extensions taken ( 17J)	496 (14.44 %)	221 (23.89 %)	717 (16.45 %)
Total number of assignments <i>n</i>	3434	925	4359
No. of extensions taken (18J)	493 (15.21 %)	352 (29.88 %)	845 (19.12 %)
Total number of assignments <i>n</i>	3242	1178	4420
95% Confidence interval for difference	(-0.94 %, 2.47 %)	(2.20 %, 9.78 %)	(1.07%, 4.27 %)

**Table 1:** Numbers and percentages of assignments on which extensions are taken for S294, S295, SK299, SXHL288 and SK228 for 17J and 18J.

The increase for disabled students is noticeable, and as the confidence interval shows, this can be considered to be statistically significant. The issue of whether our disabled students are served well by our structures is of interest; does this show that the current approach succeeds as we are making these accommodations, or that our assessment strategies are at fault if so many disabled students require extensions? We explored that to a certain extent in our focus groups.

Another point of interest to us was the differences in extension requests between modules; we considered this a potential indicator of workload or assessment strategy issues, or student preparedness for specific modules. The different proportions of assignments on which extensions were taken by module are shown in Table 2.

	No declared disability	Disabled	Total
S294 - no. of extensions taken	272 (11.43 %)	155 (22.02 %)	427 (13.85 %)
Total number of assignments <i>n</i>	2380	704	3084
S295 - no. of extensions taken	93 (14.09 %)	77 (31.05 %)	170 (18.72 %)
Total number of assignments <i>n</i>	660	248	908
SDK228 - no. of extensions taken	233 (17.26 %)	132 (30.91 %)	365 (20.54 %)
Total number of assignments <i>n</i>	1350	427	1777
SK299 – no. of extensions taken	256 (16.57 %)	163 (30.47 %)	419 (20.14 %)
Total number of assignments <i>n</i>	1545	535	2080
SXHL288 – no. of extensions taken	145 (19.58 %)	56 (29.70 %)	201 (22.22 %)
Total number of assignments <i>n</i>	741	189	930

**Table 2:** Numbers and percentages of assignments on which extensions were taken by module (17J and 18J combined).

For all the modules we found a greater percentage of disabled students required extensions than students with no declared disability, matching our findings for overall numbers in Table 1.

We were interested in these differences between modules which could be due to a number of factors such as student preparedness/previous studies, module workload, assessment dates and assessment strategies. For example, we wondered if students would be more likely to use extensions on modules with summative OCAS as they would wish to achieve as high a score as possible on every TMA compared to modules with formative OCAS, where they might just be content on submitting a partially complete assignment.

Of the modules investigated S294, S295 and SK299 had formative OCAS, and SXHL288 and SDK228 had summative assessment. There is no indication in Table 2 that the formative or summative assessment was significant. Likewise, we could not see any indication that the nature of the

examinable component was significant (SK299, S294, S295 exam; SXHL288 and SDK228 EMA). The assessment strategies and dates are in Appendix 2. We explored ‘academic’ issues relating to extensions in the student and AL focus groups. These might partly account for some differences between modules, though ALs and students had different perceptions on how academic content and ability impacted on requests for extensions (see Comparison of student and AL perceptions later).

### Study intensity and extensions relationship

The data showed that there was no clear relationship between study intensity and number of extensions taken on a module to module basis A chi-squared goodness of fit test was performed to determine whether there was any association between study intensity and extensions taken, and no module showed significant ( $p < 0.1$ ) results

The results of the tests were

S294 :  $\chi^2$  (4, 169): 6.3293 ;  $0.1 < p < 0.2$

S295  $\chi^2$  (4, 125): 2.4296;  $0.5 < p < 0.7$

SDK228:  $\chi^2$  (2, 152): 2.1000);  $0.3 < p < 0.4$

SK299:  $\chi^2$  (6, 171); 6.4893;  $0.3 < p < 0.4$

SXHL288:  $\chi^2$  (6, 165); 5.8356;  $0.4 < p < 0.5$

The pattern was noticeably different here for Q64 (**Table 3a**) and Q71 (**Table 3b**) students, however, with much higher proportions of Q71 students taking large numbers of extensions.

Q64	% of students taking each amount of extensions			
	No extensions	A third or less of TMAs	A third to two thirds of TMAs	Two thirds to all TMAs
30 (124 students)	64 %	9 %	7 %	20 %
60 (166 students)	31 %	20 %	38 %	10 %
90 (46 students)	37 %	54 %	9 %	0 %
120 (27 students)	41 %	56 %	4 %	0 %



<b>Q71</b>	<b>% of students taking each amount of extensions</b>			
	<b>No extensions</b>	<b>A third or less of TMAs</b>	<b>A third to two thirds of TMAs</b>	<b>Two thirds to all TMAs</b>
<b>30</b> (225 students)	41 %	13 %	14 %	32 %
<b>60</b> (291 students)	23 %	17 %	37 %	23 %
<b>90</b> (62 students)	31 %	42 %	23 %	5 %
<b>120</b> (68 students)	10 %	34 %	44 %	12 %

0%-10%	10%-20%	20%-30%	30%-40%	40%-50%	50%+
--------	---------	---------	---------	---------	------

**Table 3a and 3b:** Proportions of assignments on which extensions were taken by study intensity (17J) for Natural Science (Q64) and Health Science (Q71) students. The colour bar indicates ten percentage point groupings; the darker the colour the higher the percentage of requests.

The results of the chi-squared test for association were:

Q64 :  $\chi^2$  (6, 361); 118.2962;  $p < 0.001$

Q71:  $\chi^2$  (9, 646) 102.6927 ( 9 d.f.);  $p < 0.001$

This shows strong evidence that study intensity and numbers of extensions are not independent. Patterns between modules varied; two are shown to illustrate. The high proportions of students having a large proportion of extensions is marked in SDK228, and S294, S295 and SK299 showed a similar pattern, so SXHL288 may be an outlier here; the fact the module is skills rather than content driven may have an impact.

<b>SDK228</b>	<b>% of students taking each number of extensions</b>			
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>30</b> (22 students)	18 %	9 %	5 %	68 %
<b>60</b> (101 students)	14 %	14 %	24 %	49 %
<b>90</b> (14 students)	21 %	29 %	7 %	43 %
<b>120</b> (15 students)	7 %	27 %	20 %	47 %

<b>SXHL288</b>	<b>% of students taking each number of extensions</b>			
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>30</b> (26 students)	15 %	31 %	31 %	23 %
<b>60</b> (80 students)	20 %	33 %	28 %	20 %
<b>90</b> (18 students)	33 %	17 %	28 %	22 %
<b>120</b> (41 students)	34 %	24 %	20 %	22 %



**Table 4a and 4b:** Proportions of assignments on which extensions were taken by study intensity (17J) for SDK228 and SXHL288 students. The colour bar indicates ten percentage point groupings; the darker the colour the higher the percentage of requests.

**Impact of extensions on retention and success**

For the modules apart from SK299, , there is evidence of an association ( $p < 0.05$ ) between final grade for students who pass and number of extensions.

The chi-squared test for association results were

S294 :  $\chi^2$  (8, 248); 20.8869;  $0.005 < p < 0.01$

S295 :  $\chi^2$  (3, 111); 7.9297;  $0.025 < p < 0.05$

SDK228 :  $\chi^2$  (6, 238); 19.1707;  $0.001 < p < 0.005$

SK299 :  $\chi^2$  (6, 278); 1.6774;  $p > 0.9$

SXHL288 :  $\chi^2$  (6, 167); 29.3857;  $p < 0.001$

The number of extensions also shows an association with final outcome (drop-out or fail vs pass) with  $p < 0.001$  for all modules except SXHL288

S294 :  $\chi^2$  (8, 397); 95.1500;  $p < 0.001$

S295 :  $\chi^2$  (3, 156); 23.7338;  $p < 0.001$

SD228 :  $\chi^2$  (3, 350); 22.7782;  $p < 0.001$

SK299 :  $\chi^2$  (6,407); 63.7928;  $p < 0.001$

SXHL288 :  $\chi^2$  (2, 229); 4.3791;  $0.1 < p < 0.2$

Illustrative data for S294 is shown in the tables below.

eSTeEM final report: How are students using extensions and what is the impact on their success?

	After TMA 1 (53)	After TMA 2 (50)	After TMA 3 (24)	After TMA 4 (3)	Passive Withdrawal (27)
0 ext	35.8 %	10.0 %	0.0 %	0.0 %	22.2 %
1 ext	64.2 %	26.0 %	20.8 %	0.0 %	40.7 %
2 ext	X	64.0 %	29.2 %	0.0 %	14.8 %
3 ext	X	X	50.0 %	0.0 %	22.2 %
4 ext	X	X	X	100.0 %	0.0 %

**Table 5a:** Evidence of the link between number of extension requests and student drop-out rate for S294.

	Fail (76)	40-54 (57)	55-69 (103)	70-84 (75)	85-100 (13)
0 ext	10.5 %	10.5 %	17.5 %	22.7 %	38.5 %
1 ext	11.8 %	14.0 %	16.5 %	18.7 %	15.4 %
2 ext	11.8 %	14.0 %	12.6 %	16.0 %	15.4 %
3 ext	27.6 %	29.8 %	12.6 %	25.3 %	23.1 %
4 ext	38.2 %	31.6 %	40.8 %	17.3 %	7.7 %

**Table 5b:** Success rates for students who completed the module S294.

Whether or not a student takes an extension on the first TMA shows a strong link with final outcome (pass vs drop-out or fail) across all students;

The chi-squared test for association results were:  $\chi^2$  (1, 1313); 12.5034;  $p < 0.001$

These data suggest that extension requests for TMA1 can be a warning sign for struggle. At present most modules have a MILLS automated intervention sent to students who do not submit TMA01.

Our recommendation is that there should be a MILLS intervention sent to those students who use an extension on TMA1 encouraging them to reflect on their workload, guiding them to appropriate resources encouraging discussion with their tutor and/or the student support team.

In some cases, the length of the extension can also have an impact. This was much more marked for S294 than other modules.

<b>S294</b>	Disabled (n = 66)	Not disabled (n = 280)	120 credits (n = 55)	Not disabled 120 credits (n = 291)
OCAS and Mean extension length	-0.2807		-0.4330	
OES & Mean extension length	-0.2605	-0.1360	-0.4571	-0.4378
OCAS & 1 <sup>st</sup> TMA extension length				
OES & 1 <sup>st</sup> TMA extension length		-0.1138	-0.3255	
OCAS & final TMA extension length			-0.3302	
OES & final TMA extension length	-0.1600		-0.4091	

Significant negative correlation between -1 and -0.4 (a fifth of the variation in score due to extension)
Significant negative correlation (less than a fifth of variation due to extension)

**Table 6:** showing the correlation between mean, first and final TMA extension length in days and score for S294.

The impact shows up particularly here with students studying 120 credits. In contrast, S295 and SK299 showed no statistically significant correlation between extension length and performance for any student group. SXHL288 showed a correlation of 0.2194 between OES and extension length in the first TMA for students studying 120 credits; this is interesting in that a positive correlation is out of keeping with the rest of the data, but is small and the only correlation for this module for which  $p < 0.05$ . SDK228 showed some weak correlations for disabled students between OES and mean extension length (-0.2196) and OES and last extension length (-0.2348) but nothing otherwise with  $p < 0.05$ .

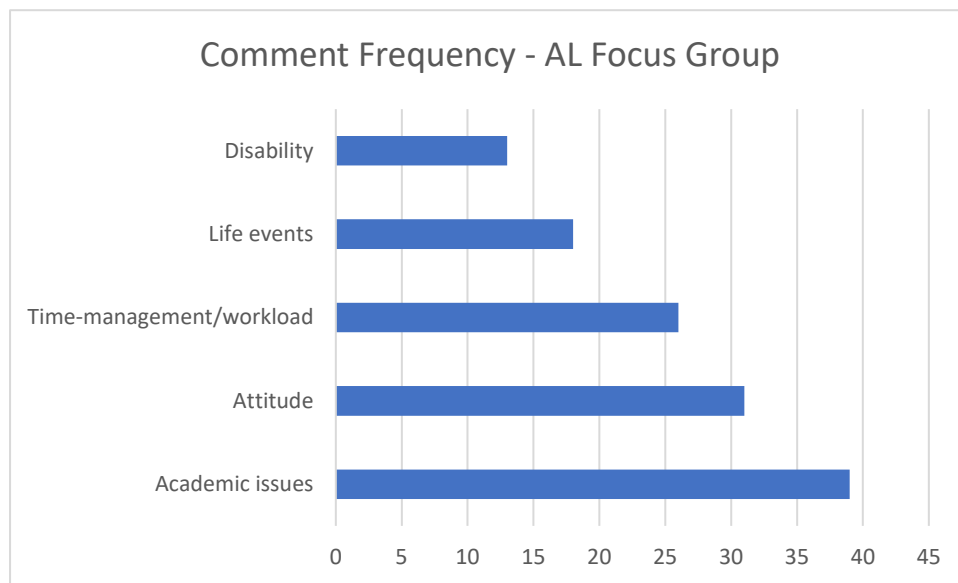
### Qualitative data

#### **The ‘whys’ behind the quantitative data**

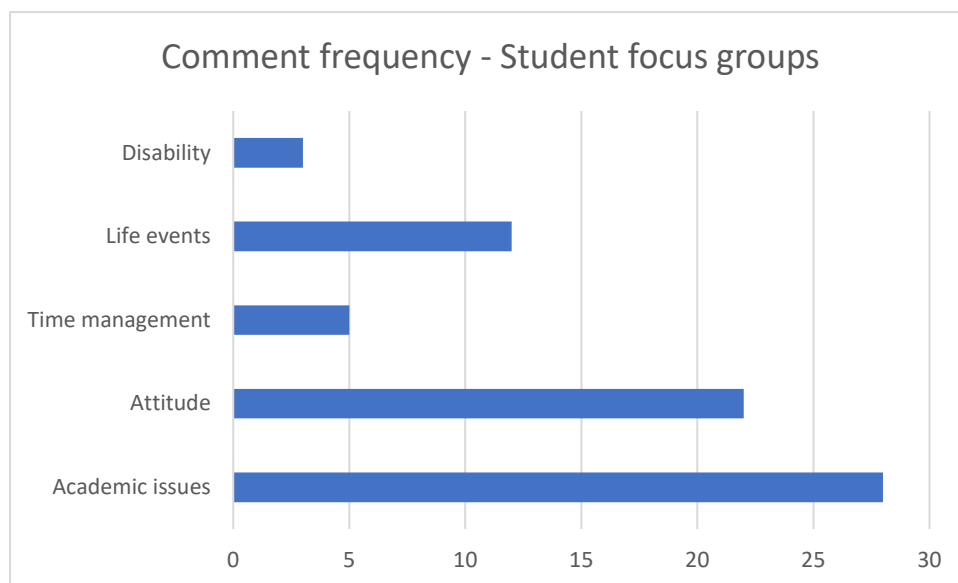
We were interested in whether students are actively using extension requests to balance their workload across multiple modules, or whether students were using extensions in a non-systematic, immediate, need-based manner. To investigate this, we conducted AL-led and student-led focus groups. However, the focus groups were held approximately 15 months apart and the COVID pandemic and mitigating measures on assessment taken by the university might have affected perceptions and comments of students.

Questions were asked based on the themes outlined earlier. Recordings of focus groups were anonymised and transcribed. We then performed a high-level overview of all the transcripts and coded them in a top-down manner, having agreed a set of coding criteria. The codes we chose were academic issues, attitudes to extensions, time-management, life events and disability. All comments on particular codes are grouped in Figures 1 and 2 below, regardless of if sentiment was positive, negative, neutral or mixed. This was because comments were often positive and negative when

students and ALs added context. So the frequency of comments is a broad measure of the importance of the different themes to the focus groups.



**Figure 1:** Showing the frequency of comments made by ALs about issues relating to why students request extensions (or not) grouped into five overarching themes.



**Figure 2:** Showing the frequency of comments made by students about issues relating to why students request extensions (or not) grouped into five overarching themes.

Frequency of occurrence was selected as appropriate for this analysis due to the limited number of participants and to triangulate data with the quantitative data. However, it should be noted that the online nature of the focus group might have inhibited interactions within the group so that wider views of participants might not have emerged (Cohen et al., 2000).

The total number of contributors was slightly different – 12 ALs and 23 students, so it is not possible to directly compare the frequency values – however it is evident that the general pattern of frequencies was very similar.

Both groups of respondents commented most on academic issues that might impact their perceptions of asking for and/or using extensions, followed by attitude to extensions requests. Student time-management and consideration of workload was mentioned proportionally more by ALs than by students.

Disability was mentioned far fewer times by students than by ALs. This could be due to ALs thinking across many different student groups, whereas students were considering their individual circumstances, though a number of students did describe specific health or disability issues. Future work should involve further exploration of how disabled students perceive and use extensions.

The five themes that comments are grouped into are described here along with illustrative quotes:

### **Academic**

We grouped a number of subthemes into the overall theme of academic reasons. These were comments that related to module content, the nature or type of assessment, module combinations, student capability and preparedness – these are academic reasons why students might need extensions according to ALs:

Q1: *“The writing up a practical project always ends up taking longer than you thought it was going to, and all three of the TMA’s on S295 involve writing up an investigation, and two of the three involve field investigations that they have to check the data, and so that kind of work tends to have setbacks.”*

And under the academic theme from students:

Q2: *“the one I came closest to requesting this for S295 for the big, the last TMA which contributed something towards the, more towards the final grade.”*

Q3: *“Human Biology clashed rather a lot with Science of the Mind.”*

### **Attitudinal**

We grouped together any comments that related to attitude toward extensions whether pro or anti from tutors, whether they had a positive or negative impact on assignment scores and their perceptions of student attitude such as nervousness in asking or sense of entitlement:

Q4: *“I haven't come across people, what you might call abusing the system.”*

Q5: *“Yes, I have had one or two, who are desperate to get very high marks, and they think if they have another couple of days, they could just work on the assignment, make it even better which it is. So, perhaps, that's the sort of wanting, trying to gain benefit, but it's not a malicious gain benefit.”*

Q6: *“Students are trying their hardest than any benefit is kind of an accidental concert consequence, rather than a deliberate game plan.”*

Q7: *"But I think, if they're really stressed out fairly early in the module, and to get an extension, and it gets them over that first hurdle, then recover so I think that definitely, that definitely happens."*

In the comments from tutors in our focus groups the attitude to extensions was generally very positive with no significant negative views on the principle of allowing extensions, but with concerns that because of student reluctance to ask it might be inequitable:

Q8: *"Yeah. I think for a start I think it would be fairer, because, there are some students who will only ask for the shortest of extensions under great, great embarrassment because they are, they really feel they shouldn't be asking for extension..., and then I get others almost flouting the rules, then that is very unfair to the ones who obey the rules."*

And for students, we grouped any comments that related to attitude toward extensions whether students were pro or anti, whether they felt they had a positive or negative impact on assignment scores and whether they felt nervous in asking:

Q9: *"But I felt quite down on myself and I was quite self critical about it in my discussion with my tutor – yeah, I found it quite difficult to ask, even though I knew that it was, logically I knew it was reasonable reason I found it quite difficult to do and quite stressful!"*

This matches well Q8, AL perception of students being reluctant to ask for extensions.

Q10: *"I've had a good like a positive reaction from the tutors and they've been very understanding about giving me an extension!"*

Q11: *"I tend to think the teachers will think I'm serious so it makes me feel 'oh they think I'm not doing well, I'm struggling, I'm not a good candidate for this course' so it's quite a struggle so I found myself having to more or less over-explain what's going on with me just so maybe I could get the sympathy because it just makes me feel 'oh my god oh I'm a bad one'."*

### **Time-management/workload**

We grouped together comments relating to whether ALs felt workload was a significant factor in students asking for extensions.

Q12: *"All sorts of reasons ...half of mine are probably to do with ill health, relationships or whatever, but ..there were a lot ...who just plain don't cope with the workload at second level and come in from level 1 doing 60 points and they think doing two 30 point courses at level 2 is going to be absolutely fine and then they are horrified if they are doing S294 and SK299."*

This was borne out in some student comments – though it is worth noting that students commented far less on workload than ALs did:

Q13: *"But I also realise an extension puts me behind my other modules and makes it difficult for me to keep up because I find myself doing my TMA and lagging behind with my other one, and also lagging behind on that same module that I'm doing the TMA as well."*

Q14: *"I think this is actually my first year of doing multiple modules together, and I accidentally picked three and they all seem to be – I mean they are all 30 credits but they do seem to be very in-depth."*

### **Life events**

We grouped together comments relating to whether ALs felt significant life events were of relevance on extension requests, for example accidents, house moves, bereavements, births.

Q15: *“Just to give an example I had a student this year, who had signed up for more than one module and was due to have a baby halfway through.”*

Students also commented on life and family events and whether they had needed extensions to help cope with these, or whether extensions should be given for such events.

Q16: *“A holiday shouldn’t be allowed is it?... I mean, I guess as well for bereavement would you count a pet, because I know if my pet did pass away that would really upset me and probably – you know – but other people may say oh its just an animal, so...”*

As the student focus groups took place after the OU had instigated changes to assessment practices due to the pandemic there were some comments on that:

Q17: *“The pandemic has made absolutely no difference to me and it hasn’t altered my number of hours available but I do think there are people who have possibly been benefitted from this. If your furloughed from work, and let’s hope you haven’t got too many children to look after, you might actually find you can benefit so we need to see both sides, I think!”*

Q18: *“I haven’t asked for one but I do know certain tutors, especially with the covid situation, who were emailing more saying if you do need to request one that’s ok.”*

Q19: *“The reason people do Open University is because they have other commitments and when other commitments get out of hand, such as in a pandemic, I think things have to be taken into consideration and people can get behind for reasons that they really really can’t help and it’s not they want to get behind.”*

### **Disability**

ALs commented on whether disability was a significant factor in extension requests. In the context of disability ALs frequently cited mental health difficulties as being relevant to requests for and granting of extensions:

Q20: *“The student has or they call it I should say, but a mental health difficulty the student has seem to almost fall into two categories, was the scenario where the student is, you might even say in control of managing their health issues...And those where they’re not in control of managing their health issue.”*

Students commented far less on disability or long-term health conditions than ALs did; this could be due to not wishing to discuss personal circumstances or that the focus groups did not have many students with declared disabilities. However, a couple of students did mention long-term health, anxiety or dyslexia:

Q21: *“They actually did know about my health situation so I do feel like that did help me deciding I was going to do it but then didn’t but that definitely did sway me.”*



Q22: *"My main reason for it mainly is because I get really bad anxiety before submitting - I've even asked the tutor the night before for an extension and it's been granted and then I've managed to then, I don't know, plucked courage up to submit and then been lucky that I've always got good grades, but when I've asked for an extension I've always kept up with the study planner, it's more that I don't like submitting because I don't think my work is good enough!"*

Q23: *"I have an interesting perspective to put maybe into this which I should have said at the start as to partly why I had extensions – I am dyslexic and I find that as the tutors know that they don't seem to mind how many extensions you have and the OU are very good because obviously the policy for people with dyslexia is different isn't for people that don't have dyslexia!"*

However, one student mentioned how they planned study in such a way to cope with a long-term health condition and avoid needing extensions:

Q24: *"I suffer from migraine and so because of that – I've spent a lot of time over the years making sure I always – it's the one reason why I've never had an extension is because I work – on the working assumption that I'm going to have one before a deadline so I always build in an extra week."*

### **Comparison of student and AL perceptions**

Whilst the frequency of occurrence for themes was approximately similar for ALs' and students' responses, analysis of the comments revealed areas of strong similarity in experience and reasoning, and other areas of strong divergence. These are discussed in more detail here.

#### **Similarities in attitude**

Often there was a similarity in comments on the benefits of extensions to student scores and learning, and of reducing anxiety:

Q25: *"More often there is a ... positive impact on the student to have extensions. It is far easier ... allowing students a bit of time to give them the ability to complete a piece of work to the best of their ability that they might not of managed otherwise. ...there are other students who might have frequent extensions and they might perform poorly overall on the module, but considering they are performing better than they would have done without the extensions ..., I don't generally find a knock on impact." – AL quote*

The quotes from students strongly complement AL perceptions on how short extensions can be beneficial:

Q26: *"Well sometimes I felt that I maybe could have got more marks if I'd had a little bit more time – you know, I'd rushed some questions, I felt like that will have to be good enough – I thought some of the questions I thought if I'd had a bit more time I could have written a better answer but I've always just thought it would be better just to – because I can meet the deadlines to meet it and then move on to the next bit." – student*

Q27: *"I think for me it gave me the time I needed to study as well as the time I need to recover my health, so I could do both rather than compromising one or the other, which would have ultimately been my study, so it meant that I was able to get a better mark and a better representation of what I was capable of rather than my health situation hinging on it," – student*

On why the OU had TMA cut-offs:

Q28: *"I like the idea of cut offs because I think it's very important that students learn about, you know, about time management and so on and cut offs, and if you didn't have cut offs at the cut offs were too lax, you know if loads and loads of extensions for every TMA, we'd all get very chaotic."* – AL quote

Q29 *"Yeah in a way, as being OU students we need more structure I guess than most because we are, you know doing it all ourselves, we don't have a university to go to so you structure yourselves, so to have an actual deadline I guess gives it that structure, if that makes sense?"* – student quote

### **Differences in attitude or reason**

Two themes were equally significant to students and ALs: attitudes to permitting extensions and the academic aspects of extension requests. However, analysis of quotes from the focus groups revealed significant difference in the content of the comments between the groups.

On **attitudes** to whether extensions should be permitted and under what reasons AL comments tended to be broadly somewhat positive in sentiment, recognising that there needed to be flexibility to account for complexity and challenges for students – a typical comment is:

Q30: *"On the whole, I think they're a good thing. I'm just wary when I've got a student asking for multiple that's when I usually have a discussion with them about extra support to see whether these extensions are actually positive or not if that makes sense."*

This sentiment may well be because tutors were considering across numerous groups of students and over multiple presentations.

However, students were more polarised with some comments supporting the notion that any extension should be allowed as they were paying for their studies [Q31] and/or a more automated to short extensions [Q32]:

Q31: *"As we are paying so much money for these degrees to a certain point I don't think it should matter if we need an extension."*

Q32: *"I think it's essentially good to have an automatic way of doing as X suggested, where you didn't even have to approach your tutor, you could maybe just click a button on your student home site requesting just letting your tutor know that you are going to take advantage of a 5 day extension or something!"*

Whereas other student comments supported there being restrictions on extensions, particularly where assessment was based on group or collaborative activities:

Q33: *"I have to work really hard to get the work in on time – I pride myself on doing that! ..... If you can't keep up with the work you're very possibly affecting other students particularly with these science degrees where parts of the course require us to participate with other students – now if somebody in the group doesn't get their work done in time that can affect my work and it does not*

*make me happy..... it bothers me when I can't do my work to my satisfaction because other people are taking their time!."*

It should be noted that student focus groups were conducted during the COVID-19 pandemic, when the OU put in place specific measures to support students and these included relaxation of the conditions that extensions could be requested and tutors were required to grant extension requests of up to three weeks, in contrast to pre-pandemic practice when it was at the tutor's discretion. AL focus groups were conducted in late 2019 under 'normal operating conditions'. Whilst we had asked students to try and reflect on general experiences of extension requests it is inevitable that some responses will have been influenced by the pandemic.

On **academic** aspects there was a difference in focus of comments. ALs routinely commented on (lack of) preparedness of students for level 2 study and students being lulled into a false sense of security during their Level 1 studies [Q12], though there were a few comments on particular assignments being problematic in timing or content [Q34].

Q34: *"Things go wrong and you have to make adjustments, and not only that but practical write (on S295) up are the kind of things always take longer to write up than you think they're going to."*

Students did not comment on (lack of) preparedness; most comments on academic aspects related to the very different nature of distance-learning compared to previous (higher) education experiences.

Q35: *"I mean it is hard doing this kind of studying – I mean, you also have to change your whole mindset to how you do studying – you have to like have all these different attributes to if you went to a brick university and I think you do need to have a bit of an allowance for that as you do have to change so much!."*

The most commented on module was S294 with students citing specific academic challenges:

Q36: *"I can see that being the case, S294 is a very fast paced module which requires you to always read a chapter of the book every week and it comes with very long activities every single week to do so maybe this year if I was to get an extension I would be a bit more apprehensive because S294 is a very heavy content module!."*

Q37: *"The current TMA02 – the work on that is phenomenal – it took me – there are 5 questions, I've still got to do the last one which is a 1200 word essay ."*

Q38: *"I think it's actually too much detail as [student name] would say, and that's why I struggled with S294 actually, there was just too much detail, and it was like, how do I go through it?"*

*I mean I know my friend – actually I hate essays, but I need quite a good amount of time to put these things together so that being the case with me."*

Students recognised the challenges of reading, assimilating and putting in to their own words a lot of factual content, which was their strongest remembrance of any assessment. A further challenge for students was the fear of falling behind on this module and then having to catch up by skimming through materials.

eSTeEM final report: How are students using extensions and what is the impact on their success?

Q39: *“Definitely, and then you are putting a lot more stress on yourself to try and catch up and then you will be rushed to catch up and going to be missing important information!”*

These comments perhaps account for some of the impact of extensions on assignment scores we found for S294 as shown in Table 6.

However, some students might welcome assessment that matches their expectation of assessment focused on content:

Q40: *“If I would say, out of all my courses so far I did my best on that one - S294!”*

Through the contextual information provided by the focus groups validating our quantitative data we are able to make a further suggestion on improving assessment experiences:

Our recommendation is that when designing assessment for modules likely to be taken in combination careful thought is given to the assessment tasks as well as the timing of assessment points. For example, further investigation into the balance of report writing, essay-type questions and problem solving in assessments is merited. We would further recommend use of the Curriculum Design Panel to obtain further insight into the types of assessment that students find most time-consuming to inform these decisions.

Our findings show the value of using stakeholder focus groups with a range of experiences and specific contextual expertise to inform interpretation of the qualitative data.

### **Reflections on Methodology and Data**

The process of applying for ethical and data protection permissions provided the opportunity for us to refine our research questions and to reflect on what absolutely essential data were needed, to directly address the research question. This did help in focusing us on what questions it was appropriate to ask of the data and to make our ambition for the project realistic and achievable, but it did mean that we had to make hard decisions, early on, about the scope of the work. For example, our approach could have been used to look at Open or Combined STEM degree outcomes as students of these degrees face challenges in dealing with different types of assessment at different times in a different way to a planned assessment route on a named qualification. Or, our approach could have been used to look at if there were differences in extension requests and outcomes between different groups of D-marked students, for example between dyslexia and undefined mental health markers.

The quantitative data provided to us was a complete set of qualification, assessment results, extensions and disability status for all student taking at least one of our five designated modules in 17J and 18J. This included other modules such students were taking simultaneously. We opted to exclude students not taking Natural Sciences or Health Sciences to avoid extraneous factors potentially affecting the performance of students on Open or Combined STEM who might not have the expected academic background from prior study. These are also the “core market” for LHCS. However, excluding students has the potential to undermine the more general applicability of

our findings for that module; in SDK228, in particular, there are a large number of psychology students taking the module who were excluded.

Ideally a stratified sampling approach would have been used for the initial data, and a quota sampling approach to select student participants, this was not viable.

We had limited control of our sample for the student focus groups; the data was supplied to us by SRPP, based on students who had started at least one of the target modules in the last academic year, who were registered on a Health Science or Natural Science qualification with those already used for research excluded. The students excluded from our sample would not have been a random selection since their exclusion would have been on the basis of their suitability for another study. It was also not possible to assess how representative they were of our target population in terms of criteria potentially likely to impact our study such as prior academic attainment, study intensity, caring responsibilities, employment status or disability. There was also no awareness of the degree of heterogeneity in terms of gender or age. However, data was sufficiently large to give us reasonable conclusions around Natural Science and Health Science qualification students.

As student focus group participants were volunteers from those contacted, there are further limitations. For example, the student volunteers might well have been those with time available for the focus groups, those with strong views on the matter under consideration, or those for whom the £25 voucher was a very significant inducement. There were not sufficient respondents to take a quota sample for focus groups. None of the respondents were previously known to the researchers or focus group facilitators.

The efficacy of the focus group format was limited by the online nature, where it is harder for participants to develop effective relationships and the ideal of free-flowing discussions with minimal prompting from facilitators was far from achieved. It could be regarded as closer to a group semi-structured interview (Cohen, 2000). We chose Adobe Connect due to its familiarity to students and ALs, but on reflection, it might have been better to use a platform that supported video better so that physical clues and expressions would have promoted additional student communications. Even so, this still might not have been as welcoming to student contributions as face-to-face focus groups, which during our study were not possible.

A further reservation concerns the timing. Our focus groups took place in January 2021, during national lockdown and very high incidence of Covid-19; this was accordingly a time of great anxiety for many, and the need for students who were parents to focus on home-schooling might also have affected their participation. We were asking participants to consider their experiences and reactions in non-pandemic times, and whilst they attempted to do this in good faith, the very different current circumstances inevitably compromised this.

The selection of the AL focus groups used quota sampling from staff lists to ensure ALs were included from each of the modules concerned, and a balance of those teaching just one or multiple modules. All ALs selected were, however, known to CMH; this might appear to carry a potential risk of selection bias, but their views on the matter under consideration were not known. The AL focus groups were conducted in autumn 2019, prior to COVID pandemic and are more reflective of general circumstances and so must be compared with caution to the student focus groups.

## **Future implications and impact**

### **Impacts**

We consider the impacts (Minocha, 2021) of this work to be:

#### **Student experience**

The qualitative data herein show the impact of the availability of appropriate assignment extensions for students to feel able to perform at their best, and to feel appropriately supported by their institution.

The noticeable differences in effect of extensions on outcomes between different modules have implications for curriculum design, showing the impact of particularly content-heavy modules, and of particular types of assessment.

#### **Student retention and progression**

The data obtained on the potential for early extensions to be used as an indicator of struggle could inform the development of appropriate interventions. These could include SST interventions, triggered not just by assignment non-submission, but also by significant extensions. There is also the potential to feed into the further development of analytics, to include extension number and length as predictive factors for module completion.

#### **Evidence-based excellence in teaching**

The Open University's policy on extensions differs significantly from that of many other institutions; this is not an approach universally supported by staff or indeed students. The work here confirms the importance of that policy for non-traditional students in particular.

The data on numbers of extensions were considered when decision making about the university's new assessment technology were being made (via personal contact between CMH and committee member)

#### **Dissemination**

A list of dissemination activities to date is provided at the end of this report.

#### **Enhanced mutual stakeholder understanding**

The dissemination of our data to staff in Student Support Teams, ALs and module teams was met with much interest; the numbers of extensions taken improved awareness of the "chalkface" experience, and the qualitative work enabled greater empathy between staff and students.

#### **Personal and professional development of project team**

For CAB, this gave a much improved understanding of qualitative research, and developed skills in project planning and confidence in dealing with the "hurdles" such as SRPP, DPIA, HREC. These feed into development of further scholarship proposals and a PhD project. It also provided valuable experience of handling large data sets.

#### **Fostering of SoTL culture**

A presentation within a staff development session on this project stimulated interest in SoTL from other Associate Lecturers, and included discussion on how they could get involved and what might be fitting subjects for such projects.

This is the first eSTeEM project involving staff and student as co-leads and as such is a "proof of concept", potentially opening doors for many future such collaborations. It also features as a case study in the SoTL Badged Open Course.

## **Discussion and conclusion**

In the last 18 months the global COVID pandemic has accelerated the implementation of online education for many HE institutions. Other developments such as more personalised, adaptive learning have also led to research into the importance of completion deadlines and their impact on student performance (Miller, L. et al 2019). Research by Ariely and Wertenboch in 2002 had recommended that evenly spaced deadlines promoted completion of tasks.

Koch et al. (2015) described the need for commitment devices to overcome academic procrastination can lead to underinvestment in the time needed to complete tasks and the need for motivation tools (commitment devices) to overcome these. Some extrinsic motivators (such as grade or ranking) increased attendance in a face-to-face education context but effects on performance were mixed or possibly detrimental to particular students (gender and perceived ability). An assignment deadline can be considered an extrinsic motivator for students and was recognised as such by student members of our focus groups – see Q29.

The timing and flexibility of deadlines has been explored. Burger et al (2011) found that what they had considered to be well-chosen deadlines to help people overcome procrastination when dealing with a lengthy task, which were designed to make people more likely to complete had the opposite effect. A particular concern was that deadlines could impose additional hurdles to completion. Their second study looked at short-term procrastination and found that, seemingly paradoxically, whilst there was a dip in activity on day one, long term success rates were higher and with higher completion rates. They asked whether *'this result represent some sort of commitment due to having suffered through this exercise, inducing the determination to complete the task?'* (Burger et al, 2011), therefore we might consider this an unspoken purpose of extensions, ie, to create a short-term, close time limit that focuses effort on a single task.

They also noted a significant day of the week effect with less effort on weekends and more in the first few days of the week – this perhaps should be investigated further in terms of assessment deadline days and also to what day of the week an extension is given, though it is likely that for OU students the effects could be quite different and varied.

Bisin and Hyndman (2020) modelled different approaches to decision making on deadlines – they found that deadlines were of varying value depending on the time-preference of the decision maker, with a limitation that modelling has looked at completion of a single task rather than multiple tasks simultaneously or very close together. Bisin and Hyndman's findings appear to contradict those of Ariely and Wertenbroch (2002), as they found that subjects performed worst under exogeneous and evenly spaced deadlines. It could be that the main purpose of deadlines is to encourage immediate task completion – however a single assignment is just a small part of the whole task of completing a module, which would link to Burger's (2011) work on the impact of intermediate deadlines for substantial tasks. It is interesting to note that no students or ALs considered deadlines as a motivator for module completion, though in dealing with individual students an AL might say on the final assignment 'you are almost there' to a struggling student. Students did, however, make reference to the importance of some deadlines for structuring their study (Q29).

By offering the opportunity to request extensions this is the closest that the OU comes to self-imposed deadlines and allowing individual free-agency. One student in our focus groups suggested completely self-imposed deadlines (Q31) and others supported 'self-certified' short extensions (Q32).

This might be effective for some students, in particular confident learners with a realistic understanding of their self-control and time-management, but would be practically very difficult to implement at scale. Ariely and Wertenbroch (2002) found that people were often willing to set self-imposed deadlines and were effective in improving task performance, however, they were often not set optimally for maximum gain (performance enhancement), hence their recommendation of some even spacing of assessed tasks.

Our findings matched, to a certain extent, those reported by Miller et al (2019) for a different academic discipline, economics. Their study was on undergraduate students learning at a distance.. This does suggest that our methodology (and potentially our findings) is appropriate beyond our work on level 2 modules in LHCS. They found that rigid deadlines had a negative relationship with participation (completion and/or points gained). Whilst we did not investigate that as none of the TMAs had a rigid deadline, we found support on that sentiment in the student and AL focus groups (Q25-27).

Secondly, participation had a relationship to what the authors call “ homework points” – i.e. assignment scores,, which we equate to TMA scores. In our case, this would equate to assignments submitted without an extension having higher scores; whilst there was some negative correlation seen between extension length and score, this was small, and was, we consider, an indicator of extensions as a marker of struggle.

Thirdly, that participation (we equate to TMAs submitted on time) did not have a significant and direct effect on exam total points (module grade). We see this in Table 5b which show us that (a) there are a lot of multiple-extension takers amongst the low achievers but (b) significant numbers of high achievers also are taking multiple extensions (e.g., over 40% of Pass 2 have 3 or 4, and over 30% of pass 1). In one of our modules, extension length did exhibit some negative correlation with final attainment (Table 6), but this was a weak effect.

We feel that we have addressed our research questions as far as we were able to, given the circumstances imposed on the OU by the pandemic, as indicated by the discussion above. Therefore, our final conclusions are the following recommendations:

Our first recommendation: to module teams is that there a MILLS intervention sent to those students who use an extension on TMA1 encouraging them to reflect on their workload, guiding them to appropriate resources encouraging discussion with their tutor and/or the student support team. Furthermore, extension behaviour on module and tutor-facing dashboards could provide valuable indication of struggling students.

Our second recommendation is to module teams: that when designing assessment for modules likely to be taken in combination careful thought is given to the assessment tasks as well as the timing of assessment points. For example, further investigation into the balance of report writing, essay-type questions and problem solving in assessments is merited. We would further recommend use of the Curriculum Design Panel to obtain further insight into the types of assessment that students find most time-consuming to inform these decisions.



Our third recommendation is to ALs: to continue to offer supportive and sympathetic conversations with students in discussing and offering extensions.

Our fourth recommendation is to students and to communications towards students: to ensure students are made aware of the benefits of engaging with their tutors in discussing their needs and that such dialogues are evidence of development as an independent distance-learner.

Our fifth recommendation is to scholarship centres, Assessment Policy Group and PVC-Students: the impact of extensions on disabled students is looked at more in the future, particularly in the context of the new exams and assignments systems to be introduced in the near future.

Our sixth recommendation is to the Assessment Policy Group and PVC-Students: That the OU continues to take a flexible approach to extensions for its students as an important aspect of enabling retention.

### **Reflection on student partnership**

The importance of students as co-inquirers in scholarly activity has been well articulated (Healey and Healey, 2019) as a means to investigate shared questions of importance to understanding the student experience (Werder et al 2016). In 2014, Healey et al. (2014) outlined a model of four stages of student engagement: consultation, where students have opportunities to respond to questions, express opinions and experiences in a structure or manner determined by educators; involvement, where students might be assigned a specific task in a more active role, for example to review literature or be a focus group host; participation, where students take an active role in decision making or in a defined activity; and partnership, with collaboration between educators and students as equal partners with joint ownership and responsibility for the scholarly investigation.

Examples of students as partners in a scholarly investigation often focus on curriculum improvement in specific disciplines (Mercer-Mapstone et al., 2017). Whilst this might be most appropriate focus at many HE institutions, OU students are potentially well placed and skilled to be partners in being active research partners in more wider scoping scholarly research. OU students can bring expertise, prior academic achievement, life experiences and can have skills sets complementary to an educator's, so we decided to pursue this investigation as an equal partnership.

This project was particularly suited to partnership between an Associate Lecturer and a student. The origin of this project lay in our joint perceptions of a recent change in student behaviours with

eSTeEM final report: How are students using extensions and what is the impact on their success?

skills, such as CMH's understanding of the approach needed and the need to limit the scope, and CAB's statistical understanding, whilst others, such as literature searches, were divided based on availability of time.

The approach throughout reflected this; CAB's expertise was in the quantitative work, and CMH's in the qualitative, and the analysis was divided accordingly. The facilitation of focus groups was divided by our roles; one of the strengths of our partnership was that by CMH facilitating AL focus groups, and CAB facilitating student groups, our respective peers would feel able to speak freely and without judgement. Flexibility was also maintained throughout; both of us had substantial other time commitments and where tasks could be undertaken by either of us, we frequently reassigned them to suit.

However, all approaches taken, methods used, and written materials or presentations produced were cross checked and further developed with the other; nothing within the project was undertaken solely by one partner with no input from the other. All decisions were taken jointly, and the work here is co-owned by both of us.

A strength of the partnership was that both of us felt able to give our opinions, to suggest changes and to disagree with each other; this is a consequence of our pre-established strong working relationship and is a key part of success in student partnership.

#### **Dissemination and deliverables activities**

- eSTeEM student conference Autumn 2019 - presentation
- eSTeEM conference Spring 2020 – presentation
- Horizons in STEM HE 2020 (hosted by University of Nottingham) - presentation
- eSTeEM SST Roadshow Autumn 2020 - presentation
- CPD event for Maths ALs March 2021 - presentation
- eSTeEM Conference, Summer 21 - presentation
- Horizons in STEM HE 2021 (on Student Partnership in Scholarship) - presentation
- OpenLearn short course “Scholarship of Teaching and Learning in STEM” - case study
- School of Mathematics and Statistics Scholarship day, Autumn 2021 – poster
- eSTeEM Conference, Summer 22 – presentation
- Horizons in STEM HE 2022 (hosted by UCL) - presentation

We tried to disseminate further, as part of the Assessment Programme Seminars, but did not receive a positive response. The data was passed to a representative to show to the Exams and Assessment Steering Group to show the scale of extensions to inform developments of the Wiseflow assessment handling software.

We intend to submit a paper to Open Learning on the qualitative aspects of student extension use, “myth busting” concerning adverse impacts and recommendations.

## **Figures and tables**

**Table 1:** Proportions of assignments on which extensions are taken for S294, S295, SK299, SXHL288 and SK228 for 17J and 18J.

**Table 2:** Proportions of assignments on which extensions were taken by module (17J and 18J combined).

**Table 3a and 3b:** Proportions of assignments on which extensions were taken by study intensity (17J) for Natural Science (Q64) and Health Science (Q71) students. The colour bar indicates ten percentage point groupings; the darker the colour the higher the percentage of requests.

**Table 4a and 4b:** Proportions of assignments on which extensions were taken by study intensity (17J) for SDK228 and SXHL288 students. The colour bar indicates ten percentage point groupings; the darker the colour the higher the percentage of requests.

**Table 5a:** Evidence of the link between number of extension requests and student drop-out rate for S294.

**Table 5b:** Success rates for students who completed the module S294.

**Table 6:** showing the correlation between mean, first and final TMA extension length and score for S294.

**Figure 1:** Showing the frequency of comments made by ALs about issues relating to why students request extensions (or not) grouped into five overarching themes.

**Figure 2:** Showing the frequency of comments made by students about issues relating to why students request extensions (or not) grouped into five overarching themes.

## **References**

Ariely, D. and Wertenbroch, K. (2002) 'Procrastination, Deadlines, and Performance: Self-Control by Precommitment', *Psychological science*, 13(3), pp. 219–224. doi:10.1111/1467-9280.00441. (Accessed 8 Nov 2021).

Bisin, A. and Hyndman, K. (2020) 'Present-bias, procrastination and deadlines in a field experiment', *Games and economic behavior*, 119, pp. 339–357. doi:10.1016/j.geb.2019.11.010. (Accessed 8 Nov 2021).

Bisin, A., & Hyndman, K. (2014). Present-bias, procrastination and deadlines in a field experiment. NBER Discussion Paper No. 19874. Retrieved from <http://www.nber.org/papers/w19874> (Accessed 8 Nov 2021).

Burger, N., Charness, G., & Lynham, J. (2011). Field and online experiments on self-control. *Journal of Economic Behavior & Organization*, 77, 393–404. doi:10.1016/j.jebo.2010.11.010 (Accessed 8 Nov 2021).

Cohen, L., Manion, L. and Morrison, K. (2000) *Research Methods in Education, 5<sup>th</sup> Edition*. London: Routledge.

Dobbyn, C., Chetwynd, F., Jefferis, H. and Woodthorpe, J. (2016), An investigation into the use of Artificial Neural Networks to predict student failure, and the efficacy of sustainable additional support for those students. Available at: [https://intranet9.open.ac.uk/collaboration/Scholarship-Exchange/documents/John\\_Woodthorpe\\_Neural\\_Networks\\_project\\_final-report%20\(web%20version\).pdf](https://intranet9.open.ac.uk/collaboration/Scholarship-Exchange/documents/John_Woodthorpe_Neural_Networks_project_final-report%20(web%20version).pdf) (Accessed 18 March 2019).

eSTeEM final report: How are students using extensions and what is the impact on their success?

Healey, M. and Healey, R. (2019) *Students as Partners Guide: Student Engagement Through Partnership; A guide to the Advance HE Framework*. Available at: <https://www.advance-he.ac.uk/news-and-views/student-staff-partnership-comes-age> (Accessed: 10 July 2021).

Healey, M., Flint, A., and Harrington, K. (2014) *Engagement through partnership: students as partners in learning and teaching in higher education*. Available at: [engagement through partnership 1568036621.pdf](https://www.advance-he.ac.uk/news-and-views/engagement-through-partnership-1568036621.pdf) (Accessed 1 Oct 2021)

Koch, A., Nafziger, J., & Nielsen, H. S. (2015). Behavioral economics of education. *Journal of Economic Behavior & Organization*, 115, 3–17 <https://doi.org/10.1016/j.jebo.2014.09.005> (Accessed 8 Nov 2021).

McCann, K., Bacon, H., Marshall, S. and Rees, S. (2014), F61 MBA Student Retention and Progression Project Final Report: Available at: <https://intranet9.open.ac.uk/collaboration/Scholarship-Exchange/documents/MPC-2014-03-08-F61-Retention-Progression.pdf> (Accessed 13 March 2019)

McLachlan, J., Chamberlain, L. and Buck, J. (2017), Supporting student success: the role of an academic progress tutor. Available at: <https://intranet9.open.ac.uk/collaboration/Scholarship-Exchange/documents/Supporting%20student%20success%20-%20the%20Academic%20Progress%20Tutor.pdf> (Accessed 13 March 2019).

Mercer-Mapstone, L., Dvorakova, S. L., Matthews, K. E., Abbot, S., Cheng, B., Felten, P., and Swaim, K. (2017) 'A systematic literature review of students as partners in higher education', *International Journal for Students as Partners*, 1(1), pp. 1–23.

Miller, L. A., Asarta, C. J. and Schmidt, J. R. (2019) Completion deadlines, adaptive learning assignments, and student performance, *Journal of Education for Business*, 94:3, 185-194, DOI: 10.1080/08832323.2018.1507988 (Accessed 8 Nov 2021).

Minocha, S. (2021) Scholarship of Teaching and Learning in STEM Available at: [SOTL 1 - OpenLearn - Open University - SOTL 1](https://www.open.ac.uk/sotl-1) (Accessed 8 Nov 2021).

Nguyen, Q., Huptych, M. and Rienties, B. (2018). Using Temporal Analytics to Detect Inconsistencies between Learning Design and Student Behaviours. *Journal of Learning Analytics*, 5(3) pp. 120–135. Available online: <http://oro.open.ac.uk/58317/1/6141-Article%20Text-29392-2-10-20181208.pdf> (Accessed 11 Nov 2021).

Penny, R. C. (2019), Supporting ALs teaching multiple modules. Available online: <https://intranet9.open.ac.uk/collaboration/Scholarship-Exchange/Wiki/Document.aspx?DocumentID=2258> (Accessed 12 March 2019)

TEL Design (2017) A4A: Data in context - an overview of issues in active presentation Available online: [https://intranet9.open.ac.uk/collaboration/Scholarship-Exchange/documents/Data%20in%20context%20an%20overview%20of%20issues%20in%20active%20presentation\\_final.pdf](https://intranet9.open.ac.uk/collaboration/Scholarship-Exchange/documents/Data%20in%20context%20an%20overview%20of%20issues%20in%20active%20presentation_final.pdf) (Accessed 15 March 2019)

Werder, C., Thibou, S., Simkins, S., Hornsby, K., Legg, K., and Franklin, T. (2016) 'Co-inquiry with students: When shared questions lead the way', *Teaching & Learning Inquiry*, 4(2), pp. 21–35.

### **University approval processes**

- *SRPP/SSPP – Approval from the Student Research Project Panel/Staff Survey Project Panel was obtained according to the Open University’s code of practice and procedures before embarking on this project. Application number 2019-102*
- *Ethical review – An ethical review was obtained according to the Open University’s code of practice and procedures before embarking on this project. Reference number HREC/3361*
- *Data Protection Impact Assessment/Compliance Check – A Data Protection Impact Assessment/Compliance Check was obtained according to the Open University’s code of practice and procedures before embarking on this project. Logged*

All data related to this project will be destroyed 6 months after acceptance of this final report.

### **Acknowledgements**

Our thanks to: Rachel Hilliam our project mentor, Stephen Kershaw for providing the data, Charlotte Hancox for facilitating student focus groups, the ALs and students who participated in our focus groups, and eSTEEem for funding, training, advice and support, and of course the opportunity to carry out this project.

eSTeEM final report: How are students using extensions and what is the impact on their success?

## Appendix 1

### Assessment strategies and dates

Module	Nature of OCAS	TMA 1	TMA 2	TMA 3	TMA 04	Other	Exam/EMA
<b>S294</b>	Formative	20% OCAS	40% OCAS	40% OCAS	25% OES		Exam: 75% OES
<b>17J dates</b>		21/11/17	30/01/18	20/03/18	08/05/18		
<b>18J dates</b>		20/11/18	29/01/19	19/03/19	07/05/19		
<b>S295</b>	Formative	40% OCAS	40% OCAS	25% OES	-	iCMAs 5% + 15% OCAS	Exam: 75% OES
<b>17J dates</b>		07/12/17	01/03/18	24/05/18	-	19/10/17; 31/05/18	
<b>18J dates</b>		05/12/18	27/02/19	22/05/19	-	18/10/18; 29/5/19	
<b>SXHL288</b>	Summative	33.3% OCAS	33.3% OCAS	33.3% OCAS	-	Skills portfolio 40% OES	EMA 60% OES
<b>17 J dates</b>		07/12/17	08/02/18	12/04/18		03/05/18	
<b>18J dates</b>		06/12/18	07/02/19	04/04/19		02/05/19	
<b>SK299</b>	Formative	33.3% OCAS	33.3% OCAS	33.3% OCAS		iCMAs 5% + 10% + 10% OES	Exam: 75% OES
<b>17 J dates</b>		30/11/17	15/02/18	26/04/18		07/12/17; 22/02/18; 03/05/18	
<b>18 J dates</b>		29/11/18	14/02/19	18/04/19		06/12/18; 21/02/19; 02/05/19	
<b>SDK228</b>	Summative	30% OCAS	35% OCAS	35% OCAS			EMA: 100% OES
<b>17J dates</b>		30/11/17	01/02/18	22/03/18			
<b>18J dates</b>		29/11/18	31/01/19	21/03/19			

### Key

Formative OCAS	Summative OCAS	OES on module with formative OCAS	OES on module with summative OCAS
----------------	----------------	-----------------------------------	-----------------------------------