Report on Students' study of online modules

1. Background

The aim of this study was to obtain data on how students studied online modules and to use this to put in place amendments to the current presentation where this could be easily done or to subsequent presentations to enhance the students' experience. In addition the findings would be used to guide future module teams producing online modules.

Science Faculty introduced new level 2 modules with all material delivered online for the 14J presentation. These modules covered biology, chemistry, earth science and environmental science. Three of the modules were 60 credit and one 30 credit. Two of the 60 credit modules and the 30 credit module had an examination in June 2015, the third 60 credit module had an exam in September 2015. The examinations constituted 75% of the examinable component in all cases with the remaining 25% being provided by the student's score on a TMA based around practical aspects of the subject. Online texts were provided through links on the Study Planner. These contained embedded video and audio clips and interactive exercises. Alternative versions were provided as follows – pdf, e-book, kindle e-book, interactive e-book, Word optimised for screen readers.

The 30 point module was entirely new, whereas the 60 point modules were based on existing bookbased modules.

Module Teams were provided with some guidance on writing for online delivery – more time should be allowed for onscreen reading (35 words per minute), text should be less discursive than in books, frequent activities requiring student interaction should be provided. Some module teams were advised to include a graphic if there were no activities on each page to make it more visually appealing. Others were advised to ensure each video or graphic was used to teach or reinforce a point rather than as decoration. A reduced production time-scale was used.

Although the OU has produced shorter online modules and long modules which are part delivered online, the simultaneous introduction of full length modules across the Natural Science curriculum was a unique opportunity to investigate how students would tackle these modules.

Student numbers had declined since the introduction of the new fee structure and it was feared that moving to online delivery would result in further decline. It was also noted that the changed fee structure had affected the demographics of the student population on Science modules.

Although these factors were noted and student numbers interrogated, the initial phase of this project concentrated on how students experienced the online learning. Questionnaires were embedded in the modules. Student consultative forums were also set up for both UK and international students. It is planned to use the observability lab to watch a small number of students interacting with the materials but we were not able to obtain permission and volunteers in time for this presentation.

2. Methods

Ouestionnaires

Questionnaires were embedded in the 14J and 15J module websites and so were available to all students on these modules but were not directed to particular samples. The questionnaires were devised with the help of Lavinia Cox, LTS, who was running a university-wide project on realtime analytics whose primary aim was to respond to problems within the presentation. One module S295

was part of this university project and so it was decided to base the 14J questionnaires on those devised for this module to avoid students being presented with two similar questionnaires simultaneously. The plan was to insert three questionnaires – one near the beginning of study, one in the middle and one at the end of the module. This was achieved for the biology and chemistry modules, S295 and S215, although due to the module teams being engaged with the final production tasks during the presentation, the first questionnaire was inserted later than planned. The earth science module team were concerned about the questionnaires setting off a train of student complaints (early forum postings on all modules featured complaints about the online nature of the modules) and opted to combine relevant questions from all three questionnaires into one inserted at the end of the module. The environmental science modules S206 and SFX206 (which shared a website) did not find time to deal with the questionnaires until well into the module and therefore combined guestionnaires 1 and 2. For 15J presentations, an additional module, S217 physics, was included. This was its first year of presentation. There were two questionnaires as the final questionnaire had attracted few responses and responses tended to echo SEAM responses. The two questionnaires were sent to SRRP for approval and apart from the nature of the interactive items should have been the same for all the modules. Slight variations were introduced by individual module team chairs. As no-one on the project team had editing rights on all the modules involved, we had to rely on module teams inserting their own quizzes.

The number of students (and percentage of initially registered) providing responses to the questionnaires was:

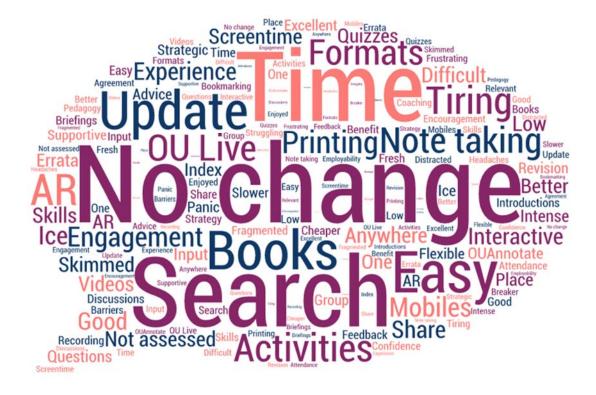
Tutor questionnaires

This part of the study was led by Vikki Haley-Minar, Julie Robson and Catherine Halliwell(AL). A questionnaire was put up on the S215 tutor website for 14J and on the s206 and S209 tutor websites for 15J.

A Wordle cloud of the responses is given below.

S217 questionnaire 1 – 155(36%), questionnaire 2 – 108(23%)

S295 questionnaire 1 - 92(25%), questionnaire 2 - 89(23\$).



OUSA student consultative forum

Following a suggestion from a student on a Natural Science qualification forum, the topic Studying online was put forward. Forums for both UK and international students took place. A summary of the findings is given in Appendix 2.

For 14J there was no specific guidance for studying online in StudentHOme. This was remedied for 15J and module teams were asked to give the link to this section on the module website.

Print on demand was made available for all the online modules from 15J. This was based on a pdf that was prepared when the websites went live and in 15J was not available at module start. From 16J students were offered print on demand bundles, typically 3 per module containing the main texts and some supplementary material.

Some years ago, the OU decided that modules could be offered worldwide if all materials were available online. At the time, that meant main texts being available as pdfs on the website. However the consultation with the international students revealed that these students wanted books.

Usability lab

We planned to run a limited trial looking at students actually studying the online material in this facility. The usability lab have been contacted and suggestions for short sections of material to use have been put forward by the module team chairs but this part of the project is still waiting.

Analytics

The module weekly reports on use of the websites were followed. As part of the realtime analytics project this was supposed to alert us to points where students were disengaging so that an intervention could be put in place.

IET statistics

During the period covered, moving to onscreen only modules was not the only change. Student behaviour could also be influenced by changes in fee structures, changes in prior education level, change in age profile and other demographic factors. Not only did these change over time but there were also differences between the cohorts on different modules. We therefore collected data on the make-up of student cohorts as given by IET statistics.

As expected from the changes in fee structure, the percentage of students with higher degrees is declining, although we note that even for 16J such students constitute 10% of the population on the physics module. There seems to be a slight decline in the percentages of female and non-white students. This is worrying. We note that the student body on S215 and S295 are generally younger than on the other modules. We have not obtained any evidence on age-related module success.

3. Students' perception and understanding of 'online'.

Questionnaire responses indicated that a large percentage of students did not realise that the module material was delivered entirely online. Indeed one student only discovered this by phoning the warehouse to ask what had happened to the mailing.

Two main factors contributed to this -1) students had not read anything giving this information and 2) students interpretation of 'online' varied widely.

1) Module teams had been discouraged from putting online in the short module description in case it put students off. Many students had not read anything further as they had decided the subject they wished to study and there was no choice of modules available.

In attempt to remedy this, S217 ensured that their short description stated up front that there were no books. However the 15J questionnaire revealed that some S217 students were expecting books.

2) Nearly all students expected online tutorials, but a substantial number (over 50% of respondents on S206/SXF206) expected an 'online' module to have books and online activities.

What did studying online mean to you before starting this module? (no. students replying)

Response 14J	S215	S295	S206/SXF206	S209
Everything happens on line and I don't have to consult	24	54	59	13
anything else or go elsewhere to work on this module				
I thought there'd be a mix of books with onscreen/online	29	43	103	8
texts				
I thought there's be face-to-face tutorials	13	24	77	4
I thought there'd be online tutorials	43	83	106	18
I thought there'd be no books	28	67	56	10
I thought there'd be alternative formats for mobile devices	21	46	58	7
I thought I'd be able to print off relevant bits of the module	28	76	80	14
material				

I thought I would be able to request and pay extra for print on demand	15	36	40	4
I want the option of print on demand	22	59	89	

Response 15J	S215	S295	S206/SXF206	S209	S217
Everything happens on line and I don't have to	21	34	59	13	66
consult anything else or go elsewhere to work on this					
module					
I thought there'd be a mix of books with	26	34	64	8	68
onscreen/online texts					
I thought there's be face-to-face tutorials	8		52	4	50
I thought there'd be online tutorials	29		98	18	105
I thought there'd be no books	18	44	76	10	59
I thought there'd be alternative formats for mobile	18		45	7	55
devices					
I thought I'd be able to print off relevant bits of the	28		76	14	87
module material					
I thought I would be able to request and pay extra	14		29	4	28
for print on demand					

Point 2 was also picked up in the consultative forums which produced a recommendation that module descriptions should state unambiguously that there would be no books.

However the majority of students who did not realise that the modules were online would still have registered if they had known.

4. How did students study the modules?

The questionnaire responses indicated that the two most popular methods were using the online text and using a printed-off pdf version. High usage of the online texts was supported by the number of students accessing the texts each week and the unusually high number of VLE visits lasting more than one hour.

A smaller but significant percentage used the ePUB version on a tablet.

The problem of annotating online texts was raised. Students used to highlighting and annotating OU texts found that OUannotate was not a good substitute.

How do you mainly read and study your module?

	S215	S295	S206/SXF206
On computer screen from module web pages	49	104	143
On computer screen using screen reader from module webpages or using an alternative format that provides this option	7	17	17
On a mobile device	14 (other than iPAD)	47	70
On an iPAD	15		
On paper i.e. printed from module webpages having selected 'view as single page option'	7	20	14
On paper i.e. printed from pdf alternative format	26	46	65

On paper i.e. printed from Word optimised for screen	6	11	4
reader document			
Mixture of formats		18	38

Figure 6 shows combined 14J and 15J data.

5. Which online activities did students enjoy?

On the whole, the students appreciated activities provided on the website such as drag and drop exercises, videos and quizzes.

Which activities did you find enjoyable and useful?

Table 4. Number and percentage of respondents who enjoyed and found useful particular types of interactivity. 14J and 15J responses combined.

Item	biology	chemistry	Earth science	physics
video	128 (91%)	50 (81%)	55(89%)	70 (65%)
audio	n/a			59 (55%)
Interactive	n/a	53 (85%)	40 (65%)	76 (70%)
activities				
Interactive	n/a	34 (55%)	30(48%)	75 (69%)
diagrams				
Online		46 (74%)	29 (47%)	64 (59%)
quizzes				
Digital	101 (73%)	n/a	37 (60%)	n/a
microscope				
Virtual	84 (61%)	35 (56%)		75 (69%)
experiments				

6. Retention

The online modules showed the same continual drop in registrations across a presentation as is usually observed for Science modules (Figures 3 and 4). The completion rates are given in Figure 2 and compared with book-led modules. We note that the retention rate is strongly influenced by assessment banking. The final years of the predecessor modules will not have been able to offer assessment banking. For example S295 completion rates declined sharply from 14J to 15J. This module did not offer assessment banking in 14J but did in 15J.

7. Module team responses to feedback during presentation.

S206/SXF206 – this was still in production at module start and it was possible to make some corrections to texts.

S209 – the questionnaire was only embedded at the end of the module.

S215 – instructions for a chemical structure drawing package used in quizzes was added, about ¾ of the way through, students were given guidance on the best way to proceed if they were behind schedule.

S295 – stash tables were introduced as a possible help to note-taking.

8. Responses and recommendations for future presentations/modules.

The main changes to modules in response to feedback from this project, forum postings and SEAM surveys are:

S206/SXF206 -

1) Including link to Studying online in StudentHome in the module guide.

S209 -

- 1) Linking to a Virtual Microscope screencast much earlier in the module
- 2) Shifting an activity using Visible Geology (an external website tool) earlier in the module, and creating a screencast on how to use the tool
- 3) Link out to a resource on using Excel (from Physics)
- 4) Addition of larger image option for several more figures
- 5) Provide central 'home' for Errata, rather than just on forums
- 6) We will also provide links to the 'Studying online' material— not sure where as yet, possibly in the Module Guide but maybe also in the Study resources section.

S215 -

- 1) Making the second halves of the final 2 blocks optional.
- 2) Moving one of the more difficult blocks later in the module.
- 3) Including link to Studying online in StudentHome in the module guide.
- 4) Adding document giving advice to students from students on the 14J presentation.
- 5) Adding 'Are you ready for' quiz to website.
- 6) Spelling out exactly what students are supposed to study each week and giving an estimate of time taken.
- 7) Noting in the Study guide for each block which activities need to be studied online.
- 8) Providing print-on-demand.

S295 -

- 1) Introduction of a template for navigating the site and making notes.
- 2) Amended items on 15J website in real time. Mark amended items by crossing through title on link.

Messages for future production teams

- 1) Ensure that the module short description makes it clear that no physical materials are provided.
- 2) Give clear guidance on timings of activities and which need to be studied online.
- 3) Do not overload the module.
- 4) Students like Moodle quizzes.

- 5) Include activities. Although students wedded to books will download the pdf or use print-ondemand, those that study online generally appreciate activities so long as they add to the teaching.
- 6) Keep video clips short. Students report download problems with videos. In addition a paper on MOOCs suggests that people concentrate on videos for only about 6 minutes.
- 7) During presentation, respond to student comments promptly and if possible act on suggestions.
- 8) Have TMAs available from start of module if possible.

9. Interaction with other projects

eSTEeM project on making chemical structures accessible to students with severe visual impairment –Vic Pearson.

This project used S215 to look at how the online chemical structures could be made accessible. Previous modules in this area had supplied model kits for students.

An outcome of this project was that these structures should be incorporated in a DAISY book read by expert readers.

DAISY books are used not only by visually-impaired students but also widely by students with dyslexia and some students with no special requirements. Work has started on S111.

Real time analytics and the Analytics project.

See under Methods

Athena SWAN

Statistics on gender differences in module result outcome were acquired for the bronze award submission of the LHCS. These led to an investigation of possible demographic differences between male and female cohorts.

10. Presentation of work from this project.

Poster at eSTEeM conference 2015

Poster at 5th eSTEeM conference 2016 on tutor feedback.

Paper submitted to The Journal of Open and Distance Learning May 2016, revised paper submitted October 2016, awaiting second reviewer's comments.

Poster on tutor feedback at STEM Horizon 16 conference.

Workshop on online activities in S215 at HEA STEM conference February 2017.

Poster at 6th eSTEeM conference April 2017

11. Future work

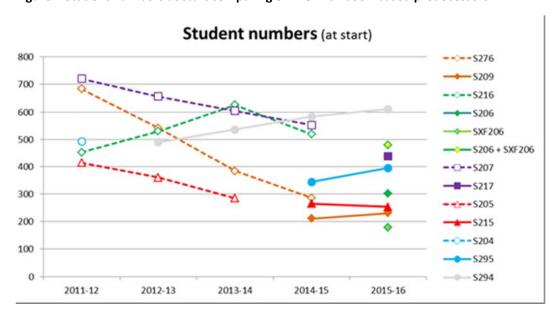
- 1) We have a large amount of qualitative data (questionnaire responses and student forum postings) giving students' opinions of studying online. This needs analysing.
- 2) The usability section of the project needs completing.
- 3) 14J students had been used to having books. It would be interesting to put questionnaires into the 18J and 19J presentations to see if students coming via S111 and S112 viewed online learning differently.

- 4) S201 should be asked if they want to be involved.
- 5) S315 and S317 are interested in looking at their students.
- 6) It would be worth looking at whether students in particular groups (e.g. women, non-white students, disabled students, low income students) were off by or succeeded less well in (or not) online presentations.

Appendices

Appendix 1 Student numbers and demographics

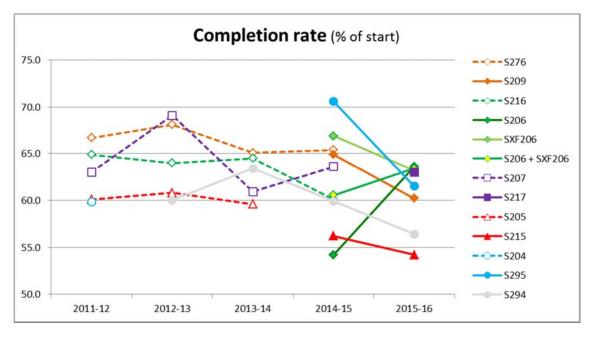
Figure 1 Student numbers at start comparing online with book-based predecessors.



S294 is a 30 point biology level 2 module with books. S276, S216, S207, S205 and S204 are predecessors of the online modules. S206/SXF206 is a 12 month module. Data referring to 14J is reported under 15/16.

Student numbers 2016-17 S209 205, S215 234, S217 426, S294 721

Figure 2 Completion rates comparing online with book-based predecessors.



Completion rates for 2016-17:S209 64%, S217 69%, S215 61%, S295 61%, S294 56%

Figure 3 Numbers registered on S206, S209, S215 and S295 during 14J presentation

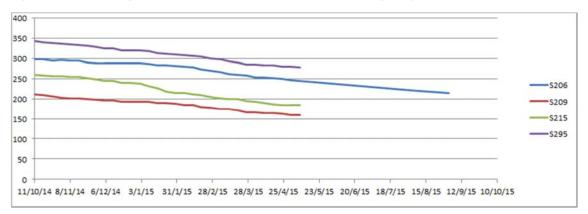
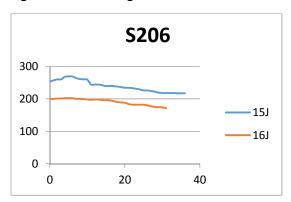
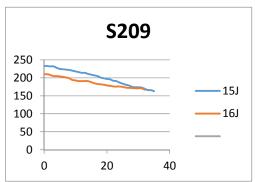
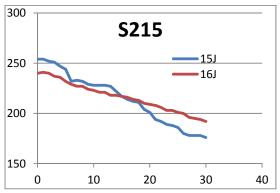
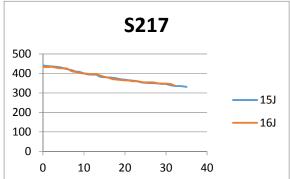


Figure 4 Numbers registered on modules in 15J and 16J per study week









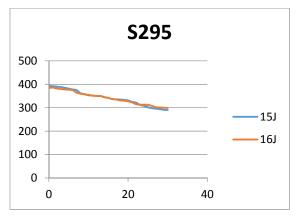


Figure 5 Number of students accessing the VLE 14J

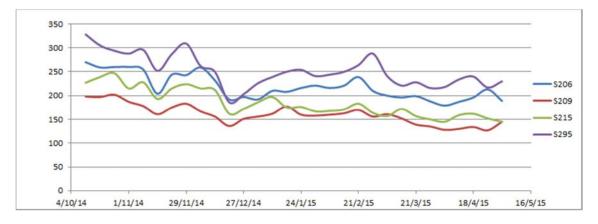
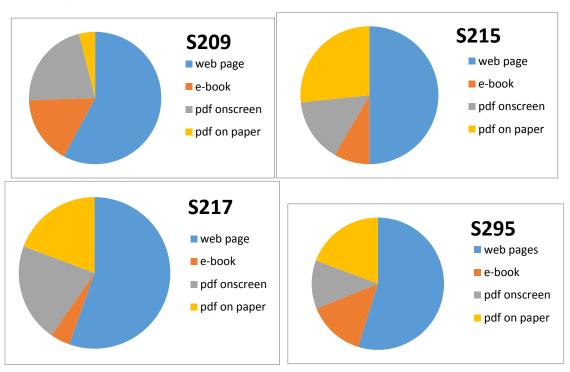
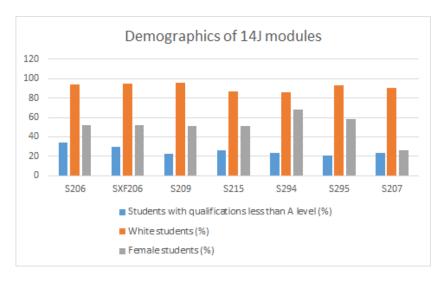


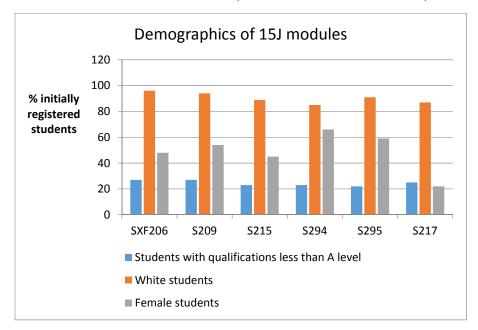
Figure 6 What was the main way students studied? (Ratios of responses. Students could tick more than one option.)



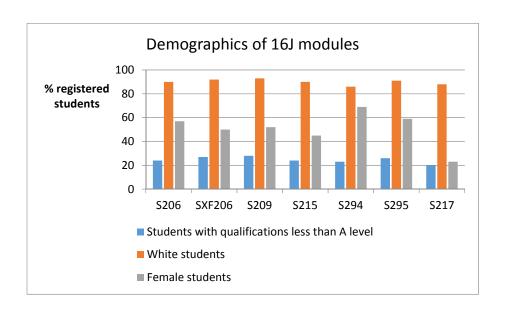
Demographics



S294 and S207 are not delivered entirely online and are included for comparison.

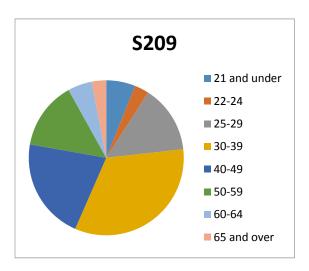


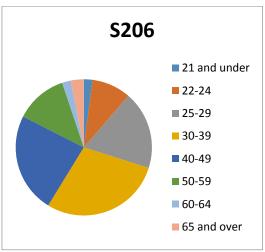
S217 (online) replaced S207.

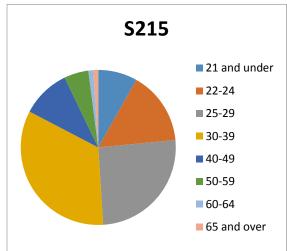


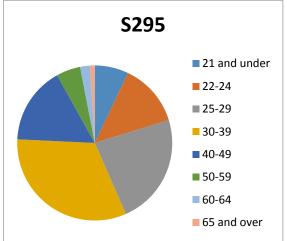
Age profile

14J

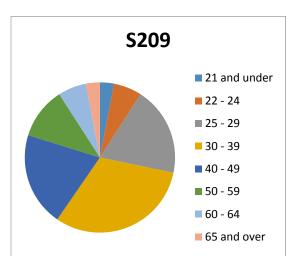


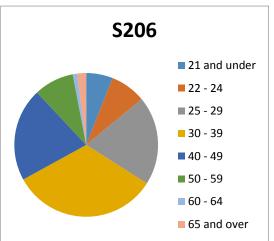


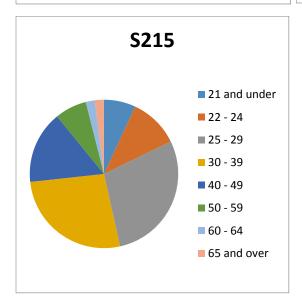


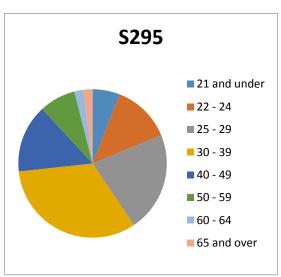


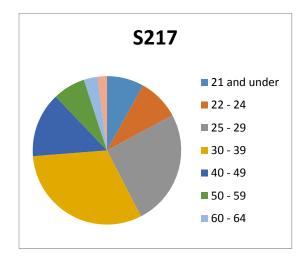
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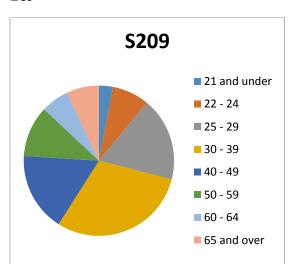


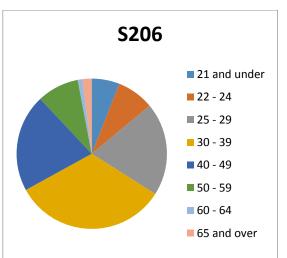


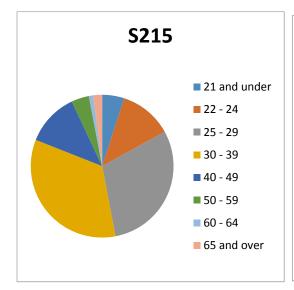


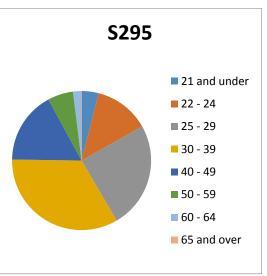


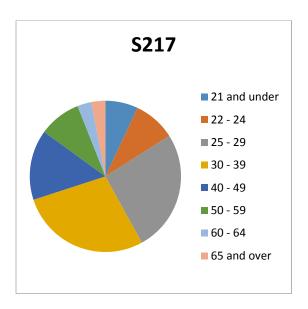
16J











Appendix 2 Summary of student consultative forum feedback

General points

Strong messages

This consultation topic was expanded by students into a discussion of whether OU courses becoming increasing online was desirable. The general consensus was that a 'blended mix' of online and hard-copy module materials was preferable and printed books were valued. It was accepted that the approach for specific modules would depend on subject area and views were influenced by learning styles. Flexibility and choice were highly valued. Students expressed a strong view that they wanted to continue to see the availability of some printed materials.

Issues raised with online study included:

- The cost and environmental impact of printing being transferred to students.
- The need to sometimes study without internet access e.g. while travelling or in areas with patchy broadband, particularly for international students and in rural areas.

- The health and safety element of needing to spend many hours at a screen (potentially when having worked at a screen all day).
- The ease of annotating print compared to onscreen.
- The ease of study needing to have everything on one screen was difficult.
- The lack of availability of module materials three years after module-end.
- The need to download large files.
- The ease of finding what you were looking for with the OU search engine seen as poor.
- The difficulty of studying without the right level of IT skills, hardware and software.
- Particular concern about working onscreen for students with additional requirements.
- Navigation not always being as straightforward as it could be.
- That modules requiring a lot of reading were not suited to online study.

Positive features of online learning noted were:

- Variety offered e.g. audio/video clips.
- Having everything in one place accessible 'anywhere'.

General messages

There should be more information and training for students about working online, including onscreen note-taking, as part of their induction.

Students should have the option of printed materials or all online materials when they register, with differing views on whether students should have the option of paying extra for printed materials.

Suggestions

Tutors should be able to see the same screen as students

Include an appropriate device for study use as part of the fee so students start on an equal footing.

A clearer rationale should be offered as to why the amount and nature of online learning is necessary and what research evidence there is to support the trend to online learning.

1. Where is the best place for the University to provide information that a module is delivered entirely online and what is the best phrase to use to indicate this?

Strong messages

Students wanted a prominent indication on relevant webpages if a module was delivered entirely online. Suggestions included making the information large, bold, in a different colour, at the top of the page and including a special icon.

What is not included should be spelled out e.g. no printed materials, no face-to-face tutorials, nothing in the post. But if an 'online only' module did have the option of face-to-face tutorials this should also be highlighted.

There should be a link to a glossary or key fact box of what 'online only' means (perhaps with a hover box), including how many activities can't be printed and how IT confident/literate you need to be. There could be a short video 'what it's like to study this module'. Information about what alternative formats are provided should be included.

There should be a check on registration with e.g. a pop-up box when you pay for a module stating 'Please confirm that you are aware this module is online/onscreen only'.

If not exclusively online, it should be clear how much of the module is online e.g. 90%, and the number of hours required of online study per week. There could be a breakdown of the sections of the module including tutorial provision – what parts are online, what onscreen and what printed. Modules could be colour coded or with a pictogram about the proportion of online/onscreen study. A table of modules could be provided with columns for online only/mostly online/books provided.

General messages

Onscreen/Online should be differentiated and defined as sometimes it is the internet connection that is crucial.

Qualification descriptions should say 'In one or more modules, study is onscreen only'.

The amount of internet capacity required for the module should be available before registration with e.g. an accessible diagnostic for students to check they have the IT capability to proceed.

Other points/suggestions

Write in Plain English.

Include 'online only' in the module title.

A letter/email should be generated to students who have signed up for online only modules explaining what this means.

Be consistent in what is meant by online/onscreen.

Seek feedback from students and make it available to other potential students about the quality of online materials/how they had found the course.

Build a network of student volunteer mentors who have studied specific online modules and can advise potential students of how they are taught.

How much online study is required should be reinforced in any conversation the OU has with an enquirer/student choosing their next module.

Potential students should be advised to try taster modules through OpenLearn.

- 2. Which interactive activities do you think do or would aid your study of an online text?
- 3. What additional tools would you find useful for online/onscreen study?

4. Are certain activities more suited to particular subject areas?

The general message from answers to these question was that students welcomed a variety of activities. Specific answers depended on learning style and subject area. The activities mentioned most often as valuable were interactive guizzes.

Students would like online activities to be given timings so it was clear how long each one should take. Time for getting used to new technology should be built into the module. Sometimes it took longer to download software and get it working than to do a particular activity.

The additional tool most needed was the ability to easily annotate online.

Students mentioned the following activities as positive:

- Short recaps.
- Audio/video (including on YouTube) transcripts and subtitles were important.
- Podcasts (better access to iTunes required).
- Short-term/time-bound forums to discuss certain ideas.
- Links to external resources.
- Regular interactive parts to break up the text.
- Virtual microscopes.
- Activity disc.
- Current and topical activities.
- Drag and drop could include feedback on areas to improve and links to helpful chapters.
- More 'how to' guides, including videos.
- Opportunities for students to post examples of their work.
- More use of social media e.g. links to Twitter.
- Tailored activities based on learning style.
- Short, sharp activities with a clear purpose and explicit benefit to the student.
- Interactive diagrams.
- Are you ready for? Quizzes.

More negatively, some students found activities too simple and would prefer larger chunks of text, Some thought virtual field trips and microscopes were a poor substitute for the real thing.

Other suggestions

Some external software applications are reliant on sufficient memory and can cause a crash.

It would be useful if links to extra materials could be put on module planner or StudentHome.

Students should be warned that if they deleted their cache/cookies, they would lose any notes they had made on screen.

Interactive activities should be fed back to the tutor if a student is struggling.

Sometimes links don't work or external websites have poor navigation.

All activities should be possible to carry out on a basic PC.

Pdfs should be updated rather than separate word files with errata supplied.

- 4. Which alternative formats should be provided?
- 5. Which would you use and why?
- 6. Which alternative formats do you think should be a priority for the University to provide?

The strong message here was that students wanted access to a wide choice of alternative formats dependent on their learning style and circumstances.

Preferably a paper version of module materials should be available, or if not, an easily printable version in .pdf or Word format. This should include a description of any interactive or AV material, not just the text so students can choose to engage with them or not at an appropriate point.

General messages

Print on demand should be available more widely, at less cost, and provide a better product.

Transcripts were important for video/audio.

Better use should be made of OU anywhere, and made more consistent across modules.

More materials, including videos, should be available to download and take offline to access at another point, possibly via OU anywhere.

Students would like more audio books.

OU software does not necessarily work well on the devices students have, particularly Apple and Kindle.

Other points/suggestions

Interactive e-books that could be annotated would be useful.

It would be good to have all module material on a disc so internet connection was not a factor in accessing it.

A simple form of text file or open format should be available for all modules.

The OU should advertise the free software available for converting different file types and companies such as Lulu which will print online material for a fee.

Appendix 3 Questionnaires

15J Student Questionnaires

Questionnaire 1

1. What did studying onscreen / online mean to you before you started S215? Check all that apply.

Options

Everything happens onscreen and I don't have to consult anything else or go elsewhere to work on this module

I thought there'd be a mix of books with onscreen/online texts

I thought there'd be facetoface

tutorials

I thought there'd be online tutorials

I thought there'd be no books

I thought there'd be alternative formats for mobile devices

I thought I'd be able to print off relevant bits of the module materials

I thought I'd be able to request and pay extra for print on demand

2. Which of the following items did you engage with before starting your study of the main texts? Check all that apply.

Are you ready for S2xx

Module Guide

Studying online on StudentHome (Help Centre > Computing help > Study skills for online learning)

Advice from 14J students

https://learn2.open.ac.uk/pluginfile.php/1557733/mod_label/intro/Study%20Advice%20from%20students.pdf

- 3. Tell us about your experience of the advice on studying online in StudentHome. Did you use this site? Did you find it useful? Is there anything not covered that you would like to see?
- 4 Which alternative formats have you downloaded/purchased so far and how have you used those?

If you are having trouble finding alternative formats, follow the instructions below:

On the righthand side of the page, scroll down to just above Forums and click on Other formats.

At the bottom of the "Downloads related to this document" section is an "All downloads across this website" link,

From the Document download box select your preferred format..

You can download them all from here individually, or as selected groups.

Options

interactive epub

epub

pdf

print on demand

Word for screen readers

kindle ebook

5. How do you mainly plan to read and study your module materials?

Options

On computer screen from module webpages

On an iPAD

On another mobile device eg smartphone; kindle, Android tablet

On print on demand copy

On paper printed from pdf alternative format

On computer screen using screen reader from module webpages or using an alternative format that provides this option

On a combination of computer screen and iPAD

On a combination of computer screen and prin on demand

On a combination of computer screen and printed off Pdf

On a combination of computer screen, iPAD and paper from print on demand or pdf

On paper printed from module webpages having selected 'View as single page' option

On paper printed from Word for Screen reader document alternative format

SRPP approved Level 2 Science online questionnaire 2

Q.1. What format(s) do you currently use to read and study the main module materials for Sxxx?

Options (Note we stated these may vary slightly to fit different modules. The wording is the S217 choice but you may want to describe the items differently e.g. ePUB2 = e-book, ePUB3 = interactive e-book depending on how you actually describe them to students.)

A Web page using a web browser (on screen / on-line)

B Zip file using a web browser (on screen / off-line) (S217)

C ePub2 using an eBook reader (on screen / off-line)

D ePub3 using an interactive eBook reader (on screen / off-line)

E PDF file using a PDF viewer (on screen / off-line)

F PDF self-printed on paper

G Print-on-demand PDF on paper

H None of the above

Q.2. What is the minimum time you would spend studying on different devices at a single sitting?

Each option to have a choice of

- 1. I do not study this way
- 2. About 1h or less
- 3. Up to 2h
- 4. Up to 3h
- 5. Up to 4h
- 6. Up to 5h or more

(Note please all use the same categories this year, so that I can analyse the results.)

Options

A Computer (desktop/laptop)

- **B** Tablet
- C Smart phone
- D Paper
- Q.3. How do you currently make notes whilst you are studying?
- A Using OUAnnotate on screen
- **B** Using another on-screen system
- **C** Using a pen and paper
- **D** I do not make notes
- **Q.4.** Which on screen interactive items have you found useful and/or enjoyed?

Each option to have a choice of:

- 1. Used, enjoyed and found helpful
- 2. Used, did not enjoy, but found helpful
- 3. Used, enjoyed, but did not find helpful
- 4. Used, but did not enjoy or find helpful
- 5. Did not use

Options S206

- Video clips
- Audio tracks
- Interactive diagrams
- Interactive activities
- Virtual experiments

S209

- Video clips
- Screen casts
- Interactive diagrams
- Photo carousels
- Interactive activities
- Online quizzes
- Figure enlargements
- Spreadsheets
- Virtual microscope
- Digital kit
- Virtual field trip
- Google Earth
- Image-J
- Visible Geology website

S215

- Videos of chemical reactions
- Videos featuring block authors
- Audio tracks
- Drag-and-drop in-text exercises
- JSMol interactive structures
- Virtual experiments
- Online quizzes
- AccelerysDraw
- ACD/Chemsketch
- JSME
- Graphplotter
- Library exercises

S217

- Audio tracks
- Video clips
- Screencasts of solutions to worked examples
- Order-of-magnitude diagrams
- Interactive diagrams
- Interactive activities
- Virtual experiments
- On-line quizzes

S295

- Video clips
- Revision hive
- Investigations A,B,C,D
- Phonotaxis (frogs) experiment
- Butterfly wiki
- Photo carousels
- Photograph enlargements
- Digital microscope
- Spectrophotometer
- Statistical spreadsheet

Q.5. What additional support or resources would help you in your Sxxx studies?

Tutor questionnaire

eSTEeM Tutor Questionnaire

As part of an eSTEeM project investigating how students engage with online only material, we'd also like the input from the ALs who have delivered some of the online only modules. We'd therefore be very grateful if you could spend 10-15 minutes completing the following questionnaire.

Your teaching

How prepared did you feel to teach an online only module before it started?
On-line presentation
First presentation

Very prepared Prepared Not as prepared as I would have liked Not prepared at all

2. How confident did you feel before the start of the module to teach an online only module?

Very confident Confident Not as confident as I would have like Not confident at all

3. Have you changed the way you support students because this is an online only module?

Yes No

Please provide comments (box needed)

4. Have you undertaken tutorials with other tutors?

Yes No

If no, please progress to question 6. If yes, please answer question 5.

5. How have you found delivery a tutorial with another AL?

Please provide comments (box needed)

6. Has your support of the students changed?

Please provide comments (box needed)

7. What staff development would have helped you feel more prepared to teach on an online only module?

Please provide comments (box needed)

8. Have the queries you've received from students changed in an online only module?

Please provide comments (box needed)

- 9. Has delivering an online only module changed the way you mark TMAs?
 - a. Has it altered the feedback you are providing to the students?

	b.		•	to refer s	tudents						
		Very e	asy	Easy		Difficul	t	Very di	fficult		
	c.	Could	you find	the info	mation	you nee	ded to n	nark?			
		Yes	No								
10.	How u	seful ha	ve your	peers be	en – cha	ange wo	rding he	ere!!			
	Very u	seful	Useful		Not par	ticularly	useful		Not use	ful at all	
11.	Do you	u feel vo	u receiv	ed enou	gh guida	nce on i	unning	particul	ar activit	ies, e.g.,	, online
	_	-		g up wik	_		J	•			
	More t	than enc	ough	Enough	l	Not en	ough		None at	: all	
12.	Do you	u think t	he stude	ents are t	ruly inte	eracting	with the	e activit	ies?		
	Yes	No									
	If no, v	what do	you thin	k might l	oe preve	nting th	em? (co	mment l	oox)		
			•		·	J	,		·		
13.	Do you	u feel th	e modul	e is it a b	ook und	der glass	or truly	interac	tive?		
	Book		Interac	ctive							
14.	Appro	ximately	how m	uch time	do you	spend o	n your 1	rgf?			
	0-1 hrs	s/wk	2-3 hrs	s/wk	4-5 hrs,	/wk	More tl	han 5 ho	ours		
15.	Do you	u have a	clear ex	pectatio	n of hov	v, why a	nd whe	n you a	required	to use y	our TGF?
	Yes	No									
	Pleas	commen	t (box ne	eeded)							
Modul	e mater	<u>ial</u>									
16.	How a	re you fi	inding st	udying t	he mate	rial onli	ne?				
	Very e	asy	Easy		Hard		Very ha	ard			
	Please	comme	nt								
17.	Have y	ou stud	ied all th	ne mater	ial (plea	se be ho	nest)?				

Yes No

Yes No
Please comment
18. What format do you use to study the module material?
Use the same list from the S295 survey
19. How are you using the module material?
Please comment (Box needed)
20. Which interactive components do you think the students have found the most useful?
Please comment (Box needed)
21. Are there particular aspects of the module material you think the students have;
a. Enjoyed
b. Struggled with
Please comment (box needed)
22. What do you perceive as the advantages of an online only module?
Please comment (box needed)
23. What do you feel are the disadvantages of an online only module?
Please comment (box needed)
24. Did the students seem prepared for an online only module?
Yes No
Please comment (box needed)
25. Do you think most of the students were aware this module was entirely online?
Yes No
Please comment (box needed)
26. What is lacking from online material?

	Please commen	it (box n	eeded)		
27.	How do you thi	nk stud	ents are making	g notes and using the mo	dule material?
	Please commen	it (box n	eeded)		
28.	How do you thi	nk will	the students rev	vise using the module ma	aterial?
	Please commen	it (box n	eeded)		
29.	What training d	lo you t	hink will help st	tudents use on-line mate	rial?
	Please commen	it (box n	eeded)		
30.	Have any stude	nts bee	n in touch with	difficulties using online of	only material?
	Please commen	it (box n	eeded)		
31.	Do you feel the disabilities and		-	as had a greater or lesser	impact on students with
	Significant impa	ict	Some impact	Minor impact	No real impact
32.	Do you feel OU online?	Live at	tendance has al	tered as a consequence o	of the module being entirely
	Greatly improve	ed	Improved	Worse	Much worse
33.	Do you feel studook?	dents a	re taking longer	to work through the onl	ine material compared to a
	Yes	No			
34.	MT interaction guidance?	– where	e do you think t	he MT could provide add	litional support and
Plea	ase comment (bo	ox need	ed)		

35. Any other comments

Box needed