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A review of the use of Office 365 and Adobe Connect for active learning by Associate Lecturers tutoring in Computing

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Adobe Connect

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1.0 Executive Summary

This scholarship work took place to identify what Open University (OU) approved technologies (Adobe Connect and Microsoft Office 365 applications) are being used by Associate Lecturers (ALs) and explore how and why they are being used for teaching and learning. There are ALs who are not aware of Office 365 applications available to them whilst there are also pockets of innovation taking place within the AL community who are using applications innovatively, for example: using discussion forums to support practice learning; using Adobe Connect for active learning; and OneNote being used for students to keep lab notebooks or for those who just want to get better at organising ideas. The challenges and opportunities of using digital technologies for learning and the impact on the learner experience are not widely shared. Digital skills are not integrated into the day-to-day professional practice of all ALs, whatever their subject area.

A mixed methods approach was adopted with ten ALs (three in a pilot and seven in the main study) from the School of Computing and Communications completing a quantitative survey and taking part in a qualitative interview to follow up on the survey answers in more detail. The findings revealed that all ALs use Adobe Connect, as this is the only OU-supported application for running tutorials, however, not all ALs (30%) are aware of the full functionality, for example, using pods and layouts, breakout rooms, running polls, desktop sharing, whiteboard and drawing. Some ALs saw tutorials in Adobe Connect to be more 'broadcast' than 'interactive'. 60% of the AL research participants did not use Adobe Connect or Office 365 tools as methods for cooperative learning or as a mechanism to motivate students. 50% of ALs advised they used technology to support students with additional needs, for example, using larger fonts in resources, using video conferencing for one-to-one support, making use of Adobe Connect functionality to provide multiple ways for students to communicate and participate, i.e. through text chat, audio and contributing to the white board. ALs reported that socialisation was primarily achieved through the use of forums and in tutorial discussions. Only 30% of ALs reported using Adobe Connect to support student reflection during tutorials. Some ALs make good use of live, interactive demonstrations where students can 'work along' during tutorials, for example, in a computer module, building a small program.

2.0 Aims and Objectives

The objectives of the project are to:

1. Support AL professional development in using OU approved digital technologies.
2. Collate in-house expertise and best practice case studies in the use of OU approved digital technologies.
3. Keep OU faculty teams informed in the use of digital technologies by ALs.

The research has four main aims:

1. To develop an understanding of best practice, use of digital technology by ALs to support students.
2. To raise awareness of the use of digital tools within the AL community for OU tuition.
3. To gather evidence and examples of how STEM tutors adapt their tuition using digital technology to support students' needs.
4. Explore how to develop a liaison system that provides a regular update mechanism to OU IT – at least annual.

3.0 Rationale

The research supports the STEM faculty strategy in the following ways:

- Inform faculty staff on how digital technology is being used for teaching and learning, and to appreciate the value of innovation and specialisation as well as safety and standardisation.
- Engages the AL community and brings ALs together who have relationships at other HEIs and can share their use of digital technologies to support teaching and learning.
- Support the development of staff through the sharing of best practice. Students also expect to leave The Open University with skills for employability. Digital skills, evidence of digital outcomes, and an e-portfolio to show what they have learned, are all vital to what the HE and skills experience can offer. It will lead to the developing of digital capability for both ALs and students.

The exploiting of technology comes from the work of ALs. It is useful to support the STEM faculty strategy by looking at capability and capacity and the potential of students and ALs to take advantage of technology and for managers to make this happen. The research builds upon existing research including Gracia et al's (2013) research on the use of online technologies for the delivery of careers and employability advice and Mattingly's (2020) research on using individualised screencasts to develop programming problem-solving skills.

4.0 Methodology

The research began with a pilot study to inform the methodology for the main study and refine the relevance and scope of the research. The pilot consisted of three interviewees to trial questions and expose ambiguity and establish clarity of purpose and a systematic approach to methods. There is risk of imposing a potentially inappropriate or irrelevant method on the research participants and the pilot study helps to resolve any issues that may arise and enables flexibility before embarking on the main study. The pilot study took place with 3 Associate Lecturers. A pilot study would usually only be used to test and refine the methodology, but I decided to include the pilot study as part of the larger study because the data that resulted was valid when taken together.

Participants were invited to participate in the research study via a camel message. Initially the scope of the research included ALs who tutored on T227 and TXY227 but because there were less than ten ALs who tutored on these modules, the invitation was sent out to all ALs tutoring on computing modules.

The pilot provided a useful check on the wording of questions and to ensure they were clear and unambiguous. Following the advice of Bell (2005), a check was completed with the pilot participants on how long completion took. The participants were asked if any questions needed to be added, amended or omitted.

Content analysis was utilised which has been used to research similar subjects to this research study including various types of learning including collaborative learning and informal learning (de Wever et al, 2006).

The questionnaire contained open questions. Open questions were used to elicit people's views on how ALs are using Adobe Connect and Office 365 for active learning. Open questions such as 'How do you utilise Adobe Connect / Office 365 tools to encourage collaborative learning?' and 'How do you use digital technology for socialisation and to get students to talk freely to each other?' were included to provide a richer dataset and open up new themes to explore. Open questions allowed people to answer in their own words, which provided relevant themes to be identified.

Follow-up one-to-one interviews were held with the participants to discuss answers from the questionnaire in more detail. The content of the survey answers was used as a basis for discussion prompts in the interviews. Prompts during the interviews were non-directive, but designed to encourage participants to discuss all aspects of the research activity. Participants were encouraged to talk informally about their experience of using Adobe Connect and Office 365 in their work with students.

It is important to note that this is a small-scale pilot study based on 3 research participants in the pilot study and 7 participants in the main study who were all Associate Lecturers tutoring in the STEM faculty.

5.0 Findings

5.1 Results

ALs reported usage of the following OU-approved technology (see Fig 1). It was no surprise that all ALs used Adobe Connect and PowerPoint, as these are needed to deliver online tutorials and Outlook for email communication. 40% of ALs reported using Word in their tutoring, 30% Excel and 10% Teams and OneNote.

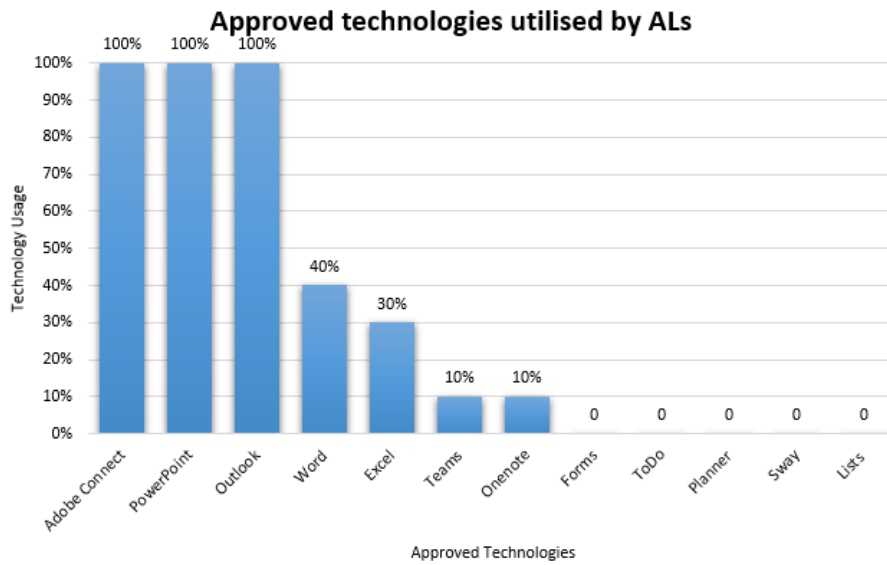


Fig 1: approved technologies utilised by ALs

The various functions of Adobe Connect were explained to ALs and they were asked if they were aware of using pods and layouts, breakout rooms, running pools, desktop sharing, using the whiteboard and draw tool. 30% were not aware of the available functionality in Adobe Connect (see Fig 2).

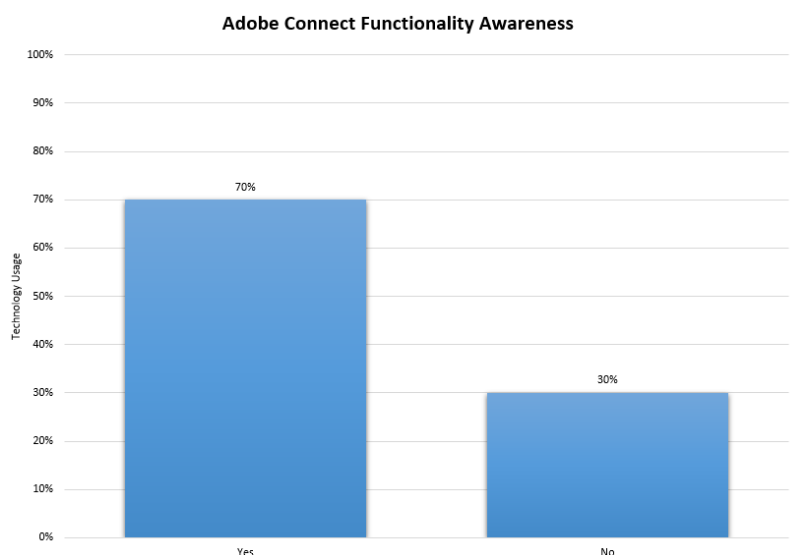


Fig 2: ALs awareness of Adobe Connect functionality

50% of ALs reported that they did not use Adobe Connect and Office 365 tools to support students with disabilities or additional needs (see Fig 3). 50% of ALs advised they used technology to support students with additional needs, for example, using larger fonts in resources, using video conferencing for one-to-one support, making use of Adobe Connect functionality to provide multiple ways for students to communicate and participate, i.e. through text chat, audio and contributing to the white board. Slides are shared in advance to support students with dyslexia.

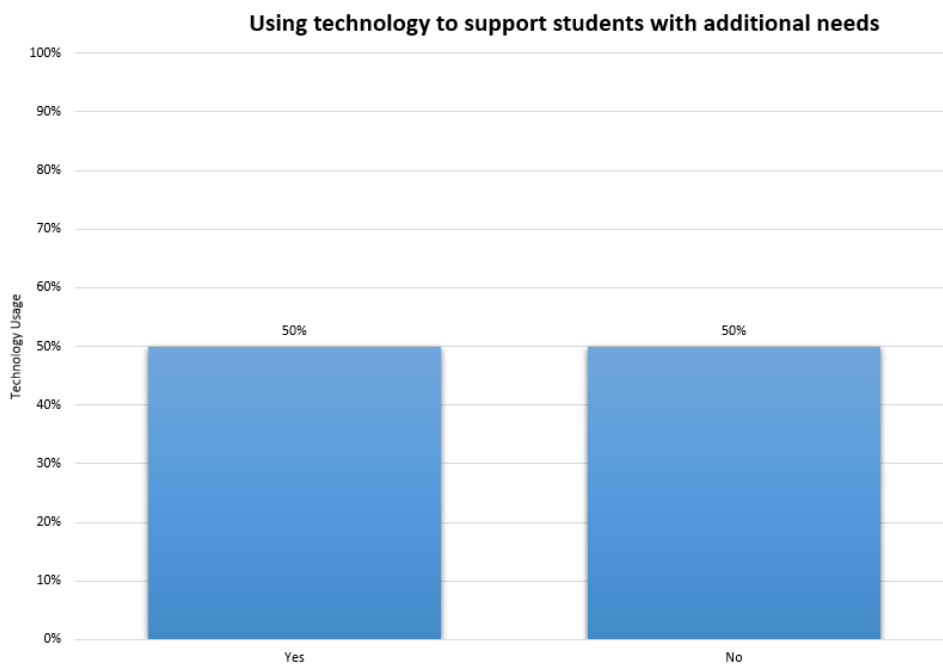


Fig 3: Percentage of AL participants using technology to support students with additional needs.

60% of the AL research participants did not use Adobe Connect or Office 365 tools as methods for cooperative learning or as a mechanism to motivate students (see Fig 4). ALs were asked how they utilise cooperative learning methods as an effective motivator and how they use Adobe Connect / Office 365 tools for intrinsic motivation and achievement motivation. Alarming, 60% of ALs saw tutorials to be for broadcast and instruction only and did not consider adopting cooperative learning methods to support students. ALs said tutorials are “delivered, rather than designed to be cooperative”. ALs reported that they did not find Adobe Connect particularly useful for encouraging cooperative learning and saw achievement motivation primarily being supported through TMA feedback. 60% of ALs reported that they did not feel they had the skills to deliver tutorials in any way that allowed for self-direction and active learning. They saw tutorials to be tutor-led and learning based upon knowledge acquisition (Ellsworth, 1989). Some ALs saw achievement motivation achieved only through the

marking and feedback on TMAs and not achievable through tutorials. In contrast, other ALs utilised the functionality of Adobe Connect for achievement motivation through the use of polls, whiteboard activities and used breakout rooms to engage, motivate and enthuse students and ensure a good learning experience.

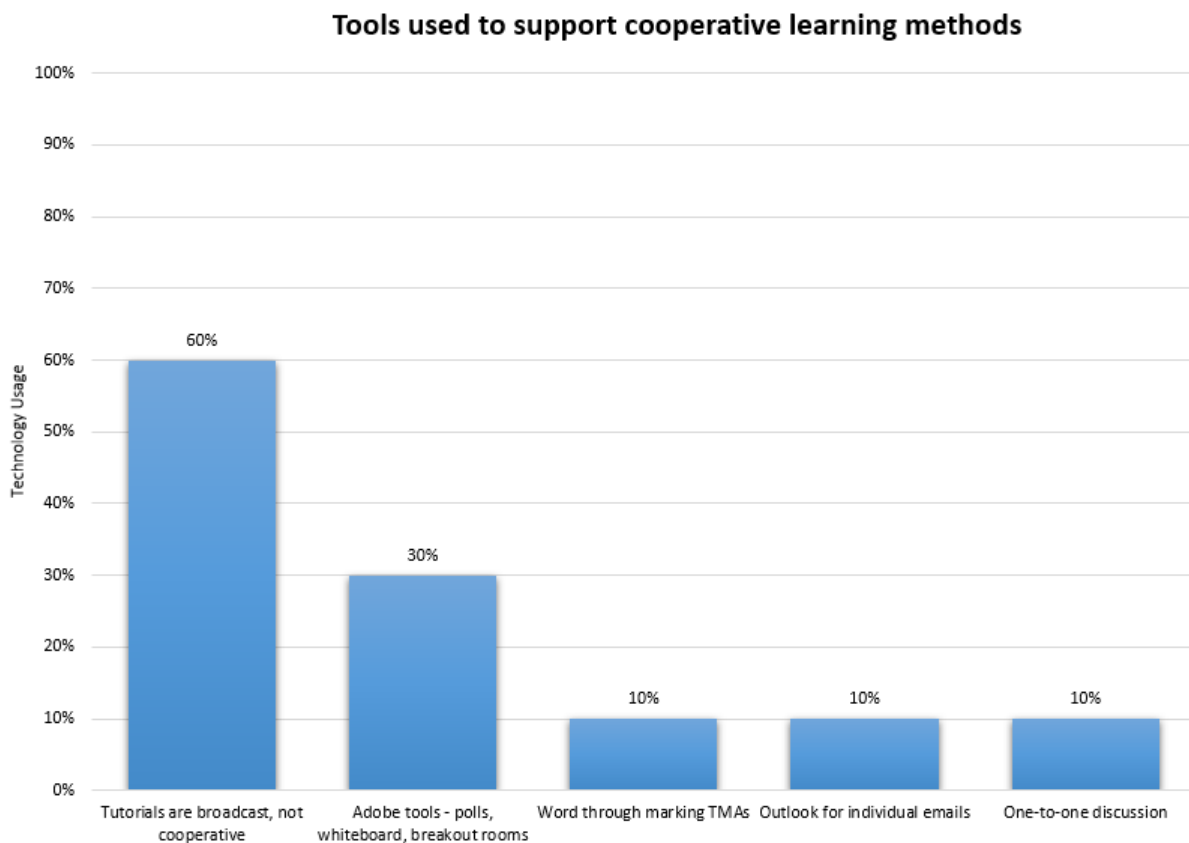


Fig 4: Tools used to support cooperative learning methods

ALs were asked to explain how they use technology to encourage students to talk freely and to support socialisation (see Fig 5). ALs reported that socialisation was primarily achieved through the use of forums and in tutorial discussions. Adobe Connect sessions tend to be more 'broadcast' than interactive reported some ALs and advised that students did not like to speak during Adobe Connect tutorials. ALs reported cooperative learning methods were easier to achieve through the use of forums and students being tasked with peer reviewing, for example, on T192, students interact and comment on each other's designs.

Technology usage for socialisation and to get students to talk freely to each other?

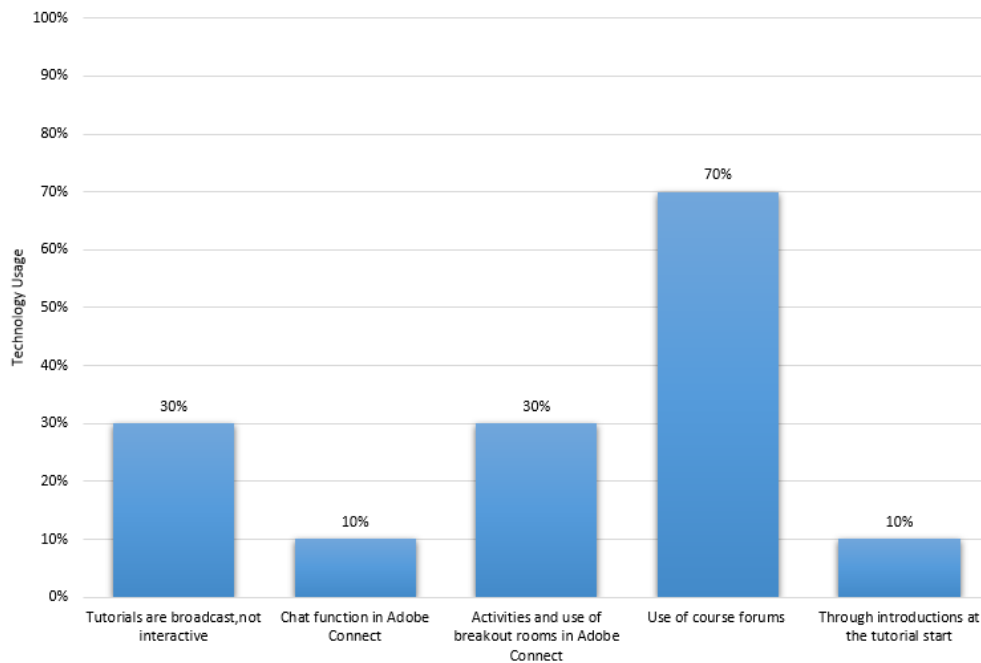


Fig 5: Technology usage to encourage student socialisation

ALs were asked how they use technology, in order, to encourage students to exchange information (see Fig 6). Some ALs found that Adobe Connect was not particularly useful for this because it depended on student numbers and who had a working microphone. ALs found the forums more useful and students using the Open Engineering Studio. Other ALs shared how they utilised Adobe Connect by inviting students to exchange information through live presentations and demonstrations, using live chat, polls and whiteboard activities.

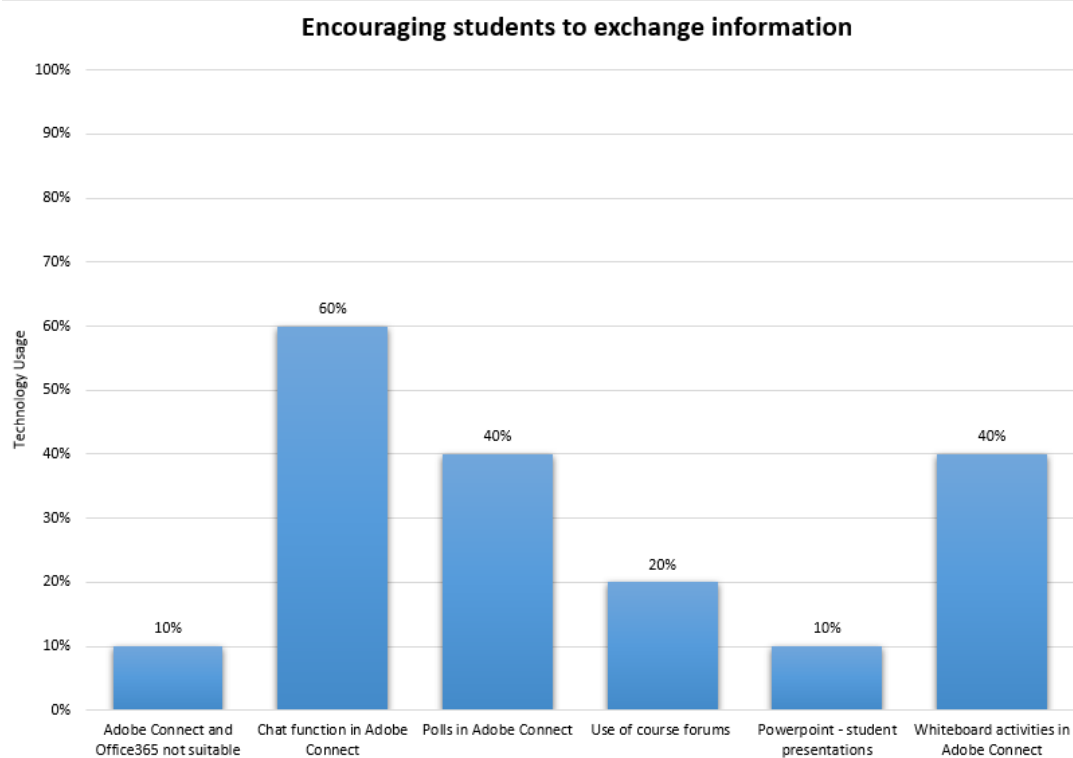


Fig 6: Technology used by ALs to encourage student exchange of information.

ALs were asked how they utilise Adobe Connect / Office 365 tools to encourage collaborative learning (see Fig 7) and 80% of ALs reported they did not. One tutor gave an example of module TM111, where a series of programming exercises are delivered and there is a dedicated forum for students to post their solutions and they are encouraged to comment on other contributions. One AL said that as far as they could see none of the tools provided features to encourage collaborative learning. Many of the ALs saw tutorial time to be used for instruction and demonstration by the tutor and not as a means to encourage collaborative learning. One AL talked about using group tasks within Adobe Connect and inviting students during the tutorial to present findings to their peers. ALs reported that they saw OU study to be very individualistic and that their experiences as OU students had been the same, due to the distance learning model. Whilst OU students themselves, they did not know other students.

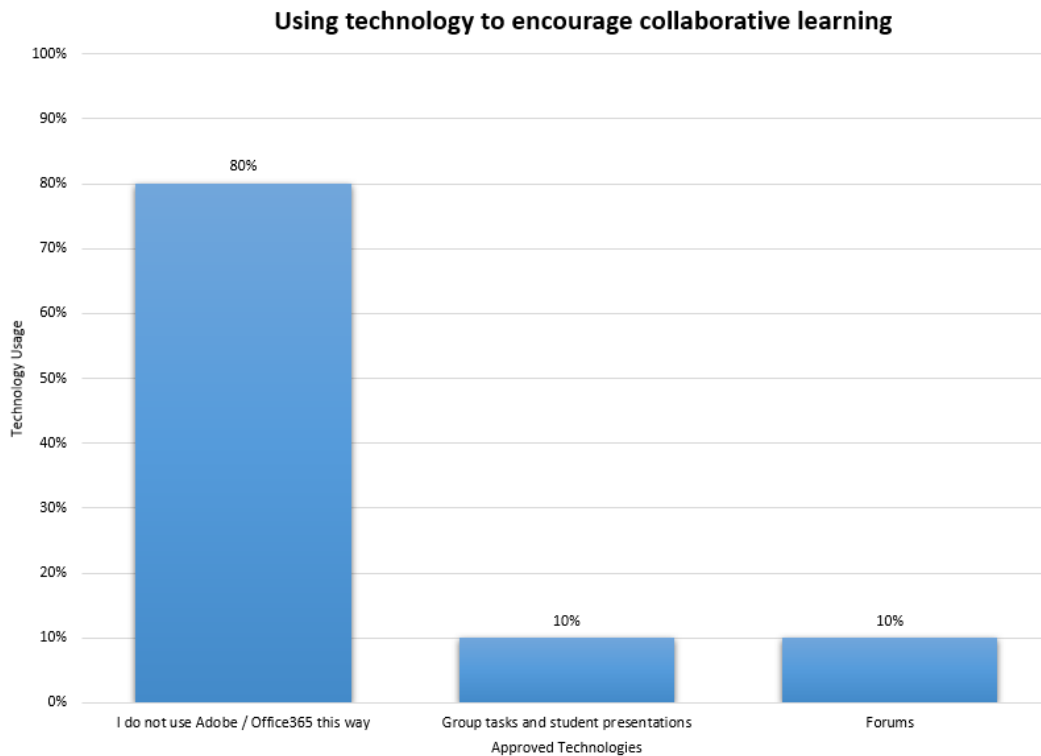


Fig 7: Technology used by ALs to encourage collaborative learning

ALs were asked how they use Adobe Connect / Office 365 to support students in reflection (see Fig 8). Only 30% of ALs reported using Adobe Connect to support student reflection during tutorials. One AL talked of using OneNote with their students to develop specific learning and study habits, including keeping an activity log and a diary for reflection. They also used the FutureYou OneNote templates with their students for reflection. 60% of ALs felt that Adobe Connect and Office 365 tools were not useful for the purpose of reflection and pointed to the module material being used for this purpose. In T192, for example, within the course itself, there are activities that foster the development of learning habits, supporting students in learning to learn and to reflect on their previous knowledge and develop approaches for study.

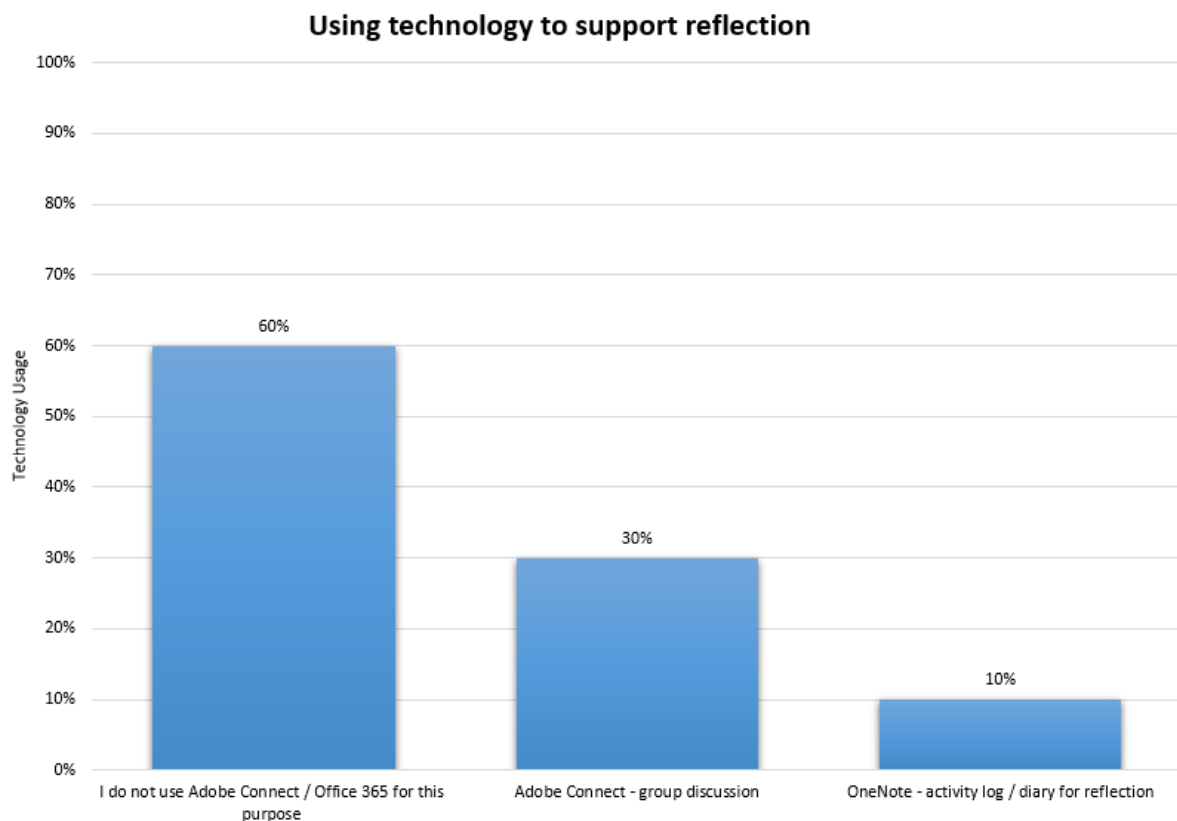


Fig 8: ALs use of technology to support reflection

ALs were asked how Adobe Connect / Office 365 were utilised to summarise discussions (see Fig 9). 30% of ALs report they did not use Office 365 or Adobe Connect for this purpose. One AL reported producing summaries in Word and posting to the tutor group forum. Another AL talked about how they would be verbally summarising throughout a tutorial on Adobe Connect. Others talked about if there was conversation in Adobe connect, then the chat could be copied to summarise and a screenshot of the whiteboard discussions and activities can be captured.

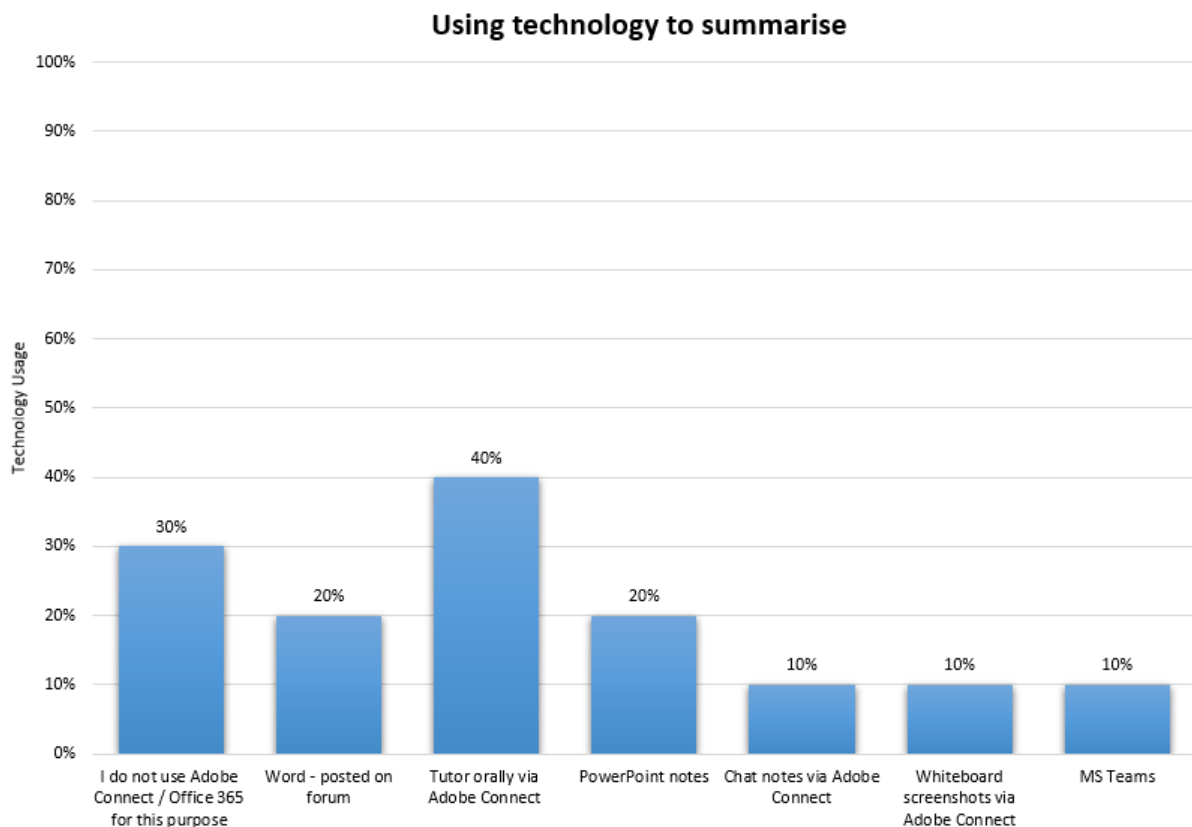


Fig 9: ALs use of technology to summarise

ALs were asked how they use Adobe Connect / Office 365 to promote active learning (see Fig 10). Some ALs reported that they used the tutorial only as a mechanism to deliver information to students. Others reported on using forums for collaborative course work and others used Adobe Connect features including online chat, polls and setting students off with participatory tasks, for example, drawing on the screen. One AL used PowerPoint to present a programming activity and then students would work in groups in breakout rooms to work on a programme in Scratch. One tutor explained how they utilised the white board and draw tool in Adobe Connect to invite students to label diagrams with module concepts using the draw tool. Another AL discussed using Q&A cards which were displayed in Adobe connect and students worked in small groups to work through the questions.

Using technology to support active learning

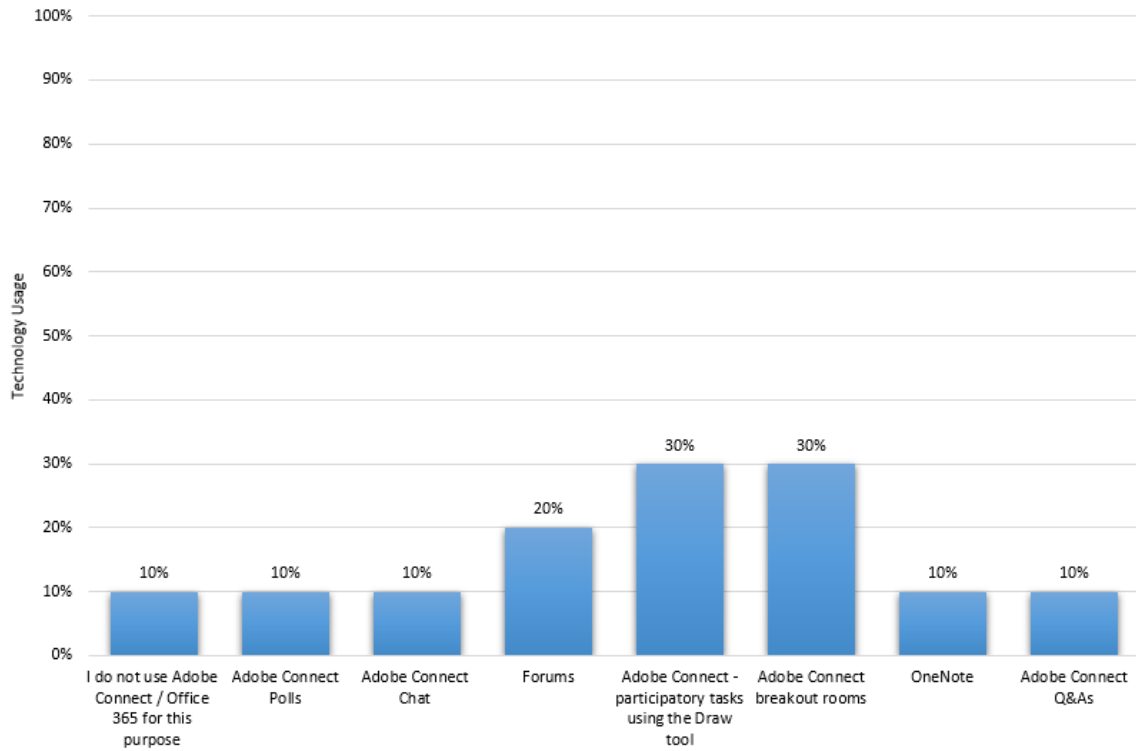


Fig 10: ALs use of technology to support active learning

ALs were asked if they use Adobe Connect / Office 365 for subject specific practices (see fig.11). Some ALs make good use of live, interactive demonstrations where students can ‘work along’ during tutorials, for example, in a computer module, building a small program.

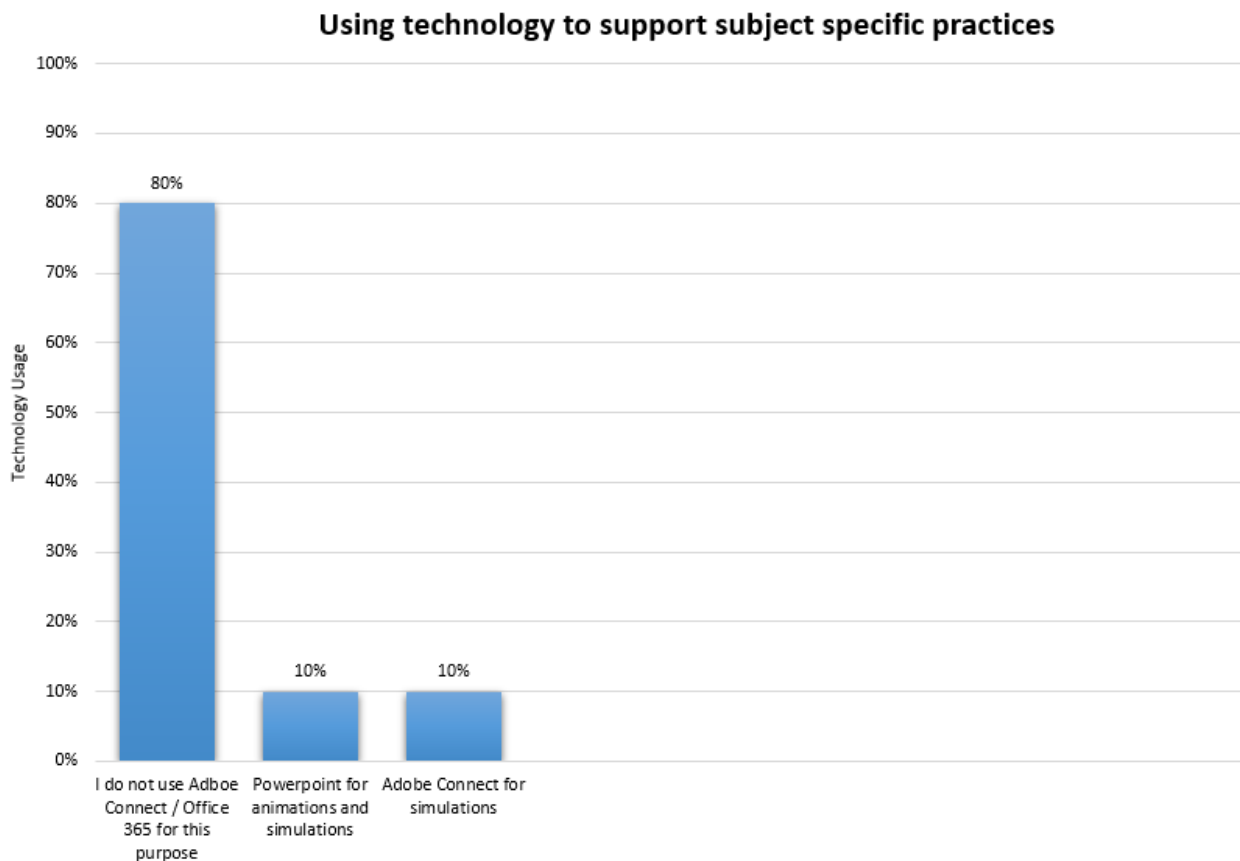


Fig 11: ALs use of technology to support subject specific practices

One AL talked about using the animation functionality in PowerPoint, in order, to show the steps of a calculation line by line or for plotting points on a graph or for creating online circuit simulations. Another AL talked about introducing the basics of programming in tutorials starting with slides in Adobe Connect to cover problem decomposition and writing algorithms and then inviting students to work on exercises, as well as, utilising screen sharing to demonstrate programming environments used in TM111 and TM112 (OU Build and Python).

ALs were not all aware of the applications available to them through Office 365. They also weren't aware of useful functionality available within common applications used, for example, 100% of ALs use PowerPoint, but 80% were not aware of the SmartArt functionality to create diagrams and represent information pictorially in tutorials. When asked to choose an Office 365 tool that they had not used and would most find beneficial in their role as an AL, 80% chose Planner. They felt planner would be useful for apprentices in the workplace. They saw Planner being useful for students studying more than one module so that students could create an overall study plan with all deadlines included.

5.2 Conclusion

This small-scale research has been useful in identifying pockets of innovation where ALs are utilising Office365 applications and Adobe Connect for active learning. One AL talked about using the animation functionality in PowerPoint, in order, to show the steps of a calculation line by line or for plotting points on a graph or for creating online circuit simulations. Another AL talked about introducing the basics of programming in tutorials starting with slides in Adobe Connect to cover problem decomposition and writing algorithms and then inviting students to work on exercises, as well as, utilising screen sharing to demonstrate programming environments used in TM111 and TM112 (OU Build and Python). One AL talked of using OneNote with their students to develop specific learning and study habits, including keeping an activity log and a diary for reflection. They also used the FutureYou OneNote templates with their students for reflection. One AL used PowerPoint to present a programming activity and then students would work in groups in breakout rooms to work on a programme in Scratch. One tutor explained how they utilised the white board and draw tool in Adobe Connect to invite students to label diagrams with module concepts. Another AL discussed using Q&A cards which were displayed in Adobe connect and students worked in small groups to work through the questions. Some ALs make good use of live, interactive demonstrations where students can 'work along' during tutorials, for example, in a computer module, building a small program.

When asked to choose an Office 365 tool that they had not used and would most find beneficial in their role as an AL, 80% chose Planner. They felt planner would be useful for apprentices in the workplace. They saw Planner being useful for students studying more than one module so that students could create an overall study plan with all deadlines included.

In contrast, the research has also shown that 30% of ALs are not aware of all the tools available to them within Adobe Connect to make active, engaging tutorials. And 60% of ALs saw tutorials to be for broadcast and instruction only and did not consider adopting cooperative learning methods to support students. ALs reported cooperative learning methods were easier to achieve through the use of forums rather than at tutorials. ALs reported that they saw OU study to be very individualistic and that their experiences as OU students had been the same, due to the distance learning model. Whilst OU students themselves, they did not know other students. Many of the ALs saw tutorial time to be used for instruction and demonstration by the tutor and

not as a means to encourage collaborative learning. 60% of ALs felt that Adobe Connect and Office 365 tools were not useful for the purpose of reflection and felt that this was achieved through the module materials.

50% of ALs were not aware of simple adaptations that can be made to support students with additional needs, for example, using larger fonts in resources, using video conferencing for one-to-one support, making use of Adobe Connect functionality to provide multiple ways for students to communicate and participate, i.e. through text chat, audio and contributing to the white board. Not all ALs are sharing slides in advance to support students with dyslexia.

6.0 Impact

6.1 Student Experience

Section 7.3 lists the dissemination events. There was on average 40 ALs in attendance across all the events. This scholarship project has impacted the student experience by encouraging, guiding and supporting ALs to consider a variety of activities which will help students develop different skills and ensure they participate in active learning, rather than consuming content from the tutor in a chalk and talk format.

Through the scholarship dissemination events, ALs were encouraged to consider ways to utilise Adobe Connect and Office 365 to design learning which promotes student engagement through thinking and doing and help students meet the learning outcomes through active participation and thinking about what they are engaging in. Through the events, ALs were able to reflect on what students need to do for the learning outcomes and provide students with space and support to think, reflect and apply their learning through the use of Office 365 tools and the use of Adobe Connect. The findings showed how taking a flipped classroom approach can facilitate active learning. One example, was students engaging with content through the OU library prior to a live tutorial. Then, during the tutorial, students engage with their peers and tutor to discuss and inquire into the concepts and explore what they have learned and how it can be applied using breakout rooms for discussion and the white board in Adobe Connect to share ideas. Rather than ALs talking at students for the whole tutorial time, the research has shared ideas on

how ALs can use live contact time for active discussion and engagement. Some examples of active learning include using Adobe Connect and Office 365 tools for students to:

- mind map, brain storm and problem solve collaboratively
- create their own slides or posters
- showcase an article(s) / research from the OU library
- collaboratively note take
- take part in a debate
- work in pairs to answer a question or problem solve
- take part in group discussions or group problem solving in breakout rooms and then returning to present to the whole cohort.
- take part in AL one-to-one support / catch-ups whilst others are participating in group activities

6.2 Teaching

The findings from the research has resulted in impact for teaching. Following the research, 100% of ALs attending a webinar, reported that their practice would change as a result (see section 7.3 for a list of events held). ALs reported through the evaluation data that they were leaving the event with actions that would change their practice, for example, being encouraged to work interactively, utilising Office 365 and Adobe tools, to help students appreciate different perspectives and grasp concepts and theories through discussion and debate with their peers and with ALs, enabling them to then apply their learning. Doing this asynchronously, making use of the tutor group forums, provides time for reflection and consideration of views and information. The scholarship findings have helped ALs to consider how many asynchronous activities that are passive can be made active with careful design and scaffolding learning opportunities, for example, students watching part of a video thinking about particular issues, then answering questions, about what they have seen and how they might apply it in real life. Whatever the content; it is the debate and discussion of it that creates the active learning experience, simply presenting information in video format will not automatically nor necessarily lead to in-depth learning (Karppinen, 2005).

The findings of the research have introduced ALs to a range of tools within Adobe Connect and Office 365 that may help them inspire students to engage in their learning asynchronously and

to help them make use of the tool to promote active learning. Asynchronous activities that are well-designed and interactive in tutor group forums can also be used as preparation tools to enhance students' learning and contributions in synchronous tutorials. The use of media and audio to help support active learning was discussed with ALs, for example, helping to build connections and convey clear yet nuanced messages through use of audio or video; images and creating smart art diagrams in PowerPoint can aid spatial or visual thinking and understanding or illustrate the relevance of a concept; media can generate interest in a topic, aid retention of information or learning, etc. Images can be useful to support learning, for example, to illustrate a concept, engage students to think about issues from a different perspective, as well as, using for socialisation and icebreaking activities. Students may be asked to label a diagram or create a poster either individually or collaboratively and present findings. Media should be used to enhance learning, rather than solely for decoration. A well-chosen piece of media can extend students' understanding; a decorative or poorly chosen piece can detract from it. When choosing what media to use, it's important to ensure that the media will be accessible for all students who need to use it. The research showed how some ALs have used video to demonstrate procedures or processes, illustrate complex and / or abstract concepts. Podcasts can help students reflect on their learning and provide an opportunity to explain to students how their learning relates to topical issues which helps to bring their learning to life. Using podcast extracts and video clips in Adobe Connect can be effective during tutorials. Adobe and Office 365 can be used for students to make their own audio reflections on their learning or for audio notetaking.

OneNote is also useful for keeping journals or notetaking for lab and field work. OneNote is a potentially powerful tool for student reflection and direct communication with ALs. Using OneNote to keep reflective journals can help students reflect on problems they have faced and how they dealt with them. Journals can be private or visible to other students.

The poll tool within Adobe Connect can be used to support active learning and assessment during tutorials. Polls are a quick and easy way to enable students to self-assess their learning and gain feedback which will help them to further develop their understanding or correct misunderstandings. Polls, quizzes and quick tests can be used to promote student engagement with course content, measure knowledge, gauge progress or gather student feedback. They can also be used to provide pre-determined feedback in response to the answers provided by the student. The use of polls is useful:

- after teaching a concept to ensure students have understood and can apply the concept appropriately;
- at the end of tutorials or on the TGF to enable students to self-assess their progress;
- to enable students to apply their knowledge to an issue e.g. asking them to answer a calculated numeric question or asking them to identify the correct steps in a process.
- to gauge student opinion on a topic e.g. provide them with a controversial statement and invite them to indicate their opinion on a Likert scale, then ask them to defend their opinion in a written answer.

The use of forum discussions and live chat functionality can be used both during live tutorials and asynchronously where students and ALs can initiate, and reply to, discussions. This can help foster a sense of community and enhance understanding through peer discussion. Using the tracking and comment function in Word can be useful to review and provide feedback on student work or for students to comment on each other's work, which can be used in both TGFs and during tutorials.

Using chat in real-time in Adobe Connect can encourage students to engage in discussion. It can be an effective way to engage students because messages are kept short. Students are not being asked to write a long essay and chat can be focused on a specific topic. The chat function can be used for students to introduce themselves and answer short icebreaker questions, for example, what they hope to gain from the module, when first starting. Chat and discussions in breakout rooms can be used to explore a topic and provide a brief summary, to analyse and debate questions, problem-solving and peer review.

6.3 Strategic change

I networked across the university and have extended the project reach by forming a collaboration with the OU library and with the Business Development Unit and IT Service and Support and Microsoft Education. We are planning to form a special interest group with various stakeholders across the university to discuss how to continue the momentum and interest in this initiative. There is a lot of work being done across the university – Micro credentials, participating in some of their educational activities, primarily <https://docs.microsoft.com/en-gb/learn/> - where the OU could both contribute our content and deliver theirs in a similar way

to the Cisco content used in the STEM faculty. The STEM faculty also packages assorted chunks of OU and third-party material together for various employers and host those short courses for specific contracts. This approach has been used internally to upskill ALs e.g. to encourage and support ALs to apply to tutor on the new stage 2 cyber security module and in things like <https://instituteofcoding.org/skillsbootcamps/course/skills-bootcamp-in-dataskills-by-the-open-university-skills-bootcamp-in-data-analysis/> . There are so many of these things around that it's hard to keep track of them all and the new SIG will bring all stakeholders together.

6.4 Additional impact

The research has resulted in an excellent contribution to continuous professional development for both staff and students across The Open University. In October 2021, I contacted my lead line manager, Prof Janet Hughes (now retired) and Director of Teaching STEM, John Woodthorpe highlighting there was funding available from Microsoft Skilling Programme, which I thought would be hugely beneficial to OU staff and students in building their effective use of Microsoft applications. Microsoft were looking for 20 institutions with 100 students / staff, to study and sit exams for the Microsoft Certified Fundamentals in Word, Excel and PowerPoint, free of charge. John was reluctant to be seen to be adding to AL / student workload but gave approval that I could submit a funding application and if successful recommend it as an AL to other ALs, which I did.

Microsoft reviewed all applications and my application for funding was successful for 100 people. I immediately set to work creating posters and news articles, sharing on social media, OU forums, in OU newsletters, OU Life and sent a CAMEL message to all ALs. The 100 places filled up almost instantly and I arranged a meeting with Microsoft to discuss additional funded places. They agreed to increase the places to 250. The same happened again and these funded places filled. I returned to Microsoft and they increased our funded places to a free 500 places. In the end, I negotiated 1000 free places on the Microsoft programme.

The free funded places ran from October 2021 – January 2022. During this time, 1000 staff (the maximum allowed by Microsoft) signed up to access self-study resources, video learning, practice tests and examinations in Microsoft Office. Registrants had the choice of signing up for up to six courses:

- Microsoft Word
- Microsoft Word Expert
- Microsoft PowerPoint
- Microsoft Outlook
- Microsoft Excel
- Microsoft Excel Expert

Fig. 12 shows the popularity of courses by the 1000 participants, registering on up to six courses.

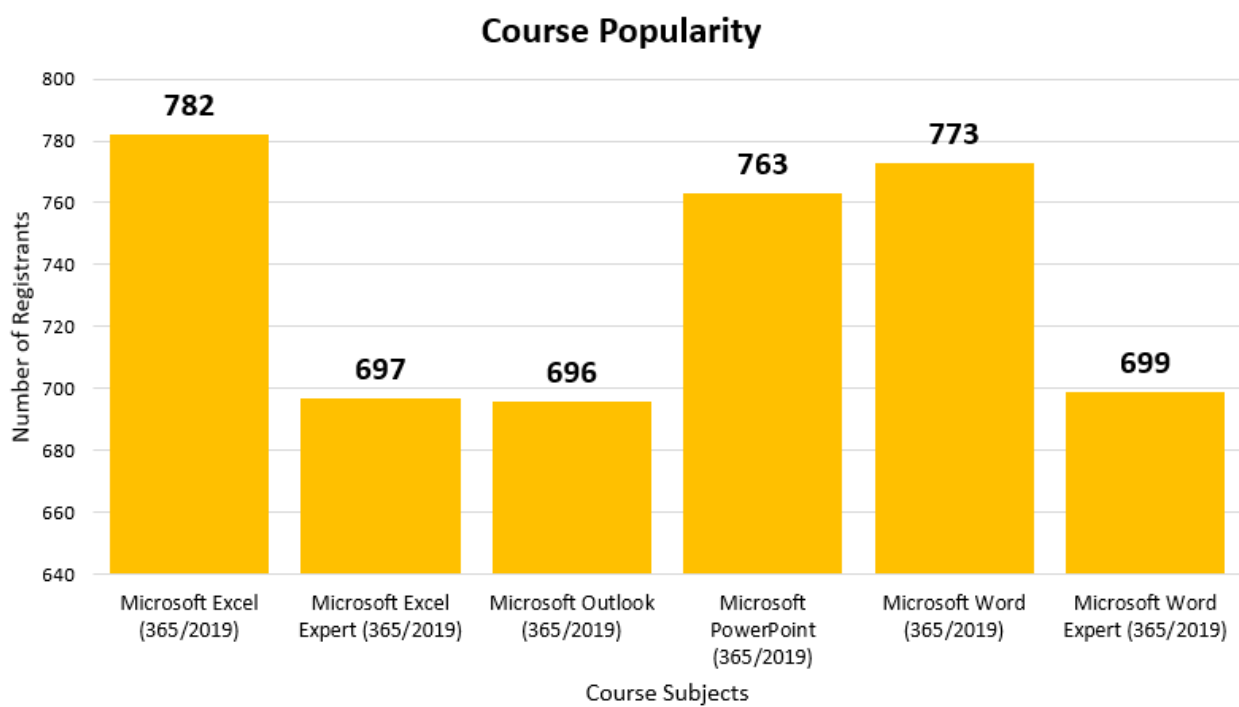


Fig 12: No of registrants by subject

By the end of January 2022, 285 people had sat an examination with 191 certifications awarded.

Fig. 13 shows the percentage of registrants who took an exam by subject.

Percentage of registrants who took an exam

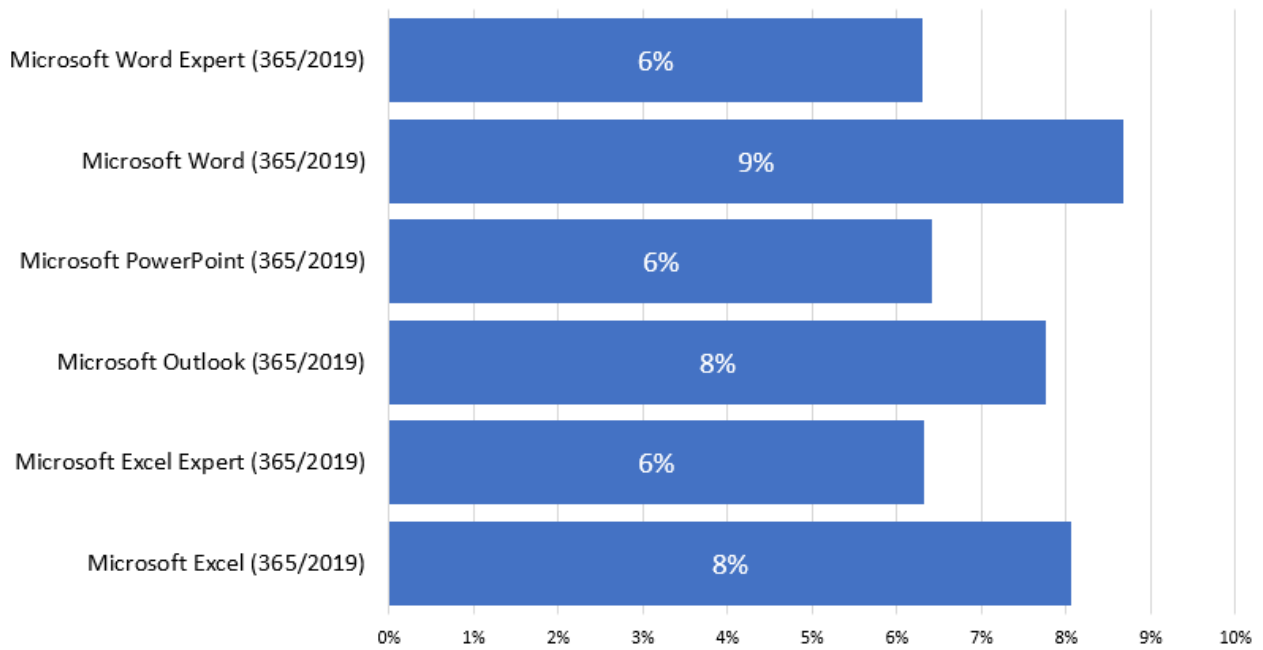


Fig 13: Percentage of registrants by subject, who took an exam

Fig. 14 shows the percentage of those registered for an exam who passed, failed or did not show.

Exam Performance

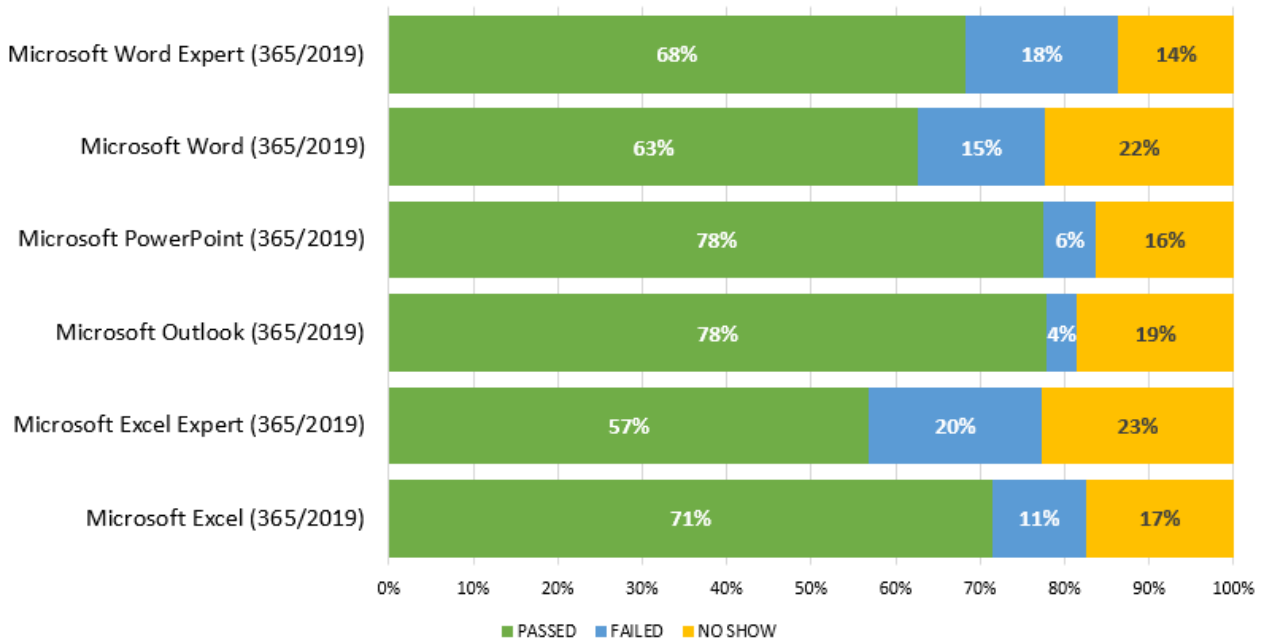


Fig 14: No of passed, fails and no shows of examinations booked, by subject

Microsoft reported that The Open University performed above average across all institutions in this promotion. Many staff and students continued to contact me after the funding was over asking if there would be further opportunities. The 1,000 staff and students continue to be able to have access to the Microsoft study material and practice tests and I know some ALs have applied for staff development funding to sit examinations later. ALs provided positive feedback on the initiative, for example, one AL said:

"I am sending you a short note to say thanks for successfully gaining access to the Microsoft Office Specialist programme. I applied to the programme, I learned, I practiced, and I learned some more! I'm pretty sure that being a 58-year-old (recently former) technophobe didn't help my plight, and my motivation was impeded because of the Christmas closedown period. That said, I did learn massively. Overall, the experience was of great value to my progression and understanding of Office 365 and I gained badges in Microsoft Word and Outlook."

Table 1 shows the number of registrants for each course, the number of exams taken in each subject and the number and percentage of those that passed and failed or did not show.

	Totals								
	Registered	Exam	Exam %	Passed	Passed %	Failed	Failed %	No Show	No Show %
Microsoft Excel (365/2019)	782	63	8%	45	71%	7	11%	11	17%
Microsoft Excel Expert (365/2019)	697	44	6%	25	57%	9	20%	10	23%
Microsoft Outlook (365/2019)	696	54	8%	42	78%	2	4%	10	19%
Microsoft PowerPoint (365/2019)	763	49	6%	38	78%	3	6%	8	16%
Microsoft Word (365/2019)	773	67	9%	42	63%	10	15%	15	22%
Microsoft Word Expert (365/2019)	699	44	6%	30	68%	8	18%	6	14%
	4410	321	7%	222	69%	39	12%	60	19%

Table 1: No. of registrants by subject and exam performance

The data shows the number of individuals who registered for Microsoft Office certification exams, the number of individuals who took the exams, the pass rate, and the percentage of individuals who either passed, failed, or did not show up for the exam. Here are some observations based on the data:

- Microsoft Excel had the highest number of registrations (782) and the highest number of passes (45).
- Microsoft Word had the second highest number of registrations (773) and also the highest number of exams taken (67). However, its pass rate was only 63%, which is lower than the pass rates for Microsoft Excel, Outlook, PowerPoint, and Word Expert.

7.0 Recommendations

It is recommended that:

- ALs are made aware of the Office365 application suite, application features and potential uses, provided with training and ideas on how the applications can be utilised in AL work – ongoing through training and dissemination events. There is training on Adobe Connect, but less focus on Office365.
- [Adobe Connect training](#) is regularly run by the OU and regular workshops as part of the Associate Lecturer Support and Professional Development (ALSPD) programme. It is recommended that this training is built into Career Development Staff Appraisals (CDSAs) for ALs.
- A series of how-to guides to provide exemplars of ALs utilising Adobe Connect and Office 365 for active learning, building upon the [PALS being creative series](#).
- Support new ALs in developing their use of Office365 and Adobe Connect and build awareness of the resources available, for example, [Online Learning Systems Guide](#), [Online rooms forum](#) and [support](#), the [PALS forum](#) and [guides](#).
- Staff Tutors to be supported in being aware of resources to use in new AL inductions and CDSAs.
- The [online rooms newsletter](#) to be distributed to all ALs via CAMEL.
- Time allocated to all ALs to complete Adobe Connect training and how to make tutorials active and engaging and not ‘talk and chalk’.

Findings from this scholarship work has been fed into the work being led by the OU library working in collaboration with the Peer Associate Lecturer Support (PALS) team and ALSPD in the development of the [AL Digital Help Centre](#) and also the digital literacy work inspired by [Jisc’s digital capabilities service](#), which The Open University are subscribers to and the Digital and Information Literacy (DIL) framework used with module teams to reflect more of the digital capabilities thinking.

A special interest group is being established for key stakeholders across the OU, as well as, the Microsoft Education Team, to support the professional development of ALs in the use of Office 365. OU stakeholders to include members of the Digital and Innovation Team, CIO Portfolio,

Information Technology Team, the New Business Development Manager (Digital) DWU (OUW) Account Management and STEM Curriculum Managers.

8.0 List of deliverables

8.1 Microsoft Office Specialist Certifications

1,000 staff and students have access to Microsoft Office Specialist study material and 191 certifications were awarded.

8.2 Special Interest Group

A special interest group is being established for key stakeholders across the OU, as well as, the Microsoft Education Team, to support the professional development of ALs in the use of Office 365. OU stakeholders to include members of the Digital and Innovation Team, CIO Portfolio, Information Technology Team, the New Business Development Manager (Digital) DWU (OUW) Account Management and STEM Curriculum Managers.

8.3 Conference Papers and Workshops

- Jewitt, Katharine (2021): A conversation event, Open University Library. 4 February 2021
- Jewitt, Katharine (2021): ALs for ALs development session 'A review of the use of Office 365 and Adobe Connect for active learning'. 31 March 2021
- Jewitt, Katharine (2020): AL Staff Development Sessions on 'Making the best use of Forums for Active Learning' 2 December 2020
- Jewitt, Katharine (2020): AL Staff Development Sessions on 'Making the best use of Tutorials for Active Learning' 9 December 2020
- Jewitt, Katharine (2021): Association for Learning Development in Higher Education: An exploration of practice in the online space, Workshop. 4 March 2021
- Jewitt, Katharine (2021) Using Office 365 for active learning, UNESCO Inclusive Policy Lab Education and Digital Skills: A Conversation Event. 18 March 2021

9.0 References

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10.0 University approval processes

The Open University Human Research Ethics Committee approved the project: HREC/3685/Jewitt.

Information Rights advised as no personal data was being collected for this project, thus, no data protection registration number was required. An ethical review was also not required.