

Enhancing the LUMS Student Digital Experience:

Online Marking Scoping Project

Digital Lancaster Student Bursary Scheme

Faculty: Lancaster University Management School

Department: Undergraduate & Postgraduate Offices

Contacts: Clare Edwards & Christine Percival

Student: Luis Angel Perez Gomez

List of Contents

1. Introduction.....	3
2. Methodology	4
2.1 Research Design.....	4
2.2 Data Collection	4
2.3 Data Analysis	5
3. Online Survey Results.....	6
3.1 Students.....	6
3.2 Academics.....	15
3.3 Staff.....	27
4. Interviews.....	35
4.1 Academics.....	35
4.2 Staff.....	39
5. Case Studies	41
6. Recommendations.....	43

1. Introduction

As access to technology increases and the use of online learning tools have been progressively incorporated into the education environment, Lancaster University has made the exploitation of digital technologies a main goal for the upcoming years. One of these goals involves understanding how academics, staff and students engage with online marking and feedback systems available across Lancaster University. Currently, there are different methods of marking and delivering feedback. Particularly within the Lancaster University Management School (LUMS), academics and staff employ a wide variety of methods for marking individual and coursework from students.

The project “Enhancing the LUMS Student Digital Experience” intends to scope and identify the current marking and feedback practices within the Management School. Moreover, it will provide an understanding of the main challenges and issues that academics, staff and students face with regards to the adoption of online services and tools for marking and feedback processes. In this sense, from online surveys, interviews and case studies, this report will recommend practices that can increase work efficiency across the Management School and enhance the use of digital systems and online learning tools among staff and academics. Finally, by incorporating standard processes towards delivering feedback, students can also benefit by receiving a consistent and more engaging experience when using the online tools available across the university’s network.

This report is divided into five major sections. The first section, explains the methodology used to collect and analyse the data collected for the purposes of this report. Second, the results from the online surveys and the interviews conducted with staff and academics from different departments from the Management School are presented for analysis. The third section, develops a case study analysis based on the online marking pilot projects that were implemented during the last term across different undergraduate and postgraduate marketing modules. Finally, drawing on the findings from the online surveys, interviews and the case study analysis, the fourth section makes recommendations on how to increase the adoption of online marking and feedback tools. This section also takes into consideration the concerns and challenges that were raised by academics and staff with regards to a wider implementation of online marking tools and their effect on academic performance and student engagement.

2. Methodology

The methodology of this report explains how the research process was conducted. The first part, describes the research design and the type of research conducted to fulfil the purposes of this report. Second, the research techniques used to gain evidence and relevant information regarding the use of online marking tools, along with the type of information collected for analysis are approached in the data collection part. This section ends by explaining how each data is analysed in order to provide rich insights towards building future recommendations.

2.1 Research Design

The main purpose of the research design is to provide a brief road map which introduces how the research was conducted and the steps undertaken for data collection and analysis. This report takes an exploratory research approach as it tries to analyse why there is a low adoption of online marking and feedback tools across LUMS. Moreover, it explores what are the constraints that academics, staff and students face in adopting online marking and feedback across the different departments. As this reports aims to capture the perceptions, opinions and preferences of the different groups involved in the implementation of online marking and feedback systems, qualitative and quantitative research are applied.

2.2 Data Collection

Primary research is conducted by using two data collection techniques: online surveys and interviews. For the aims of this report, online surveys sent to academics, staff and postgraduate students from LUMS. These surveys provide an initial understanding of the usage and preferences towards using online or paper-based marking and feedback systems. Moreover, they are also helpful in identifying sample differences according to segmenting variables such as: age groups, years of academic or staff experience and type of subjects taught (quantitative vs qualitative).

Semi-structured interviews were carried out with academic and staff personnel from different departments across LUMS. These in-depth interviews have the potential to identify opinions or detailed preferences that were not captured through the initial online survey. Additionally, through these interviews academics and staff were able to express their concerns and the challenges that they face in moving from paper-based marking and feedback to the new online approach. The

information regarding the number of interviews and online surveys that were collected for this research is presented in Tables 1 and 2. It is important to mention that it is not possible to determine a participation rate. This is because the online surveys were distributed several times by the Postgraduate office, without knowing the total population reached. Interviews were conducted based on the staff and academics that provided their contact details at the end of each online survey. Nevertheless, the number of responses received from the online surveys and the interviews conducted were above the initial project's requirements and scope.

Table 1. Online Survey Responses per Group

Group	Number of Responses
Academics	30
Staff	10
Students	50

Table 2. Interviews Conducted per Group

Group	Number of Interviews
Academics	8
Staff	6

2.3 Data Analysis

After the data collection stage, the information from the online surveys and the interviews was analysed through the following process. First, the online surveys were segmented by response group: staff, academics and students. For the staff and academics, the analysis focused on findings common patterns in responses as well as identifying similarities and contrasts by filtering the data according to the segmenting variables mentioned above. For example, the usage of online marking tools or the preference for paper-based marking was filtered according to the numbers of professional experience in academia or staff role. In the case of the surveys responded by students, the analysis focused on identifying student's preferences with regards to online or paper-based feedback. Additionally, it was also considered the students' opinion on how to improve the means by which feedback and marks are delivered for individual and group work.

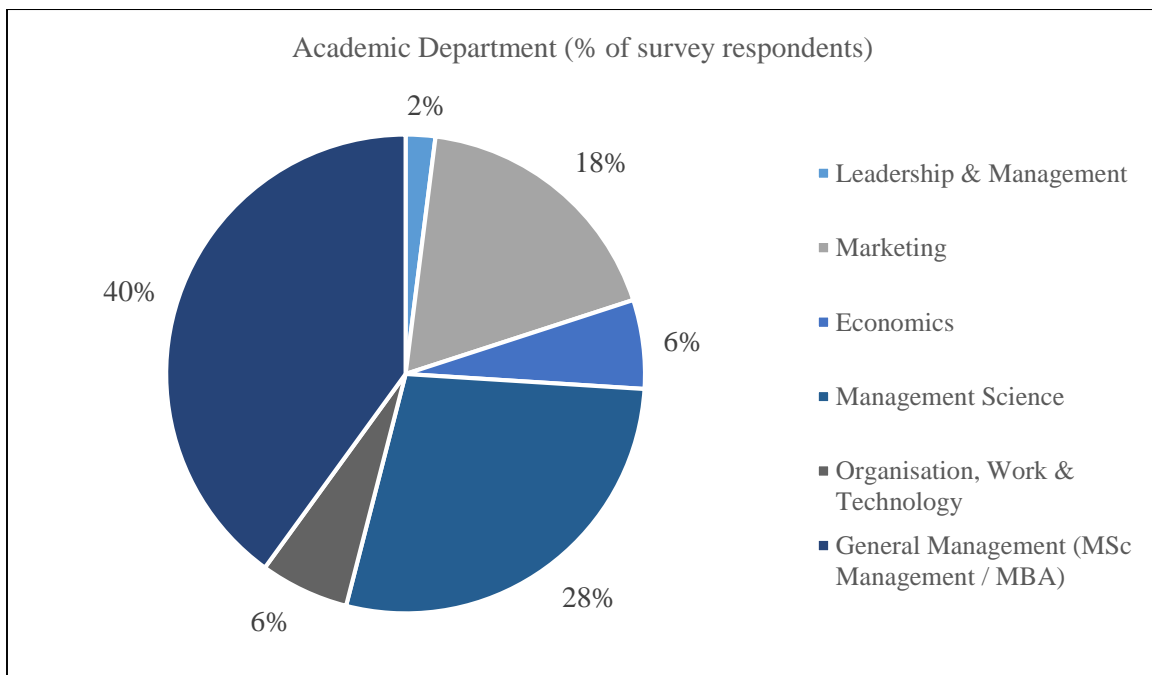
Interviews conducted with academics and staff build upon the survey analysis. This enable the interview to be more focused on the key areas that needed further exploration and give an indication of what is relevant or not for academics and staff in implementing online marking and feedback processes into their daily activities. From this, each interview was analysed by identifying the statements that were relevant to the topic of this research, highlighting the ones that were repeated by different participants during the interview. Moreover, relevant comments or statements regarding processes, constraints and challenges involved in marking and feedback operations were considered for the coding process. From these interviews and their in-depth analysis combined with the results from the case study and surveys, findings and recommendations are formulated.

3. Online Survey Results

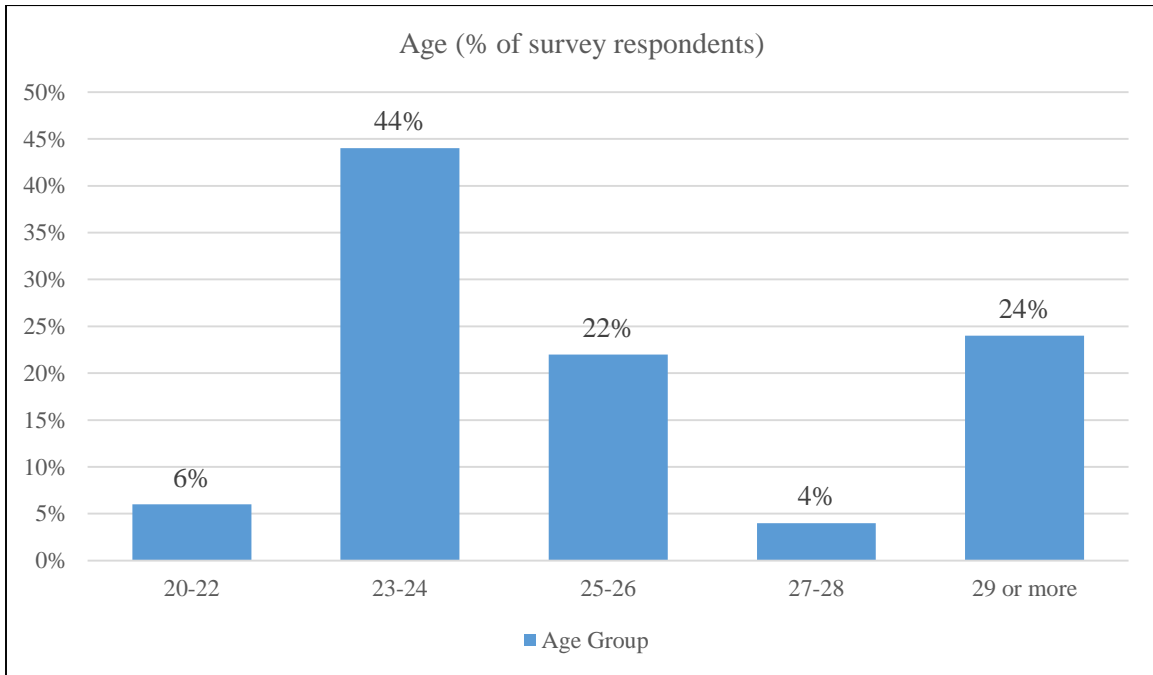
The results from the online surveys conducted among students, academics and staff are reported in the following sections. Relevant comments and insights are stated in the last part of each survey group as a means to provide a broad understanding of the survey findings within each group.

3.1 Students

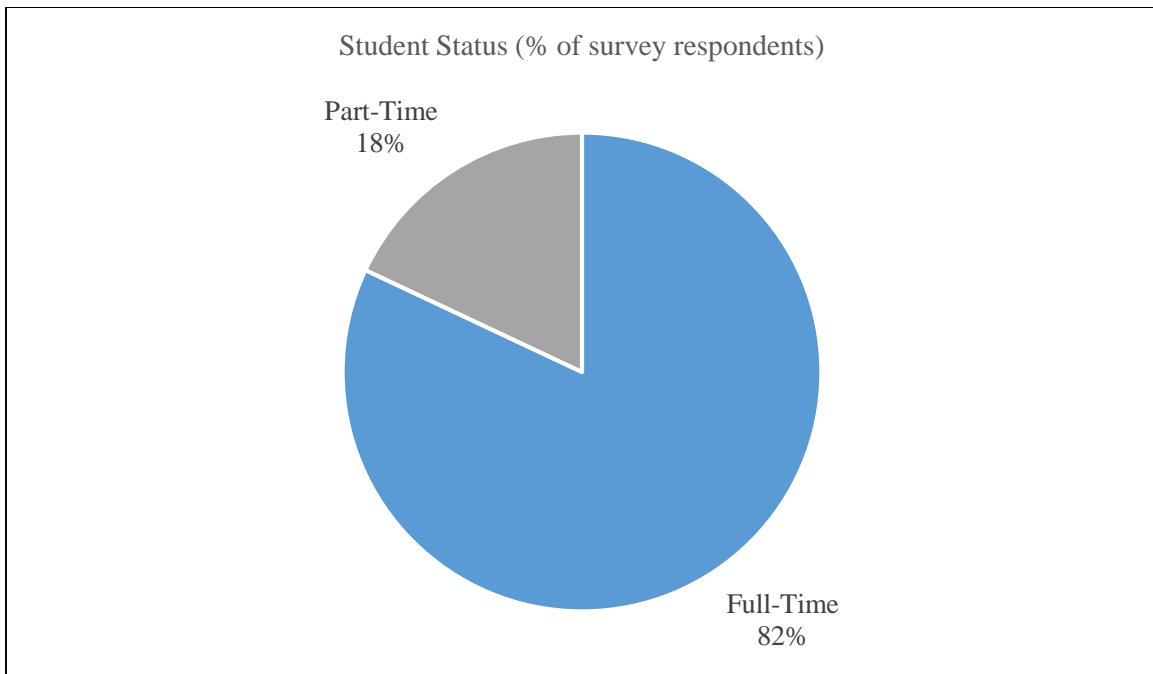
1. Which academic department does your programme belong to?



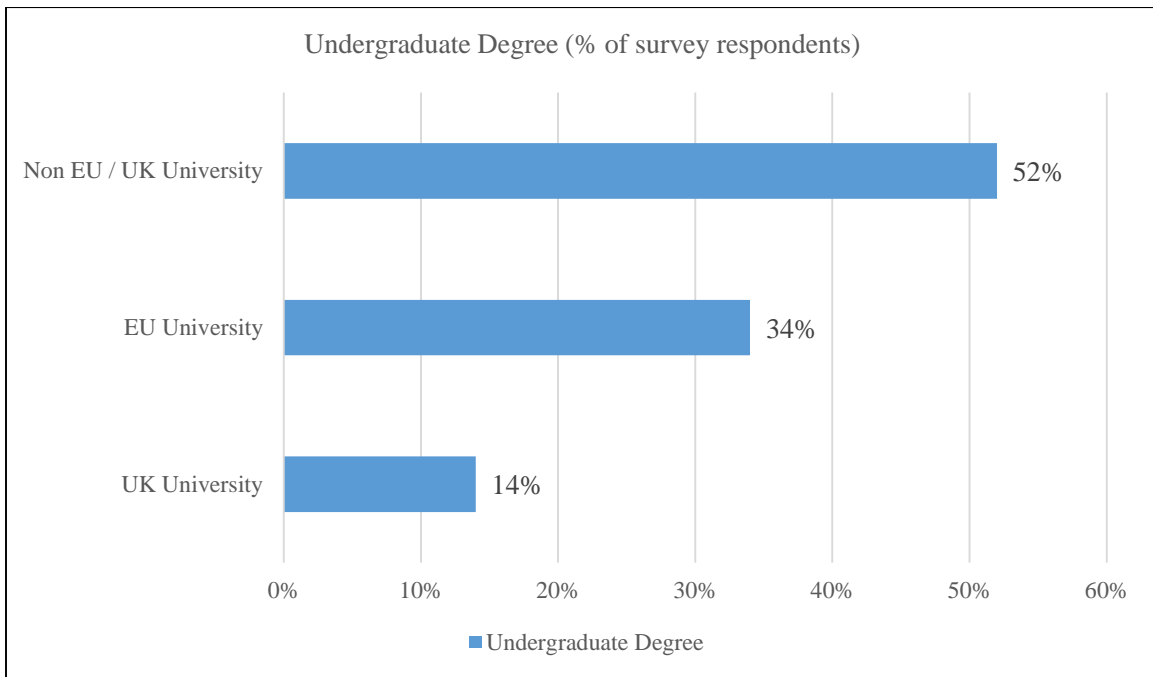
2. What is your age?



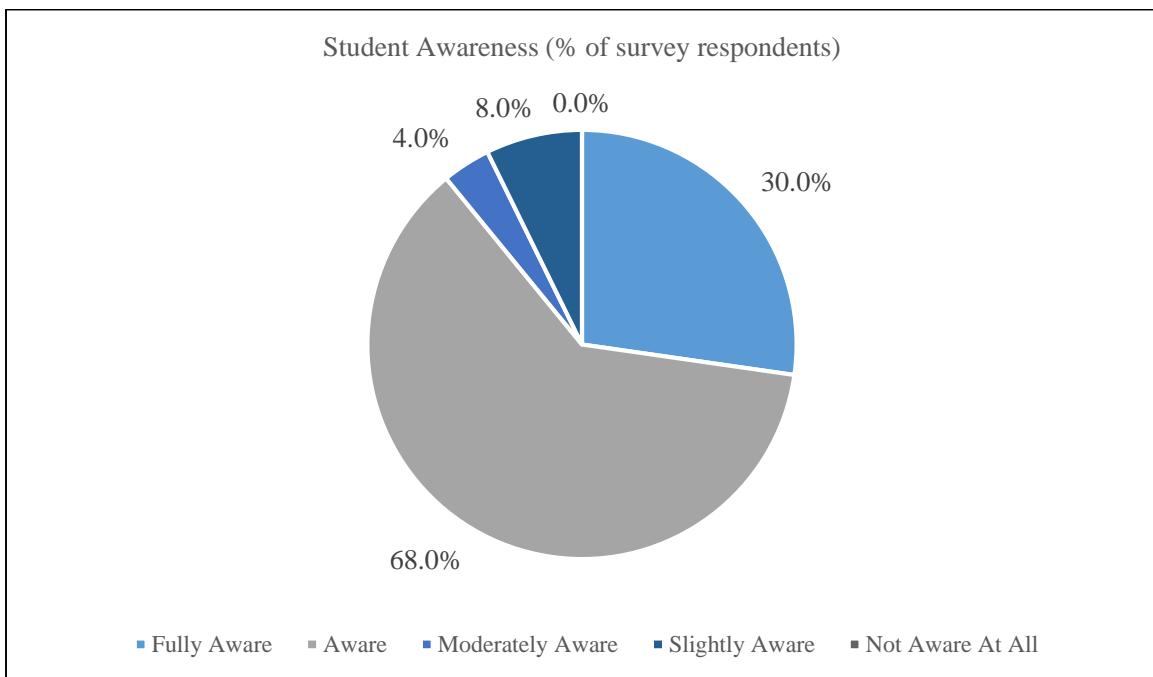
3. What is your current student status?



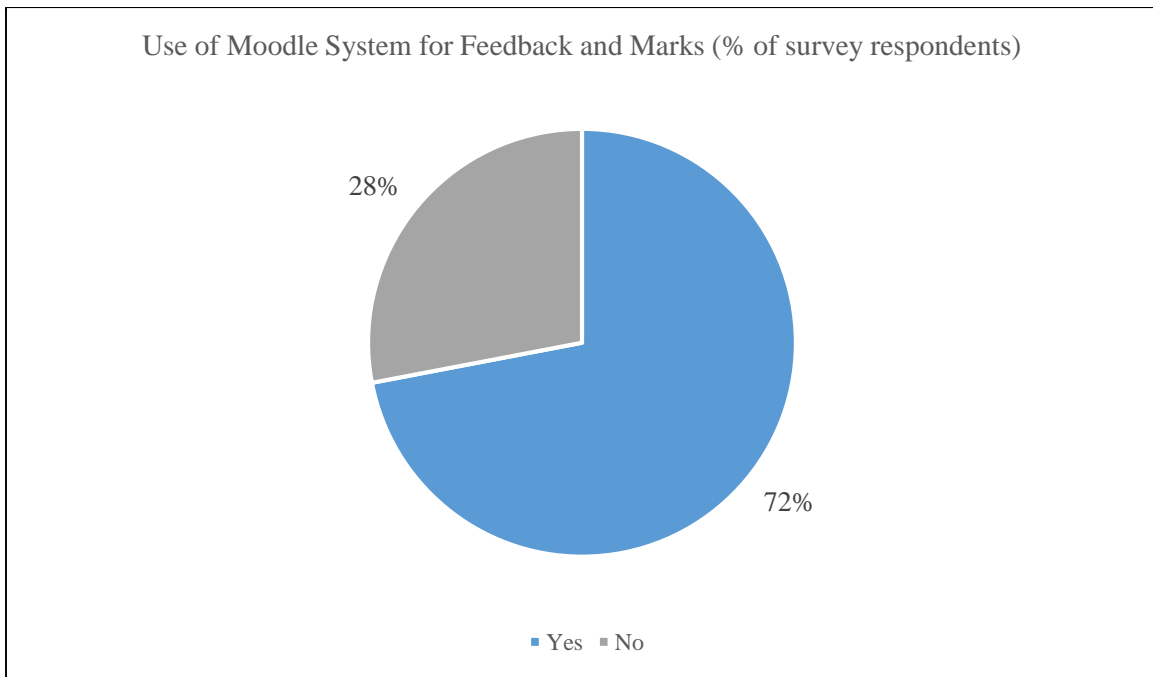
4. Where did you study your undergraduate degree?



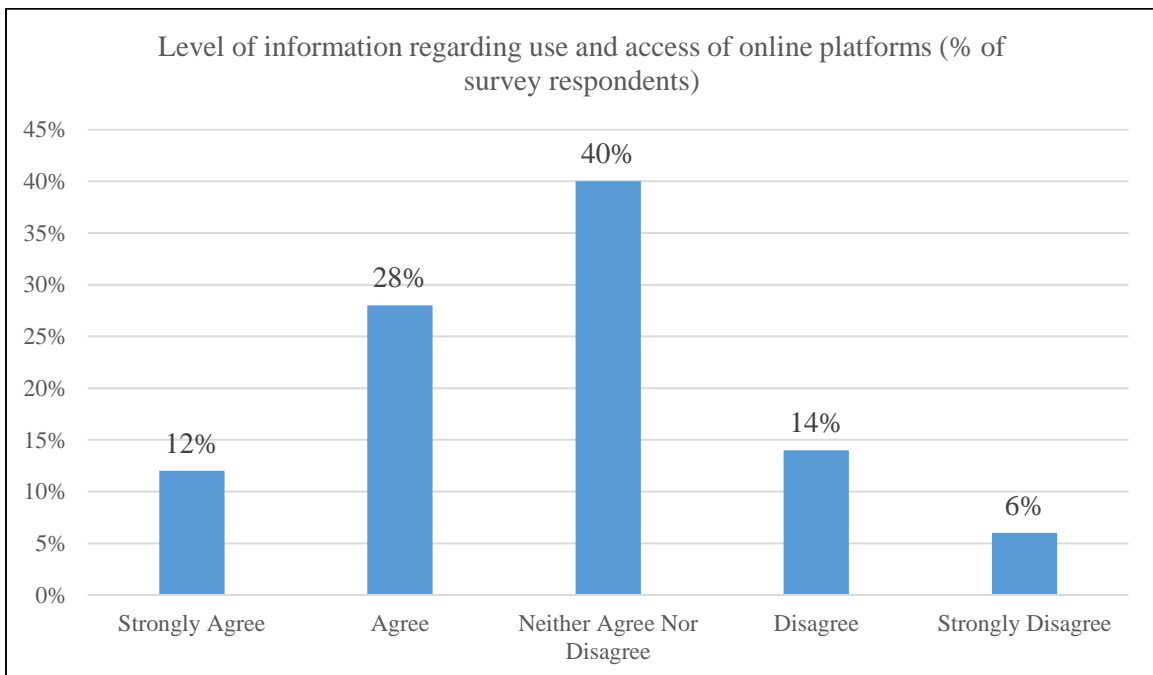
5. How well aware are you of the tools available on the university's online platform (Moodle) to check your marks/feedback from coursework and exams?



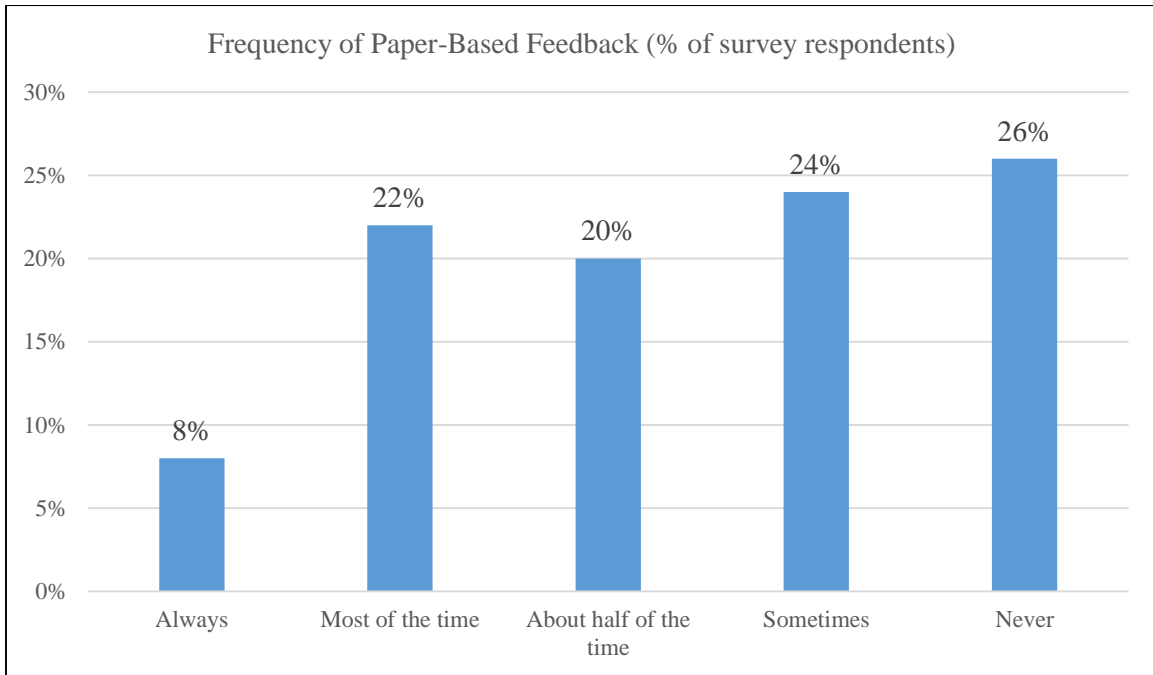
6. Does your programme use the Moodle online system to return coursework feedback or results?



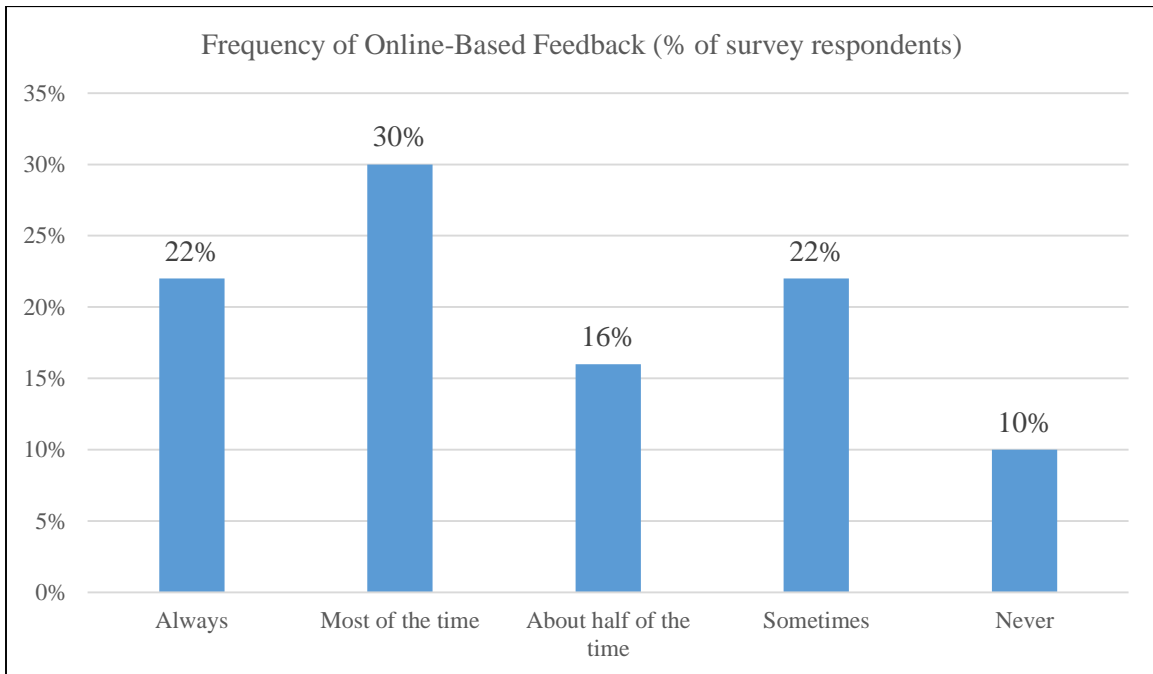
7. On a scale from 1 to 5, 1 being strongly agree and 5 strongly disagree, do you think that the university provides you with enough information/training on how to use and access online platforms for receiving marking/feedback information?



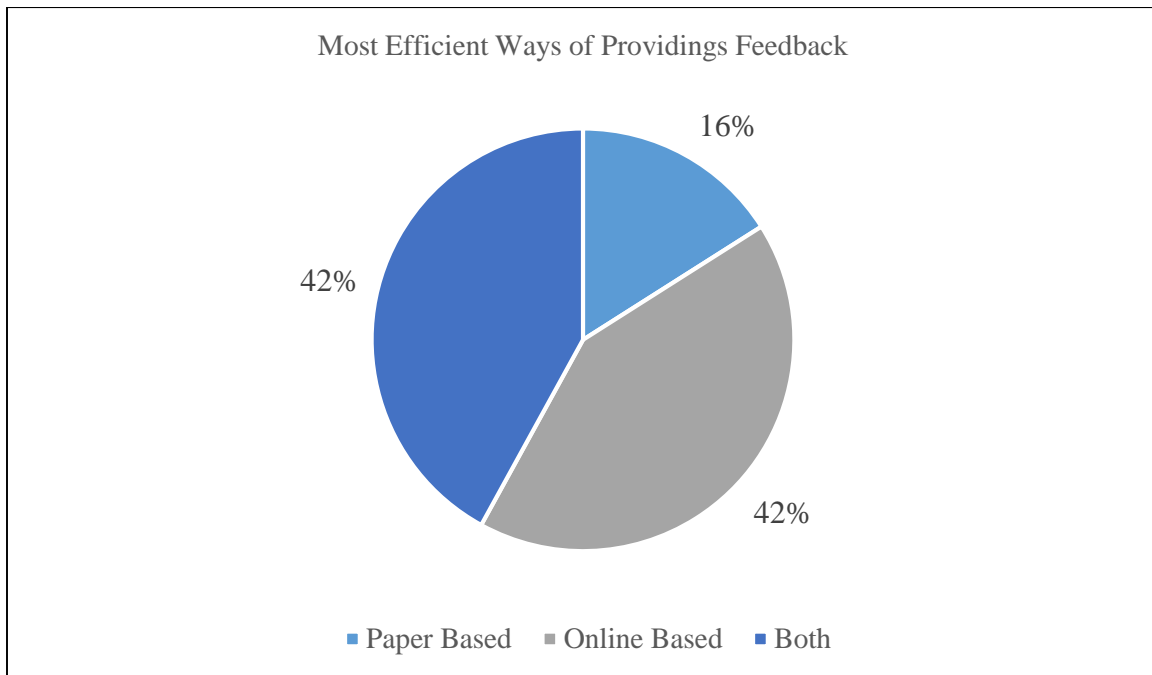
8. How often do you receive paper-based feedback for your coursework?



9. How often do you receive online-based feedback for your coursework?



10. Which means of providing feedback/marks do you consider the most efficient?



11. According to you what are the advantages of paper-based marking/feedback? Order them from 1 (a) to 3 (c), being one the most relevant advantage and 3 being the least relevant of them.

- a. More comfortable to read
- b. Physical proof of feedback
- c. Easy to store

12. Q13 - According to you what are the disadvantages of paper-based marking/feedback? Order them from 1 (a) to 3 (c), being one the most relevant disadvantage and 3 being the least relevant of them.

- a. Time consuming in collecting feedback
- b. Non-environmental friendly (paper waste)
- c. Not accessible via mobile devices

13. According to you what are the advantages of online-based marking/feedback? Order them from 1 (a) to 3 (c), being one the most relevant advantage and 3 being the least relevant of them.

- a. Real-time access
- b. Mobile accessibility
- c. Eco-friendly

14. According to you what are the disadvantages of online based marking/feedback? Order them from 1 (a) to 3 (c), being one the most relevant disadvantage and 3 being the least relevant of them.

- a. Easy to ignore
- b. Unreliability and incompatibility of technology
- c. Discomfort of reading

15. From a student perspective, how would you improve the way feedback is delivered?

- “Give students a tutorial or have some short clips or link for students to familiarise themselves with the system”.
- “Use moodle to deliver feedback. In this way, students do not have to waste time on collecting it from the office”.
- “All stored in one place and same format”.
- “I am fine with online based feedback. But I would prefer that it is embedded format on moodle. Rather than having to download separate documents. It's hard to view on iOS.
- “Reduction in the time between when the course work is submitted and when the marks/feedback is obtained”.
- “Less time in delivering feedback/marks”.
- “Online and paper should be both available (maybe paper availability on request? e.g. in case someone stops by the office and needs the paper feedback for following up with the marker?)”.
- “All assessments (i.e. essays, reports, AND examinations) should have feedback. There were some were no feedback was received (mainly exams)”.
- “Coordination between departments - in cases where the course is provided by a department different to the students, no visibility is given with regards to when marks/feedback will be out from that department's office, and it takes much more time for it to delivered”.
- Online feedback should ensure the existence of comments inside the text if relevant. In terms of delivery it could be faster so you can use it in the next assignments. I think what

can be improved is the feedback content itself as well as its speed. In that way students will be satisfied and able to comprehend and use it, no matter its delivery method”.

- “More engagement with student”.
- “Feedback needs to be elaborate - students need to know what they're done right, and wrong”.
- “Yes. Online feedback could also give feedback instead only give grades”.
- “Customised e-mail or upload in a platform which is easily accessible. Moodle is too complicated and confusing; same for the online transcript”.
- “Give feedback both online and paper”.
- “Some professors have to make their feedback more elaborate. For instance, just recently our professor handed in his feedback containing 'to-do list, or what he is going to mark'. Simply stating 16/20 etc. Doesn't work for me. How do I know what exactly I can progress on?”.
- “Everything is fine now. I won't change the way how it is delivered”.
- “Current online system is good. It is eco-friendly. People who are curious to know their marks and feedback won't be so careless to ignore it, so the current system is good”.
- “Explain in more detail why marks are deducted”.
- “I would prefer to receive all feedback from my university email”.
- “I don't know how to get input in terms of feedback for online grades, only the grades. It may be there - if it is I clearly need training”.
- “Sometimes receiving online feedback was confusing because it came through different channels. Sometimes in an email with a direct link. Sometimes we had to go to the moodle page of the module. You never really knew where the feedback would be”.
- “Before starting the programme give students some useful links on how to check and their feedback online. Sometimes it takes some time for students to get used to the moodle and online platform. Short clips or videos would be useful in this matter”.

Summary of Findings

The factors age, student status (part-time or full-time) and place of undergraduate degree do not influence student's opinion regarding the preference towards online or paper-based marking. 88% of student mentioned that they are either aware or fully aware of the tools available through moodle to revise grades and marks regarding coursework. Moreover, only 28% of students surveyed mentioned that courses in their master's degree do not use online marking. In this sense, most students are aware and already used to reviewing their grades through online systems.

Despite the high awareness of online marking tools among the student community, only 40% either agree or strongly agree with the fact that the university provides them with enough information/training regarding the use of online marking tools. In this sense, the university might want to increase information given to students on how to use the online platforms available for revising marks on individual and group work.

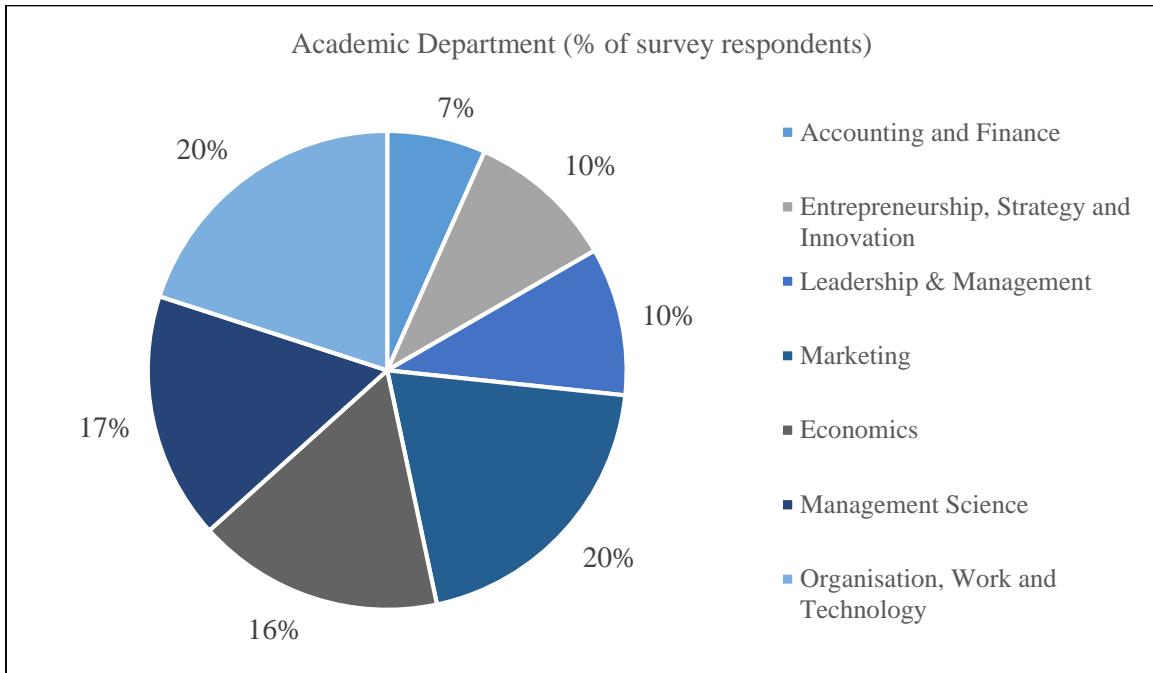
While online marking is a popular and a more common practice among students, when students were asked which way of delivering feedback is more efficient there was an equal answer towards a preferred approach. Both online marking and paper based received the same preference, while 12% of students mentioned that it should be considered delivering feedback by both means.

For students, paper-based feedback is easy to ready and can be stored physically for further revision. Nevertheless, students mentioned that collecting paper-based feedback can be time consuming and is therefore not available for students not present at the university when the feedback is released. In terms of online based feedback, students mentioned that the principal advantages are real-time access and mobile accessibility. In contrast, online feedback can be easily ignored by students and the purpose of feedback might be compromised.

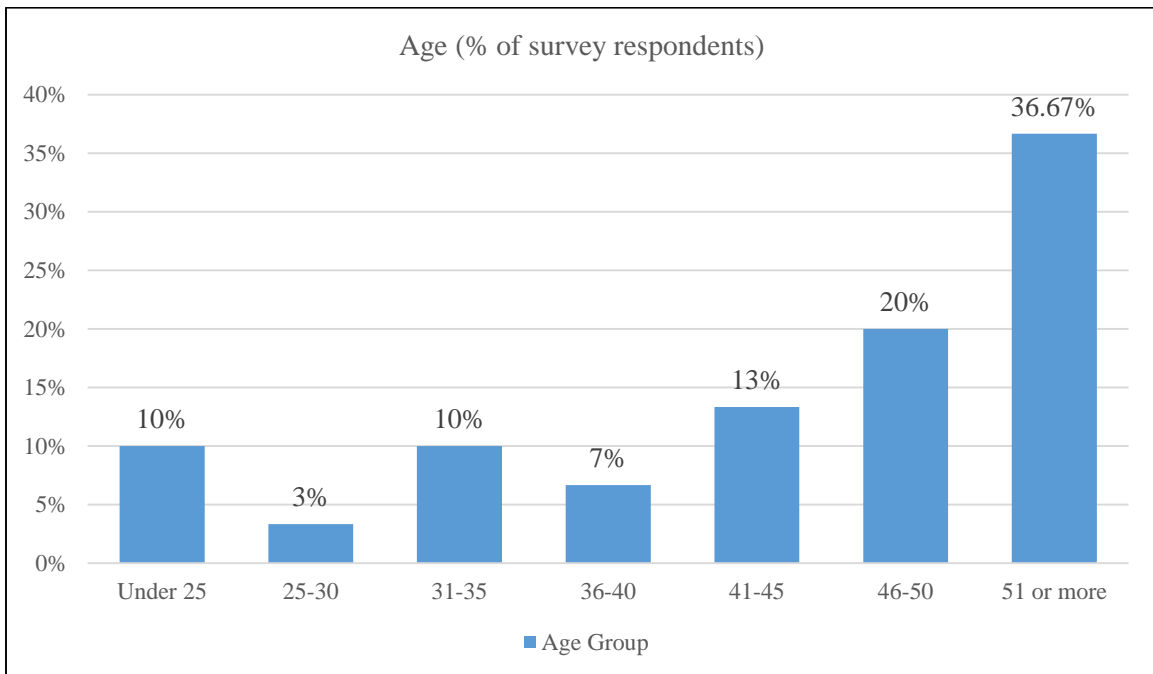
Finally, students suggested ideas in order to improve the way feedback is delivered. Most suggestions indicate that regardless of the way feedback is delivered, it should be more elaborate on the areas that the student should improve on. Moreover, the university should put more emphasis on standardising feedback delivery. Either make everything online or stay with paper based feedback. Students get confused by receiving marks and information through different channels.

3.2 Academics

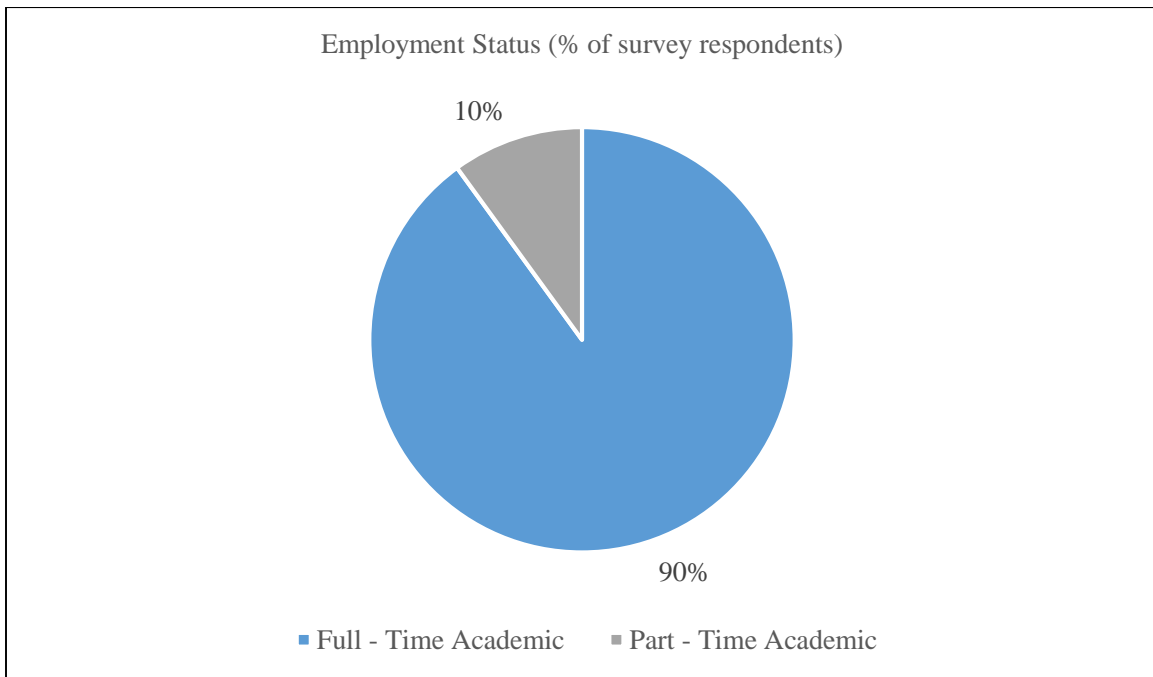
1. Which academic department do you belong to?



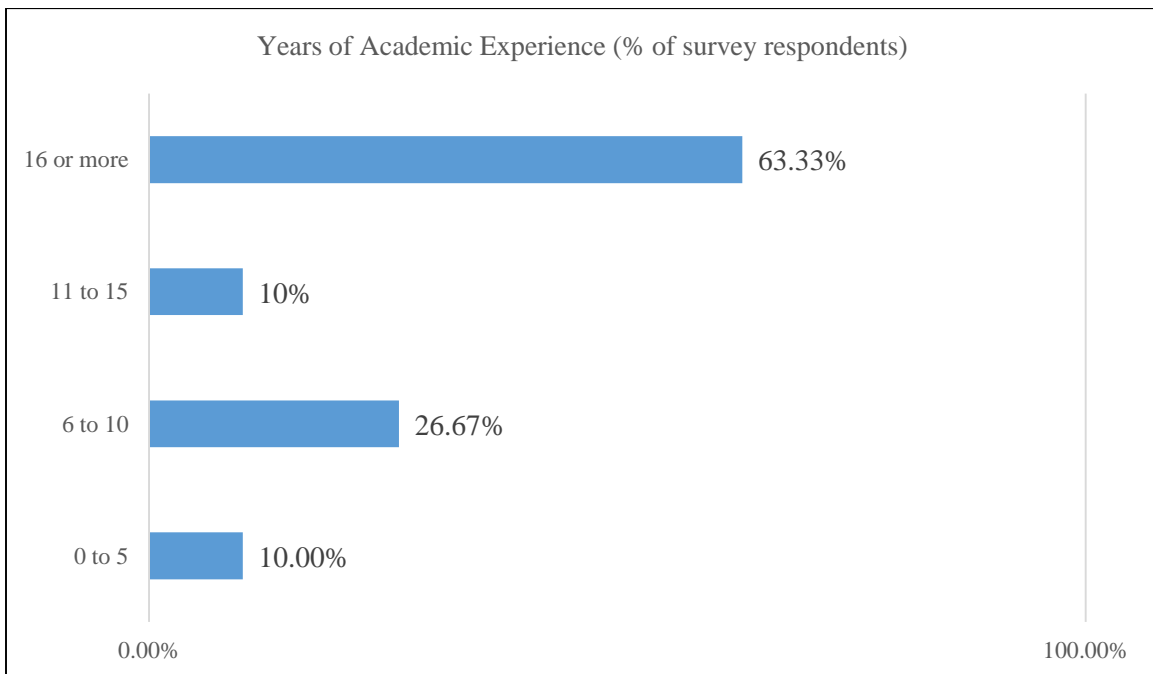
2. What is your age?



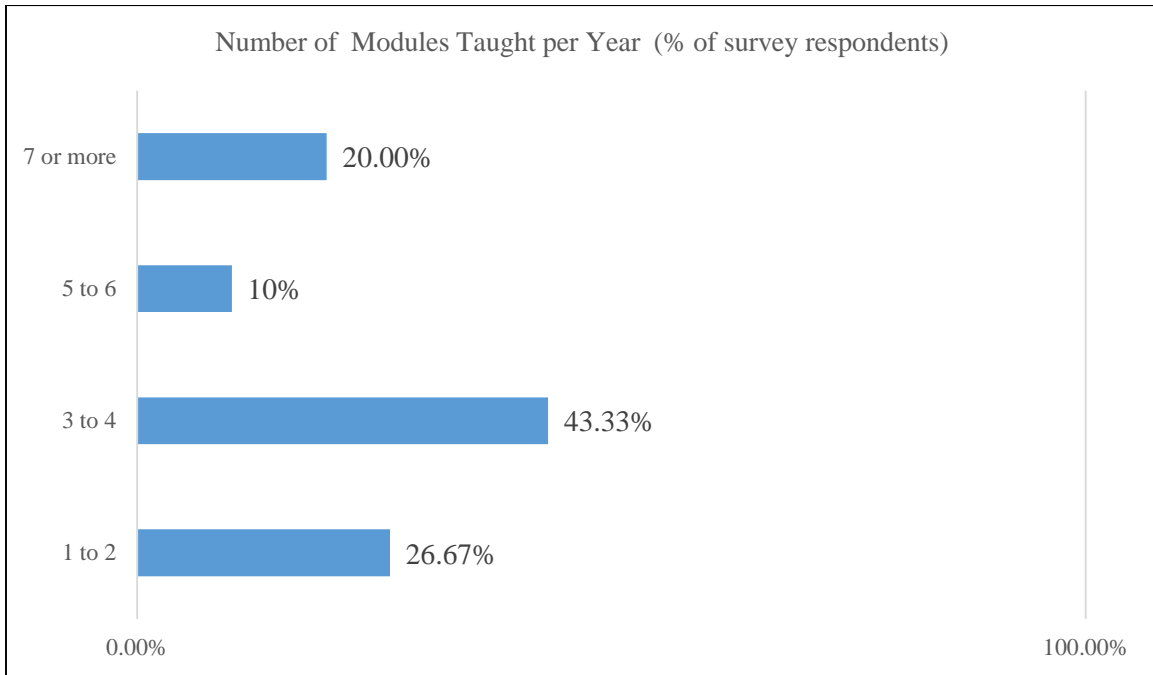
3. What is your current employment status?



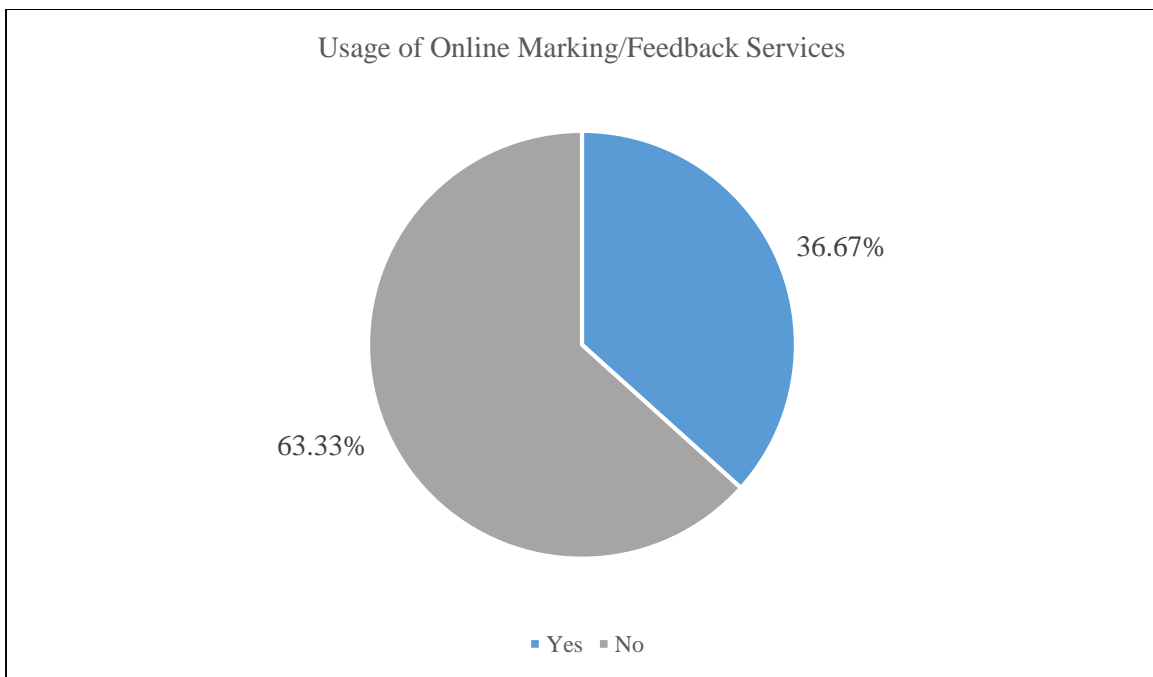
4. Academic / Teaching experience in years:



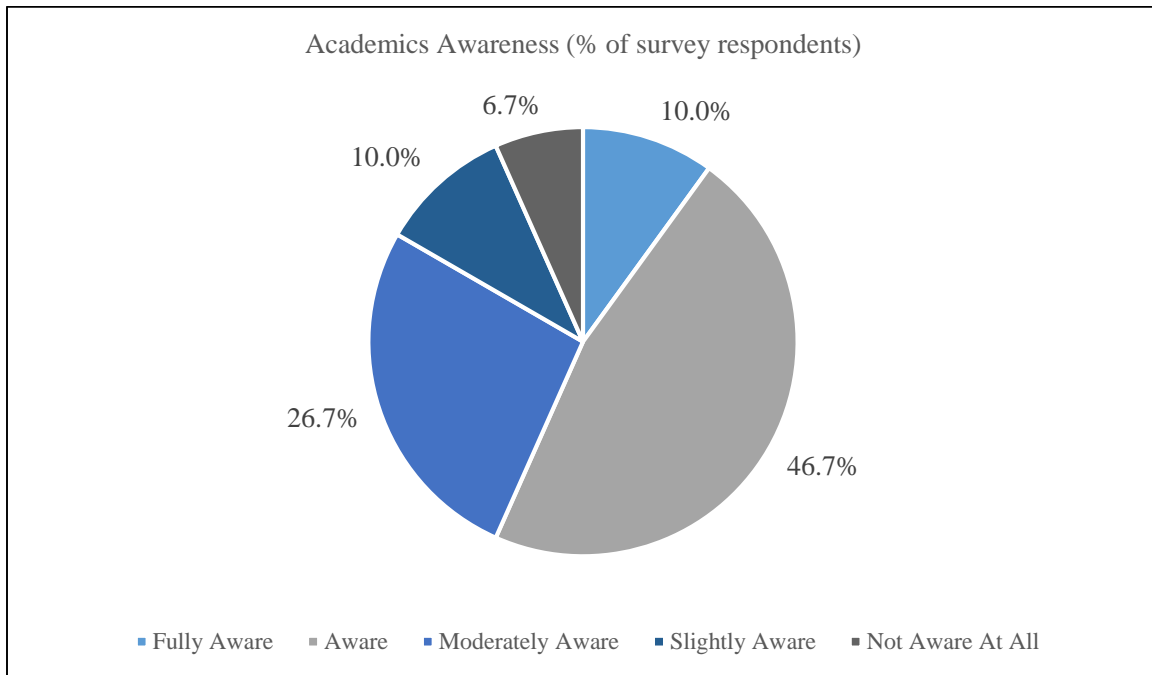
5. Number of modules taught per year:



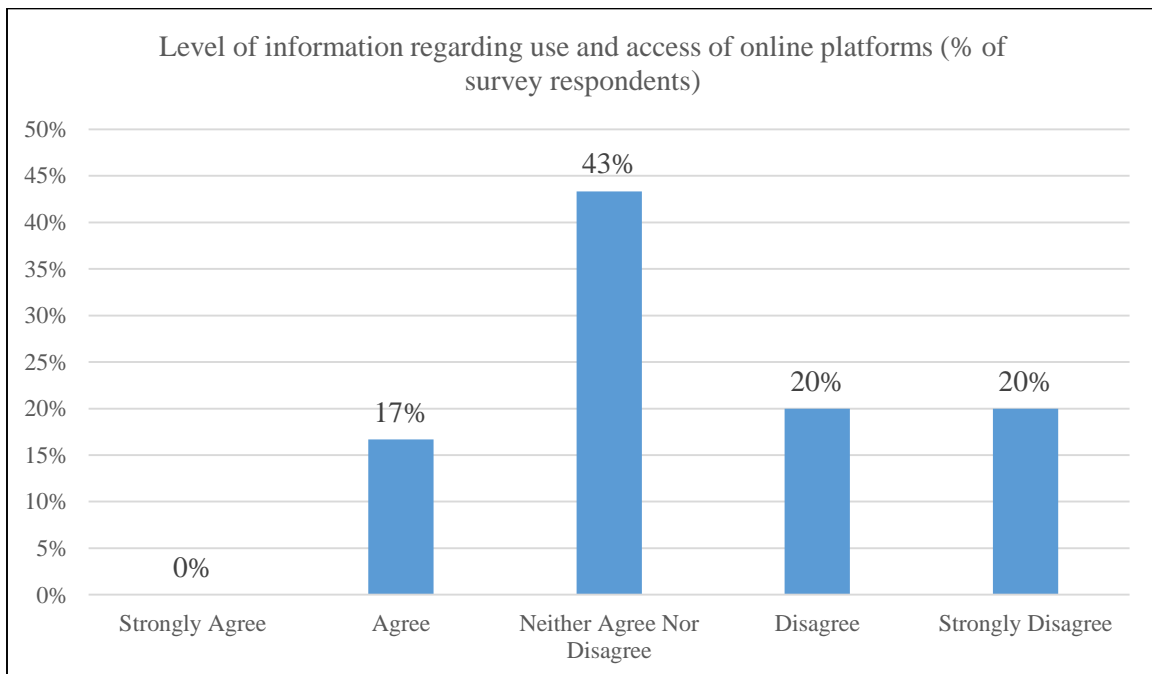
6. Have you used the Moodle online marking/feedback services and tools available on the University's network?



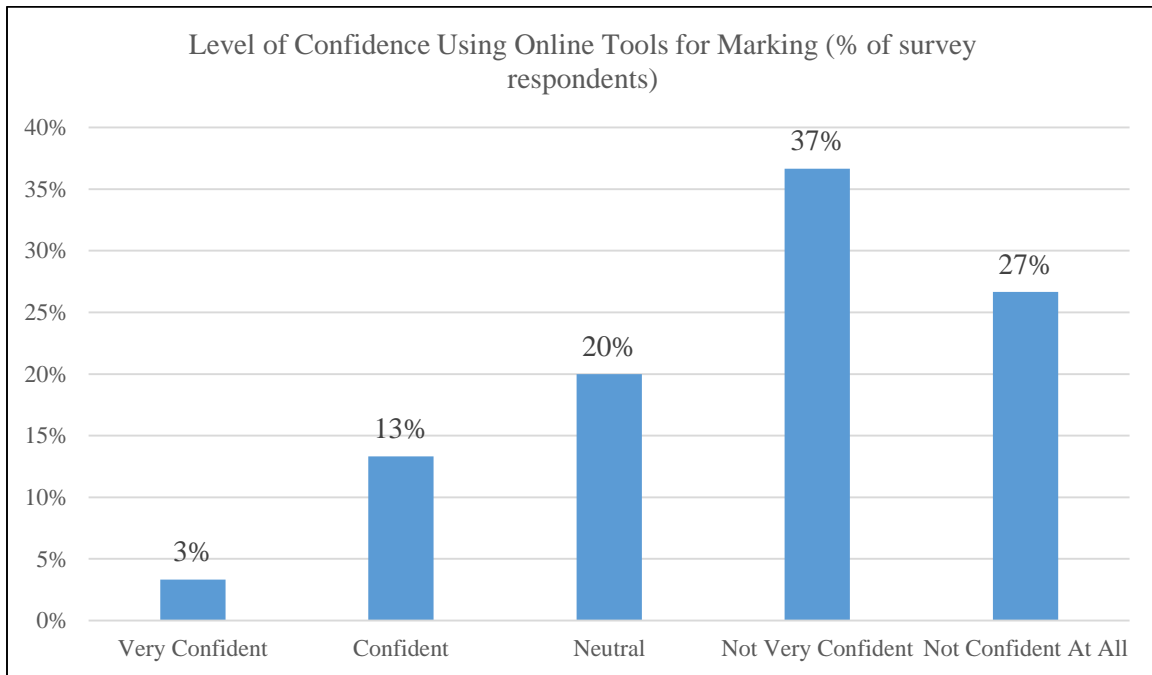
7. How well aware are you of the Moodle online marking/feedback services and tools available on the University's network?



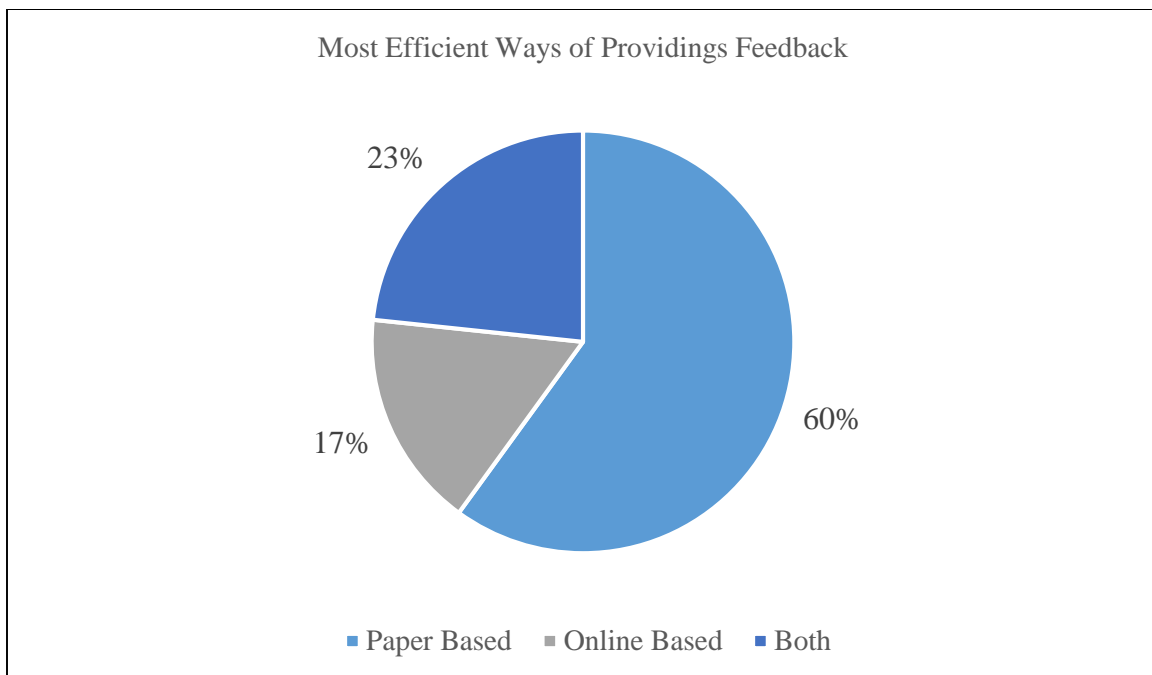
8. On a scale from 1 to 5, 1 being strongly agree and 5 strongly disagree, do you think that the university provides you with enough information/training on how to use online platforms for marking/feedback purposes?



9. On a scale from 1 to 5, 1 being Very confident and 5 Not confident at all, how confident are you with using the online tools for marking and delivering feedback?



10. Which means of providing feedback/markings do you find the most efficient?



11. Why do you consider this approach the most efficient?

Online-based

- “Easy to make annotations of reports / scripts”.
- “Quicker to use”.
- “If all markers for a programme are engaged in online marking the process is smooth, efficient and easy to manage. The moderation process needs to be included as an online activity (a function that is not currently easy to implement) as currently this requires email/hard copy to be used”.
- “Annotating the PDFs is quick and simple and useful to refer to when preparing the "general comments" feedback”.
- “Common feedback categories are available which saves time”.

Paper-based

- “Considering the number of scripts especially in essay form it is unfeasible and unreasonable to expect people to read this on a screen. It also is extremely difficult to engage with material fully when it is on-line”.
- “I have a vision problem which means I cannot mark online; I need printed materials”.
- “Because when I used the online marking for a doctoral module assessment it turned out that the student only received the feedback sheet with comments and none of the original text marked up with my (and my co-marker's) comments. This was particularly frustrating in the light of how much additional time had been consumed doing the online marking mode”.
- “It is a question of long-term efficiency and effectiveness. Online-based may be more efficient in the short-term, but working on a computer for long periods has significant issues for musculoskeletal health. Also important is that written feedback on an essay can be more precise (and therefore more effective in actually helping the student learn)”.
- “You can mark on the text exactly where the feedback is relevant to and give qualitative feedback in a meaningful way. Online takes a lot longer to give good feedback which is bad for both academics and students”.

- “I like to read documents using paper because I like the feel of paper and being able to write comments on the side margins. I often print out most pdfs of academic papers”.
- “I can annotate on the scripts and also flick back through the assessments, ours are typically essays, and get a better sense of the flow. I currently type my feedback up to the students so they get the comments. Online marking is fine for me depending on the length of the assignment. If it is long, then it is difficult to flick back from one page to another”.
- “It is the only the one I have used”.
- “I scribble on papers as I read them”.
- “I am not tied to a computer to mark the assessment”.
- “I send the feedback sheets to an administrator, who then distributes them to the students.
- annotation, speed”.
- “Gives more flexibility to be able to mark where and when I want. I had a problem and had to download files separately - so that turned out to be inefficient”.
- “I consider typing my feedback and then email my typed feedback as the most efficient because I can easily archive them”.

Both (Online – Paper Based Feedback)

- “Some assessments are easiest to mark when it is possible to write or highlight things on the script - this is why I prefer paper based feedback in some situations. However, for other types of assessment (e.g. quiz, blogs) on-line feedback is much more efficient”.
- “I like to provide feedback electronically, but would prefer to be able to do so via email attachment of the document - this is the most intuitive way to work for me. I find the online based system to be difficult to navigate, with many steps along the way”.

12. According to you what are the advantages of paper-based marking/feedback? Order them from

1 (a) to 3 (c), being one the most relevant advantage and 3 being the least relevant of them.

- a. More comfortable to read and write
- b. Physical proof of feedback
- c. Easy to store

16. According to you what are the disadvantages of paper-based marking/feedback? Order them from 1 (a) to 3 (c), being one the most relevant disadvantage and 3 being the least relevant of them.

- a. Non-environmental friendly (Paper waste)
- b. High cost of printing
- c. Time consuming in delivering feedback

17. According to you what are the advantages of online based marking/feedback? Order them from 1 (a) to 3 (c), being one the most relevant advantage and 3 being the least relevant of them.

- a. Eco-friendly
- b. Real time access
- c. Mobile accessibility

18. According to you what are the disadvantages of online based marking/feedback? Order them from 1 (a) to 3 (c), being one the most relevant disadvantage and 3 being the least relevant of them.

- a. Discomfort of reading
- b. Unreliability and incompatibility of technology
- c. Easy to ignore for students

19. According to you what are the reasons and factors that influence a low adoption of online marking/feedback amongst academic staff?

- “Learning curve to understand this new method”.
- “Inertia”.
- “Old practices take time to change”.
- “It is not feasible to expect teaching staff to read coursework on-line. It becomes very difficult to engage with the work and it makes it difficult to get a sense of the whole. I would also suggest that this would have very negative impact on the wellbeing of teaching staff who would be expected to stare at a screen for such a length of time.
- “Being tied to a screen for marking. Eye strain from looking at the screen all the time. Lack of access to tablets/ computers at home/ on the move. Reluctance to change. IT problems - e.g. allocating students to groups for marking group assignments. Lack of support from

admin staff (i.e. feel their jobs are being threatened). Still have to put the marks into the excel spreadsheet. The lecturer actually has more work than when they are handed a pile of assignments to mark”.

- “It is not intuitive, difficult to read online - Moodle is unfriendly”.
- “Personally I find it very difficult to read off the screen”.
- “Eye strain and the potential of musculoskeletal problems”.
- “Online feedback being less effective than written feedback on essays”.
- “It is not good for students - poorer quality and quantity of feedback”.
- “Bad for academics - time-consuming, difficult to do, bad on the eyes”.
- “You cannot at present do anonymous marking digitally, which is important for fair feedback and treatment”.
- “Prefer to read and write on printed paper, where it is much easier to flick back and forth between pages to see the development of an argument or the overall quality of knowledge and its application”. dislike of reading on screen, having to sit at terminal - medical issues”.
- “People don't want to read large amounts of text on screen”.
- “Lack of information”.
- “Primarily low adoption appears to be that programmes have a choice about whether to adopt it or not. Where it is not adopted there tends to be an aversion to adopting to new technology”.
- “I mandated that all marking on my programmes be undertaken online. I provided training and support to academics during initial use of online. I also had to find the best approach for my particular programmes (there are many different ways that online marking can be implemented) and then produced a guide for programme staff explaining their role and how to implement the process”.
- “Hassle of learning a new system. Too many perceived administrative problems attached to the systems. Many colleagues are very happy editing/commenting on work electronically, it is the whole system that is the issue”.
- “Tradition and fear”.
- “Unfamiliarity with the technology, assumptions that marking online will take longer, length of the coursework”.

- “Don't know how to use the service or it is difficult to navigate. Not sure if the feedback/mark has been saved and/or different places to save”.
- “I think not being able to have home tablets/computers is a major issue and not having any support for private computers. Early teething issues have made it more time consuming”.

20. How would you improve the way feedback is delivered?

- “Increase the time that we have to provide feedback. Include formative feedback in every course (like in real life situations)”.
- “Use peer to peer feedback too”.
- “It is not clear why or how improvement is needed. I would suggest that the personal touch of writing comments indicates a close engagement on the part of the lecturer and I have never heard a student complaining that feedback is not good enough because it is not done on-line”.
- “I'm not sure. What would be helpful is a system/process whereby students are inclined to read and engage with the comments on their essays (both the advice and the questions). As to what system is best to do this I do not know”.
- “Explain to students why it takes a while to provide full and meaningful feedback. Encourage students to actually pick up and use the feedback we have spent so much time providing. Not make sure everyone has to conform to a one size fits all online feedback”.
- “Make it compulsory for students to read, internalise and interact with it in the first place. After that the feedback modality is immaterial. Without it we are discussing choice of placebo”.
- “Provide tools which enable academics to give feedback verbally, with this being digitally recorded on an essay for onward communication to students. Perhaps Lancaster does this already and I simply don't know it exists”.
- "Online feedback is a great improvement to the marking and feedback process. It is, however, impersonal and I would improve this by ensuring that students have access to their tutor - this is particularly important for students achieving fail marks where, previously it was possible to discuss the mark with the student in advance of marks being formally released, rather than this being a fully automated process”.

- “I would also improve the moderation process to ensure that a smooth online process is implemented”.
- "Use of voice activated software for using in providing feedback would help develop thoughtful and personalised student feedback”.
- “Make the students read the feedback before they have access to the mark”.
- “Streamline and clarity of use. The Turnitin system works well but it is external to moodle and the access is not clear”.

Summary of Findings

Factors such as age, number years in teaching and employment status (part time or full time) do not influence preference towards using either online marking or paper based feedback. This is important, as there seems to be a “general understanding” that age and an increasing number of years in teaching come with the inability to incorporate new ways of working. Especially, processes that involve the use of new technology.

More than 82% of academics are somehow aware that online tools are available for marking purposes. Despite a high degree of awareness, only 36% of academics surveyed mentioned that they have used online marking for their courses. Hence, the problem seems to be the level of online marking implementation and not necessarily the knowledge academics have of it.

This is supported by the fact that 40% of academics considered that the university provides not enough information and training on how to use online marking. Only 17% mentioned that there is enough training and information in this regard. In terms of the level of confidence in using online marking tools, 64% of academics mentioned having a low level of confidence. Only 16% mentioned feel confident or strongly confident regarding the use of online tools for marking purposes.

Interestingly, when academics were asked which means of providing feedback they consider the most efficient, 60% of them favoured paper-based marking vs 17% which preferred online marking. Comments supporting online marking are related to efficiency (faster processes of marking) and the fact that the marking process is unrestricted by time and space.

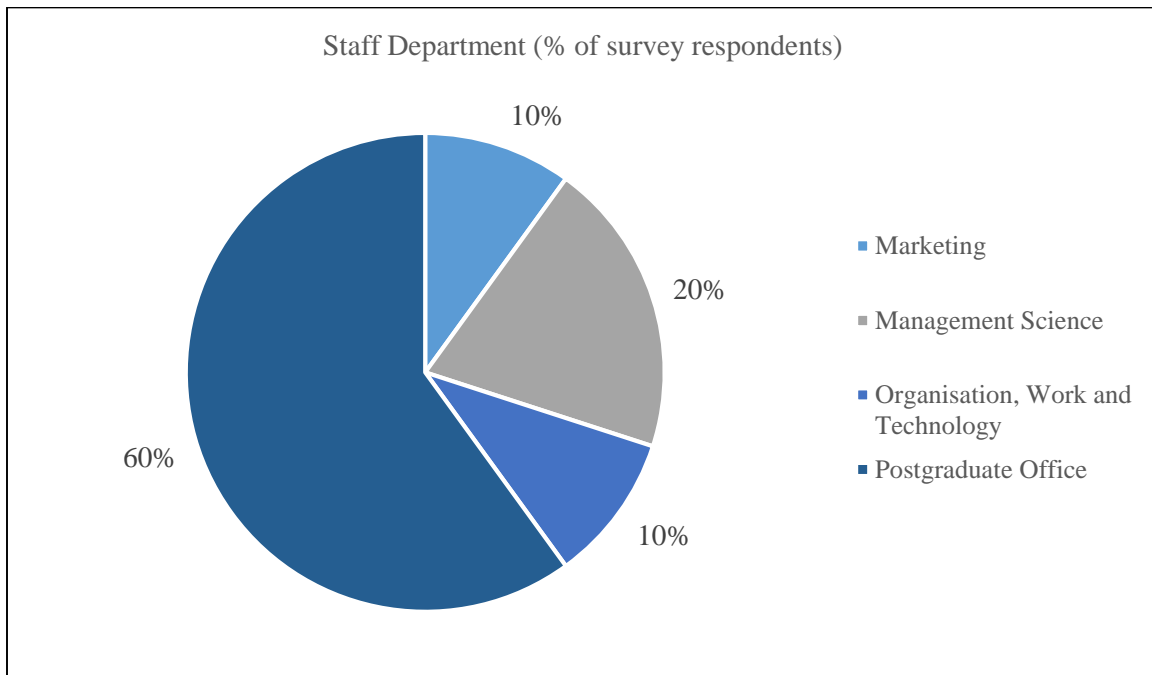
Academics supporting paper-based marking mentioned that it is easier to understand the flow of a document when it is on paper. Especially when the document is considerably large. Moreover,

comments are more focused on highlighting the deficiencies of online marking rather than the advantages that paper-based marking can provide. Other academics mentioned that both online and paper-based are can be useful depending on the assignment being marked. For example, for quizzes and blogs online marking is easier and for larger assignments paper based will be more useful.

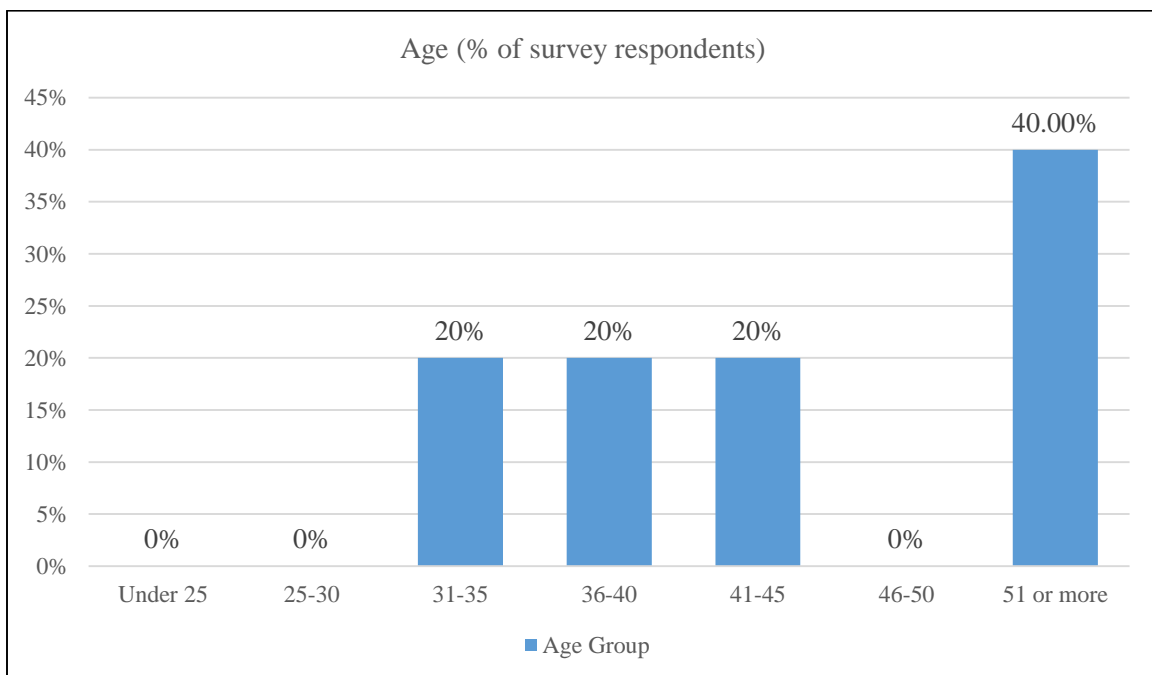
When academics were asked how would they improve the way feedback is delivered the following points were mentioned. More information and training would improve the adoption process of online marking. Additionally, other forms of delivering feedback should be considered such as voice and video recording feedback. In this way, technology can increase the engagement level of feedback and bring efficiency by enhancing the process of marking.

3.3 Staff

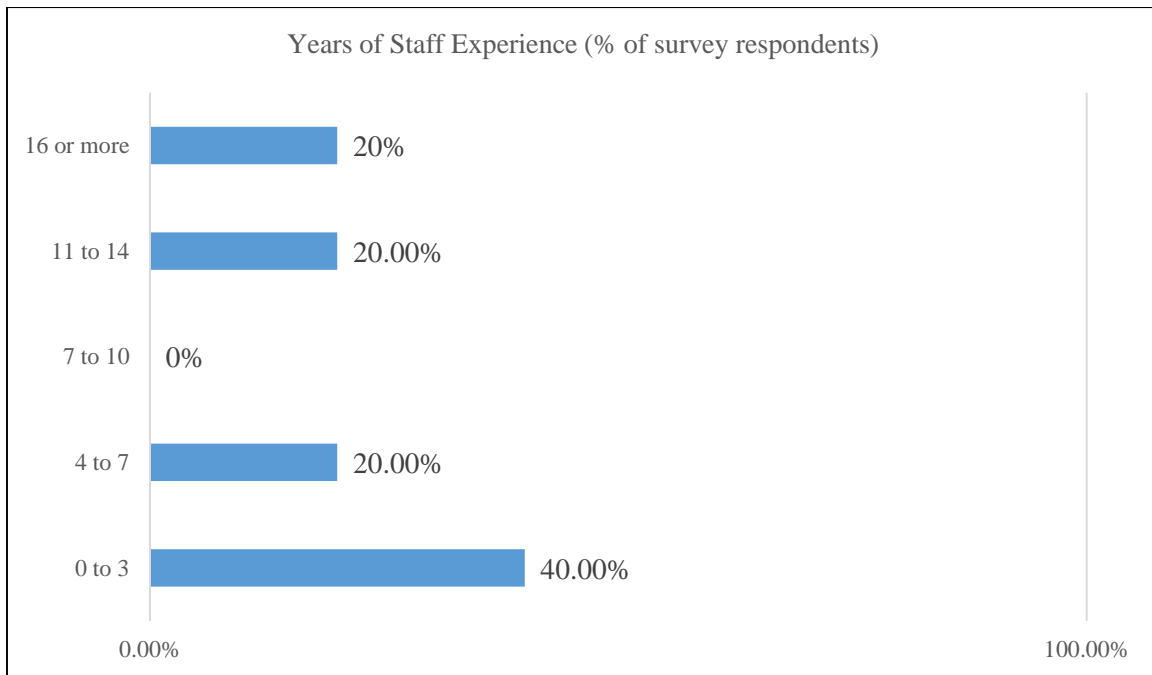
1. Which academic department do you belong to?



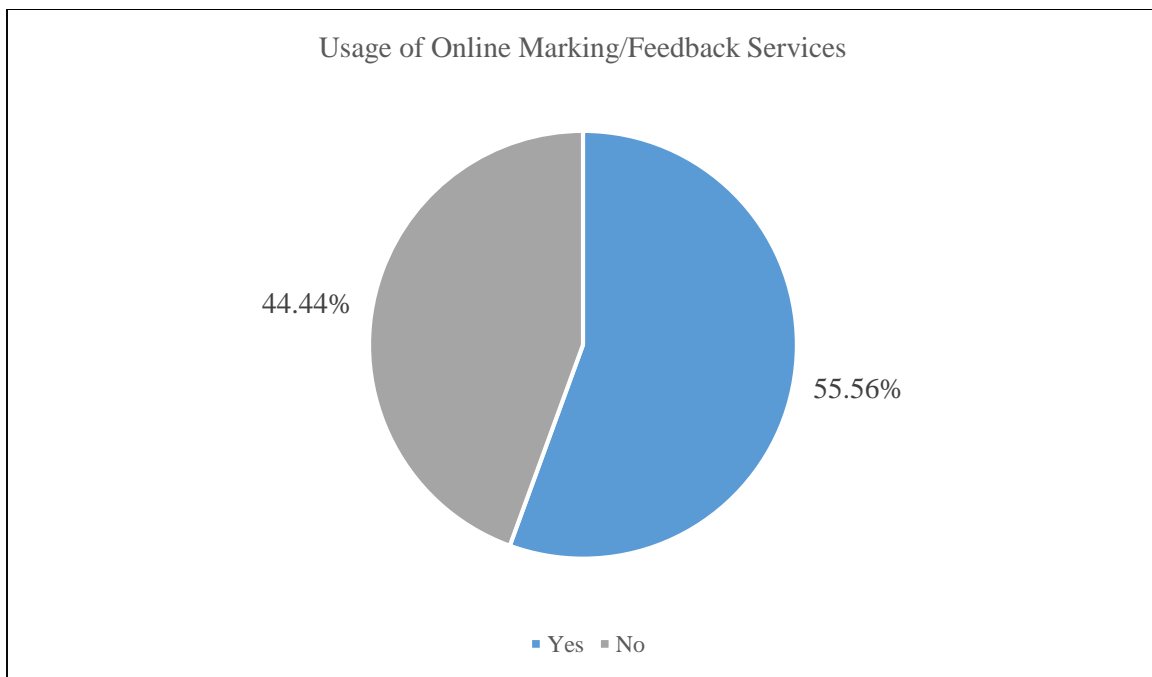
2. What is your age?



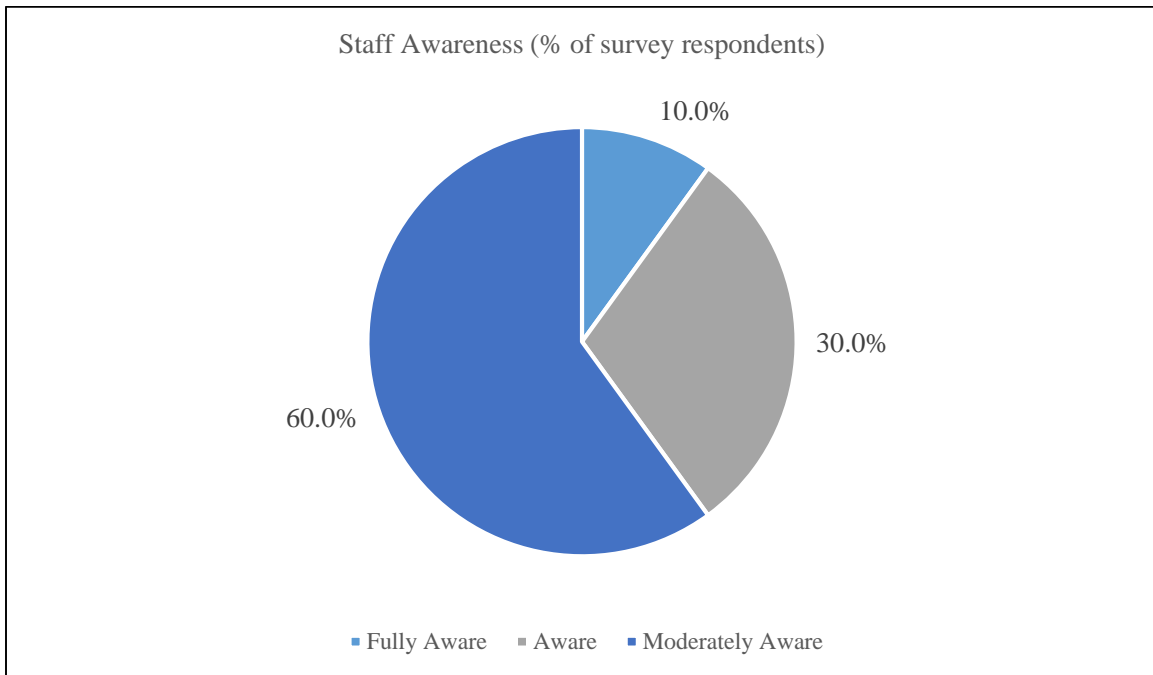
3. How many years of experience do you have in the supporting staff department?



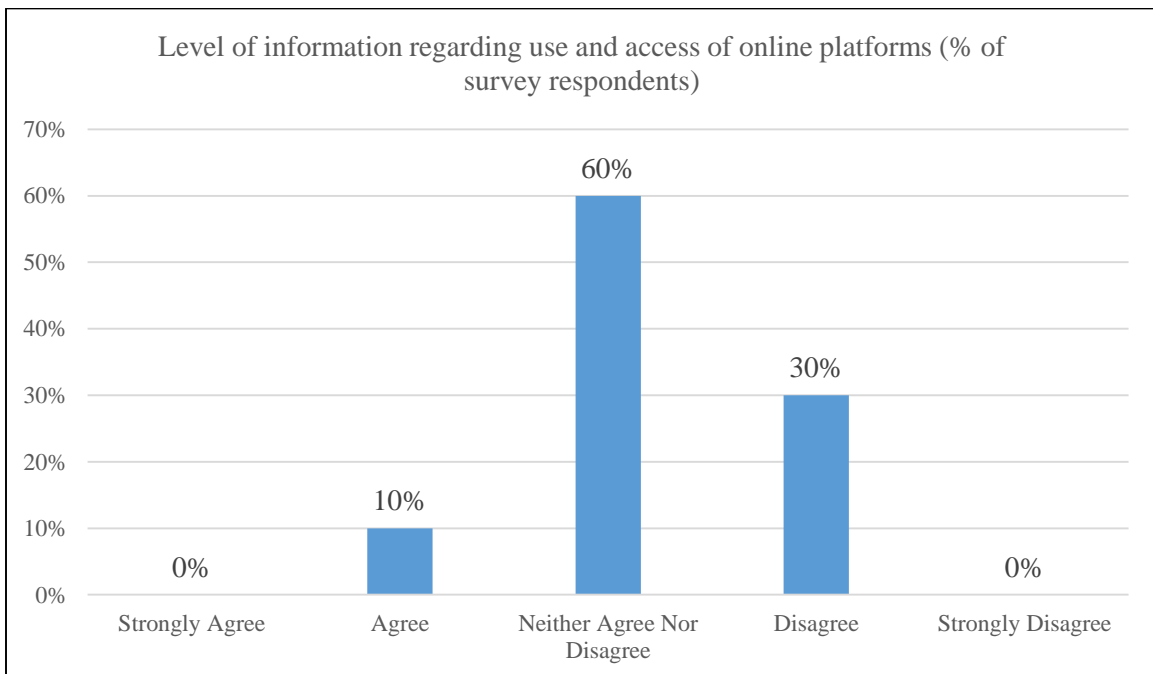
4. Does your department currently use the Moodle online marking/feedback services and tools available on the University's network?



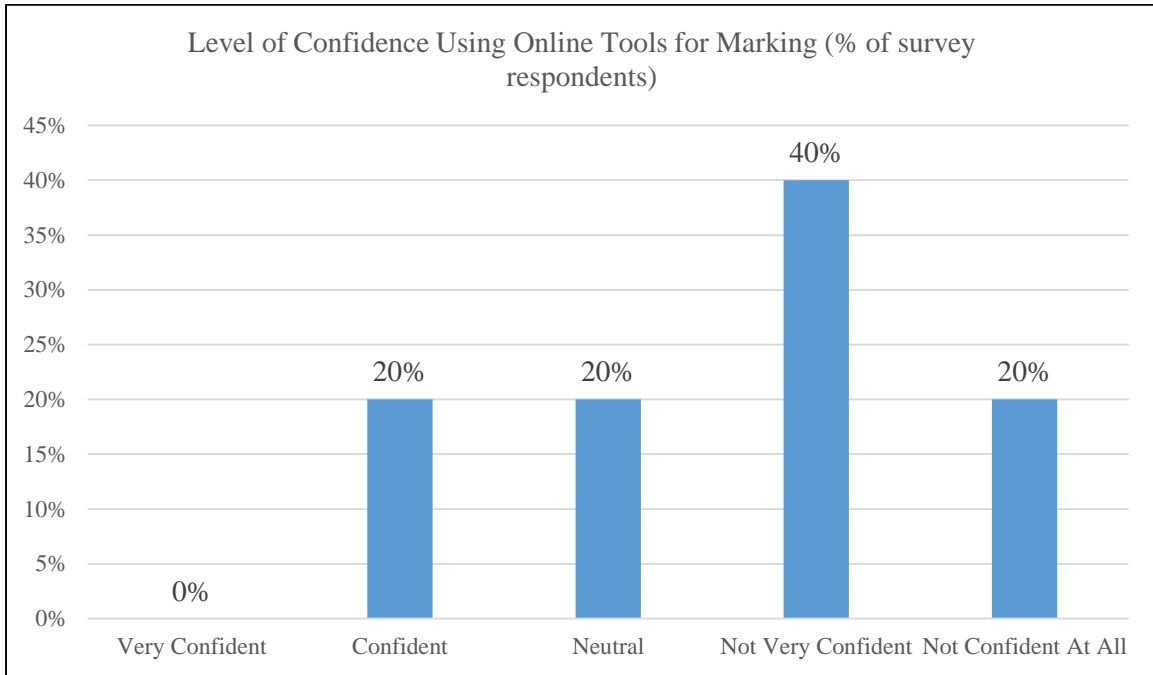
5. How well aware are you of the Moodle online marking/feedback services and tools available on the University's network?



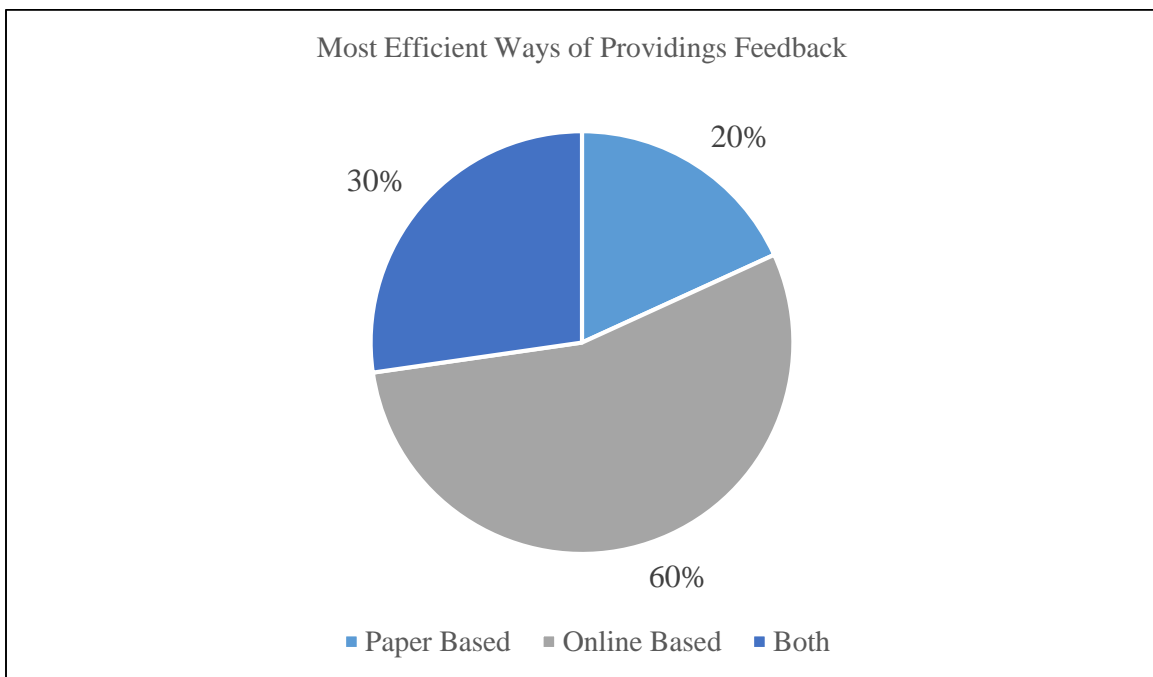
6. On a scale from 1 to 5, 1 being strongly agree and 5 strongly disagree, do you think that the university provides you with enough information/training on how to use online platforms for marking/feedback purposes?



7. On a scale from 1 to 5, 1 being Very confident and 5 Not confident at all, how confident are you with using the online tools for marking and delivering feedback?



8. Which means of providing feedback/marking do you find the most efficient?



9. Why do you consider this approach the most efficient?

Online-based

- “It is more efficient to upload all feedback and mark sheets to Moodle rather than emailing individual students or asking students to collect hard copies from the office”.
- “It quick and effective”.
- “Quicker and easier once you're used to it”.

Paper-based

- “We normally do not use on-line marking although one tutor has just done it using grademark. I believe this will be phased out soon. I have not received training on how to deal with retrieving the feedback when using grademark. If we decide to use online marking, training will be required”.
- “Staff in administrative roles are more organised than academics for this type of activity and need to keep control of this procedure to link into both their pastoral role and the external exam board process”.

Both

- “Not all tutors mark on-line yet and it is difficult with presentation marks”.
- “Different types of assessment carry different types of mark/feedback”.
- “It depends on the type of assignment but mostly on-line is better”.

10. According to you what are the advantages of paper-based marking/feedback? Order them from 1 (a) to 3 (c), being one the most relevant advantage and 3 being the least relevant of them.

- a. More comfortable to read and write
- b. Physical proof of feedback
- c. Easy to store

11. According to you what are the disadvantages of paper-based marking/feedback? Order them from 1 (a) to 3 (c), being one the most relevant disadvantage and 3 being the least relevant of them.

- a. Time consuming in delivering feedback
- b. Non-environmental friendly (Paper waste)
- c. High cost of printing

12. According to you what are the advantages of online based marking/feedback? Order them from 1 (a) to 3 (c), being one the most relevant advantage and 3 being the least relevant of them.
- Eco-friendly
 - Mobile accessibility
 - Real time access
13. According to you what are the disadvantages of online based marking/feedback? Order them from 1 (a) to 3 (c), being one the most relevant disadvantage and 3 being the least relevant of them.
- Unreliability and incompatibility of technology
 - Easy to ignore for students
 - Discomfort of reading
14. According to you what are the reasons and factors that influence a low adoption of online marking/feedback in LUMS?

- “Reluctance of some academics to engage with online marking. They prefer to mark hard copies of essays and also a lack of knowledge about how online marking works. From a support staff point of view, I am concerned that the return of marks should not be taken out of the support staff role. Support staff need to check that the marking has been done correctly and also that the feedback is correct before returning marks and feedback to students”.
- “Academics who don't like change”.
- “We should have a directive to all in LUMS to use the online marking/feedback system and given the appropriate training”.
- “Lack of training and many tutors are used to doing it in a different way, so possibly unwilling to change. Possible concern that feedback will be released too soon in error etc, so not as much control over proceedings”.
- “Academic staff willingness. Administrative staff cannot force them to do this”.
- “This survey assumes that academic staff provide feedback back to students directly. There are several disadvantages to this - admin staff need to be involved in the process as it impacts on pastoral care and ensures (assuming admin competency!) that mistakes are not made. Academics are not careful with this type of activity and make mistakes”.
- “I think most people find it more difficult fully absorb screen read documents after a certain amount of text and all assignment are usually in this category”.

- “Also academic staff feel it takes them longer to do: downloading assignments; unzipping and saving them; opening each one marking it and then saving to a 'marked folder'; zipping the 'marked folder'; uploading back to Moodle; emailing support staff to advise completed. Rather than picking them up from support staff, marking them, handing back to support staff”.
- “Lack of training and awareness about the system”.
- “Misunderstanding of how to do it, unfamiliarity with Moodle”.

15. How would you improve the way feedback is delivered?

- “At the moment I am happy with the way feedback is delivered. Although we don't do online marking the feedback is returned online via Moodle. It would probably be more efficient if the whole process was done online but I would need to know more about the process of online marking”.
- “Simplify moodle to each programmes criteria”.
- “Make sure training is provided to ensure a full understanding for support staff and academics before it is used”.
- “Happy to adopt online, but need training and support for academic staff and administrative, particularly when non-standard assessment”.
- “Feedback should not be handwritten - students often can't read tutors writing. A template should be emailed from the admin staff to the tutor and returned for logging (for exam boards) and returned to the students. This gives the student an opportunity for a face to face discussion with the admin staff and to raise any issues. Admin staff have an overview of progress which academics don't have”.
- “Maybe if they (academics) could click on a student's essay in Moodle, mark it there and then (the system should also automatically save each version in case of interruptions like Box does) then once they have fully completed all of their marking they could click a finalise button, which would (again like Box) e-mail support staff to advise this was complete”.

Summary of Findings

Since most of the staff surveyed belongs to the Postgraduate Office, it is important to take into account that answers and opinions might not reflect the broad reality and practices across LUMS. The awareness and usage level of online marking tools across the different departments are high. Most of them are already implementing online marking and are informed about its existence. Nevertheless, staff only 10% of staff responded that they think that the university provides them with enough information and training regarding the use of online marking tools. This is actually reinforced by the fact that 40% of staff feel not very confident or not confident at all when using online marking tools.

For staff, online marking is considered the most efficient approach. 60% of them considered online marking as being more efficient compared to only 20% who supported paper-based feedback. According to staff members, a low adoption of online marking tools across the management school is due to lack of information and training on how to incorporate online marking into their daily processes. Moreover, they recognise that there are still some technology issues around online marking, making the processes actually more tedious and time consuming.

When asked how to improve the way feedback is delivered staff mainly suggested that it would be useful to simplify online marking so that academics and staff are more encourage to adopt it. Finally, more communication efforts should be made to highlight the benefits of online marking.

4. Interviews

This section provides a summary of the relevant arguments, comments and suggestions that academics and staff members made during the in-depth semi-structured interviews. Given the nature of the interviews, not all comments referred specifically to marking and feedback processes but bring value to the concerns that academics and staff have regarding online marking and its implementation. The number of interviews conducted between staff and academics is reflected in Table 3.

Table 3. Number of Interviews

Group	Number of Interviews
Academics	6
Staff	8

4.1 Academics

Six academics were interviewed during the execution of this project. The comments and suggestions of each interview will be displayed along the questions and topics that were covered across the interview process. For confidentiality purposes, names and academic departments are omitted.

1. What has been your experience so far with the online marking system?

- “I haven’t really used moodle for online marking, but I have used Moodle as an online platform for collaborative work across my courses. This has proven to be a great tool for online collaboration and exchange of ideas”.
- “I did it once for the MSc in Project Management. It was a good experience, all the work was read and graded online. It was hard to read online when the assignments were long. For example, to scan through a dissertation and identify specific things doing it online it would be very easy, but when doing this for the whole piece of work it would become a nightmare”.

- “I have avoided using online marking. For me, it is like reading a book from the screen. It is not as tangible and engaging. Particularly when you are dealing with a large number of essays. I would be very concerned if we are pushed towards using online marking. It is important to recognise how people have individual preferences towards ways of working”.
- “I’ve graded several individual and pieces of work online. It is great in the sense that it gives me the flexibility to mark at anywhere at any time. Moreover, I can write the comments on the specifics points I have spotted. Nevertheless, it is very time consuming and hard to read long hours from the computer screen”.
- “I really don’t like online marking. Everything I do is paper-based marking. The main reason why I don’t do it is because I already spend a lot of time on the screen every day. Also, some students have told me that they prefer paper-based feedback. Finding the comments along the document is more engaging for students and easier for us”.
- “Marking is the least attractive part of my job. My experience with online marking is actually quite limited. Personally, I do not really like online marking. I like the feel of paper when I am reading and assessing a student’s work”.
- “I had more experience with online marking in the previous institution where I worked before joining Lancaster University. Since I have joined Lancaster, only one module which I taught involved online marking. I personally do not like online marking for long pieces of work”.

2. How has the shift from paper to online feedback been communicated and accepted by staff/academics?

- “In my department, it was introduced as a voluntary trial with undergraduates. This was in September 2015. Eventually, I got introduced to it and started with it. I felt that I did not receive enough information or training. People should be given more time to go through the learning curve”.
- “I am part of the teaching committee and it has been mentioned there. It was not an enforced idea but more of a proposal towards academics. I do not think this will become a compulsory practice. There would be a lot of resistance”.

- “We heard nothing about it. The department received no information as far as I am concerned. Even with Turnitin, we didn’t really get any formal instruction on how to handle this”.

3. For which type of assignments would you use paper-feedback and for which online-feedback?

- “For short assignments and work that doesn’t involve much reading online marking is very efficient. For long assignments online marking can become very painful. Especially as this means being in front of a screen for a long period of time”.
- “I can’t really speak for quantitative assignments. But I doubt that “one best practice” can be implemented to all people. Everything depends on context and individuals”.
- “I only mark essays so for me basically online marking gets me very tired”.
- “I think short assignment might suit online marking, but thesis and long assignments I prefer to do it paper based”.
- “Both can adopt online marking. It all depends on the length of the document that needs to be marked”.

4. What do you think the University can do in order to provide better tools for marking purposes?

- “Increasing communication across the different departments can enhance the process of online marking. Observing the people that have already adopted this system and if they could share their ideas with other colleagues would be great to encourage the use of it”.
- “During the past months I have been working with a group of academics which have been applying online marking to some courses. I think the university can improve the process of online marking by improving the technology available for this purpose. Simplify the processes and the steps academics and staff do in order to mark group and individual work. Moreover, there is an issue regarding the administrative staff when all the marking is done online. They (staff) feels that responsibility is taken away from them. Finally, emphasis should be made on ensuring that the students do receive and take their feedback. With online marking, at least until now, there is no possible way to know that students actually read and understood their feedback”.

- “I think the Management School is making good steps into moving towards online marking. Appointing specific people and roles in the ISS department is key to work with academics. What it has been recognised is that change takes times and information should be constant to support academics”.
- “In order to have efficient processes throughout the marking process, coordination between academics and staff is key to achieve this. Anything that enhancing the communication and coordination channels between academics and staff is welcome”.
- “If someone has successful experience with online marking, the university should inform this to other colleagues. Make people see the benefits of this”.
- “I don’t think the Management School should be prescriptive in terms of telling you what to do. I would be good if we are provided with a general guideline into what we are able to do with online marking and paper-based marking. Another important thing is to listen and read success stories and practices from other academics”.

5. Have you received enough training? Do you feel confident in how to use the system?

- “Training is a key thing in encouraging staff and academics embrace online marking. Some of them do not know the benefits that it can bring to their daily work. Communication is important in achieving this”.
- “There needs to be more training for academics and staff as well. Having one person who becomes an expert is fundamental in providing experience support for others to follow”.
- “Training is important in the sense of giving the people the information needed to operate in a particular way. Nevertheless, it should be recognised that people have different ways of working and give them flexibility into how they incorporate themselves into using the new online systems”.
- “Training and the digital student ambassadors which can help and provide support academics and staff with the daily challenges around the use of technology is fundamental in increasing confidence”.
- “Not formal training. I have been teaching myself around the technology, but some people might find training useful to adapt faster”.

4.2 Staff

Eight staff member were interviewed during the execution of this project. This includes one person from the ISS department who provided rich insights into the technological development of online marking and how it has been adopted by both academics and staff. The comments and suggestions of each interview will be displayed along the questions and topics that were covered across the interview process. For confidentiality purposes names and academic departments are omitted.

1. What has been your experience so far with the online marking system?

- “I did a trial with some of the master’s courses in which I work with. We had some problems. Looking at the screen for a long time was a major issue. Moreover, there is a long process and technology is not helping in making it easier for staff and academics”.
- “At the moment we do not really do online marking. Students only submit an online version for plagiarism purposes. Everything we do is paper based, which I think gives it a more personal touch”.
- “We have been trying to move more processes online, but some academics still do paper-based marking.
- “It has been good. Moodle was introduced around 4 years ago but online marking and feedback have only been running for a couple of months. It really depends on the line manager how the work is done. Different people apply different policies”.

2. How has the shift from paper to online feedback been communicated and accepted by staff/academics?

- “Not really. I have learned down the process of implementation, but not really because any formal instruction has been given”.
- “There were some introductory sessions for learning and using the system, but not everybody attended. There has been a low participation rate in this regard. It has been accepted by most of the staff members but in practice it is different. Most people are sticking to the old way of doing things”.

3. If used the system successfully have you had to make any process changes to integrate the online system? Has this caused any difficulties?

- “Make technology easier to use. There are many steps involved that result in process duplication”.
- “Academics have different practices towards marking, hence making difficult our work as we have to standardise all the work before being released to students”.
- “There was a problem between Moodle and Turnitin. Sometimes the feedback is on Turnitin and it takes some time to know how to find it and download it. The system is user-friendly but I believe there needs to be more training for staff”.

4. What do you think the University can do in order to provide better tools for marking purposes?

- “More communication and integration between academics, staff and departments”.
- “We are happy if academics can mark online, but it is important that the final process remains under administrative control. It is our responsibility to release and standardise everything”.
- “The moodle team (ISS) should provide more training sessions. More support for both staff and academics”.
- “The Management School or the ones interested in implementing this system should put more emphasis in highlighting the benefits of online marking. Our influence as staff is very limited”.
- “The university and LUMS should provide before the academic year starts some training and manuals on how to use every particular part of the system. Make it compulsory for everyone and not just optional”.

5. Have you received enough training? Do you feel confident in how to use the system?

- “An initial training would be useful for everybody. Videos and short clips can help solve common things that staff and academics might encounter during the implementation process”.
- “We really need support from the ISS team, because even if we want to implement online marking we do not have the sufficient knowledge and practice to do it”.

- “Yes, if you attend the courses and training offered then it is really easy to familiarise yourself with the system. It is just a matter of involving everyone in the process. Some staff members can’t be bothered with adapting with new things, they think that the way that has always worked is the best”.

5. Case Studies

This section presents the results from the online marking pilot project which involved several undergraduate and graduate modules from the marketing department. Academics were in charge of conducting online marking by assessing individual and group assignments via word and pdf documents. A summary of the modules’ characteristics and the type of work assessed is presented in Table 3.

Table 4. Undergraduate and Postgraduate Modules involved in Online Marking

Academic Level	Module	Number of Students	Assignment Type
Undergraduate	Consumer Behaviour	225	Individual Essay
	Digital Marketing	200	Group Presentation
	Market Research	250	Group Report
Postgraduate	Markets	42	Group Presentation
	Strategic Marketing	42	Individual Essay
	Consumer Behaviour	42	Group Report
	Managing Marketing Channels	40	Group Report

The wide variety of assignments and differences between group sizes led to positive and negative experiences and feedback from academics and tutors involved in online marking.

Positive Feedback

Academics mentioned that by using word or pdf documents for online marking it was easy and fast to make detailed comments and consistent feedback to all students. Moreover, the marking

process started immediately after the individual or group work was submitted without having to wait for the administrative staff to print or send the documents for marking. As a result, hard copies were eliminated resulting in less printing costs and use of paper.

Tutors also highlight the accessibility and remote access that online marking can provide. This enhances the process of marking by enabling tutors to access the student's work unrestricted by location and time. Finally, academics also recognise that by speeding the marking process, students can have access to their marks and feedback easily and without having to collect them physically from the administrative office.

Negative Feedback

While the general perception is that online marking speeds up the process of marking compared to paper-based marking, tutors mentioned there are some technological and technical barriers that still remained to be addressed. Online marking imposes additional steps for the tutor which should be considered in the marking workload. Particularly, as with online marking tutors have to: download scripts, mark each one and save to a different folder, upload feedback and then complete the spreadsheet with the marks. Another important issue relates to the way individual and group work is submitted. Submissions in different formats (pdf or word) constraints online marking by having to switch between different programs when marking. Moreover, when marking group reports or presentations, feedback and results are not directly linked to the individual members of each group. Finally, academics mention that online marking involved working long hours in front of a computer or screen. As a result, health consequences can arise such as eye strain and back problems.

6. Recommendations

Based on the foregoing primary research, the following recommendations can be stated. These, have the purpose of highlighting the aspects and factors that are important with regards to implementing online marking on a wider scale.

First, it is relevant to mention that online marking is already known by academics and staff. Most of them have either heard of it or are already using it to a certain extent. Hence, the problem doesn't lie there. Issues with online marking refer mainly to its implementation. More simple and friendly technology is key in making online marking processes faster and more understandable for academics and staffs. In this regard, close collaboration between academics and staff, together with the ISS department is crucial in developing easier ways of online marking. By making online systems easier to use, staff and academics would be more encouraged to abandon paper-based marking.

Second, more communication regarding online marking and its benefits is important in creating more awareness and engagement of academic and staff members. Sharing "success stories" of pilot projects concerning online marking in undergraduate and postgraduate courses can increase its adoption process. Moreover, while recognising differences in terms of how departments operate, an effort towards standardising how marking is conducted would be beneficial not only for individual departments but also for modules that run across different departments and master's degrees.

Finally, concerns remain over the extensive use of computers and digital equipment for marking processes. In this regard, academics and staff opinions should be considered before enforcing online marking practices. In this way, these groups can share their concerns and even recommend ways to expand the implementation of online marking practices. Additionally, communication, training and constant support for academics and staff should be considered in order to help them make a faster and smoother transition into online marking while reducing tensions and resistances regarding its implementation.