

# **Digital Skills and Research Methods BMSW4003**

## **Impact of Virtual Learning Environment (VLE) Moodle**

### **Impact of Moodle on Students**

Developed by-

Maria Luisa Salvagno (1818772)

Lecturer: Balan Kandasamy

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### **1 Executive Summary – Abstract:**

This formal research method aims to demonstrate how to apply essential strategies on how to develop a reputable research method. It will display important facts about the background and information about the research, the purpose principle of study and research explaining in detail about the impact of Moodle on students. This research will also cover about methodology, how the data was collected, the results, limitations and a summary of conclusion. For further readings, a reference list will be available as a final resource.

According to (businessdictionary.com, 2020) the definition of research methods is how we gather data in order to make decisions, it gathers data, information and knowledge)

### **2 Introduction – Aims – Objectives:**

As an introduction, I would like to highlight the importance and aim and objectives for this research. This research is called "Impact of Moodle on Students" because it aims to find out how the students from the University of Wales Trinity Saint David, in the London Campus located in Oval, are making use of Moodle.

Moodle is a login system where students find every vital resource to study daily in order to succeed in their academic journey. On Moodle students can find out about: Timetables, university mails, library resources, help desks, forms, readings about student life, financial support, health and wellbeing, attendance, punctuality and many other resources.

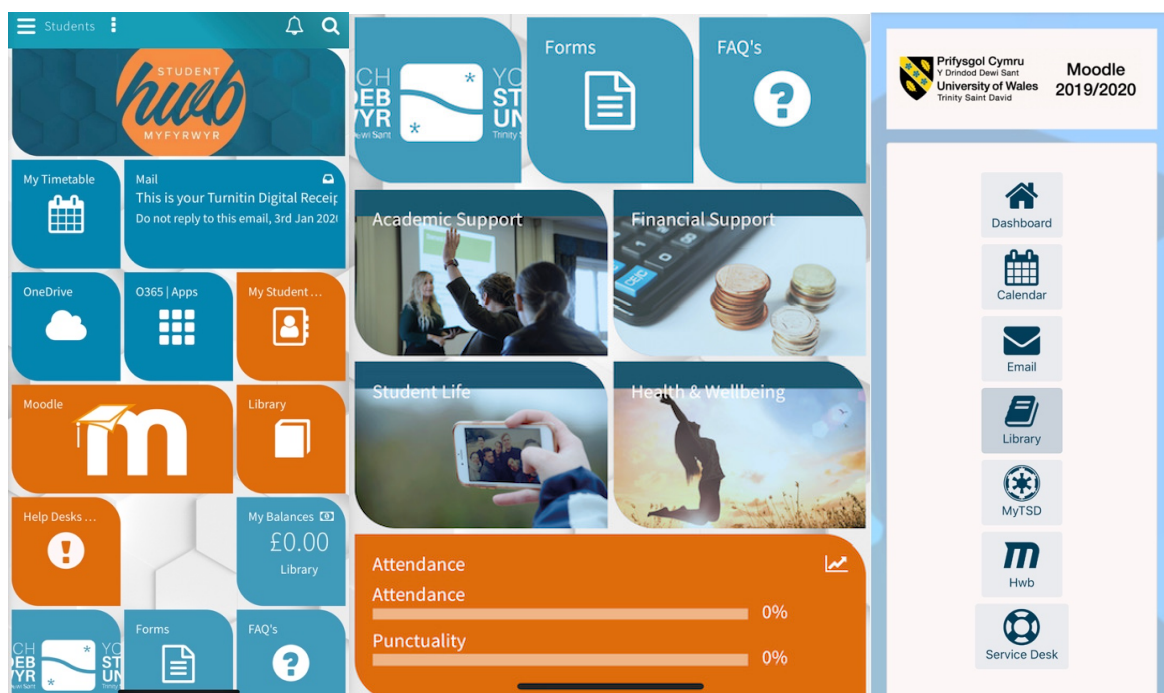
When a student clicks on the Moodle link, it also directs them to their modules of studies which are divided by terms. Now that you have a good understanding of Moodle, it makes it easier to explain what the objective and aim for this research method.

The objective is to find out in between the gender of Male and Female, including the age group of 16 to 55 and above, the following questions:

- On average how often Moodle is used per week
- Course category (Business related, Health Care, IT or other)
- How students find the new – dashboard recently recreated in between very easy and very difficult
- If students make use of IT exclusives (yes or no)

To be more specific, I would like to share how Moodle looks like, on a screen for a Student.

Please see the image below:



Here it can be seen the visual information about how the research questionnaire has been developed and handed to students to fill up.

I have aimed and handed to twenty students the same research questionnaire below.

The goal of this research is to find out how well Moodle is functioning for the students.

### **3 Background:**

As part of the background of my research strategy, I would like to explain my research method and why I have chosen those questions.

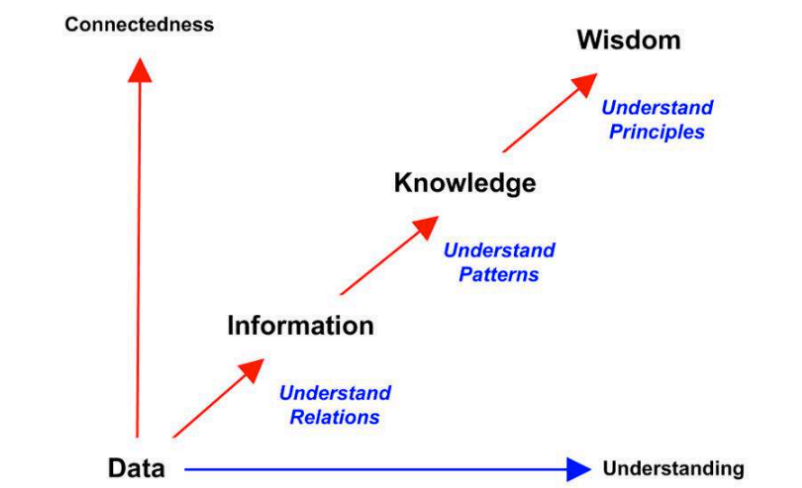
The reason why I have chosen the handpicked questions, it's because it helps in making clear to discover the students:

Gender, age group, how often students access Moodle, their courses category and use of yes or no would make it more objective in the answers also. In other words, the knowledge gathered would help me in interpreting the data since their principles come from experiences and personal experiences.

I understand that processing data is very important because it translates into meaningful information in which becomes knowledge. Please see below a good definition.

#### **Some definitions**

**The Data, Information, Knowledge, Wisdom Chain:**



According to ([libguides.macalester.edu/data1](http://libguides.macalester.edu/data1), 2019) data is the information we gather in order to have an understanding on a particular subject, there are different ways and methodologies for the collection it, data overall is the raw factor of knowledge.

## **Literature Review:**

In regards to the literature review, I must say that this is primary research. Primary research is a work that has never been done before, so all the information collected are new and exclusive to the University, in which I have worked personally and exclusively myself.

According to (entrepreneur.com, 2020) primary research gathers resource for the first time in order to collect knowledge; usually, this information comes directly from the root collected by yourself.

## **4 Primary Research (Methodology):**

As part of the methodology, here I explain how I managed to collect the data and how I came up with the results

The questions and the questionnaire were created on a word document, and then twenty copies of them have been printed and physically handed to students in the Oval, London Campus.

Here you can see the visual format about how the research questionnaire has been developed and handed to students to fill up:

Student: Maria Luisa Salvagno

ID: 1818772

### Impact of Moodle on Students

**1. Please select your gender**

Male ☐ Female ☐

**2. Please select your age group**

16 to 24 ☐

25 to 34 ☐

35 to 44 ☐

45 to 54 ☐

55 and above ☐

**3. On average how often you use Moodle**

0 to 3 times per week ☐

4 to 6 times per week ☐

6 or more times per week ☐

**4. Please select your course category**

Business related ☐

Health and Social Care ☐

IT related ☐

Other ☐

**5. How do you find your new-dashboard on Moodle?**

Very Easy ☐

Easy ☐

Okay ☐

Difficult ☐

Very Difficult ☐

**6. Do you make use of IT exclusives on Moodle?**

Yes ☐

No ☐

The students were very receptive when asked to complete the research, and they handed me back on the spot.

The sampling method used was “convenience - sampling”; it was unbiased, totally randomly. However, I can also say that it also classifies as cluster sampling because I took different groups of students from different classes. My research is also qualified as qualitative data because it does focus on groups and depths of questions analysed in different ways. Because the results are not statistically significant, they may be later be verified with a quantitative survey. The Focus for this survey is to gain insight.

According to (social research methods, 2020) sampling terminology included different aspects which can be used from the population, totally randomly, geographically, races and many more options.

For the production of the table in this research, I have chosen a few methods of sampling because they are specific and direct to the point.

According to (thought.com, 2019) convenience sampling in research is also known as accidental sampling because it's randomly, and information can be collected fast from whomever the researcher can find, there is no restriction.

According to (methods.sagepub, 2018) cluster sampling uses elements from gathering information from groups of different borrows, geography and classes.

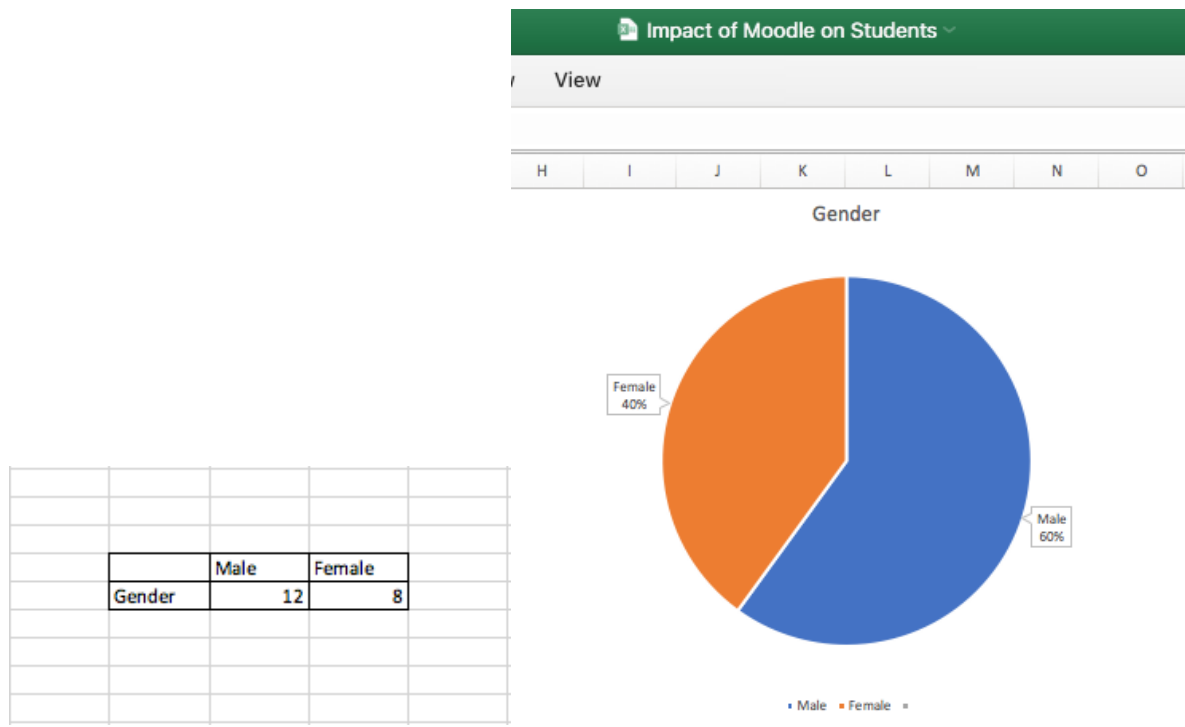
With the data collected, I was then able to create an excel sheet with the variables (V), case units (C/U Row) and Data Type (DT).

For a better understanding, please see below the final Excel sheet with the data laid out.

| AutoSave OFF      Impact of Moodle on Students  |    |        |          |                       |                  |               |               |   |   |   |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|--------|----------|-----------------------|------------------|---------------|---------------|---|---|---|--|
| Home Insert Draw Page Layout Formulas Data Review View                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |    |        |          |                       |                  |               |               |   |   |   |  |
| R1                                                                                                                                                                                                                      |    |        |          |                       |                  |               |               |   |   |   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | A  | B      | C        | D                     | E                | F             | G             | H | I | J |  |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |    | Gender | Age      | Moodle - Frequency    | Course           | New Dashboard | IT Exclusives |   |   |   |  |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1  | Male   | 25 to 34 | 0 to 3 times per week | Business related | Very Easy     | Yes           |   |   |   |  |
| 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2  | Male   | 25 to 34 | 0 to 3 times per week | Business related | Easy          | No            |   |   |   |  |
| 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 3  | Female | 25 to 44 | 0 to 3 times per week | Business related | Okay          | No            |   |   |   |  |
| 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4  | Male   | 16 to 24 | 0 to 3 times per week | Business related | Easy          | No            |   |   |   |  |
| 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 5  | Male   | 25 to 34 | 0 to 3 times per week | Business related | Very Easy     | Yes           |   |   |   |  |
| 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 6  | Female | 25 to 34 | 4 to 6 times per week | Business related | Difficult     | Yes           |   |   |   |  |
| 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 7  | Female | 35 to 44 | 0 to 3 times per week | Business related | Very Easy     | Yes           |   |   |   |  |
| 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 8  | Male   | 16 to 24 | 0 to 3 times per week | Business related | Very Easy     | Yes           |   |   |   |  |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 9  | Male   | 25 to 34 | 0 to 3 times per week | Business related | Easy          | No            |   |   |   |  |
| 11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 10 | Female | 25 to 34 | 0 to 3 times per week | Business related | Easy          | Yes           |   |   |   |  |
| 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 11 | Male   | 25 to 34 | 0 to 3 times per week | Business related | Very Easy     | Yes           |   |   |   |  |
| 13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 12 | Male   | 25 to 34 | 0 to 3 times per week | Business related | Easy          | Yes           |   |   |   |  |
| 14                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 13 | Female | 25 to 34 | 0 to 3 times per week | Business related | Okay          | Yes           |   |   |   |  |
| 15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 14 | Male   | 35 to 44 | 4 to 6 times per week | Business related | Easy          | Yes           |   |   |   |  |
| 16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 15 | Male   | 25 to 34 | 0 to 3 times per week | Business related | Okay          | Yes           |   |   |   |  |
| 17                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 16 | Female | 25 to 34 | 0 to 3 times per week | Business related | Difficult     | Yes           |   |   |   |  |
| 18                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 17 | Male   | 15 to 34 | 0 to 3 times per week | Business related | Difficult     | No            |   |   |   |  |
| 19                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 18 | Female | 25 to 34 | 0 to 3 times per week | Business related | Easy          | Yes           |   |   |   |  |
| 20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 19 | Male   | 25 to 34 | 0 to 3 times per week | Business related | Easy          | Yes           |   |   |   |  |
| 21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 20 | Female | 35 to 44 | 0 to 3 times per week | Business related | Easy          | No            |   |   |   |  |

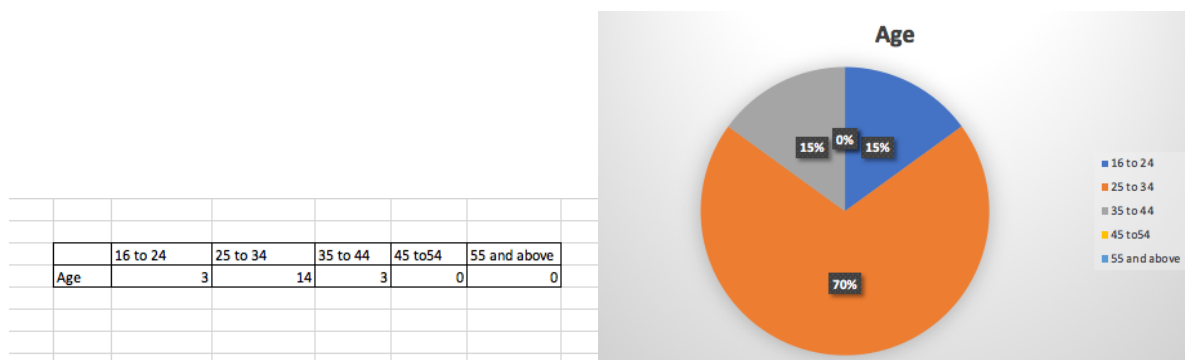
After creating an excel sheet with the total data, I then created a graphic in which demonstrates the percentage between male and Female students answering to my research.

**Please see the Graphic below as a demonstration of gender:**



As you can see, the total gender displays 40% female students and 60% male students out of 100% of the 20 students asked to fill up the research questionnaire.

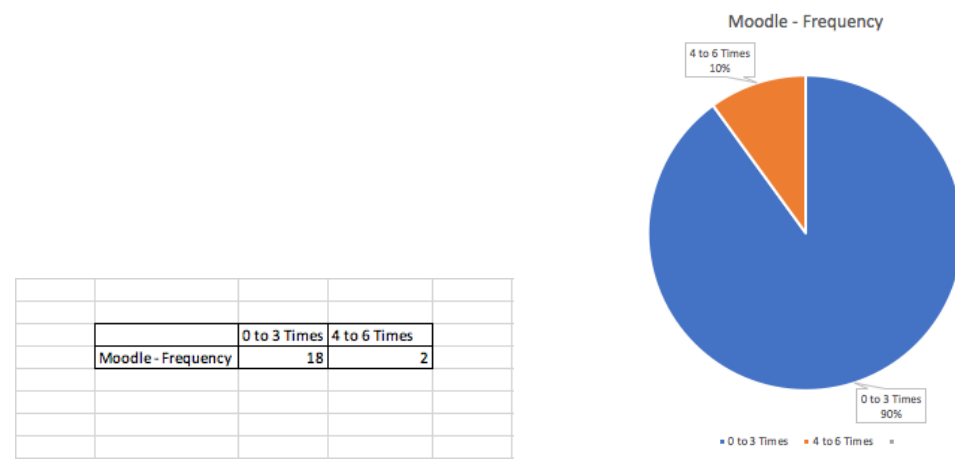
**Please see the Graphic below as a demonstration of students age:**



As you can see the variety of students age goes from sixteen years old and above 55 years old. Although the majority of students who answered to this research are in between the age of twenty - five years old and thirty - four years old, resulting in 70% in the graphics. The minority in between sixteen to twenty - four years old, equivalent to 15% of students.

Students from thirty - five to forty - four years old, also reaching a margin of 15%. As for students of fifty - five years old and above, the percentage was equivalent to zero.

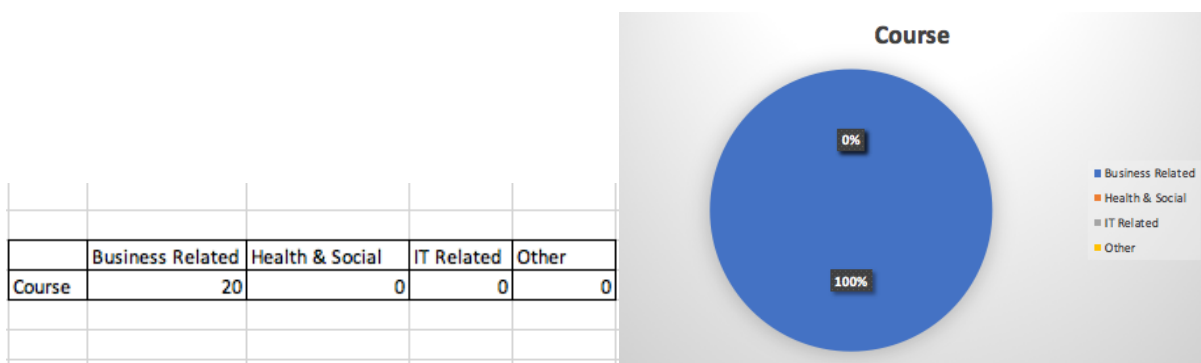
**Please see the Graphic below as a demonstration of the average on how often students use Moodle:**



This graphics demonstrates how frequently students use Moodle, and according to the research, majority of students uses Moodle in between zero to three times per week, resulting in a margin of 90% in comparison to minority of students who uses Moodle four to sixty times per week, resulting in a margin of ten per cent.

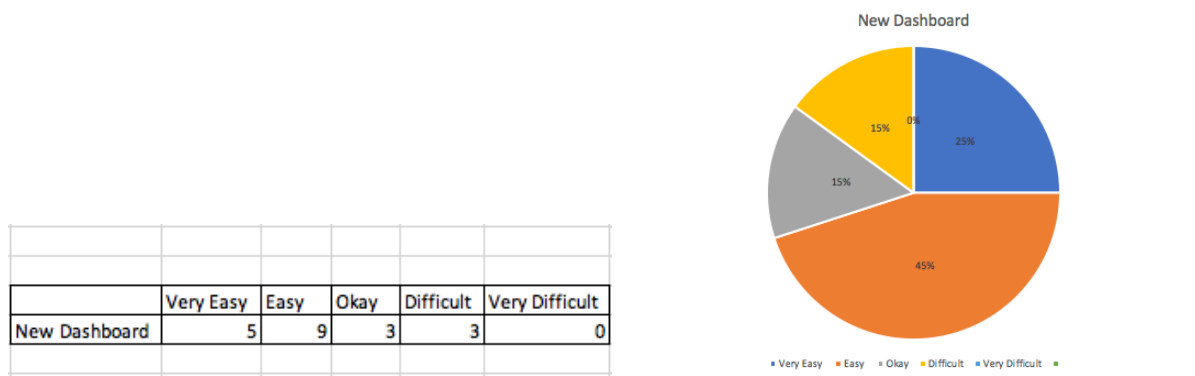
In other words, eighteen students use Moodle zero to three times per week and two students uses Moodle in between four to six times per week.

**Please see the Graphic below as a graphic demonstration of course selections students are attending:**



These graphics were very straight forward since the majority of students are attending a Business related course in the London Campus, resulting in a margin of one hundred per cent out of the twenty students who answered the questionnaire.

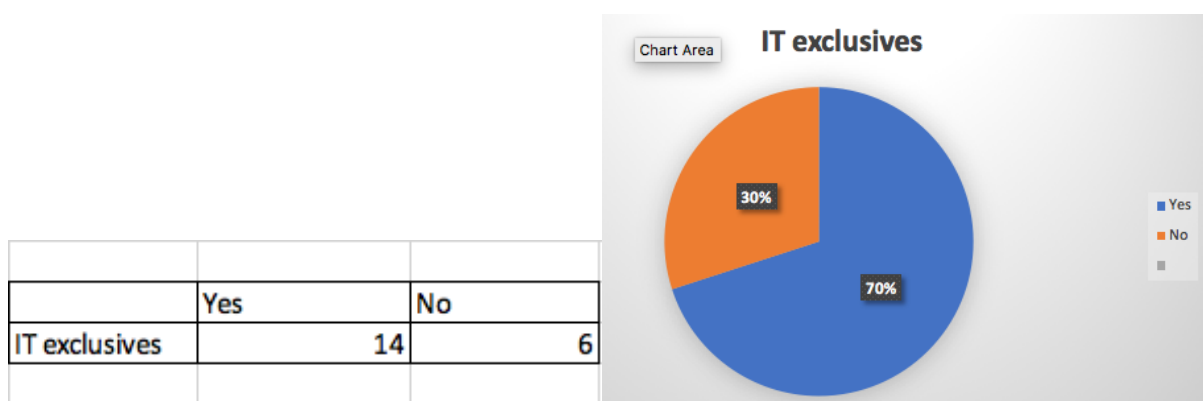
**Please see the Graphic below as a demonstration of easy or difficult students are finding the new dashboard on Moodle:**



This data collected is fundamental, because, from this, we can see how students are doing in their studies. During the first term holiday, a new and improved version of Moodle dashboard has been created. This question was essential to identify the outcome, how easy or difficult students are finding to use.

According to the answers, we can see that the majority of students finds it very easy, easy and okay to use, and the minority finds it difficult to use it.

**Please see the Graphic below as a demonstration for the use of IT exclusives on Moodle:**



These question has been developed because IT exclusives on Moodle gives access for students to download important applications to conclude their work in the commodity of their home or on the go.

These applications are free packages of Microsoft Office, One drive, Unidays, in which students can load their application and get student discounts on specific software that are very costly. However, as students, it would cost a lot less.

## **5 Results:**

As a result from my research, I can take that, from the data collected and the answers acquired from students, delivered a good knowledge on what can be improved on Moodle, and what sort of support students may need for their Academic development.

Also, it shows that most of the students have a knowledge of benefits on Moodle, such as IT exclusives.

It also helps the university to bring more awareness to students about how to make the best use of it for their own advancement, since those resources were originally created and offered for the students to excel in their academic lives.

## **6 Limitations of Study:**

As for limitations, I would like to mention that, since this research is primary, I was not able to research previous, secondary studies since it has never been done by someone else before. However, I hope that this research will give a good foundation for future ones to be developed in order to help students and the university to succeed, not only on Moodle subject but also other important topics too.

According to (word vice, 2020) limitations of the study are the flaws in sample size or methodology too, which can help answer unanswered questions.

## **7 Conclusion:**

As a conclusion, my research work showed that the impact of Moodle on students, displays:

Majority of students are mature, using Moodle for a reasonable amount of times per week.

Most of the students requested to answer this research are attending a Business related course, and they make good use of Moodle and finds the new – dashboard easy to use.

These students also do enjoy the features of IT exclusives as an advantage to their studies.

The strategy of handling the questionnaire sheets in person was beneficial, and fast, allowing the students to answer the question and hand me back on the spot, this method minimized possible delays to start and conclude this piece of work.

Making the use of graphics on excel, helped me to display the numerology and percentage on how the results look other than written, making the use of analysis in order to gather knowledge.

These techniques will be very important in the workplace and my academic journey.

Overall, I hope this first-ever research I have worked on, will help students, the university itself and future researchers in one single voice in the present time and for future improvements on Moodle, in the next months and years to come.

## **8 References:**

Business Dictionary. (2020) [Online] Available from <http://www.businessdictionary.com/definition/research-methodology.html> (Assessed 2nd January 2020)

Entrepreneur. (2020) [Online] Available from <https://www.entrepreneur.com/encyclopedia/primary-market-research> (Assessed 2nd January 2020)

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Word Vice. (2020) [Online] Available from <https://wordvice.com/how-to-present-study-limitations-and-alternatives/> (Assessed 3rd January 2020)

## **9 Appendix:**

**Student: Maria Luisa Salvagno**

**ID: 1818772**

## **Impact of Moodle on Students**

### **1. Please select your gender**

Male ☐ Female ☐

### **2. Please select your age group**

16 to 24 ☐

25 to 34 ☐

35 to 44 ☐

45 to 54 ☐

55 and above ☐

### **3. On average how often you use Moodle**

0 to 3 times per week ☐

4 to 6 times per week ☐

6 or more times per week ☐

### **4. Please select your course category**

Business related ☐

Health and Social Care ☐

IT related ☐

Other ☐

### **5. How do you find your new-dashboard on Moodle?**

Very Easy ☐

Easy ☐

Okay ☐

Difficult ☐

Very Difficult ☐

### **6. Do you make use of IT exclusives on Moodle?**

Yes ☐

No ☐

Student: Maria Luisa Salvagno

ID: 1818772

## Impact of Moodle on Students

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**3. On average how often you use Moodle**

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IT related ☐

Other ☐

**5. How do you find your new-dashboard on Moodle?**

Very Easy ☒

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Difficult ☐

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**6. Do you make use of IT exclusives on Moodle?**

Yes ☒

No ☐