Office365 for Improving Learning Quality on Online Tutorial and Online Practicum

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Abstract

One of the main means to enhance student's learning activities is by implementing technology in their learning activities. Nowadays, many universities in the world had applied this method due to many benefits that its offer. Universitas Terbuka (UT) is one of distance learning institution in Indonesia that had applied this method for its student. Therefore, this research intends to investigate the perceptions of students and tutors in utilizing the features and facilities of Office 365 in online tutorial and online practicum. Furthermore, the perceptions of students and tutors that was analyzed include the use of standard applications contained in Moodle and their expectations in utilizing Office365 features and facilities for online tutorials and online practicum. This study employs online survey that consists of 11 items. The perception of student regarding the Office365 features is influenced by age, gender, education, online tutorial training, and online tutorial activities. The students' responses of Office365 facilities are affected by age, gender, education, employment, training and online tutorial activities. Office365's features and facilities are most likely to influence the effectiveness of the distance learning process since students have the opportunity to interact with their teachers, peers, and learning materials. Moreover, the Office365 enable student to access the material through this facility. The other benefit is the existence of forum that could be used as discussions means between student and lecturer. Hence we recommend that all online activities should be designed to achieve the optimization of distance learning such as strengthening the online tutorial and online practicum, improving the ICT competence of academic staff and their involvement in online tutorial and online practicum, improving services to all UT's stakeholders and developing an upgrade of standard application training of Moodle and Office365.

Keywords: Office365, online tutorial, online practicum, distance learning

1. INTRODUCTION

1.1. Background

Higher Education through Open and Distance Learning (ODL) have unique characteristics, which distinguishes it from face-to-face university. These differences include various aspects, whereas one of which is in the learning system. Face-to-face university has more emphasis on learning in the form of face to face whilst university with ODL applies distance learning. Distance learning system is supported by various aspects, one of them is tutorial.

Tutorial is one important aspect in the implementation of university with ODL. Students who study with distance learning are required to independently solve all the learning problems they faced. Learning materials printed in the form of modules and newsletter via emails and university's website are various means that accompany students in solving problems encountered. However, these students often face loneliness and boredom, isolation and a sense of solitude that sometimes lowers the spirit of learning and ultimately leads to drop outs . The results of various studies relating to high drop-out rates reveal that distance learning students generally face two types of problems: (1) problems related to achievement and ability acquisition and (2) problems related to learning motivation (Flinck & Flinck, 1990). To overcome this problem, university with ODL develop two ways communication/interaction between student and tutor/facilitator . Such communication/interaction is generally conducted in the form of tutorial.

E-learning has experienced tremendous growth over the past few years, the learning paradigm; technological solutions, methods and pedagogical approaches have been developed, discarded and

adopted. Learning Management System (LMS) is a software that automates the administration of training activities. LMS not only records users or learners, tracks courses in catalogues and records data from learners, but also provides reports to management. LMS has achieved a balance to meet the structure and methods of traditional schools, universities and other educational institutions.

Moodle is an open source Course Management System (CMS), as well as a Learning Management System (LMS) or Virtual Learning Environment (VLE). In order for Moodle to work properly, it needs to be installed on a web server somewhere, either on one of its own computers or one in the company's web hosting (http://moodle.org/). Moodle is chosen for a variety of reasons i.e. free software licenses, rich experiences and reliability.

The limited time of online classroom teaching sometimes hinders the tutors in giving all the learning materials to their students. This is another problem for tutors who want to convey the subject in detail. This difficulty is much complained by the students and tutors today that sometimes the material that needs a long explanation should be explained in a short time. In addition, teachers are always provide tests manually along with test result. This is very inefficient because much time is consumed on the job done manually.

Practicum is one form of teaching and learning activities for applicative material. It is held as a learning support for students aimed at assisting students in understanding the concepts and theories that explained in modules, so that students can achieve the expected competencies after taking a certain course .

Agribusiness study program is one of the study programs in the Faculty of Mathematics and Natural Sciences that has 18 courses of practicing. In this course, practicum is a requirement in completing the course. This shows that the practicum must be done by students of Agribusiness study program, whereas if there is no practicum grade then the grade of the course taken cannot be processed.

Implementation of practicum in Agribusiness study program should accommodate all students that spread all over Indonesia. Whilst the reality is that student domicile is not always easy to reach, and spread in different locations hence makes it hard to gather them in on location to do practicum. Thus, the constraints that must be considered include the following : (1) The spread of UT students locations across the archipelago so that difficulties arise to carry out practicum activities in groups ; (2) Constraints in the recruitment of supervisors of practicum activities in the regions ; and (3) the cost constraint.

These constraints must be immediately resolved so it won't interrupt the learning process. And therefore there should be an alternative solutions that could minimize these problems and constraints.

Independent practicum is one of the breakthrough by study program to help students implement the course's practicum. Through independent practicum, students can carry out practicum at the location of each residence in accordance with their needs. To conduct this independent practicum, a new model practicum guidebook is designed whereas there is no necessity of obtaining supervisors from other parties. A practicum guidebook is created for each course of practice, which is structured in such a way that it can lead students to a practicum without direct supervision.

Since 2012 UT has been working with Microsoft. In 2014 UT had launched the Microsoft Office 365 for students. This program is UT's partnership with Microsoft, which provides a new experience in improving the effectiveness of online distance learning, by utilizing the integrated communication solutions with enterprise-standard of educational environment.

In the use of e-learning in UT researchers tried to analyse the utilization of features and facilities of Office 365 in e-learning, whereas the utilization of Office 365 is still less efficient and effective, therefore the existence of Office 365 applications are not used optimally.

Researchers try to integrate Office 365 with Moodle. This is intended to improve teaching and learning process in online tutorial and practicum for students as an effort to improve quality in the future.

From the above background, several problems that can then be solved by the integration of Office 365 and Moodle are as follow:

1. Less optimal learning process in the online classroom .
2. Tutors have difficulty in teaching all the topics or materials in a very short online classroom.
3. Students have difficulty interacting with tutors directly to discuss academic problems.
4. Tutor has difficulty in giving test because it is still conducted manually especially test which require cooperation within group .

1.2. Research problem

Referring to the background mentioned above, then the formulation of the problem in this study are:
1. What is the perception of students and tutors in the use of standard applications contained in Moodle ?
2. What students and tutors expectations to take advantage of Office 365 features and facilities for online tutorials and online practicum?

1.3. Research purposes

Based on the problem formulation, research objectives are:
1. To analyse student perceptions and tutors in the use of standard applications contained in Moodle.
2. To analyse the expectations of students and tutors in utilizing Office 365 features and facilities for online tutorials and online practicum.

1.4. Benefits of research

The results of this study are expected:
1. Theoretically, it provides an expansion of insight about the utilization of Office 365 features and facilities for online tutorials and online practicum .
2. Practically, it is an input for UT for improving student learning support services .

2. LITERATURE REVIEW

2.1. Effectiveness

According to Danfur (2009) effectiveness is a measure on how far the target (quantity, quality, and time) has been achieved; the greater the percentage of targets achieved, the higher the effectiveness. A program/work is called effective if the achievement of the output target should be bigger than the realization output, as measured by comparing the output with the realization output.

Arifin (2009) defines effectiveness as doing the right thing at the right time for a long period of time. Effectiveness is a measure of the organization's successfulness. As the organization's ability to achieve all its needs, the organization must be able to organize its resources to achieve goals.

Based on the notion of effectiveness, it can be concluded that effectiveness is a measure on how far the target (quantity, quality, and time) has been achieved, which is executed with the correct procedure by optimizing the existing resources, and the target that has been determined first.

2.1. Tutorial

Indonesian Dictionary (1997) defines tutorial as: (1) class tutoring by a tutor for a student or a small group of students, or (2) additional teaching through tutors. While a tutor is defined as (1) a person who teaches a person or a small number of students (at home, not in school), or (2) a lecturer guiding a number of students in their studies.

Based on those definition, seen from the activity, tutorial means teaching others or providing assistance to someone to learn. Such learning assistance may be provided by an older person or a peer. The tutorial activities involve people who teach/give help called tutors and people who are learning or who are given study assistance (tutee). There are materials/learning resources between the tutor and the

tutee, which are the sources of learning studied by the tutee with the tutor. Furthermore, between the tutor and the tutee there is interaction or communication, and this is what is the essence of the tutorial.

Universitas Terbuka (UT)'s students can choose the type of tutorial that suits their interests and abilities. This applies to all students except for student that take basic education program whereas the subject that offered tutorial has been predetermined. The types of tutorials that students can follow are:

1. Face-to-face tutorials. Face-to-face tutorials is a learning support for students implemented in every UT's regional offices. To be achieved as expected, learning support should also include designing, provision of academic facilities in the form of utilization of facilities and infrastructure that can be utilized by students, such as: (a) tutorial room, (b) mini lab, (c) mini library,) computer room, and (e) internet access.
2. Online Tutorial. Online Tutorial is a learning support for students via internet. Teaching and learning activities are conducted online between fellow students and between students and tutors.
3. Tutorial through radio, television and mass media. Students can follow the tutorial via radio through national program of RRI (Indonesia Radio Program). This tutorial is conducted 6 times a week, Monday through Saturday. Especially for teachers, tutorials through television can be listened to through TV Edukasi channel 2. Moreover, some local mass media also presents tutorial for UT students.
4. Online Counselling. This activity is done online through UT website, via the information service menu/communication forum or send e-mail to head of department/head of the study program (Universitas Terbuka, 2005).

This research is focused on tutors of online tutorials in UT. According to Wardani (2000), in Open and Distance Higher Education it is required a serious and continuous tutorial management; careful planning and regular evaluation for the development of tutorial programs.

2.2. Practicum

According to Sund and Trowbridge (1973) laboratory work or practicum includes 1) planning experiments and composing hypotheses, 2) assembling equipment, 3) compiling materials and equipment, 4) observing natural phenomena, 5) observing a process, 6) collect and record data, 7) modify equipment, 8) conducting readings on gauges, 9) calibrating equipment, 10) drawing materials and graphs; 11) analyzing data; 12) drawing conclusions from data; 13) making experimental reports; 14) explaining experiments performed; 15) identifies problems for further studies, 16) removes, cleanses, stores, and repairs equipment.

While Djamarah and Zain (2002, p.95) explained that practicum method is a learning process in which learners conduct and experience themselves, follow the process, observe the object, analyze, prove and draw the conclusion of an object, the state and process of the material learned about natural phenomena and their interactions. So it can answer the question 'how is the process?; consists of what elements?; Which way is better?; How can the truth be known?' All of which are obtained through inductive observation.

3. FRAMEWORK OF THINKING

This research intended to know the level of effectiveness of Office 365 features and facilities in Moodle. The effectiveness of Office 365 features and facilities is thought to be related to the level of student satisfaction in utilizing online tutorials. The relationship between research variables is presented in Figure 1.
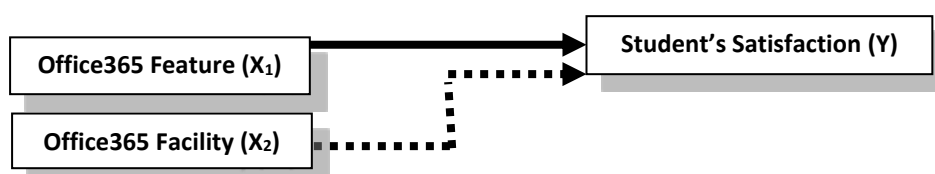

Figure 1. Framework of Thinking the Effectiveness of Office 365 Integration within Online Tutorial

3.1. Research Hypothesis

Based on problems and frameworks that have been proposed, then the research hypothesis is: there is a relationship between the effectiveness of features and facilities of Office 365 with the level of student satisfaction in using online tutorial.

4. RESEARCH METHOD

4.1. Sample Research

The study population is all online tutorial tutors and students in UT. Research sample are all tutors of online tutorial either before or after the registration period of 2017.1.

4.2. Research Design

Based on the research objectives to be achieved, the type of research used is a descriptive correlational research conducted to see the relationship between research variables and test the hypothesis that has been formulated previously. The study consisted of independent variables of Office 365 features (X_1) and Office 365 facilities (X_2); and the dependent variable is student satisfaction (Y).

The statistical test is done to know the relationship of each variables, therefore using the quantitative approach and to explain the substance of statistical test results it used qualitative approach.

4.3. Operational Definition

Operational definitions in research activities are given to prevent misdirection against predefined concepts, thereby variables can be measured clearly and measurably. The operational definitions in this research are:

Effectiveness of Office 365 Features (X_1)
1. Material ($X_{11)}$ is the level of adequacy and appropriateness of Office 365 features.
2. Completeness (X_{12}) is the level of completeness of Office 365 features.
3. Tutor (X_{13}) is the level of tutor quality.

Effectiveness of Office 365 (X_2)
4. Facility support (X_{21}) is the level of facility support of Office 365 facility.
5. Ease of use (X_{22}) is the level of ease of Office 365 facility.

Student Satisfaction (Y)
Student satisfaction is the level of student satisfaction of Office 365 on online tutorial.

4.4. Instrumentation

Instruments or tools used in the study is a questionnaire that contains a list of questions related to the variables in the study. The questionnaire includes independent variables and dependent variables.

4.5. Validity Test

Validity is a measure that indicates the validity of an instrument. The valid instruments means it has high validity, and vice versa. An instrument is said to be valid, if able to measure what is desired or reveal data from the variables examined appropriately (Hasan, 2002).

This study uses a technique of construct validity, with the following steps: (1) adjusting the list of questions to the essence of the conceptual framework obtained in the study of literature, mainly focusing on the variables and indicators studied; (2) consultation with other parties who are deemed to have competence on measuring materials.

4.6. Reliability Test

According to Singarimbun and Sofyan (1989) reliability is an index indicating the extent to which a measuring instrument can be trusted or reliable. When a measuring instrument is used twice to measure the same symptoms and the measurement results are relatively consistent, then the measuring tool is reliable.

Reliability is an index that indicates the extent to which a measuring device is reliable or reliable. The measuring instruments in testing reliability in this study is SPSS (Statistical Package for the Social Science) version 21.

An experimental test was conducted on 10 tutors and students outside the respondents, who had similar characteristics to the respondents. According to Malhotra (1996), the instrument is considered to be quite reliable if α ≥ 0.6.

4.7. Data collection

The data collected consist of primary and secondary data. Primary data was obtained by visiting and interviewing respondents based on the questionnaire. This data collection will be assisted by an enumerator, who will first be briefed on anything related to this research. Qualitative data collection is done by conducting in-depth interviews with selected respondents to find the meaning of quantitative data.

In addition to interviewing the respondents, other parties related to the research are also interviewed, namely academic staff of UT's regional office.

4.8. Data analysis

The collected data is processed through the editing, coding, and tabulation steps with intervals that generated in each measurement result. Data obtained then processed and analyzed quantitatively and qualitatively.

Hypothesis testing uses nonparametric statistics to measure the closeness of the relationship between Office365 features and facilities with student satisfaction level. The reason for using nonparametric statistic test, because the data scale used is ordinal. Hypothesis testing is done by using Rank Spearman correlation test at α = 0,05 or α = 0,01 (Siegel, 1992), and SPSS (Statistical Package for the Social Science) version 21 program to facilitate data processing.

5. RESULTS AND DISCUSSION

5.1. Results

Based on the online survey, there are 1,524 total responses, but only as many as 970 response is complete answer, the rest as many as 554 respondents did not complete the answer. Complete responses are then processed and analyzed into the results of research after the analysis, as follows:

1. Respondents

Table 1. Respondents by characteristic

No.	Characteristic	Student Frequency	Student %	Tutor Frequency	Tutor %	Total Frequency	Total %
1.	*Age*						
	Less than 25 years	306	47,6	2	0,9	308	35,6
	25 to 29 years	126	19,6	29	13,0	155	17,9
	30 to 34 years	91	14,2	54	24,2	145	16,7
	35 to 39 years	66	10,3	30	13,5	96	11,1
	40 to 44 years	29	4,5	36	16,1	65	7,5
	More than 44 years	25	3,9	72	32,3	97	11,2
2.	*Sex*						
	Male	306	47,6	127	57,0	433	50,0
	Female	337	52,4	96	43,0	433	50,0
3.	*Education*						
	High School	468	72,8			468	54,0
	D1	25	3,9			25	2,9
	D2	24	3,7			24	2,8
	D3	81	12,6			81	9,4
	S1	39	6,1	10	4,5	49	5,7
	S2	5	0,8	175	78,5	180	20,8
	S3	1	0,2	38	17,0	39	4,5
4.	*Occupation*						
	Retired	1	0,2	3	1,3	4	0,5
	Private Employee	251	39,0	46	20,6	297	34,3
	Public Employee	130	20,2	105	47,1	235	27,1
	entrepreneur	38	5,9	9	4,0	47	5,4
	Unemployee	85	13,2	6	2,7	91	10,5
	Others	138	21,5	54	24,2	192	22,2
5.	*Online Tutorial Experience*						
	Less than 1 year	327	50,9	44	19,7	371	42,8
	1 years	79	12,3	21	9,4	100	11,5
	2 years	93	14,5	52	23,3	145	16,7
	3 years	71	11,0	19	8,5	90	10,4
	4 years	34	5,3	14	6,3	48	5,5
	More than 4 years	39	6,1	73	32,7	112	12,9
6.	*Online Tutorial Training*						
	Participant	394	61,3	185	83,0	579	66,9
	Not Participant	249	38,7	38	17,0	287	33,1
	Total Respondents	*643*	*100*	*223*	*100*	*866*	*100*

Note:
- **Respondents** 866 people, 643 students, and Tutors 223 people.
- **Students**, nearly half (47.6%) are <25 years of age, about 20% between 25-30 years, and about 30% above that age; balanced between the number of men and women (about 2% more women); recent education dominant secondary school (72.8%), 20.2% diploma, other 7% undergraduate or above; employment of civil servants, private sector or self-employed is about 65%, 13% not yet employed, and 22% other (housewives, non-permanent employee, or retired).
- **Tutor**, 85% age 30 years and over, about 50% over 40 years old; the number of men and women balanced (men about 7% more); tutor education 79% magister, 17% doctorate, other 4% undergraduate; employment, almost half of civil servants (47%), private sector (21%), and other 30%.

- **Online tutorial training and experience:** Students, 60% have had training, the number that follows online tutorial is balanced between those who are over with less than a year; Tutor, 80% ever been training, about 70% has been tutoring for two years or more.

Table 2. Respondents by Regions

No.	Region	Student	Tutor	Total	No.	Region	Student	Tutor	Total
1	Banda Aceh	10	1	11	22	Pontianak	13	1	14
2	Medan	19	1	20	23	Banjarmasin	12	1	13
3	Batam	21	3	24	24	Samarinda	20		20
4	Padang	14	1	15	25	Palangkaraya	19	1	20
5	Pangkal Pinang	19	4	23	26	Manado	4		4
6	Pekanbaru	16	2	18	27	Gorontalo	3	1	4
7	Jambi	8	3	11	28	Palu	6		6
8	Palembang	12	1	13	29	Majene	4		4
9	Bengkulu	11	20	31	30	Makassar	10	7	17
10	Bandar Lampung	15	5	20	31	Kendari	2	1	3
11	Jakarta	88	55	143	32	Denpasar	22	3	25
12	Serang	18	2	20	33	Mataram	8	1	9
13	Bogor	32	9	41	34	Kupang	16	1	17
14	Bandung	29	10	39	35	Ambon	4	1	5
15	Purwokerto	24	7	31	36	Ternate	4	2	6
16	Semarang	18	5	23	37	Jayapura	4		4
17	Surakarta	23	2	25	38	Sorong	6	1	7
18	Yogyakarta	25	8	33	39	Foreign Countries	4		4
19	Surabaya	20	2	22	40	Kalimantan Utara	4	1	5
20	Malang	28	5	33	41	UT's Head Office	2	53	55
21	Jember	26	2	28		**Total**	**643**	**223**	**866**

5.2. Tutor Training

Table 3. Satisfaction of tutor training

No.	Training Aspect	Frequency, N=185					Percentage (%)				
		DK	US	LS	S	VS	DK	US	LS	S	VS
1	Coverage		2	21	117	45		1,1	11,4	63,2	24,3
2	Organized Content		1	25	121	38		0,5	13,5	65,4	20,5
3	Content's benefit for tutor		1	14	100	70		0,5	7,6	54,1	37,8
4	Content's relevance for tutor's need	1	1	17	106	60	0,5	0,5	9,2	57,3	32,4
5	Content is up to date	1	4	29	112	39	0,5	2,2	15,7	60,5	21,1

Note : DK, Do not know; US, Unsatisfactory; LS, Less Satisfactory; S, Satisfactory; VS, Very Satisfactory

- Learning material update 80% satisfy or very satisfy
- Other aspects (1-4) generally 85% have been satisfy or very satisfy.
- There are still tutors who say they do not know when answering the questions of no. 4 and 5.

5.3. Online Tutorial Activities

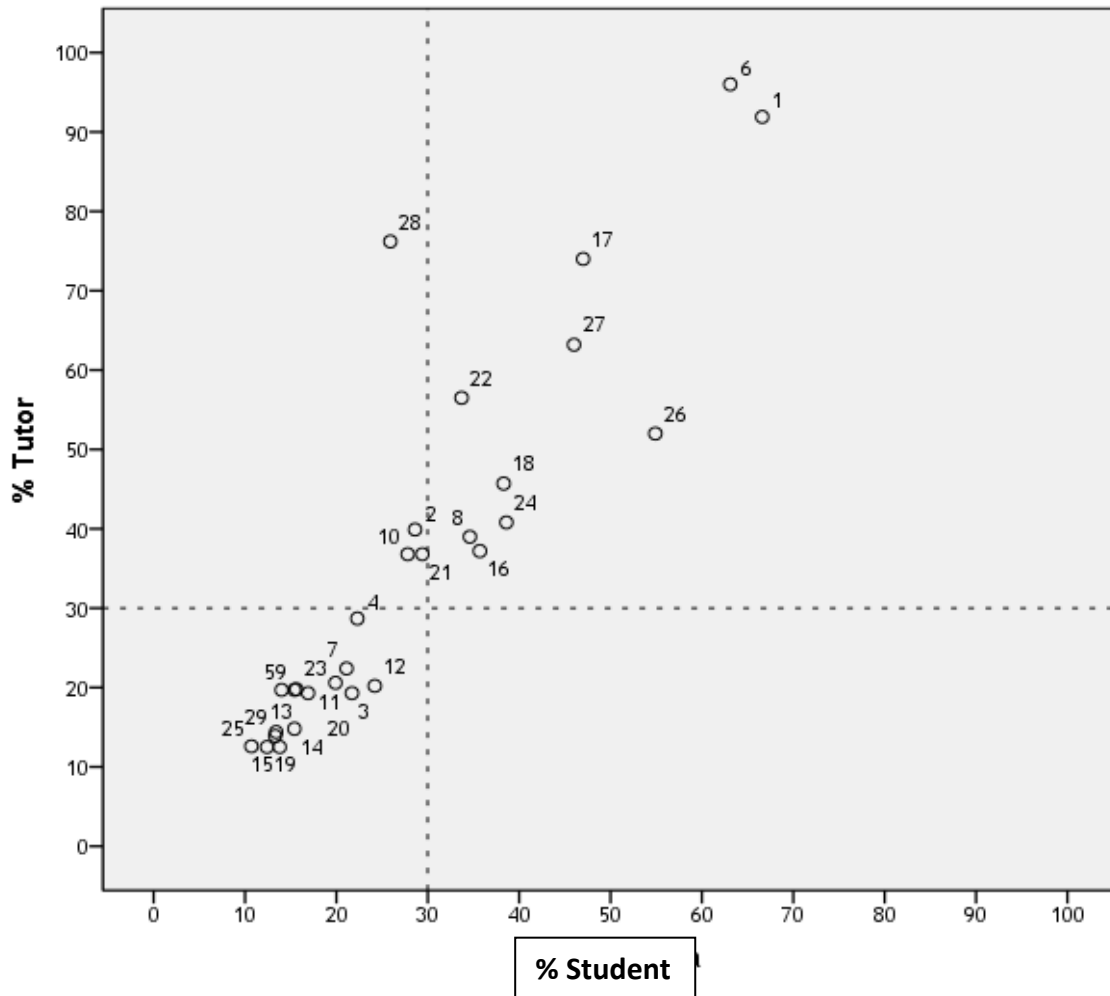Table 4. Online tutorial activities of student and tutors

Figure 1. Percentage of students and tutors on items of activity that are often or always used in online tutorial activities

[*Notes* : 1, Assignment ; 2, Attendance; 3, Chat; 4, Choice; 5, Database; 6, LAB EJSApp ; 7, External Tool; 8, Feedback; 9, Forum; 10, Glossary; 11, Lesson; 12, Open Meetings; 13, Quiz; 14, Reengagement; 15, SCORM Package; 16, Survey; 17, Virtual Programming Lab ; 18, Wiki; 19, Workshop; 20, Book; 21, File; 22, Folder ; 23, IMS Content Package; 24, Label; 25, Page; 26, URL ; 27, GISMO (Learning Analytic) ; 28, Self-Exercise ; 29, Utilization of OER]

Note:
- Activities 1, 6, 28, 17, 27, and 22, are more often done by tutors than students
- Activities 10, 21, 2, 8, 16, 24, 18, and 26 are commonly used by quite a lot of students and tutors (each about 30-50% of students and tutors)
- Other activities (15 items): 19, 15, 25, ..., 3, 12, 7, and 4, are often used by a small number of students and tutors (about 10-30% of students and tutors)
- No visible activity is more used by students than tutors
- So, there appear to be two patterns, i.e. : tutor activities (more often than students) and tutor and student activities (equally often).

5.4. Office365 Features and Facilities

Table 5. Office365 features and facilities considered necessary by students and tutors

No.	Features and Facilities of Office365	Student, N=643		Tutor, N=223	
		Frequency	%	Frequency	%
Features					
1	*Easy Collaboration*	588	91,4	202	90,6
2	*Document Fidelity*	623	96,9	219	98,2
3	*Familiar Tools*	623	96,9	219	98,2
Facilities					
4	Email and Calendar	626	97,4	213	95,5
5	File Sharing	617	96,0	216	96,9
6	Online Conference	610	94,9	199	89,2
7	Skype and Instant Messenger	598	93,0	197	88,3
8	Discussion Room	612	95,2	206	92,4
9	Social Network	591	91,9	204	91,5
10	Work Management	604	93,9	206	92,4
11	Online Scheduling	627	97,5	213	95,5
12	Digital Storytelling	544	84,6	193	86,5
13	Search Engine	600	93,3	206	92,4
14	Work Flow Automation	599	93,2	210	94,2

Note:
- Student and tutor consider all Office365 features and facilities (90% or more) necessary, except facilities no 12 are considered unnecessary by approximately 20% of students, and facilities 6, 7, and 12 are considered unnecessary by approximately 20% of tutors.

Table 6. Distribution of the number of students who declared **unnecessary** features or facilities of Office365

No.	Feature and Facility of Office365	Item that has ben answered "unnecessary"												Total	%
		0	1	2	4	5	6	8	9	10	11	12	13		
12	Digital Story-Telling	4	1	1	2		1	3	11	14	19	26	17	**99**	15,4
1	*Easy Collaboration**	4	1	1	3			2	5	7	7	10	15	**55**	8,6
9	Internal Social Network	4	1	1	2	1	1	2	4	9	8	9	10	**52**	8,1
7	Skype and Instant Messenger	4	1	1	1	1	1	2	5	7	5	12	5	**45**	7,0
14	Workflow Automation	4		1	2	1		1	6	7	10	9	3	**44**	6,8
13	Search Engine	4	1	1	1	1	1	1	6	11	6	6	4	**43**	6,7
10	Work Management	4	1	1	2				5	9	7	6	4	**39**	6,1
6	Online Conference	4	1	1	2	1	1	2	5	3	6	5	2	**33**	5,1
8	Discussion Room	4	1	1	1		1	1	7	3	4	4	4	**31**	4,8
5	Storage and File Sharing	4	1		3	1		1	5	3	2	3	3	**26**	4,0
2	*Document Fidelity**	4	1		3	1			1	3	2	3	2	**20**	3,1
3	*Familiar Tools**	4	1	1	3	1	1	2	1	2	2	2		**20**	3,1
4	Email and Calendar	4	1	1	3		1		1	1		4	1	**17**	2,6
11	Online Schedulling	4	1	1	2	1		1	3	1		1	1	**16**	2,5

Note : %) toward N = 643; *) Feature

- Out of 55 respondents who declare unnecessary in the **Collaboration** items (feature 1): 15 people stated need for other items (13 items), 4 stated not necessary for all other items.
- Out of 99 respondents who declare unnecessary items of Facilities 12: 17 people stated need for another item, 4 stated unnecessary for everything.
- There are 4 respondents stated there is no need to get all 14 features or facilities.
- There is one respondent who declares no need on any item (except item 14) but states it is necessary on one other point.

Table 7. Distribution of the number of students stating the **need for** features or facilities of Office365

No.	Feature and Facility of Office365	1	2	4	5	6	8	9	10	11	12	13	14	Total	%
11	Online Schedulling			1		1	2	10	19	26	49	70	449	**627**	97,5
4	Email and Calendar				1		3	12	19	26	46	70	449	**626**	97,4
3	Familiar Tools *						1	12	18	24	48	71	449	**623**	96,9
2	Document Fidelity *		1			1	3	12	17	24	47	69	449	**623**	96,9
5	Storage and File Sharing		1			1	2	8	17	24	47	68	449	**617**	96,0
8	Discussion Room			2	1		2	6	17	22	46	67	449	**612**	95,2
6	Online Conference			1			1	8	17	20	45	69	449	**610**	94,9
10	Work Management			1	1	1	3	8	11	19	44	67	449	**604**	93,9
13	Search Engine			2			2	7	9	20	44	67	449	**600**	93,3
14	Workflow Automation	1		1		1	2	7	13	16	41	68	449	**599**	93,2
7	Skype and Instant Messenger			2			1	8	13	21	38	66	449	**598**	93,0
9	Internal Social Network			1			1	9	11	18	41	61	449	**591**	91,9
1	Easy Collaboration *				1	1	1	8	13	19	40	56	449	**588**	91,4
12	Digital Story-Telling			1	1			2	6	7	24	54	449	**544**	84,6

Note : %) toward N = 643; *) Feature

- There are 449 students (70% of 643) states need all item of office365 features and facility. Approximately 25% of other students stated it is necessary at more than half of the number of items of other features or facilities (8-13 items).

Table 8. Distribution of the number of **tutors** who declared **unnecessary** features or facilities of Office365

No.	Feature and Facility of Office365	0	4	5	8	9	10	11	12	13	Total	%
12	Digital Story-Telling	2	1	1		5	2	8	6	5	**30**	13,5
7	Skype and Instant Messenger	2		1		3	3	6	5	6	**26**	11,7
6	Online Conference	2	1	1		4	5	3	5	3	**24**	10,8
1	Easy Collaboration *	2		1		2	2	5	2	7	**21**	9,4
9	Internal Social Network	2	1	1		4	5	4	1	1	**19**	8,5
8	Discussion Room	2	1	1	1	2	4	4	2		**17**	7,6
10	Work Management	2	1	1	1	2	2	4	2	2	**17**	7,6
13	Search Engine	2	1	1		2	4	3	1	3	**17**	7,6
14	Workflow Automation	2	1	1	1		1	5	2		**13**	5,8
4	Email and Calendar	2	1		1	2	1	1	1	1	**10**	4,5
11	Online Schedulling	2	1		1	2	1	1	2		**10**	4,5
5	Storage and File Sharing	2			1	2	1		1		**7**	3,1
2	Document Fidelity *	2						1		1	**4**	1,8
3	Familiar Tools *	2	1					1			**4**	1,8

Note : %) toward N = 223; *) Feature

Table 9. Distribution of the number of **tutors** who declared the **need for** features or facilities of Office365

No.	Feature and Facility of Office365	Item that has ben answered "necessary"									Total	%
		4	5	8	9	10	11	12	13	14		
2	*Document Fidelity* *	1	1	1	6	7	15	15	28	145	219	98,2
3	*Familiar Tools* *		1	1	6	8	14	15	29	145	219	98,2
5	Storage and File Sharing	1	1		4	7	15	14	29	145	216	96,9
4	Email and Calendar		1		4	7	14	14	28	145	213	95,5
11	Online Schedulling		1		4	7	14	13	29	145	213	95,5
14	Workflow Automation				6	7	10	13	29	145	210	94,2
8	Discussion Room				4	4	11	13	29	145	206	92,4
10	Work Management				4	6	11	13	27	145	206	92,4
13	Search Engine			1	4	4	12	14	26	145	206	92,4
9	Internal Social Network			1	2	3	11	14	28	145	204	91,5
1	*Easy Collaboration* *	1	1		4	6	10	13	22	145	202	90,6
6	Online Conference			1	2	3	12	10	26	145	199	89,2
7	Skype and Instant Messenger	1	1	3	5	9	10		23	145	197	88,3
12	Digital Story-Telling			1	1	6	7	9	24	145	193	86,5

Note : %) toward N = 223; *) Feature

- As many as 145 (65%) tutors need all features/facilities, 2 respondent think unnecessary (Table 8)
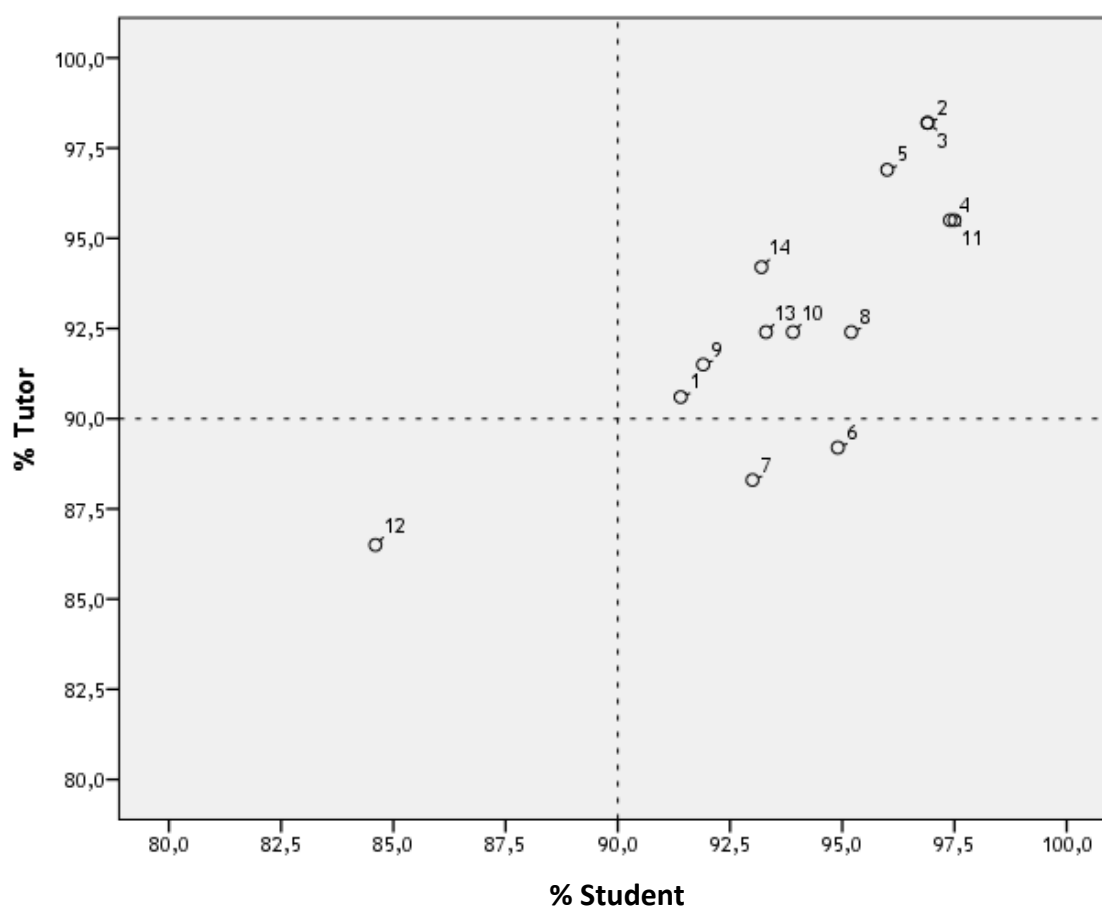

Figure 2. Percentage of students and tutors who need Office365 features and facilities
[*Caption* : 1, Easy Collaboration; 2, Document Fidelity; 3, Familiar Tools; 4, Email and Calendar; 5, File Storage and Sharing; 6, Online Conference; 7, Skype and Instant Messaging (text, audio, video); 8, Discussion-based workspace; 9, internal social networking; 10, Work management (personal academic calendar); 11, Online scheduling; 12, Share digital story professionally; 13, Search and discovery (search engine); 14, workflow automation]

Note:
- Facilities number 12 is required by approximately 85% of each student and tutor
- Facilities 6 and 7 are required by more students than tutors
- Other facilities (9, 13, ..., 11, 4, 5) and all features (1, 2, and 3) are required by almost all students and tutors (90% or more).

Table 10. Logit regression coefficient of factors and online tutorial activities on whether or not Office365 features and facilities in online tutorial are required.

FEATURE AND FACILITY	FACTOR							ACTIVITY		
	Q0	Q1	Q2	Q4	Q5	Q6	Q7	ACT1	ACT2	R^2
FEATURE										
1 Easy Collaboration *	-0,02	**0,41**	0,26	**-0,20**	-0,03	-0,01	0,04	**-0,49**	**0,52**	0,28
2 Document Fidelity *	-0,47	**0,33**	0,42	0,03	0,05	0,05	**-0,75**	**-0,86**	0,12	0,45
3 Familiar Tools *	1,28	**0,70**	**1,01**	**-0,33**	0,21	0,19	-0,21	**-0,78**	**0,20**	0,69
FACILITY										
4 Email and Calendar	0,12	**0,61**	**0,74**	**-0,40**	0,00	0,02	0,13	-0,45	0,43	0,48
5 Storage and File Sharing	0,80	-0,04	0,40	-0,11	-0,08	**-0,34**	**-0,80**	-0,19	-0,32	0,43
6 Online Conference	-0,38	-0,06	-0,27	-0,10	-0,09	-0,02	-0,35	0,31	-0,07	0,24
7 Skype and Instant Messenger	0,02	**0,33**	-0,09	**-0,24**	**0,30**	**-0,17**	-0,29	-0,11	-0,19	0,34
8 Discussion Room	**-1,62**	-0,01	**1,05**	**0,30**	**-0,19**	**-0,14**	-0,29	**-0,57**	**0,57**	0,39
9 Internal Social Network	-0,64	**0,26**	**0,81**	-0,05	0,10	0,06	-0,08	0,44	-0,24	0,27
10 Work Management	-1,14	0,11	0,15	0,17	-0,03	**-0,27**	-0,18	-0,23	0,24	0,26
11 Online Schedulling	-0,43	0,11	0,52	-0,03	0,02	0,03	**-0,99**	-0,52	0,21	0,25
12 Digital Story-Telling	0,39	-0,07	0,16	0,02	-0,02	-0,09	-0,02	-0,31	**0,62**	0,13
13 Search Engine	**-1,57**	0,14	**0,56**	**0,25**	0,05	**0,27**	0,13	0,30	-0,18	0,34
14 Workflow Automation	-0,19	0,18	0,00	0,02	**0,19**	-0,09	-0,40	**-0,67**	**0,76**	0,22

Note : Q0, Student and Tutor; Q1, Age; Q2, Gender; Q4, Education; Q5, Occupation; Q6, Tutor Experience; Q7, Training; ACT1, Activity dominance by tutor; ACT2, Activity balance between tutor and student; number in bold t value > 1.0; underlined number t value > 2,0; Effective Sample Size 338

- Tutor and student responses differ on facilities 8 and 13.
- Responses to whether or not features are affected by age, gender (no 3), education (no 1 and 3), online tutorial training (no 2), or online tutorial activities (no 1 and 2).
- Except on facilities 6 and 12, responses to the availability of facilities are affected by age, gender, education, employment, training and/or online tutorial activities.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1. Conclusion

- The response to whether or not a feature is necessary is influenced by age, gender, education, online tutorial training, and online tutorial activities.
- Except for online conferencing facilities and digital story sharing, responses to whether or not facilities are necessary is influenced by age, gender, education, employment, training and/or activities of online tutorial.

6.2. Recommendation

It is required an activities designed to achieve the optimization of distance learning include strengthening the environments of online tutorial.
- Increased ICT competence of academic staff and their involvement in online tutorial.

- Improved excellent service capacity to all UT stakeholders.
- Developing and upgrading the training of using Moodle and Office365 standard application to complement each other.

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