

# Utilization of UT-Online by the Students of Universitas Terbuka Indonesia

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## ABSTRACT

UT-Online is a student learning support service based on information and communication technology provided by Universitas Terbuka Indonesia (UTI). This study aimed to analyze (1) the characteristics of students who use UT-Online, (2) the students' awareness and knowledge of UT-Online, (3) the behavior of students in using UT-Online, and (4) the attitude of students toward UT-Online. The method used in this study was a survey of UT-Online users. The population in this study was all students of UT-Online users. The sample was 904 students who return the completed questionnaires that were sent via email to 3000 UT-Online users. The results of the study were in the following findings: (1) the students' intensity of using UT-Online was characterized by the ease of access to the internet, age, and sex, and there was a tendency that the number of UT-Online users increased day by day; (2) each facility at UT-Online had a diverse level of awareness, use, mastery, and training needs; (3) each facility of UT-Online could be classified based on the number of users, frequency of use, duration, time and place of access; (4) the students attitude toward UT-Online were positive, in the score of 3.06 on a scale of 1 to 4.

**Keywords:** UT-Online, Online Tutorials, ITV-UT, access behavior.

UT-Online is a student support services based on Information and Communication Technology (ICT) provided by Universitas Terbuka, Indonesia (UTI). UT-Online have been developed gradually. In 1997, UTI implemented e-learning with the goal was to increase student interactivity with learning materials, student to tutor, and student with student (Belawati, 2003). Furthermore, Belawati stated that UTI's e-learning was implemented through three types of applications, namely: the provision of teaching materials supplement (web-based supplement) or known as the web supplement, network-based tutorials (web-based tutorials) known as electronic tutorial, and online courses (web-based courses). UT-online, which was launched in 2002, is a further development of the e-learning services. UT-Online, at the beginning of its development, was in the form of what was known now as the online tutorial. In 2007, UT-Online experienced a new development which was that in addition to providing academic services also offering administrative services (Zuhairi, Adnan, & Thaib, 2007). Academic services included digital libraries, online information for teacher (GPO), learning object materials (LOM), ITV-UT (internet-based television), and dry laboratory (dry lab). Administrative services that had been developed include an online bookstore, a UTI information service system which was better known as CRM (Customer Relationship Management), and online registration service. All services, both related to the academic and administrative processes, were included in the UT-Online at [www.ut.ac.id](http://www.ut.ac.id).

Various studies related to UT-Online service had been carried out by researchers at UTI. It was astonishing that these studies were still around online tutorials, which forms the beginning of the development of UT-Online, though the online tutorial was only one feature of many features that were available on the UT-Online. Some of these studies were summarized as follows:

- Minrohayati (2010) examined the aspect of participation in online tutorials and concluded that out of 81 students who registered online tutorial there were 51.47% of the students activated (login) in the tutorial online service, 31.05% were active in forum discussions, and only 17.62% did the online tutorial tasks.
- Royandiah & Hermawati (2011) reported that the level of participation in the online tutorial only reached 2 to 6% of the students and according to students' opinion the participation in online tutorial was contributed to learning outcomes.
- Agustina & Ben (2010) described that the students' inactivity in online tutorials were due to the fact that most of the students were workers and have limited time to interact in an online tutorial.
- Hendrian (2009) reported that the level of student satisfaction towards tutorial online as a learning tool, reliability, speed of service response, and certainty were 64.5%, 87.4%, 73.2%, and 83.3%, respectively.

It appeared that although UT-Online had developed more than 15 years and the features of UT-Online were already growing rapidly, yet the researches about the UT-Online were still related to online tutorials and focuses on student participation and response. No studies that examined the students' utilization of UT-Online comprehensively. In fact, a study of the utilization of UT-Online would be of much use to improve UT-Online and gave direction in the future development of UT-Online. This study tried to analyze the pattern of utilization of UT-Online comprehensively. Since many services were provided at UT-Online, the study was limited only to academic services, namely the services which were directly related to the student's learning process. These included online tutorials, online enrichment courses, ITV-UT, journals, digital libraries, virtual reading room, online information for teachers, learning object material (LOM), and dry laboratories. This paper analyzed (1) the characteristics of UT-Online user students, (2) knowledge to UT-Online, (3) students's access behavior in using UT-Online, and (4) attitude toward UT-Online.

The population of this study was all students of UT-Online users. The sample study was 904 students who returned the completed questionnaires that were sent via e-mail to 3000 users of the UT-Online. The sample was taken in October 2013 using a questionnaire which consisted of 22 questions. Students responded to the questionnaire by clicking on the provided answer choices.

## RESEARCH RESULTS

### 1. The Characteristics of UT-Online Users

The Table 1 below was a comparison of characteristics between UT-Online users (based on a sample of 904 students) and a population of UTI's students within the same period in the 2nd half of 2013. The comparison was used to get the contrast between the UTI's students who used UT-Online and the UTI's students in general.

Table 1  
Comparison of Characteristics between UT-Online Users and UTI Students in  
General

Characteristics	UT-Online Users (A sample of 904 users taken in 2013)	UTI Students (Condition in 2013)
Age	Median = 25	Median = 26
Sex	Male = 52.5% Female = 47.5%	Male = 48.6% Female = 51.4%
Working Status	Employed = 86.7% Unemployed = 13.3%	Employed = 71.1% Unemployed = 28.9%
Marital Status	Married = 31.1% Unmarried = 68.9%	Married = 39.64% Unmarried = 60.36%
Domicile	Abroad = 3.5%	Abroad = 1.5%
Distribution of Students Based on First Year Enrollment	Less than 2010 = 8.7% 2010 = 8.6% 2011 = 11.9% 2012 = 18.9% 2013 = 51.9%	Less than 2010 = 50.0% 2010 = 7.2% 2011 = 5.2% 2012 = 12.7% 2013 = 16.9%

Table 1 revealed some interesting findings. UT-Online users were characterized by relatively young age (25 years old), male (52.5%), employed (86.7%), and unmarried students (68.9%). Other findings were the students who lived abroad tended to be a user of the UT-Online. It was thought to be related to the availability of better internet facilities in the country where they lived, such as Singapore, Taiwan, Hong Kong, or South Korea. In general, UT-Online user demographic characteristics in various aspects demonstrated conformity with the characteristics of internet users in Indonesia.

There was a tendency that the number of UT-Online users increased each year. For example, the students who enrolled in 2013 was 16.9% of all students of UTI, but 51.9% of UT-Online users were the students who enrolled in that year. This result was in line with some studies that internet penetration in Indonesia was gradually increasing by 24.23% in 2012 (APJJI, 2012). Thus, UT-Online users would increase in the future aligned with the increasing of internet users in Indonesia.

## 2. Knowledge of UT-Online among Students

Table 2 described the student knowledge of the various facilities in the UT-Online. The online tutorial was most known by the students (95.5%), followed by digital libraries and enrichment courses, respectively 63.5% and 45.0%. The dry - lab was also only known by 22.6% UT-Online users. The proportion of students who used the ITV-UT dropped dramatically to only 2.8%. This means that out of 11.6% students who know ITV-UT, only 2.8% had ever used the facility. Enrichment courses were known by 45.0% of UT-Online users and it was only ever used by 21.7% of the students.

Table 2  
Knowledge of UT-Online\*)

UT-Online Facilities	Aware	Use	Mastery	Need Training
Online Tutorial	863 (95.5%)	851 (94.1%)	851 (94.1%)	541 (59.8%)
Enrichment Courses	407 (45.0%)	196 (21.7%)	131 (14.5%)	270 (29.9%)
ITV-UT	105 (11.6%)	25 (2.8%)	15 (1.7%)	294 (32.5%)
Journal	255 (28.2%)	172 (19.0%)	84 (9.3%)	241 (26.7%)
Digital Library	574 (63.5%)	499 (55.2%)	396 (43.8%)	249 (27.5%)
Information for Teacher	369 (40.8%)	162 (17.9%)	105 (11.6%)	137 (15.2%)
Learning Object Material (LOM)	216 (23.9%)	120 (13.9%)	41 (4.5%)	353 (39.0%)
Dry Lab	206 (22.6%)	59 (6.5%)	24 (2.7%)	268 (29.6%)

\*) n = 904 and respondents may choose more than one option

The online tutorial was mastered by more than 50% students of UT-Online users. Other facilities were mastered by less than 50% of UT-Online users. ITV-UT was mastered only 1.7% users. Dry Lab facilities were also mastered by only 2.7% of UT-Online users. This percentage appeared to be related to the percentage of use, i.e. the higher the percentage of use of a facility by the student the higher the percentage of students who mastered these facilities.

UT-Online users expressed training needs as indicated in the last column of Table 2. The students wanted training for almost all of the facilities of UT-Online. There were 32.5% UT-Online users who needed training for ITV-UT. Learning Object Material (LOM) was most widely expected for training by 39% of UT-Online users.

Most of the students (59.8%) obtained skill in using UT-Online through their own learning without the help of others. This could be seen in Table 3. The regional offices of UTI had an important role in introducing the UT-Online to 57.4% of UT-Online users. Nevertheless, in assisting the using of UT-Online facilities, the role of the regional office of UTI was only 19.4%, there were more students assisted by their friends (30.2%).

Some of the recommendations were proposed by the students. A total of 12.9% of students proposed to UTI for more socializing facilities in UT-Online to students. In addition, 66.9% of students suggested that UTI should provide training in the use UT-Online. Furthermore, 59.3% of students suggested the availability of individual guidance on the use of UT-Online. In this case, the regional office of UTI -- as a leading unit in UTI who provide services to students -- could be empowered to implement these student recommendations.

Table 3  
Introducing and Helping the Students in using UT-Online

Source	Introduce UT-Online *)	Help in using UT-Online *)
Self	395 (43.7%)	541 (59.8%)
Friends	266 (29.4%)	273 (30.2%)
Tutor	221 (24.4%)	104 (11.5%)
Local office of UTI	519 (57.4%)	175 (19.4%)
Publishing Media	113 (12.5%)	-
Others	45 (5.0%)	23 (2.5%)

\*) n = 904 and respondents may choose more than one option

### 3. Access Behavior

The most frequently used facility respectively, were tutorials online (91.9%), enrichment courses (2.5%), ITV-UT (4.1%), and digital libraries (1.1%). Thus, online tutorial was still the most popular among UT-Online users. Behavior of student access, henceforth, would be analyzed based on the facilities that they use most frequently. The results of the analysis were presented in Table 4.

The frequency of accessing UT-Online facilities for most students was once every one to three days. This applied respectively to 80.0% of online tutorial users, 65.2% of enrichment course users, and 97.5% of ITV-UT users. Only 10.0% of digital library users used this facility once every one to three days, most of them (50%) used it more than once every seven days. Meanwhile, there was 30.4% of course enrichment users accessed more than once every seven days. Thus, approximately 80% of UT-Online users had an access frequency to the UT-Online facilities as much as once every one to three days.

Access period is the time used by students to open UT-Online in a single accessing. Access period to UT-Online varied depending on the facilities that students often use. For students of online tutorial users, most of them (54.9%) accessed for one to two hours and 35.8% of the students did more than two hours. For enrichment course users, there were 60.9% of them accessed it for one to two hours and 39.1% of them accessed it more than two hours. For users of digital libraries, 50.0% of students opened this facility between one to two hours and the rest (50.0%) had a longer access, i.e. they opened for more than two hours. ITV-UT facility shorter accessed by students, 89.2% of the students accessed it less than an hour. Thus, except for the ITV-UT, the facilities of UT-Online were accessed for more than one hour in every single access.

Access time for online tutorial users was at night (43.7%). On the contrary, the majority (97.3%) of ITV-UT users opened it in the morning. The morning time was also preferred by 56.5% and 50.0% of students when accessing enrichment courses and digital library respectively. Time used by students was allegedly related to the duration of the access. To access for long time period, the students choose in the evening, whereas for short access (just look around) they prefer in the morning.

For online tutorials and digital library, students tended to do it at home. There were 66.3% of the users of the online tutorials who opened the facilities at home and

even much more for digital library users, i.e. 100.0% of them accessed it at their home. On the contrary, there were 78.4% of the users of ITV-UT who chosen their workplace to watch the ITV-UT. The students who used enrichment courses varied in where they accessed the facilities, 39.1% at home, 30.4% in the workplace, and 30.5% were no specific places for accessing it. The use of smart phone in accessing enrichment courses were the probably causes of places diversity for open the facilities.

Most students used a portable computer to access the UT-Online. The users of online tutorials, enrichment courses, ITV-UT, and digital library used portable computers, respectively of 73.3%, 73.9%, 94.6%, and 100.0% respectively. Tablet computers was only used by 0.6% of the online tutorial users.

Table 4  
Access Behavior in Using UT-Online

Access Behavior \ Facilities of UT-Online most frequently used	Online Tutorial	Enrichment Courses	ITV-UT	Digital Library
1. Access Frequency:				
• Once every 1 – 3 days	80.0%	65.2%	97.3%	10.0%
• Once every 4 – 6 days	13.8%	4.3%	0.0%	40.0%
• Once every more than 7 days	5.2%	30.4%	2.7%	50.0%
• Not used for a long time	0.7%	0.0%	0.0%	0.0%
2. Access period:				
• Less than 1 hour	9.3%	0.0%	89.2%	0.0%
• 1 – 2 hours	54.9%	60.9%	2.7%	50.0%
• More than 2 hours	35.8%	39.1%	8.1%	50.0%
3. Access Time:				
• Morning	19.1%	56.5%	97.3%	50.0%
• Noon	19.0%	4.3%	0.0%	0.0%
• Afternoon	8.9%	0.0%	2.7%	10.0%
• Night	43.7%	4.3%	0.0%	40.0%
• No specific time	9.3%	34.8%	0.0%	0.0%
4. Place to access:				
• Home	66.3%	39.1%	18.9%	100.0%
• Workplace	22.0%	30.4%	78.4%	0.0%
• Schools	5.8%	0.0%	2.7%	0.0%
• On the way	1.0%	0.0%	0.0%	0.0%
• No specific place	4.9%	30.5%	0.0%	0.0%
5. Tools to use:				
• PC	22.0%	0.0%	2.7%	0.0%
• Laptop/Notebook/Netbook	73.3%	73.9%	94.6%	100.0%
• Smart phones	3.1%	26.1%	2.7%	0.0%
• Tablet	0.6%	0.0%	0.0%	0.0%
• Others	1.9%	0.0%	0.0%	0.0%

#### 4. Attitude toward UT-Online

Student attitude toward UT-Online was based on the following indicators: (1) ease of use , (2) readability, (3) reliability of the information presented, (4) general benefit, (5) effects on learning results, (6) effects on interaction with fellow students, (7) effect on the students ' interaction with lecturers/tutors, and (8) clarity of information. The student attitude toward UT-Online was presented in Table 5.

Overall average median score rating for facilities at UT-Online was 3.06 on the scale of 1 to 4. The median value of 3.00 or more at some indicators showed that UT-Online rated by students as a positive for the indicator. Thus, the students rated the UT-Online as positive in terms of ease of use, reliability of the information, benefit, and the effect on the results of the study. Aspects of the benefit received the highest ratings from students, namely of 3.49. This showed that UT-Online was perceived by students as a very beneficial learning support services. The students expressed specifically the benefits of UT-Online by rating 3.33 to the learning results of UT-Online. The students

score on the benefit of UT-Online on learning results was the second largest after the assessment of the score of the general benefit indicator.

Table 5  
Student attitude toward UT-Online (n = 904)

Indicators	Percentage of score frequency				Median
	1	2	3	4	
Ease of use	0.7%	10.5%	71.6%	17.3%	3.06
Readability	0.8%	18.6%	63.2%	17.5%	2.97
Reliability of information	1.0%	7.3%	69.4%	22.3%	3.15
Benefits	1.0%	1.3%	47.0%	50.7%	3.49
Effects on learning results	1.0%	5.1%	56.7%	37.2%	3.33
Effects on interaction among students	12.1%	24.3%	42.3%	21.3%	2.77
Effects on interaction with tutors	20.2%	30.6%	36.5%	12.0%	2.43
Clarity of information	8.6%	15.3%	59.6%	16.5%	2.90
Average					3.06

There were several indicators which students gave the score less than 3.00. The students rated the UT-Online for such indicators as less positive. The readability and clarity of information were scored with 2.90 and 2.97 respectively. Improvements to these two aspects could be resolved by applying the design that included a trial to the students prior to launching the UT-Online facilities. In addition, indicators of influence on students' interaction with lecturers/tutors had the lowest score, i.e. 2.43. This indicated that the students perceived UT-Online had nothing to do with other learning activities, such as face-to-face tutorial.

## CONCLUSIONS

1. The UTI's students who used UT-Online were younger and tended to be man, employed, and unmarried. The students who lived abroad had a better easiness in accessing UT-Online. In addition, there was a tendency that the number of UT-Online users was increasing each year.
2. The online tutorials were the most familiar to the UT-Online users, while ITV-UT facilities less familiar. The users of the UT-Online required further training for using online tutorials. The regional offices of UTI had a great role in introducing UT-Online to the students.
3. Some facilities in UT-Online could be classified based on the number of users, the access frequency, and the duration of access. For example, internet television of UTI (ITV-UT) was used by a few students, with high frequency, in short duration, in the morning, and in the office. On the contrary, online tutorials were used by many students, with low frequency, in longer access time, in the afternoon, and at home.
4. The overall average median score rating for attitude toward UT-Online was positive in terms of ease of use, reliability of the information, benefit, and impact on learning outcomes.

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