
EVALUATION OF ONLINE TUTORIAL USING THE CASE OF AN AGRICULTURAL EXTENSION PRACTICE COURSE

Nurul Huda

Universitas Terbuka (Indonesia Open University)
nurul@ecampus.ut.ac.id

ABSTRACT

One of the obstacles in conducting counseling for practice courses at Indonesia Open University or Universitas Terbuka is the scattered student's residence. This article aims to discuss the potential of online tutorials in providing counseling to students enrolled in practice courses. Specifically, it aims to identify the student's characteristics, level of participation in online tutorial, practice report score, final grade, and their Grade Point Average. This study used the online tutorial of the Program and Evaluation Course, an Agricultural Extension Programme Course as a case. All students on the course, who were agricultural extension workers, were used as respondents. Data were collected during the eight weeks duration of an online tutorial period were analyzed quantitatively. Student's characteristics as well as the grade of online tutorial and practice course were used to support the analysis. The findings indicated that the level of student participation in the online tutorial was good, at 75.61 %. From this participation rate, as many as 58.06 percent of the students submitted practice reports in accordance to the guidelines given. Generally, students successfully passed the practice course with grades varying from C to A. The pattern observed area of support and the potential for online counseling for practice courses.

Key words: *practice course, online tutorial, distance education, online counseling*

INTRODUCTION

Indonesia Open University (Universitas Terbuka or UT) like other universities, implement a learning process that includes the provision of learning materials covering both theory and practice. Delivery of theory components has not been challenging for UT. However, the delivery of practical components is faced by several limitations. Primarily, caused by the fact UT's students are distributed throughout Indonesia making harder to find a common ground for practice in groups. The potential of each student from such a diverse locality also varies. In addition, there are also constraints in terms of supervision of practice activities and cost. In a study by Susilo, Huda, Putra, & Ludivica, (2015) one of obstacles in conducting practical activities is the availability of a competent instructor. In overcoming these obstacles an alternative solution is to provide a practical counseling through online tutorials (also referred to as Tuton) is explored in this paper.

Online tutorials or Tuton is a learning assistance given to students to help them understand the content of learning material. The Tuton has features that can be used for online counseling. The screen capture of the online tutorial page at UT is shown in Figure 1. Online tutorial consists of activities for 8 initiation materials, 8 discussions, and 3 tasks performed

over 8 weeks (Universitas Terbuka, 2016). Interactions experienced by students in an online tutorial are divided into three types: student interaction with materials, student interaction with tutor, and interaction among students. During online tutorial, the student must play an active role in learning the provided initiation materials, participate actively in the discussion forum and complete all three tutorial tasks. Song & McNary (2011) stated that interaction in and online tutorial becomes important because it can affect the quality of online learning.

Interaction with material when student read, comprehend and think about the knowledge and skills presented. Further interactions occur when students discuss relevant content with either with tutor or other participants/students/peers. The interaction is enriched through questions, answers, feedback, opinions and suggestions from peers and the tutor. Through tuton, students can interact directly with their tutor in order to discuss the problems they encountered in carrying out practical activities. In addition, students can also interact directly with fellow students so that they can share information and experiences. Another advantage is that students can carry out the practice at their own premise at their convenience.

Student participation in online tutorial is taken into account in online tutorial score. The score contribution is 20% for the eight initiation materials, 30% for the 8 discussions and 50% for three tasks. The total score of the online tutorial has a contribution of 30% towards the final grade of the course.

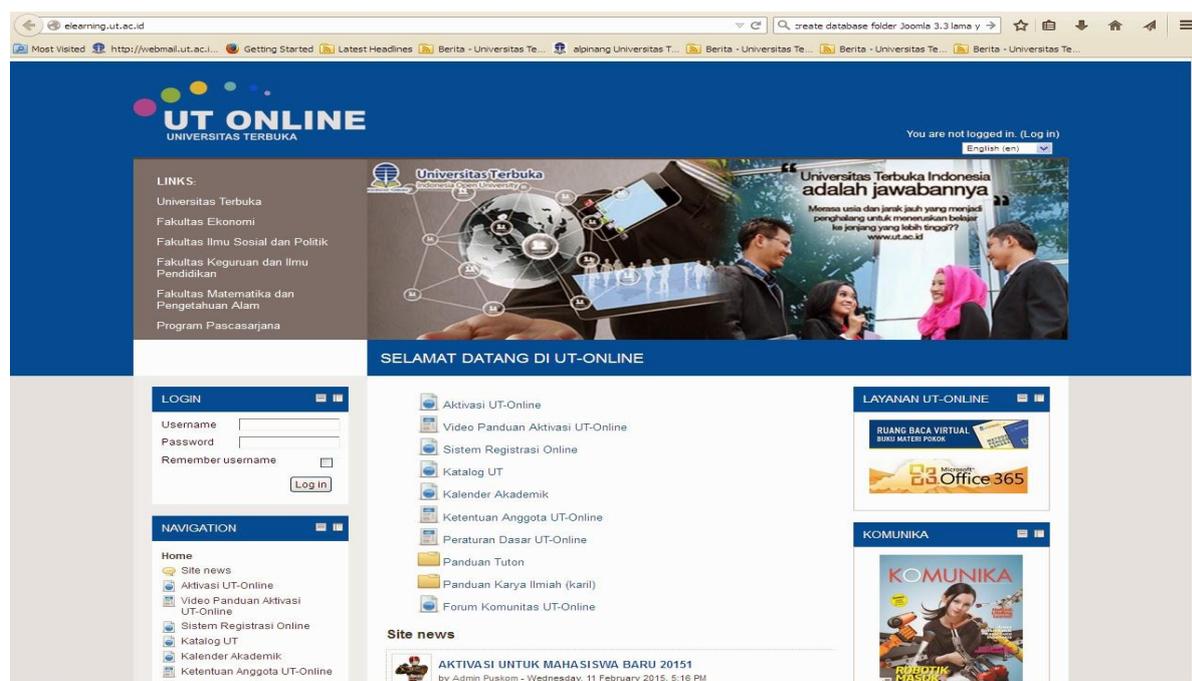


Figure 1: UT's Online Tutorial Profile
(source : <http://elearning.ut.ac.id>)

Practice refers to actual application/implementation of a theory. Practice course activity is inherent in the learning process as it aims to provide field experiences for students that can not be obtained if by merely learning the theory. Through practice, students can compare the results of his experience with the related concept or theory.

According to Djamarah and Zain (2002) practice is a learning process where learners do and experience for themselves using the following the process: observe, analyze, demonstrate, and draw conclusions concerning of an object, a situation, or a process and their interactions. Practical activities undertaken help to answer questions concerning the subject being studied such as: 'What the elements involved?', 'How a process occurs?', 'Which

method is better?', and many other similar questions. Theory and practice are related to each other.

Practice is a form of learning activity that is intended to strengthen the mastery of knowledge. Practices designed at UT serves as a learning strategy intended to assist students to comprehend concepts and theories given in the module, and to acquire the expected competencies. As such great emphasis is placed in designing practice activities that are effective. Puspitasari and Huda (2000) found that design or model of tutorial is one of the important aspects that should be developed to improve student's learning performances; build their perception and attitude towards learning; and develop their learning independent skill. Murray, Pérez, Geist, and Hedrick (2012) mentioned that online learning material which includes material content, learning activities, evaluation tests, and material supplements must be carefully designed. In another study by Farisi (2014), the quality of student's performance in online tutorials is viewed from several processes including discussion of contents, questions posted, task completion time, assignment scores and competencies achieved. In addition, students assessed positively on online tutorials in terms of ease of use, reliability of information, usefulness, and its benefits on learning outcomes. A research conducted by Huda, Setijorini, Yani, and Farida (2017) mentioned that although the access of students to the online tutorial is still less compared with face-to-face tutorial, but the activity of the tutorial itself is in demand by students because it is considered to help them in the learning process. This means that if the online tutorial activities are properly managed, then students can get benefits for their learning process. These studies help us to understand the potentials of online tutorials and the learning pattern of online learners. For example, Sugilar and Abzeni (2014) mentioned that most students accessed online tutorial at night. A thorough review of the existing studies can help us design an online tutorial that best serves the learning outcomes and the need of the students.

UT issued has provided online tutorials for all courses since 2012. The practical guidance courses have been conducted through online tutorials for eight semesters. Therefore, an evaluation of the online tutorial for managing practice activities is timely. This study aims to identify the student's characteristics, level of participation, practice scores, final grade, and students's GPA in discovering the potential of online counseling.

METHOD

This study used the online tutorial of the Programma and Evaluation course (course code LUHT 4429) under the Agricultural Extension programme as a case. This course is one of practice courses in agribusiness at Universitas Terbuka. Practice activities featured in the online tutorial consist of two units: Unit 1 - activity for the stages in the preparation of agricultural extension programme, and Unit 2 - stages in the extension evaluation. All 41 participants who are agricultural extension workers were used as respondents. Data were collected over online tutorial duration (eight weeks) for the registration period 2014.2 whereby the score of online tutorial, practice reports, final grade, and student's GPA were used to support this exploratory study.

RESULTS AND DISCUSSION

Student's Characteristics

The Programma and Evaluation course students/respondents for 2014.2 were mostly men (75%). This reflects the profile of the students in the programme who were agricultural extension workers who worked in the field. Half of the participants were aged over 45 years,

and about 30% were aged between 35-45 years. The others were under the age of 35 years. In a study by Huda (2010), most agricultural extension workers are aged 46 to 50 years; an age where they driven to seek better career opportunities by acquiring a Bachelor degree. These respondents are scattered throughout the various regions in Indonesia, across Java, Sumatra, and Kalimantan. Regardless, these respondents/students carry out practical activities in accordance with the guidelines provided via the online tutorial while placed within their local agricultural environment. Online counseling initiatives were incorporated through the online tutorial to encourage students to carry out the practice independently under remote supervision of the course tutor who also act as the counselor.

Student's Participation

The number of participants is quite a lot that was 41 agricultural extension workers. Tutorial online activity in the course of Programma and Evaluation of Agricultural Extension was going well since majority of the students accessed the online tutorial (75.61 %) and only some was less active (24.39 %). Students who accessed the online tutorial, read the material given, participated in discussion or responded the question and answer (QA) session either with tutor or counselor, as well as with other participating students. In addition, students who were active also accomplish their practical activities according to the direction given, then sent a practice report requested, consisting of 2 units report whereas Unit 1 focused on the stages in the preparation of agricultural extension programma, and Unit 2 focused on the stages in extention evaluation.

Unfortunately, some students did not participate optimally, for example, less intensively participated in discussions, copy paste in providing the answer of discussions and assignments given. Farisi and Malik (2013) mentioned the low of students' participation in the tuton was caused by the limited time for access viewed from the amount of students who accesses, access frequency, duration, and time; and technical factors associated with cost, facilities, and access network constraints or limitations

Sometimes, practice reports submitted were also lacking, for example only one unit report submitted, which was categorized incomplete. This is presumably because of the obstacles encountered by the students, especially those in remote areas. This condition associated with their problem in accessing tutorial online which partly due to the internet network is still lacking, so sometimes they have to go far enough to be able to access the network internet. Besides, they were still not literate to access the internet so that they must learn before responding to tutorial online activities. Some students even made only one hit for all activities in tutorial online. This means that they accessed the initiations, discussions, and assignments at the same time. This condition certainly needs attention from the counsellor to find ways to keep students obtain the necessary information related to the implementation of practical activities. This condition is in line with the findings of the study conducted by Adji and Wahyuni (2010) which mentioned that to create a high quality, conducive, active, and dialogues tutorial, every aspect of it should be well developed.

Tabel 1: Distribution of initiation, discussion, participation, and assignment of tuton on LUHT 4429

No	I	D	P	T	N	No	I	D	P	T	N
1	2	0	5	-	5	21	1	1	5	15	20
2	8	7	40	45	85	22	1	0	2	-	2
3	6	5	32	15	47	23	7	4	27	45	72
4	3	2	13	0	13	24	6	4	27	30	57
5	0	0	0	0	0	25	5	8	25	30	55
6	0	0	0	30	30	26	0	0	0	0	0
7	4	0	10	0	10	27	0	0	0	0	0
8	7	7	42	45	87	28	8	8	45	35	80
9	8	8	45	45	90	29	0	0	0	0	0
10	5	5	27	15	42	30	0	0	0	0	0
11	1	0	0	0	2	31	5	7	37	30	67
12	0	0	0	0	0	32	6	4	25	0	25
13	3	0	7	30	37	33	3	7	32	0	32
14	2	0	5	0	5	34	0	0	0	30	30
15	0	0	0	0	0	35	0	0	0	30	30
16	2	1	8	0	8	36	5	3	20	0	20
17	2	0	5	0	5	37	8	5	40	15	55
18	0	0	0	0	0	38	5	4	27	15	42
19	0	0	0	0	0	39	7	7	40	45	85
20	0	0	0	0	0	40	7	0	15	0	15
						41	1	1	5	15	20

Note: I = Initiation, D = Discussion, P = Participation, T = Assignment, and N = Tuton score

Referring that the score contribution is 20 % for 8 initiation materials, 30 % for 8 discussions and 50 % for 3 tasks, then the students with high participation levels in the tuton, whether in terms of reading initiation materials, active in discussions, or performing assigned tasks, they will get score a maximum of 100. However, for students who are less active in tuton will get a score less than 100 depending on their level of participation and the quality of their work. For example, the student number 28 on the table 2, he/she only got a score of 35 despite submitting 3 tasks given.

On Table 1, it can be seen that 10 students or 24.39 percent was not active at all, either in initiation materials or discussion. They also did not submit the assigned tasks. In this case they only get a zero score. Probably, one of the reasons they were not active in tuton because of having problems in accessing internet network in their domicile area.

On the other hand, most of the students (31 students or 75.61 percent) utilized counseling services through tutorial online. This means practical counseling through tutorial online was needed by students because it was helpful and useful to them in carrying out practical activities in the field, as well as making the practice report.

In terms of the tutorial online final score obtained by the students, it can be seen that students who got high score was a diligent student who read the material on the initiation, as well as participated in discussions with the tutor and with their fellow students. This was supported by the high access of the students on the initiation and discussion sessions, so that the participation rate was high. This good participation then gave a high contribution on the tutorial online score.

Interesting things that can be seen on Table 1, there was a student who reached the highest tuton score of 90. This means that if a student participated well and active, and made the practice reports as directed, then the student can get a very good score. Surely these achievements will contribute to the practice course grade, which in turn can have a positive impact for the completion of their studies at UT. Consequently, this means counseling for practice courses through tutorial online has a good potential in helping students in doing their practical activities.

On the other hand, there were students achieved a lowest score of 2, where the value was obtained from just one time access in the initiation session. In fact, if the student was active

and makes the task given they can get the maximum value of 100. Therefore, it can be said that student's participation in tutorial online will provide benefits for them in obtaining the counseling of practice courses.

There were also students with a grade below 60, which generally occurred because students were less active in accessing the materials provided, as well as in the discussions, so that sometimes students did not make a full report to the practices in accordance with the direction given. Therefore, if students wanted to have good grades in practice course, they must be diligent to participate in tutorial online and also active in practice counseling.

On Table 1, it also showed that although there were students who were less active in the discussions, but they still read the material of initiation given in tutorial online, ranging from initiation 1 to the initiation 8 which can be seen from the data access of the students at every initiation. This means practical counseling through tuton has a good potential that can help students in fulfilling their practical activities and to do their practical report in order to acquire a better final grade.

Practice Report Score and Final Grade

For the practice course of LUHT 4429, students were asked to create two units reporting practice: Unit 1 on the stages in the preparation of extension programming, and Unit 2 on the stages of extension evaluation. Of the total participants (41 students), 18 students (58.06 %) submitted complete practice reports consisting of both Unit 1 and Unit 2. As shown in Table 2, the average student scored 69.72 and 67.22 for Unit 1 and Unit 2 respectively. The minimum value requirement for practices is 60, and the students passed practice component. This in turn contributed to 50% on the final grade as depicted in Table 3. The remaining 50% is determined by the final exam score. High final grades (A) were obtained due to the high average practice scores (90 and 85). However, there was one student who obtained a final grade of course with B, although the average value of the practice was 90. This is presumably due very low final exam score. Table 3 also indicates that the average score of Unit 1 was slightly higher than the average score of Unit 2. Half of the students obtained C for their Final Grade C as they had an average score of the practice report around 60 (the minimum score) with exception one student who had an average score of the practice report at 75. The rest obtained a B for their final grades.

Most students with few exceptions performed well through online tutorial where they were able to ask support from their tutor to overcome problems that they encountered while doing their practice activities. Such support and counseling seem to motivate students to complete their activities and thereby highlights greater potential for online counseling.

Tabel 2: Distribution on the score of practice reports on LUHT 4429

No	Unit 1 Score	Unit 2 Score	Average score	Final Grade
1	75	75	75	C
2	90	90	90	A
3	80	90	85	A
4	80	85	82.5	B
5	90	90	90	B
6	65	70	67.5	B
7	60	60	60	C
8	75	75	75	B
9	70	70	70	B
10	60	60	60	C
11	75	75	75	B
12	60	60	60	C
13	60	60	60	C
14	65	60	62.5	C
15	60	60	60	C
16	65	60	62.5	C
17	60	60	60	C
18	65	70	67.5	B
Mean	69.72	67.22	68.47	

Student's GPA

Student's GPA represents the number of quality passed, divided by the number of credit courses taken. The distribution of credit number, quality credit and student's GPA for the 18 students who completed both Unit 1 and Unit 2 are shown in Table 3 where the average value of students GPA is 2:39. This figure is sufficiently good when compared to the minimum GPA requirement, 2:00. There were two students who achieved GPA above 3 and many with GPA above the average GPA value. The 3.50 GPA is obtained by student who had obtained 42 for number of quality passed for 12 number of credits taken (equivalent of 4 subjects). Two were on the border line. Four students had GPA below 2. The student with lowest GPA (1.29) obtained 31 number of quality passed, but had taken 24 number of credits. The high number of credits (20 and above) seem to be associate with low GPA with few exception. The recommended credit for a semester is only 12 credits. As such students for this course must be advised against a heavy credit load. This can be general applied to practice courses where students will have to consider time taken for both learning the theory and preparing and conducting the practice in the field.

Tabel 3: Distribution of credit number, quality credit and student's GPA

No	Number of credit taken	Number of credit passed	Number of quality passed	Student's GPA
1	17	17	52	3.06
2	12	12	42	3.50
3	14	14	40	2.86
4	23	18	41	1.78
5	20	20	51	2.55
6	15	15	40	2.67
7	24	19	31	1.29
8	23	20	60	2.61
9	20	17	35	1.75
10	14	14	34	2.43
11	10	9	24	2.40

12	14	14	40	2.86
13	23	18	47	2.04
14	20	20	51	2.55
15	15	15	40	2.67
16	24	19	38	1.58
17	20	17	41	2.05
18	14	14	34	2.43
Mean	15.9	16.22	39.06	2.39

Tutor may need to spend more time responding to the students for practice course. They must encourage students to participate actively in reading and understanding initiation materials, be involved in online discussions, and complete practice activities including submitting their practice report. Active participation can help students to have a better understanding of the procedures and report writing.

CONCLUSIONS

The findings indicated that generally the students who are agricultural extension workers participated actively in the online tutorial of the course. 58.06% of the active participants submitted their practice reports in full consisting of Unit 1 and Unit 2. Practice score obtained varied from 60 to 80, with an average of 68.47. The achievement of the final grade of the courses ranged from C to A, with an average GPA value of 2.39. These findings indicate the pattern in the students' performance and the nature of support needed and the potential; for online counselling. An improvement in the quality of online tutorial by incorporating online counselling can provide a better service for the students.

ACKNOWLEDGEMENT

The author wishes to thank colleagues in the Agribusiness Study Program at the Faculty of Mathematics and Natural Sciences, Universitas Terbuka.

REFERENCES

- Adji, S., & Wahyuni, S. (2010). *Model Pembelajaran Problem-Based Learning (PBL) pada Tutorial Online*. Research Report. LPPM-UT, Jakarta, ID.
- Djamarah, S. B., & Zain, A. (2002). *Strategi belajar mengajar*. Jakarta, ID: Rineka Cipta.
- Farisi, M.I., & Malik, A. (2013). Pengembangan desain tutorial online pendidikan ilmu pengetahuan sosial model siklus belajar di universitas terbuka. *Journal of educational research*, 42 (2), 18-33.
- Farisi, M.I. (October, 2014). Students' performance At tutorial online of social studies Through the use of Learning cycle model Faculty of education, *Turkish Online Journal of Distance Education-TOJDE*, 15 (4), 229-247.
- Puspitasari, K.A., & Huda, N. (2000). Reviu hasil penelitian tentang tutorial di Universitas Terbuka. *Jurnal Pendidikan Terbuka dan Jarak Jauh*, 1(1), 28-35.
- Huda, N. (2010). Pengembangan kompetensi penyuluh lulusan pendidikan Jarak Jauh. *Dissertation*. IPB. Bogor. ID.

Huda, N, Setijorini, L. E, Yani, D. E, & Farida, I. (2017). Keragaan proses pembelajaran penyuluh pertanian dalam pendidikan terbuka dan jarak jauh. *Jurnal Matematika, Sains, dan Teknologi*, 18 (1), 56-67.

Murray, M., Pérez, J., Geist, D., & Hedrick, A. (2012). Student interaction with online course content: Build It and they might come. *Journal of Information Technology Education: Research*, 11, 125-140.

Song, L., & McNary, S.W. (2011). Understanding students' online Interaction: Analysis of discussion boards postings. Towson University. *Journal of Interactive online Learning*, 10 (1), 1-14.

Sugilar & Abzeni. (2014). Pemanfaatan UT-online oleh mahasiswa Universitas Terbuka. *Jurnal Pendidikan Terbuka dan Jarak Jauh*, 15 (1), 43-53.

Susilo, A, Huda, N, Putra, A.A.S, & Ludivica, E.S. (2015). Evaluasi penyelenggaraan praktikum mandiri program studi agribisnis Universitas Terbuka. *Jurnal Pendidikan Terbuka dan Jarak Jauh*, 16(1), 58-67.

Universitas Terbuka. (2016). *Katalog Universitas Terbuka*. Jakarta. ID: Universitas Terbuka.