

USERS' PERCEPTION ON THE QUALITY OF OPEN EDUCATIONAL RESOURCES ACCOUNTING DRY LAB FOR DISTANCE LEARNING

Rini Dwiyani, Universitas Terbuka
rini@ut.ac.id

Abstract

Universitas Terbuka (UT) is an institution of higher education that implements distance education in Indonesia. UT has provided expansive opportunity for Indonesian citizens and foreigners, wherever their place of residence, to attain higher education. In implementing distance education, UT utilizes numerous learning materials, either in the form of printed materials or non-printed materials. Utilization of technology into the learning process also becomes a priority in implementing distance education at UT that can help learners to study independently. UT has produced various IT-based intensives in media delivery systems and instructions. UT has also shared some of their educational products free and open to public through UT Online programs.

The purpose of this study is to analyze the users' perception toward the quality of Accounting Dry Lab (ADL) as Open Education Resources (OER). Respondents in this study were students in accounting department who were active at the registration period of 2012 to 2013. This research seeks to identify each variable the users' perception on content quality and features quality of ADL and also to analyses which variable has significant.

The findings showed, the quality of ADL Program has been is good, majority of the user perception of agree and strongly agree with the quality of the contents and features of ADL Program. Although there are still weakness quality in accessibly and network very slow. Another interesting result from users' that the assessment and feedback in ADL the most interesting and interactive point. In the future, ADL Program can replace the face to face practicum and also can be used by the public as OER, especially in accounting.

Keywords: Open Educational Resources, distance education, dry laboratory, accounting

Introduction

Universitas Terbuka (UT) is an institution of higher education that implements distance education in Indonesia. UT provides learning materials specifically designed for independent learning. This mode of learning makes the university has its own characteristics since it requires the learners to study independently through a variety of media, either printed or non-printed media. UT has produced various Information and Communication Technologies (ICT)-based intensives in media delivery systems and instructions. UT has also shared some of their educational products free and open to public through UT Online programs. Learning processes and sharing educational creative and products can take place via streaming videos and audios for education. Video streaming can defeat the time and space limitations, even crossing country boundaries. UT has contributed to the expansion of OER concepts and development, as they are freely accessible, openly formatted and openly licensed documents and media that are useful for teaching, learning, education, and assessment and research purposes. Some of UT OERs include online bookstore, online and digital library, online teacher portals, I-TV on Demand, and UT Open Courseware.

Accounting Department is one of study program in UT require special attention in practicum. One of the most important aspects in the Accounting Department is the compliance of practicum subjects in a distance learning system. Some doubts whether practicum can be thought in distance requires discretion. This becomes a challenge for accounting to carry out the practicum in the distance learning system. UT develop teaching materials that have sufficient motivation to learn, and the knowledge or the substance has presented an interesting, relevant and of good quality. This features of distance education system is the use of technical media, either printed, audio, video or computers to deliver the knowledge from teachers/tutors to the students. Submission of material content should be supported by a description, whether written, audio, images and video.

Based on that, as an institution that implements distance education, UT especially Accounting Department provide a variety of learning assistance to help the students learn one particular subject/course. A kind of technology that can be explored to be used as the learning material is Accounting Dry Lab (ADL) Program. The ADL Program as the learning materials will be enriched by adding various learning materials taken freely accessible from the Internet. This study discuss the users' perceptions on quality of ADL as one of learning materials integrated into OER, including the responses and opinions concerning contents and features quality of ADL.

Literature Review

In distance education practices, ICT has promoted learning and teaching be implemented as synchronous and asynchronous modes as indicated previously. It refers to technology-based instructions in which the students are at a location physically separated from their instructors during the entire course of study (Ormrod, 2008).

According to Keegan (1986:49) as cited in Suparman and Zuhairi (2004), there are six components that characterize the distance education system: (1) separation of teachers and students which distinguish the distance education system from conventional face-to-face system; (2) there is the influence of an educational organization which distinguishes it from private study; (3) the use of technical media such as printed, audio, video, or computers to deliver the knowledge from teacher to the students; (4) providing two-way communication so that the students can get benefit from it, as well as encouraging the students to take the initiative in discussions; 5) the possibilities of meeting with others or for the purpose of teaching and socialization; and 6) participation in the industrialization of education.

ICT have contributed to qualify educational practices and management in distance education and has broadened alternatives to reach quality of educational management and practices. Most of higher education institutions around the world have been using ICT to develop and distribute teaching and learning. At a minimum, OER possess at least three elements, (1) learning content, (2) the tools required to support the development and sharing of learning content, and (3) implementation resources such as intellectual property licenses that support the sharing and re-use of learning content.

According Suparman and Udan S (2012), Open Educational Resources (OER) is concepts and development, as they are freely accessible, openly formatted and openly licensed documents and media that are useful for teaching, learning, education, assessments and research purposes. OER is teaching, learning, and research resources that are in the public domain or have been released under an intellectual-property license that permits their free use or customization by others (Harsasi, 2012). UT OERs include online bookstore, online and digital library, online teacher portals, I-TV on Demand, and UT OpenCourseWare.

OER is digitized materials include learning content, software tools to develop, use and distribute content, and implementation resources (Bissell, 2009). Benefits of OER can expand

access to learning for everyone, including nontraditional groups of students and those from disadvantaged backgrounds, resulting in the widening of participation in higher education. OER can be a valuable resource to students and instructors for many reasons. From the student's perspective, OER had the following advantages: (1) free materials; (2) continuous access to resources; (3) the ability to pursue a topic thoroughly; (4) the ability to learn for personal knowledge or enjoyment; and (5) easy access to materials (Arendt and Shelton, 2009).

Thomson (2010) found that online learning is also suitable for gifted students due to its more individualized and more student-centered approach. In all, most studies in the effectiveness of the internet and web-based language learning materials highlighted the findings that they create a new, conducive and encouraging environment to the learners.

Research Questions

Having reviewed the related literature, the researchers understand that there are several questions that need to be addressed. This study focuses on these questions:

- What are the users' perceptions on the quality of open educational resources Accounting Dry Lab for distance learning?
- Do Accounting Dry Lab for distance learning promote or motivate students to be interested in learning Accounting?

Methodology

Respondents in this study were students in Accounting Department who were active at the registration period of 2012 until 2013. Twenty five students from four different registration period with an average age of 26 - 35 years old were the subjects of this study. Distribution of subjects based on registration period listed below.

Table 1. Number of Respondents from registration period

Registration Period	Number of Respondents
2012.1	5
2012.2	5
2013.1	8
2013.2	7
Total Respondents	25

Procedure

A questionnaire was designed and distributed to 50 students who took accounting classes. Completed questionnaires were received from 28 subjects, but only 25 valid to processes. Analysis of their responses to questions concerning content and feature quality of accounting dry lab learning materials reveal their perceptions about this subject. Feedback from this questionnaire also highlighted some challenges that students faced which would be very helpful for future improvement of this subject.

Data collection method used is random sampling and through the questionnaire to students. This study used a scale using a five-point Likert Scale. D. Bertram (2012) states that based on the strict definition, the scale as used in the Likert scale is not considered as an interval scale.

The variable of this study are contents and features quality of DLA. Contents quality consists of structure of the content, the content is accurate, the language used is simple and clear, the language used is in a personalized style, the of illustrations are suitable and they properly placed in the text, The illustrations are adequate enough to cover all significant aspect and Assignments are well structured, attractive and encouraging.

Features quality consists of layout menu, animation, design of background, font and the color, accessibly, visual and navigation quality of Accounting Dry Lab Program.

Results and Discussions

A number of students have been asked to answer a set of questionnaires containing questions on their perception of the usage on dry lab learning materials. The questions asked were based on the two questions in research questions. They were also interviewed at random to find out on their opinion on the accounting dry lab learning materials. Fifty questionnaires have been distributed and 28 were returned but only 25 valid.

Table 2. Number of respondents based on Gender

Gender	Frequency	Percentage
Male	11	40%
Female	14	60%
Total	25	100%

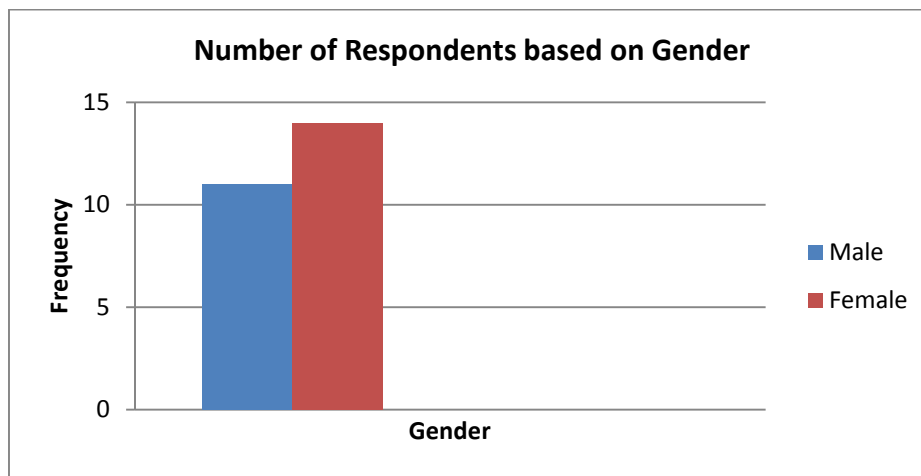


Fig. 1 Numbers of Respondents based on Gender

The above table shows the number of respondents based on gender. 11 out of 25 or 40% who responded were male, while 14 out of 25 or 60% were female students. More females were taken as samples as currently there are more female students than male students.

Table 3 below shows the number of students based on occupation, 52% respondents is a private company employee, 44% is a civil servant and other occupation is an entrepreneur. It means that most of students in accounting classes is a worker and had occupation.

Table 3. Number of Respondents based on Occupation

Occupation	Frequency	Presentase
Civil Servant	11	44%
Private Company Employee	13	52%
Other	1	4%
Total	25	100%

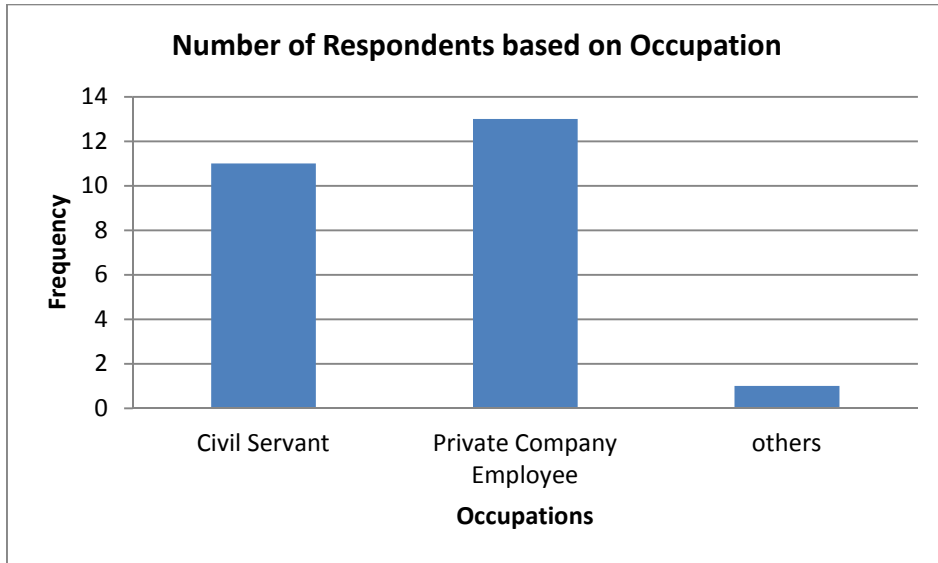


Fig 2. Numbers of Respondents based on Occupation

Table 4. Number of Respondents based on Age

Range of Age	Frequency	Percentage
16 - 25	4	20%
26 - 35	18	90%
36 - 45	3	15%
46 - 55	0	0%
Total	25	100%

From Table 4 shows the number of respondents based on age. 18 out of 25 or 90% who responded with average age 26 – 35 years old, while 4 out of 25 or 20% were 16 – 25 years old.

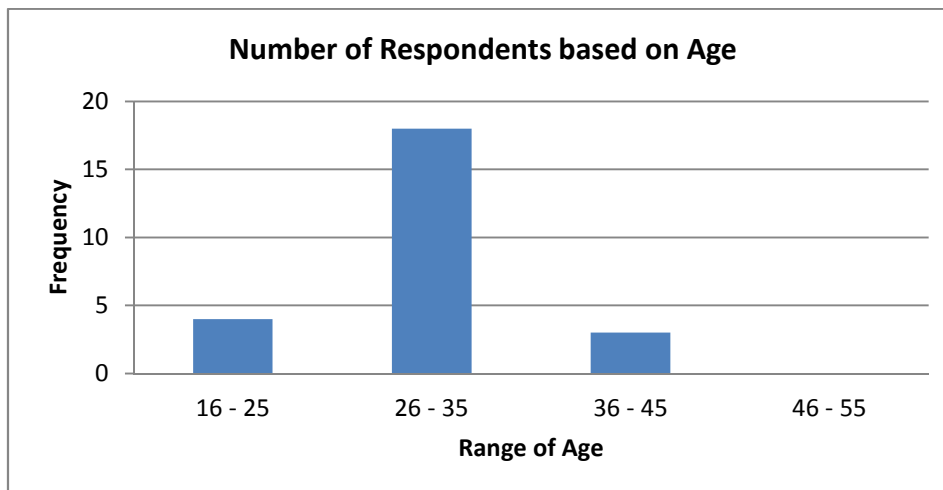


Fig 2. Numbers of Respondents based on Age

Table 5. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
cont1	25	3	5	3.95	.605
cont2	25	3	5	3.80	.616
lang1	25	3	5	4.00	.725
lang2	25	2	5	3.95	.759
illust1	25	2	5	3.65	.745
illust2	25	3	5	3.95	.394
Exer1	25	3	5	3.95	.605
lay1	25	3	5	3.75	.716
anmt2	25	2	4	3.05	.553
desig3	25	2	5	3.68	.754
acces4	25	2	5	2.90	.813
visua5	25	2	5	3.85	.671
navg6	25	2	5	3.85	.671
Valid N (listwise)	25				

Content Quality

Contents quality consists of structure of the content, the content is accurate, the language used is simple and clear, the language used is in a personalized style, the of illustrations are suitable and they properly placed in the text, The illustrations are adequate enough to cover all significant aspect and Assignments are well structured, attractive and encouraging.

Table 6. Structure of the content is well organized

	Frequency	Percentage
Moderate	4	16%
Agree	18	72%
Strongly Agree	3	12%
Total	20	100%

Based on this data, it can be seen that majority perception of user is agree (72%) that structure of the content of ADL is well organized. Some users claim that the content of the material has been arranged in a systematic and facilitated their understanding of the material. From Table 5, user perceptions on content quality in the range 3 until 5 with average 3.95. That is, most of the students agree (3.95 approaching 4) the content has been prepared properly and regularly.

Most of respondents were also agree that the content of Accounting Dry Lab is accurate in respect of concept, terms and facts. It shows 68% agree and 8% strongly agree.

Table 7. The content is accurate in respect of concept and up to date

	Frequency	Percentage
Neither	6	24%
Agree	17	68%
Strongly Agree	2	8%
Total	6	24%

Table 8 and 9 below shows the perception of user about the language quality of ADL. From

the Table 8 it can be seen that 60% users agree and 20% users strongly agree, it means the language is simple, precise, correct and clear. This somehow user also mentioned that language is comprehensible. 68% users agree and 16% users strongly agree that The language used is a personalized style like you, I, we and so on. This makes the user comfortable and familiar.

Tabel 8. The language used is simple and clear

	Frequency	Precentage
Neither	5	20%
Agree	15	60%
Strongly Agree	5	20%
Total	25	100%

Table 9. The language used is in a personalized style

	Frequency	Precentage
Disagree	1	4%
Neither	3	12%
Agree	17	68%
Strongly Agree	4	16%
Total	25	100%

The users' perception on the illustrations quality has shown from Table 5, user perceptions on illustrations quality in the range 3 until 5 with average 3.65 and 3.95 that is mean, most of the users agree (3.65 and 3.95 approaching 4) the illustrations are suitable and they properly placed in the text and also adequate enough to cover all significant aspects.

Table 10. The of illustrations are suitable and they properly placed in the text

	Frequency	Precentage
Disagree	1	4%
Neither	7	28%
Agree	15	60%
Strongly Agree	2	8%
Total	25	100%

Table 11. The illustrations are adequate enough to cover all significant aspects

	Frequency	Precentage
Neither	5	20%
Agree	18	72%
Strongly Agree	2	8%
Total	25	100%

Furthermore, from Table 10 it can be seen 60% users agree and 8% users strongly agree with the illustrations are suitable and they properly placed in the text. Users also mentioned that illustrations are adequate enough to cover all significant aspects (Table 11).

Table 12. Assignments are well structured, attractive and encouraging

	Frequency	Precentage
Neither	4	16%
Agree	18	72%
Strongly Agree	3	12%
Total	25	100%

The users were also given their perceptions about the assignments quality on Accounting Dry Lab Program. Table 5 shows the average 3.95 most of the users agree (3.95 approaching 4) Assignments in Accounting Dry Lab Program are well structured, attractive and encouraging. From Table 12, it can be seen 72% users agree and 12% users strongly agree that assignments quality is good.

Features Quality

Features quality consists of layout menu, animation, design of background, font and the color, accessibly, visual and navigation quality of Accounting Dry Lab Program.

The below table shows the users perceptions on layout menu, 14 out of 25 or 56% is agree and 3 out of 25 or 12% is strongly agree, it means quality of layout menu has been effective and eye catching for users. The users give suggestion that table of contents and subject matter presented in the main menu, it make the user running the Accounting Dry Lab program easier.

Table 13. The layout menu is effective and eye catching

	Frequency	Percentage
Neither	8	32%
Agree	14	56%
Strongly Agree	3	12%
Total	25	100%

Table 14. Interesting animation

	Frequency	Percentage
Disagree	7	28%
Neither	14	56%
Agree	4	16%
Total	25	100%

Table 5 Statistic Descriptive shows the average of interesting animations 3.05, most of the users neither agree nor disagree (3.05 approaching 3). Table 14 shows 14 out of 25 of 56% users said neither agree nor disagree on animation quality in ADL Program. It means users not sure that interesting animations related to the content. Sometimes it does not needed and significantly affect in Accounting Dry Lab Program.

The design quality of the background, the font, and the color Accounting Dry Lab Program is attractive and appealing. It can be seen form Table 15, 56% user agree dan 8% user strongly agree with the quality of background, font and color of Accounting Dry Lab Program is good. Other user state that neither agree nor disagree (32%) because the font is too small and difficult to read especially the numbers.

Table 15. The design of the background, the font, and the color is ttractive and appealing

	Frequency	Percentage
Disagree	1	4%
Neither	8	32%
Agree	14	56%
Strongly Agree	2	8%
Total	25	100%

Table 16. Accessibly

	Frequency	Percentage
Disagree	12	48%
Neither	6	24%
Agree	7	28%
Total	25	100%

From Table 16, the majority of the users disagree with the accessibility 12 out of 25 or 48%. It means accessibility problem faced by user, user reported that they difficulties to access as most of the time they the internet connection is very slow. 7 out of 25 or 28% agree, it means user easy to access and the internet connection is good. It also shows from Table 5 Statistic Descriptive, the average of accessibility is 2.90, most of the users disagree with accessibility (2.90 approaching 3).

Table 17. Visual aids given to represent important themes

	Frequency	Percentage
Disagree	8	32%
Neither	3	12%
Agree	14	56%
Total	25	100%

Table 18. Clear navigation

	Frequency	Percentage
Disagree	1	4%
Neither	3	12%
Agree	19	76%
Strongly Agree	2	8%
Total	25	100%

Another features quality can be seen from visual aid and clear navigation, from Table 17 and Table 18 it shows the users perception of visual aid and clear navigation is good. The majority of user stated agree and strong agree. 56% user agree with the visual aids given to represent important themes. 76% user agree and 2% strongly agree with the navigations of Accounting Dry Lab Program is clear and easy to use.

So, as a whole, it can be seen that majority of the users perception of agree and strongly agree with the quality of the contents and features of Accounting Dry Lab Program. Although there are still weak quality in accessibility and internet network very slow.

Conclusion

Accounting Department UT have practicum course and some doubts whether practicum can be thought in distance requires discretion. Accounting Dry Lab Program as the learning materials will be enriched by adding various learning materials taken freely accessible from the Internet.

The conclusion of this study shows that users' perceptions on contents and features quality of Accounting Dry Lab Program very good, especially content quality. Most of user agree and strongly agree with the contents quality. Accounting Dry Lab for distance learning promote or

motivate students to be interested in learning Accounting. In features quality, there is weak quality in accessibility. The networking of internet in educational institutions and home sometimes unstable. This support by Zarlina, Airil, Sheema and Johana (2011) and LeLoup and Pontero (2000), internet accessibility is the backbone of online learning. Without stable and efficient connection, students will only face a lot of frustrations instead of developing and enhancing literacy based on the new technology. In the future, Accounting Dry Lab Program can replace the face-to-face practicum and also can be used by the public as OER, especially in accounting.

Limitations

The limitations of this study are the sampling methods and the number of sample. Therefore, the process of generalizing these or other user groups is limited. This study is a work in progress and more detailed research into the areas of dry lab as an OER and also its effectiveness will be covered in the future.

References

- Arendt, A.M., & Shelton, B. (2009). Incentives and Disincentives for the Use of Open Course Ware. *International Review of Research in Open & Distance Learning*, 10 (5), 1-25.
- Bissell, A.N. (2009). Permission granted: open licensing for educational resources. *Open Learning*, Vol. 29, No. 1, 97-106.
- Beller, M. E. (2006). The Crossroads between Lifelong Learning and Information Technology A Challenge Facing Leading Universities. *Journal of Computer-Mediated Communication*. *Journal of Computer-Mediated Communication*, Volume 4, Issue 2.
- Ormrod, J.E. (2008). *Educational Psychology: Developing Learners* 5th edition. Uppersaddle River, New Jersey, NJ: Pearson/Merrill Prentice Hall.
- Harsasi, Meirani. (2012). Integrating Open Educational Resources Into Tablet-Based Learning Materials In Open And Distance Education. *Proceeding International Symposium on Distance E-Learning (ISODEL)*. Bali
- LeLoup, J. W. & Ponterio, R. (2000). On the Net: Foreign Language Teacher Resources. *Language Learning and Technology*, 6-9.
- Suparman, M.A., & Zuhairi, A. (2004). *Pendidikan Jarak Jauh: Teori dan Praktek*. Jakarta: Pusat Penerbitan Universitas Terbuka.
- Suparman, M.A., & Udan Sumarwan (2012). Technology in, for, and of Education: Conception, Implementation, and Challenges. *Proceeding International Symposium on Distance E-Learning (ISODEL)*. Bali
- Thomson, L. D. (2010). Beyond the classroom walls: Teachers' and students' perspective on how learning can meet the needs of gifted students. *Journal of Advanced Academic*, 21(4), 622- 712.
- Young, S. S. C. (2003). Integrating ICT into second language education in a vocational high school. *Journal of Computer Assisted Learning*, 19, 447-461.
- Zamaria., Zarlina Mohd, Airil Haimi Mohd Adnanab, Sheema Liza Idrisa and Johana Yusofa. (2011). Students' Perception of Using Online Language Learning Materials. *The 3rd International Conference on e-Learning ICEL 2011*, 23-24 November 2011, Bandung, Indonesia
- D. Bertram. (2014). "Likert Scales". <http://www.al-huda.net/2012/PA/2014/topic-dane-likert.pdf>. accessed March 15, 2014.