

THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGY IN UNIVERSITAS TERBUKA LEARNING: ALUMNI AND STAKEHOLDER PERCEPTION

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ABSTRACT

The use of technology in UT instructional media allows students of the Open University of Indonesia (Universitas Terbuka, UT) to improve their knowledge and skills without being hampered by distance, space, and time. This study explored the perception of UT alumni and stakeholders about the benefit of using information and communication technology (ICT) and learning media obtained during their study period in UT. The information was gathered from a tracer study conducted in 2008, which was used to evaluate 5 study programs at the Faculty of Teacher Training and Educational Science in the use of ICT and instructional media. The data were collected from 37 UT regional offices through questionnaires to a sample of alumni teachers and their principals, as well as interviews with selected alumni and stakeholders. According to the surveys and interviews, both alumni and stakeholders perceived that alumni had improved in their knowledge and skills of ICT and learning media. However, according to alumni perceptions, the knowledge and skills they had learned from UT were relatively low. On the other hand, stakeholders perceived that the alumni had good knowledge and skills of ICT and learning media. We argue that differences in perception between alumni and stakeholders result from different experiences and expectations on the part of each group.

Key words: alumni and stakeholder perceptions, information and communication technology, tracer study.

Information and communication technology (ICT) generally relates to those technologies that are used for accessing, gathering, manipulating and presenting or communicating information (Toomey, 2001). In the education world, the presence of ICT has become increasingly important for educational activities, especially in the learning process. Rosenberg (2001) stated that in the expansion of ICT there are five shifts in the learning process, namely: (1) from training to performance, (2) from the classroom to anywhere and at any time, (3) from paper to online or channel-based, (4) from physical facilities to network facilities, and (5) from classroom cycle time to real time. These shifts had some impacts on the change of patterns, methods, and presentations of learning strategies, as well as the approach used. Riyana (2004) states there are 3 (three) functions of ICT in the learning process, namely (1) technology serves as tools, in this case ICT is used as a tool for users or students to assist

learning; (2) technology serves as a science; and (3) technology functions as materials for learning (ICT literacy).

Through the use of ICT and the development of ICT-based learning systems, educational services can be expanded to reach remote areas. The existence, development, and advancement of ICT, as well as the free flow of information, allow the application of the concept of lifelong learning and flexibility in human resource development (Rosenberg, 2001). The concept of lifelong learning underlies the establishment of the Open University of Indonesia (Universitas Terbuka, UT) as the provider of distance education systems and educational services to the public in Indonesia. With a unique characteristic that is the separation between students and lecturers, and the use of various media in learning processes, UT has demanded the integration of ICT in the learning program to assist students' learning process.

Usage of ICT by an educational institution can be known from assessment of the parties that are directly related and using the services. These parties include alumni and stakeholders, such as employers, consumers, and managers. The assessment provided by the stakeholders or customers can be considered as perceptions of the educational institution. According to Kotler and Armstrong (2004), perception is the view of the customer service given. Kotler and Armstrong also stated that perception is a process whereby a person can select, organize, and interpret the information into an image that is very meaningful in the world. Meanwhile, Horovitz (2000) stated that perception is the assumption that arises after observations in the environment to obtain certain information. On the other hand, Rakhmat (2000) stated that perception gives meaning to sensory stimuli. Interpreting the meaning of sensory information involves not only the sensation but also attention, expectation, motivation, and memory. Furthermore, according to Rakhmat (2000), perception, as well as sensation, is determined by personal and situational factors.

Exploring the perception of UT alumni and stakeholders about the benefit of using ICT and learning media obtained during their study period in UT is important to improve UT learning process. The alumni and stakeholders perceptions are gathered by tracer study. According to Schomburg (2003) tracer study is a study of alumni of higher education institution. Tracer studies can provide information on (1) the evaluation of educational outcomes that can be used to improve and guarantee the quality of higher education institution, (2) the relationship between higher education with a professional world, (3) assess the relevance of higher education, and (4) information for decision makers, and (5) as one of the requirements for completeness of higher education accreditation (BAN, 2009).

Tracer study done at Washington and Lee University (McAhren, 2000) found that from alumni perceptions they believe that the university prepared them adequately for their worked-related writing since college and this is the area of general education they have found most useful. Guhr (2009) mentioned that alumni play an increasingly important role in the overall efforts of higher education institutions developing and raising profiles internationally. The functions that alumni often assist with range between traditional marketing and outreach support, various financial support schemes, talent acquisition, and, more recently, the gathering of competitive

intelligence and commercialisation efforts for their alma maters. Furthermore, Guhr stated that tracer study will contribute to the better understanding and management of the emerging alumni network and support landscape in New Zealand.

In the global level there is lack of tracer studies in distance education institutions. Nevertheless, Indira Gandhi National Open University reported their tracer study of the vocational educational programme in Gaba (2009) and Barbados Community College reported their tracer study for enhancing relevance and marketability in online and distance education (Millington, 2007). In general, tracer studies in Indonesia are still in the development stage, and the University of Indonesia tried to implement various training regarding tracer study for some higher education institutions in Indonesia.

Indonesia is the world's largest archipelago with over 17,000 islands, and the area over 80% comprised of water. Demographically, Indonesia is the fourth most populous country in the world (after China, India, and the United States of America), with over 220 million people. The country represents a mosaic of ethnic and regional cultures with over 1,000 local languages and dialects spoken among different ethnic groups; however, Bahasa Indonesia is used as a national language (Universitas Terbuka, 2009).

UT was founded in 1984 to address low quality and limited capacity in Indonesia higher education. Currently UT has 35 degree programs in 4 Faculties (Teacher Training and Educational Sciences; Mathematics and Natural Sciences; Economics; Social and Political Sciences). By 2009, UT enrollment had reached 596,922 active students and 770,257 alumni (Universitas Terbuka, 2009). Since UT was established, most of its students have been teachers (Wahyono & Setijadi, 2004). Not surprisingly, most of the alumni (94%) are also teachers (Universitas Terbuka, 2009). As a result, the tracer discussed here focused exclusively on the Faculty of Teacher Training and Educational Sciences (Fakultas Keguruan dan Ilmu Pendidikan, FKIP).

As a higher education institution, UT is required to be accountable for quality and good learning process for prospective students, governments, employers and society. To provide such information UT has conducted three tracer studies in 2007, 2008, and 2009. The tracer study conducted in 2008 focused on alumni teachers from FKIP. The goals were to examine the quality and performance of UT alumni teachers, as well as satisfaction of alumni and their employers. The tracer study examined various aspects of UT's training, one of which is the usage of ICT.

This study was conducted based on research results from a UT Tracer Study conducted in 2008, which was designed in part to evaluate the usage of ICT in teaching at UT and its impact on the competence of UT alumni in ICT. The aim is to present information about (1) alumni perceptions while they were studying at UT related to improving their competence; (2) stakeholder perceptions on the impact of the UT alumni learning experienced and performance of alumni in their institutions; and (3) differences in perceptions between alumni and stakeholders. The stakeholders consist of parents of children who are taught by UT alumni, principals, and Heads of the Education District Offices.

METHODS

In 2008 UT alumni tracer study was conducted using a survey of UT alumni and stakeholders. To elaborate on the data obtained through questionnaires, interviews of a smaller sample of alumni (and stakeholders) were also conducted. The population in this study is all UT alumni from the degree program of FKIP through the year 2008, a total of 83,786 alumni. Respondents were selected randomly from this population. The delivery of 8,440 questionnaires and interviews was conducted in 37 UT regional offices (UPBJJ-UT) all over Indonesia. The number of alumni who returned questionnaires was 1,229 people, for a response rate of 14.56 percent. Details of population and sample from each study program are presented in Table 1.

Table 1. Number of Population and Sample

Study Program	Population	Sample (Delivered	Returned	
		Questionnaire)	n	%
		N		
Mathematics and Science Education (PMIPA)	12,386	1290	197	15.27
Bahasa Indonesia Education (PBINDO)	4,508	459	89	19.39
English Education (PBING)	5,256	536	57	10.63
Elementary School Teacher Education (PGSD)	60,033	5918	836	14.13
Social Science Education (PIPS)	1,603	237	50	21.10
TOTAL	83,786	8440	1,229	14.56

The quantitative data obtained from questionnaires were analyzed by calculating the frequency (n) and percentage (%) of respondents' answers. There were 1687 interviews conducted and the respondents consist of: at least 1 alumnus for each study program, 1 parent of children who are taught by UT alumni, 1 Principal, and 2 Heads of the Education District Offices in each regional office. Interviews were transcribed and responses were grouped according to themes found in the questionnaires. The results of quantitative data analysis are elaborated with qualitative data analysis, in order to obtain a complete and comprehensive analysis.

RESULTS AND DISCUSSION

Table 1 presented that the highest return rate of the questionnaires came from the Social Science Education (PIPS) study program. The questionnaire return rate is very dependent on the accuracy of the respondents' address. In general, teachers' addresses are their address at the time of their first registration at UT. During registration, students used the address of their UT study groups or the District Education Office where they worked. Consequently, there were many questionnaires sent to addresses of study groups that no longer exist. In other cases, respondents moved to another district and did not receive the questionnaire.

Profile of Alumni from the Faculty of Teacher Training and Educational Science

The profile of UT alumni who participated in this study will be described based on age and work status of respondents (Table 2).

Table 2. Alumni Profiles Based on Age and Employment Status

Aspects	Category	PMIPA	PBINDO	PBING	PGSD	PIPS
Respondents' Age	≤ 30	0 (0.00)	0 (0.00)	2 (3.51)	15 (1.79)	0 (0.00)
	31-40	51 (25.89)	7 (7.87)	12 (21.05)	195 (23.23)	3 (6.00)
	41-50	108 (54.82)	49 (55.06)	25 (43.86)	565 (67.58)	40 (80.00)
	51-60	34 (17.26)	28 (31.46)	16 (28.07)	61 (7.30)	7 (14.00)
	> 60	4 (2.03)	5 (5.62)	2 (3.51)	0 (0.00)	0 (0.00)
Job Status	Employed	180 (91.37)	83 (93.26)	50 (87.72)	760 (90.91)	26 (52.00)
	Unemployed or Retired	17 (8.63)	6 (6.74)	7 (12.28)	76 (9.9)	24 (48.00)

Note: numbers in parenthesis are percentage of respondent per study program

Table 2 shows that the highest percentage of UT alumni from FKIP falls between the age of 41 to 50 years old. This means that their age at the time they studied at UT ranged from 30 to 40 years. This condition is in line with Andriani and Pangaribuan (2006), who stated that the majority of distance education students are within the age range of 25 to 50 years. In terms of job status, most of UT's students are working adults (Universitas Terbuka, 2009). Even before becoming UT students, many of them had worked. This fact is supported by Orr (2000) stating that distance education university students generally learn by doing, because they have already chosen their careers and do not want to go to college full time. They also assume that they can obtain working experience and knowledge simultaneously.

Based on age and employment status, UT students are adults, so their learning process should be tailored to the characteristics of adult education (Knowles, 1990). According to Knowles, one of the characteristics of adult education is independence and personal responsibility. As such, it is highly possible for UT as distance education institution to integrate the use of ICT in the learning process. This is in line with Yaumi (2006), who argued that independence in learning process can lead to changes in learning, such as learning in a different time and place.

UT Alumni Perceptions of the Use of ICT

The use of ICT within distance education institutions is nothing new, for example in the United States, as well as in other countries, most higher education institutions use some forms of Learning Management System (LMS), which serve as a medium to communicate between facilitator and learners (Tillman, 2009). There is some usages of ICT in UT, including registration data management activities, development of teaching materials, learning aids or tutorials (online tutorial, web supplements, and exercise independent online), and test data management. The purchase of teaching materials at UT has also been implemented through an online system (e-bookstore).

Access to online tutorials is one of the useful experiences for alumni who are working as teachers in the classroom. They can develop and apply their knowledge about ICT in the teaching and learning process. UT's website also offers web supplements, which are online subject materials that provide additional material to enrich the printed subject material. Experience in access to various online facilities is very useful for UT alumni to apply in their

places of work. Through learning at UT, alumni have at least minimal ICT literacy. Research conducted by Sukarsih (2005) in UT's regional office in Yogyakarta found that nearly 75% of respondents (UT students) who were observed knew about UT online services. However, utilization and participation of students in online tutorials is still very low (Kusmawan, 2001 in Winatapura & Ratnaningsih, 2006). One of the problems as presented by Padmo and Pribadi in Belawati (2002) is the minimal feedback received by learners about the learning process and outcomes at UT.

Regarding the usage of ICT by UT alumni, there are two inter-related aspects discussed in this article, which are information technology and learning media. Alumni's responses regarding the benefits of information technology and instructional media that they learned at UT are presented in Figures 1.

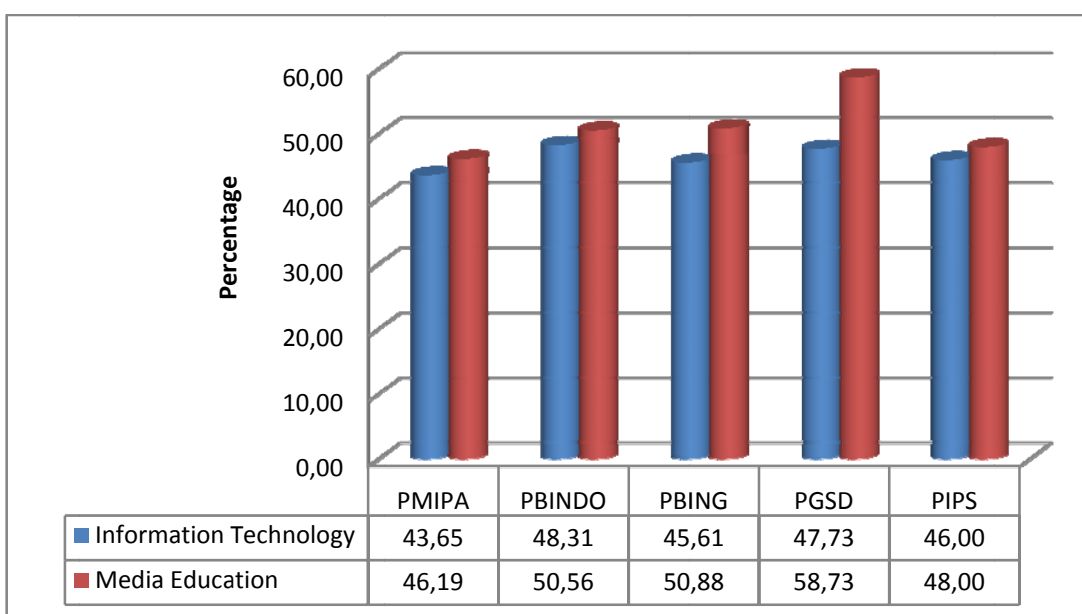


Figure 1. Use of information technology and media education while learning at UT (in percentages)

From Figure 1 we can see that the alumni who took advantage of ICT facilities during their study at UT is almost uniform (45% -50%) among the five study programs. The highest percentage is among the graduates of the Bahasa Indonesia Study Program/PBINDO (48.31%), and the lowest percentage is among graduates of the Mathematics and Science Education Study Program/PMIPA (43.65%). Figure 1 demonstrates that students from the five study programs were able to take advantage of ICT facilities during their study at UT. This is understandable since UT, as a distance education institution, reaches students with a variety of media, which is supported by the characteristics of adult education. According to Knowles (1990), characteristics of distance education learners are adults who adopt an adult education system. Knowles (1990) suggested five pillars of theoretical study of adults, including (1) adults are motivated to learn when they think their needs can be achieved through learning, which is why the starting point of learning is needs and/or interests. Also, individual differences become

larger at older ages, so adult education must be provided in accordance with their learning styles, time, place and pace of learning.

Below are transcripts of interviews with alumni about the benefits of studying at UT and the knowledge of information technology:

- “Personally, what I felt with respect to particular learning at UT, the use of multi-media in teaching and learning made me gain a lot of benefits...”; (UPBJJ-UT Bogor).
- “Yes, after I attended UT because we have to try by ourselves, we can directly access the learning materials available on the Internet. We can compare with schools in Java Island. We can see the learning process in Java. We can also compare the other schools”. (UPBJJ-UT Palangkaraya).
- “The use of computer technology, the Internet, a tape recorder because it had already been provided from UT, such as tapes consist of teaching materials”. (UPBJJ-UT Mataram).
- “As an elementary school teacher I found it very helpful to have tutorials and practice in a computer course. Now the technology is more sophisticated, elementary school teachers also have to follow the globalization of the Internet. But unfortunately, in my elementary school there was no Internet”. (UPBJJ-UT Samarinda).
- “The results of study at UT can be used as the basis for the use of media technology and learning in schools. It can be the basis of behavioral changes too, with the improvement of my confidence that has been established through study at UT”. (UPBJJ-UT Lampung).

Meanwhile, some of the other UT alumni have not felt the benefits of information technology knowledge through study at UT. This may be because most of UT alumni are teachers and most of them live in remote areas far from the reach of Internet access. This is supported by the results of a study conducted by Karnedi (2002) which stated that not all UT students have computer access. In addition to demographic and geographical factors, the utilization of ICT may result from internal factors such as the students’ access to computer facilities at home, the possibility that they are Internet illiterate, and their time to study is limited. This fact is supported by Kusmawan’s (2002) research results stating that the low utilization of UT students in participation of online tutorials is because those students are unskilled in using computers. In addition Suparman (2009) noted that only 20% of UT students use online learning. This is because almost 98% of students registered at UT are employees and civil servants (PNS) not have much time to learn the Internet. Here is an excerpt of UT alumni’s opinion on some of their lack of skill in using computers.

- "The technology associated with computers and the Internet is still difficult for me, because I do not have computers at home. At school there are some computers, but my teaching schedule is very tight so I do not have enough time to learn computers." (UPBJJ-UT Samarinda-East Kalimantan).
- “I was not using it, not using the LCD. Even though it is necessary .. what .. so far I have not yet developed the mathematics learning materials by computer. Actually I want to do it, only what ... time is limited for me. So ...”. (UPBJJ-UT Bengkulu-Sumatra).
- "I do not understand computers and the internet". (UPBJJ-UT Jember-East Java).
- "For computers and the internet, I must learn elsewhere." (UPBJJ-UT Malang-East Java).

Another benefit that alumni UT felt while studying at UT is the improvement in knowledge about learning media. The percentage of alumni perception on these aspects also can be seen in Figure 1. This Figure shows that the alumni who used media to learn while studying at UT are above 40%. The highest percentage was achieved by alumni of the Elementary School Teacher Education Study Program (PGSD), which is 58.73%, and the lowest percentage was achieved by alumni of the Mathematics and Science Education Study Program (PMIPA), 46.19%. Given the characteristics of UT students who live far from the city, the percentages are relatively good in the use of learning media. This indicates that most alumni have knowledge of media studies after graduating from UT. Learning media knowledge can be applied in their learning process at schools where they work. Here is excerpt from interviews with UT alumni.

"Clearly support, and strongly support my job, at least we must have insight into teaching with a clear presentation of many disciplines and for children the subject matter can be easier to comprehend and for the presentation." (UPBJJ-UT Kupang-East Nusatenggara).

Knowledge of learning media obtained during the study at UT affects the pattern of presentation of material by the teachers (alumni) to students at their schools. This is in accordance with the characteristics of the benefits of ICT in changing the learning process. Yaumi (2006) declared that in situations of independence and high sense of responsibility, it is very possible to apply ICT in the learning process. This has obviously been applied by UT alumni in their work as students, as demonstrated by alumni' responses to questions about their current use of ICT. The use of learning media in the process of learning can help learners to communicate to their teachers (Sofa, 2008a). In addition, the use of learning media can motivate students to learn. This was revealed from alumni from regional centers in Ternate and Malang, who stated:

- "In class there were also changes. If in class, one method that we teach to students was not successful, we moved to the other pattern. So there was a change. For example, a method which we applied and the students did not understand, we took another method that eventually students understood. With continue practicing, with another medium".
- "... sometimes we use CD media to explain the variation formulas. Students feel happy ... there is another form of how to deliver subject materials ..."

Presentation materials that are exact sciences like mathematics and natural sciences will be more easily understood if the subject matters are presented in audio video, such as VCD instructional, television program, instructional slides and film strips. Presentation materials like this do not make students bored (Sofa, 2008b).

Stakeholder Perceptions of the UT Alumni

Stakeholder perceptions in assessing the UT alumni are very important to know the quality of alumni directly from the user. These perceptions are discussed so that there are complementary assessments between the two sources of information, alumni and stakeholders. Stakeholder perception is assessed in relation to the aspects of knowledge and utilization of information technology and instructional media by alumni in their learning process.

In the research instruments (questionnaires and interview guidance), the alumni and stakeholders' perceptions were divided into three categories, namely "good", "sufficient" and "low" use of ICT in UT alumni's teaching. From the analysis, the perception of alumni and stakeholders in the category of "low" is not very large. The percentage of "low" assessments from the two sources of informants is very small (under 4% for alumni and below 1% for the stakeholders). Hence, this article only discusses two rating categories, of "good" and "sufficient," as a comparison of the alumni and stakeholder perceptions. Alumni and stakeholders' perceptions of information technology and media study reporting "good" quality are presented in Figure 2a.

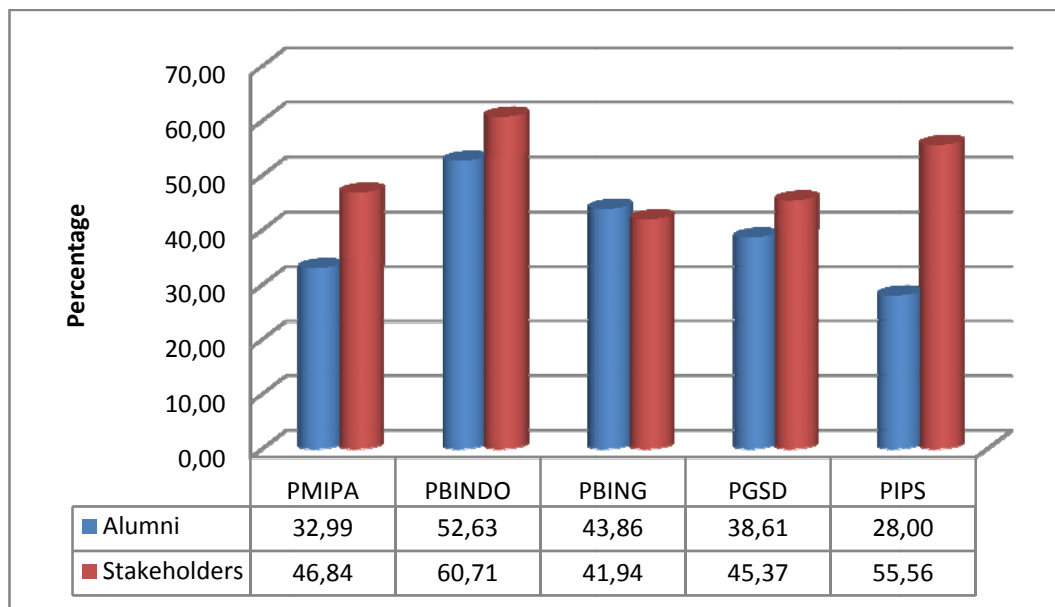


Figure 2a. Stakeholders and alumni perceptions of information technology and learning media by "good" quality

Figure 2a shows that the general perception of UT stakeholders about alumni knowledge and skills in ICT and learning media are above 40% in ratings of "good." However, from the alumni themselves, knowledge of ICT and learning media in their schools and its utilization is low (the percentage is below the stakeholder perception). It is quite possible, at the time of study at UT, alumni felt their ability or knowledge is still low, because of limited facilities and low skills in operating computers and other learning media. Constraints faced by alumni include lack of facilities required and low skills in both computers and the operation of the Internet. But after graduating, demands to master the knowledge and skills in both fields are needed. Therefore, to increase their knowledge and skills, as many as 10% of alumni expressed after graduation they were trying to attend various types of training. Type of training that they attended include: computers (including operation of the LCD and development of PowerPoint), Internet, media, web, and even programming languages.

The appraisal made of "sufficient" quality by both stakeholders and alumni is presented in Figure 2b.

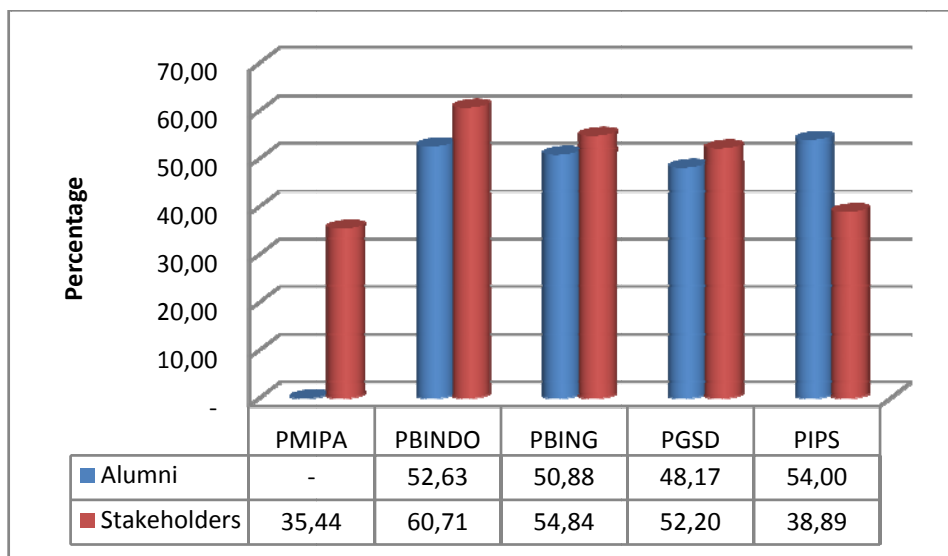


Figure 2b. Stakeholders and alumni perceptions of information technology and learning media alumni conducted by "sufficient" quality

These results are not very different from the appraisal made of "good" quality. Stakeholder perceptions on the ability of alumni having to do with the quality of "sufficient" are almost the same as "Good" quality. Stakeholder perception is higher than perceptions of alumni, except for the Social Science Education (PIPS) study program. This may be due to the fact that several courses that were offered in the PIPS study program such as online tutorials and web supplements are still limited. Therefore, the instructional media mostly used by students is printed media. This is supported by a statement from a principal from Padang in the province of West Sumatra, who has an alumnus from the Social Science Education Study Program as a teacher in his school, as follows:

"Regarding the use of technology he has not really mastered it, the computer only for typing, perhaps because the social science subjects are not too demanding for using the computer"

Here is a qualitative analysis related to the stakeholders' perception of UT alumni qualifications in ICT and media learning. Stakeholders who provide valuations are: Head of School (Principals), Head of the Education District Office, and parents of students who are taught by UT alumni. Stakeholder perceptions with respect to information technology are presented through excerpts of the interview.

- "Often, sometimes using a laptop, LCD, and others." (Parents of students in Samarinda).
- "For certain subjects, for a specific chapter the teacher uses laptop and LCD in class, because our school is SBI (international standard school) and equipped with LCDs, the subjects are presented by her laptop". (Principals from Samarinda).
- "The use of technology is good enough ... the teacher sometimes uses CD media to display in front of the children to explain the variation formulas". (Parents of students in Malang)
- "Teachers have good teaching skills. Ability and willingness for self development, every opportunity for training offered is always used. Relationships with other teachers are good,

also good in communication. They are coaching students, and parents are invited for discussion and deliberation. Technology is applied, teachers already have their own laptop". (Principals from Mataram)

- "Capabilities in using technology and media learning of alumni UT teachers are good, their scientific works already can be presented in the form of PowerPoint". (Principals from Bengkulu)

In fact, the effort toward staff (teachers) development at the schools is supported by the school principal to provide the necessary facilities related to the school's interests in the use of information technology. For example, the following is an excerpt interviews with school principals in Pontianak, in the province of West Kalimantan.

"Well, yes, the program we started two years ago we planned 1 teacher 1 laptop. Now there are 63 teachers. If I am not mistaken, there were 49 already borrow laptops. Now we hope they are using the laptops for the learning process in accordance with the demands of technology. Then, in this school, there is also a hot spot. Internet can be used 24 hours. They also have laptops equipped for wireless internet connection. So, they are able to communicate and search for materials"

Stakeholder perceptions regarding the instructional media are presented through the following excerpts of the interview.

- "Now for the media learning, yes it may be at least the teacher has been using the media, but not to the maximum. For example using the simple tools that exist in schools. However, the use of IT is not too much." (Principal from Bogor-West Java).
- "The technology condition in our school is simple, it cannot be done at school because there are no such facilities. The Government has been providing computer media, VCD. Because the subsidy from the government provided only one VCD and the some lessons done simultaneously so that the VCD is underused. Because we work for the children to understand the subject matters using as simple media as we have, with various efforts we are looking for that media". (Principal from Palembang-South Sumatra).
- From my point of view the possibility of UT alumni to improve their knowledge is just the same as the other alumni. Almost 80% of them are enthusiastic to master the ICT, especially in using the tools of learning media like CDs, OHP (overhead projector) that can stimulate the child to participate in the learning process. We see that that kind of enthusiasm is something that can encourage their friends to be able to use such tools. Can attempt to improve the quality of student learning" (Head of Education District Office from Palembang-South Sumatra).

According to UT alumni from the Faculty of Teacher Training and Educational Science, they are still not optimally using technology and learning media, but according to stakeholders their ability is good enough. This is supported by the opinion of Rakhmat (2000) that perception is influenced by one's experiences. Because the experience of alumni and stakeholders are different, they also have different perceptions towards the teachers' use of technology and instructional media.

CONCLUSIONS

UT alumni gained some improvement in their knowledge and skill of using technology and learning media when they were studying at UT. Based on alumni perceptions obtained through questionnaires and interviews, they feel that their knowledge and skill in using technology and learning media is limited. On the other hand, the alumni stakeholders, who consist of parents whose their children are taught by UT alumni, Principals, and Head of the Education District Office, have different perceptions. They stated that the UT alumni knowledge and skill in using technology and media learning are good, and they are implemented in their teaching and learning process. The difference perceptions between alumni and stakeholders come from their different experiences.

According to the UT alumni from the Faculty of Teacher Training and Educational Science perceptions, while they were studying at UT, the knowledge and skills related to ICT and learning media they learned were relatively low. Nevertheless, that kind knowledge and skills is very useful as they teach the material that requires the use of the computer. The improvement ability of UT alumni after they graduate is not only felt by the alumni but also by all stakeholders. Since the use of ICT in distance education is a must, so that the information about the distance education alumni perception in ICT knowledge and skills can be used by other distance education institutions in to improved the usage of ICT in their learning process. On the other hand, the distance education institutions can prove their quality to their stakeholders based on the tracer study results.

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