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# THE BENEFITS OF STUDY AT UT (OPEN UNIVERSITY) IN TERM OF KNOWLEDGE, ATTITUDE AND SKILLS ASPECTS



#### ABSTRACT

As the institution that has relationship with human resources development, UT has to know the performance of its graduates related to the accountability in developing qualified human resources and the impacts. The impacts can be known through *Tracer Study* done by UT in 2008. One of goals is to know the perception of the graduates of Education Faculty at UT i.e. Science, Indonesian Study, Social Science, English and Elementary Teacher (*PMIPA, PBIN, PBIS, PGSD and PIPS faculties*) about the benefit of taking long distance learning at UT on gaining 3 aspects of competences (knowledge, attitude and skill). The tracer Study shows that the most dominant aspects are the knowledge and thought aspect, self-confidence aspect and self development and teaching skill aspect.

Keyword : benefit, graduates, tracer study,

### **INTRODUCTION**

Open University (UT) is one of the institutions in Indonesia that conducts educational system through long distance learning (PJJ). It was built on the purpose of giving learning opportunity for any learners who would like to achieve their higher education. The learning system to be achieved by the learners in UT is a little different with other university learning process. At UT, though the learners and the educators are physically separated by the distance, space, and time, they can follow the lectures well, while it can not be permitted for the learners in any remote regions if they do not attend the lectures at common university. Although the learners and the educators can not meet face-to-face in a class, however, it is not a barrier for UT to produce qualified learners since they can interact each other through provided media that connect them.

Basically. UT and other university have the same goals i.e. to produce graduates who have academic and professional competences and able to compete in global era. Due to the Decree of National Education Minister No. 045/U/2002 (Surat Keputusan Mendiknas No. 045/U/2002), the university has to increase and develop three competence elements for the learners i.e. knowledge, attitude, and skills.

In an effort of increasing the quality of the three competence elements (knowledge, attitude, and skills), learners as individuals have important position as they are the targets of the learning program to be achieved. (Galusha, 2008). Although there are still some differences in learning system, but based on the reseach (study) result, there was no significant difference in qualified graduates between long distance learners and face-to-face learners (Andriani dan Pangaribuan, 2006). In line with this study, it shows that UT as the PJJ holder is competent to produce qualified graduates as well as face-to-face university graduates. This is because of the UT effort in desaining learning program based on national curriculum developed with PJJ system to offer good academic and administration service to the consumers in order to achieve education goal.

To have description of PJJ program that have been done for years, UT has carried out a *Tracer Study* activity. This article is a shortened *Tracer Study* result that specifically discusses the perseption of the S1 FKIP graduates on the benefits of learning at UT to their knowledge, attitude and skills.

#### Methods

UT has been carrying out *Tracer Study* since 2008 to obtain information about the results achieved in implementing PJJ. One of them is to the benefit of studying at UT on the knowledge, attitude and skills of S1 FKIP graduates. The sample was taken from the years 1986 to 2007 graduates of 5 study program i.e. Mathematics and Natural Science, Education, Indonesian, English Education, Elementary School Teacher Education and Education of Social Science. The effort to obtain data from the graduates conducted by distributing questionnaires in the way of : (1) sending the questionnaires to the address of the graduates, (2) informing them at UT website (http //: www.ut.ac.id), and (3) delivering the questionnaires directly to the graduates in 37 UPBJJ-UT throughout Indonesia before they were interviewed.

# **RESULTS AND DISCUSSION**

The result of Tracer Study showed the number of questionnaire that was compiled based on each study program as follow :

No.	Study Program of S1	Respondents 197		
1.	Mathematic and Science Study (PMIPA)			
2.	Indonesian Study (PBIN)	89		
3.	English Study (PBIS)	57		
4.	Elementary Teacher Study (PGSD)	836		
5.	Social Science Study (PIPS)	50		
	Total	1229		

Tabel 1. The number of questionnaire that was compiled per study program

Data in Table 1 shows the number of respondents graduated from a PGSD study (836 respondents) was higher than those from other studies. This was caused by the respondents from the PGSD were graduated from FKIP UT and worked as teachers in Primary Schools (SD), meanwhile the respondents from other studies (PMIPA, PBIN, PBIS and PIPS) were graduated from UT FKIP and worked as teachers in Secondary Schools (SMP) or Senior High School (SLTA).

Before 1991, in general the educational background of Primary School teachers were Teacher Training College (SPG) which is equivalent to High School. Starting 1991, government issued a new policy that Primary School teachers should fulfill requirement D2 educational background and provided scholarships to some of them in turn. In line with the policy, UT managed the program of D2 PGSD UT in 2002, while offering PGSD S1 study program. The program was then followed by the graduates of D2 PGSD throughout Indonesia to continue their studies by their own finance. Meanwhile, most of the teachers at the Junior / Senior High School have generally had S1 degree. The number of the non S1 educational background of Junior / Senior High School teachers was relatively less than those of S1 degrees. The Teachers of Junior / Senior High School who had not had S1 degree were then continued their studies at other university. Thus, those who were in a few number and spread outposts among the regions throughout Indonesia had made UT difficult to obtain their data. This was evidenced by most of UT questionnaire that sent to the teachers did not return to UT. As a result the number of S1 PGSD respondents were much higher than those of S1 FKIP UT respondents from non S1 PGSD program (Mathematic and Science Education, Language, and Social Studies).

From the data compiled at *Tracer Study* (Tabel 1), it was found that there was a difference assessment on each aspect of competence elements. In detail it can be shown as follow :

# Knowledge

The knowledge of FKIP UT graduates can not be separated from the knowledge they gained at UT. The knowledge they got from UT can be implied to their work and they can increase their knowledge, thought, technology and learning media mastery. The perception of the graduation about beneficial study at UT viewed from knowledge aspect gained at *Tracer Study* is as follow :

	Study Duogue	Knowledge Aspect (%)					
No.	Study Program S1	Knowledge of Specific Science	Insight Thought	Technology	Learning Media		
1. Mathematic and Science Study		85,79	79,70	43,65	46,19		
2.	Indonesian Study	82,02	85,39	48,31	50,56		
3.	English Study	82,46	75,44	45,61	50,88		
4.	Elementary Teacher Study	86,48	80,74	47,73	58,73		
5.	Social Science (IPS) Study	86,00	84,00	46,00	48,00		
	reduction % from nighest and the est	4,46	9,95	4,66	12,54		

 Tabel 2. The distribution of FKIP UT graduates based on the beneficial study at UT in increasing knowledge

From the *Tracer study* there was a perception among the five study program graduates about three aspects of knowledge (materials science, knowledge and technology) was not significantly different (Table 2). This is shown by the difference percentage of graduates from the five study program (PMIPA, PBIN, PBIS, PGSD and PIPS) that considered the benefits of studying at UT in increasing scientific knowledge, insight thought, and technology mastery was on a narrow range (less than 10%), except to the learning media mastery that showed a different perception between the PGSD and PIPS graduates i.e. 12.54%.

In Table 2 it can be shown that the percentage of graduates of PGSD (58.73%) who considered studying at UT provided benefits to gaining knowledge in learning media, was higher than that from other study program./courses.



Figure 1. Benefits of study at UT on aspects of knowledge

When viewed from the average percentage among the aspects of knowledge (Figure 1) a significant differences shown by the average percentage of college graduates who considered that study at UT can improve their knowledge in the field of materials science (84.55%) and insight (81.05%) is much higher than the percentage of graduates who consider that study at UT was beneficial to increase knowledge about technology (45.26%) and learning media (50.87%).

This can occur as a result of support from the teaching materials provided by UT. According IGAAK Wardani and Prayekti (2008) some teaching materials provided by UT are completely able to ease students study the lesson. Furthermore, Moore and Kearsley (1996) suggested that good teaching materials should enable students to build knowledge through a process of processing personal information.

The Benefits of study at UT to increase knowledge of materials science and insight though, are not also separated from the availability of teaching materials needed by graduates while they were still study at UT. It is noted by UT PBIS graduates from UT UPBJJ Bengkulu at the time of the interview, as follows.

"Teaching materials are easily available. They are not problem for us. But they are very expensive. So, at least we afford and use the modules together with friends."

Based on the results of Tracer Study, the material science fields that are considered most useful to support their profession as teachers vary between programs of study. However, the graduates of the 5 courses of study have the same opinion that the most useful subjects in supporting their profession as a teacher, was the subject of Classroom Action Research (Table 3). This is apparently stated that the knowledge gained from this course is beneficial for them especially for making paper to be used at the time of applying teacher certification.

No.	Study Program in S1	Thje most beneficial lectures/subject (Sorted according to the percentage is higher)
		1. Classroom Action Research
1.	Mathematic and Science Study (PMIPA)	2. Mathematic Capita Selecta
		3. Calculus
		4. Linear Algebra
		5. Statistics
	Indonesian Study (PBIN)	1. Reading
		2. Classroom Action Research
2.		3. Writing
		4. Speaking
		5. Basic Writing Skill
	English Study (PBIS)	1. Reading
		2. Writing
3.		3. Speaking
		4. Classroom Action Research
		5. Listening
	Elementary Teacher Study (PGSD)	1. Classroom Action Research
		2. School-Based Management
4.		3. Curriculum and Learning Developments at
ч.		Elementary School
		4. Komputer dan Media Pembelajaran
		5. Tes dan Asesmen di SD
	Social Science Study (PIPS)	1. Classroom Action Research
		2. School-Based Management
5.		3. 1945 Constitution
		4. Science
		5. Instructional Media

Table 3. Material science fields that are considered to support a graduate profession from FKIP UT

On the other hand, from Figure 1 shows that the lowest percentage of UT graduates assess that study at UT benefit them in improving their knowledge of technology. This is related to teaching materials as a source of reference provided for the UT FKIP students who enrolled long before year 2007 in the form of print media (module) and up to now the use of printed media are still dominant as a source of learning. According IGAAK Wardani (2008), Up to this date, in the implementation of the program PJJ both in developed countries or developing countries, the use of printed media are still dominant.

Winataputra dan Juliah (2006) stated that the heart of PJJ is a self-learning process because the learning process can drive a whole life in the sense that students can absorb, precipitate and construct knowledge. To get in touch succeessfully with PJJ learning process, it is required the readiness of the students. The readiness is meant here is the wilingness of the students to learn independently in determining the learning need, time to study, and evaluate the learning result that have been conducted by their inisiative. According to Andriani dan Pangaribuan (2006), the readiness to study will encourage students in building independent behavior and dicipline. As the behavior performed repeatedly by the students in learning process, it will become their habit or value attitude (Mulins, 2005 *in* Andriani dan Pangaribuan, 2006).

Based on the *Tracer Study* result on the FKIP UT graduates, changes in attitudes happened to the students was such an experienced studying at UT which are shown as follow :

No.	Study Program	Attitude Aspect (%)						
		Dicipline	Honest	Independent	Confident	Self Development	Creative	
1.	Mathematic and Science Study	65,99	54,82	72,08	73,10	73,10	56,85	
2.	Indonesian Study	69,66	65,17	70,79	83,15	77,53	64,04	
3.	English Study	61,40	56,14	77,19	73,68	66,67	54,39	
4.	Elementary Teacher Study	74,88	64,59	77,87	78,35	73,92	62,80	
5.	Social Science (IPS) Study	72,00	68,00	74,00	74,00	84,00	64,00	

Tabel 4. The Distribution of FKIP UT graduates based on beneficial study at UT to the change attitude.

Figure 2 shows the perceptions of FKIP UT graduates to the benefits of study at UT on each aspect of attitude varies. Percentage of the 3 aspects of attitude (independent, confident and self-development) show relatively small differences and basically the 3 aspects have a relationship to each other.



Figure 2. Benefits of study at UT attitudes towards aspects

The highest percentage of graduates opinion considered that the tuition at UT provide benefit in improving aspects of self-confidence (76.45%), followed by self-development aspects (75.04%) and independent (74.38%). This occurred as a result of the lecture atmosphere on FKIP UT during the graduates studied at PJJ UT institutions, they accustomed to follow learning process independently. According to Miller (1989), this independent study habits will build self confidence. By following the lectures at UT, the graduates not only become independent learners, creative, but also are able to increase their self-development and self esteem. This is in line with the graduates' statement as follow :

"In fact during having learned at UT my learning independent has grown up and it has been continuing in delivering teaching process since then ' (graduate from UPBJJ-UT Malang).

"Yes I become independent person, creative, discipline, and honest in many aspect of life since I was accustomed to be during I learned at UT and it was followed with other attitudes . They all grow naturally. I try to be honest to do the sums. When I find some difficulties I ask those who are knowledgeable about the topic. In short I could improve my knowledge since I have learned at UT . Thank you very much UT (graduate from UPBJJ-UT Denpasar)

"When I made a Classroom Action Research, I found that I could do it. That made me more confident in applying certified teacher. Though I am not good enough but at least I gain some knowledge from UT that is beneficial for teacher certification". (graduate from UPBJJ-UT Malang)

"Yes, they show great self-esteem and confident in teaching in class, managing class, and guiding students" (Principal. UPBJJ-UT Bogor).

The independence of graduates as they were students at UT in completing all tasks or steps that must be passed until they finally can finish their studies at UT have made a high self-confidence to themselves and this will become a strength or capital for them to develop themselves soon after they graduate from UT.

### Skill

The higher education institutions should be able to contribute in improving the competitiveness of nations, not only to improve the knowledge of their students, but also their skills. These skills should be useful for students especially for their future. To support this, higher education institution is asked to develop courses or study program that fit with market needs. This is also done by UT as the steering of higher education institution through its efforts in adjusting the curriculum of courses offered in accordance with the applicable curriculum. In detail, the percentage of UT FKIP graduates that consider any changes in those aspects related to the skills they gained from self-Tracer Study can be shown as follows.

	Study Program	Skill Aspect (%)						
No.		The usage of Technology	Media utilization	Reading	Skill Teaching	Communication		
1.	Mathematic and Science Study	47,21	58,88	61,93	69,04	56,85		
2.	Indonesian Study	48,31	65,17	65,17	75,28	58,43		
3.	English Study	52,63	64,91	45,61	64,91	61,40		
4.	Elementary Teacher Study	50,00	67,70	69,14	71,29	61,24		
5.	Social Science (IPS) Study	48,00	60,00	74,00	68,00	58,00		
prece from	reduction entage (%) the highest e lowest	4,63	8,82	28,39	10,37	4,55		

Table 5. Distribution FKIP UT graduates based on the benefits of study at UT to their skills

Table 5 shows the percentage of graduates from the 5 courses (study program) who considered that studying at UT were beneficial in developing their skill at technology use, media utilization and communication were on a narrow range (less than 10%). This shows the similarity opinion of the graduates on these three skill aspects.

In the aspect of reading skills, there was a fairly large percentage differences. The percentage of graduates from the highest PIPS course/study program (74%) considered studying at UT was beneficial in improving reading skills, while the percentage of PBIS graduates (45.61%) who agreed of that opinion were far fewer than PIPS graduates. This is apparently caused by the subjects offered at PIPS course are generally related to aspects of memory, so they should be diligent to read the modules provided by UT, while the subjects offered at the PBIS program are more dominant in the aspect of understanding and skills such as at Speaking, Writing, Listening, Reading, Translation courses.



Figure 3. Benefits of study at UT on aspects of skills

When each aspect of skills compared, it shows there was a significant percentage difference between aspects of teaching skills (69.70%) and the skill aspects of technology use (49.23%) (Figure 3).

Teaching skills that are currently owned by graduates was engaged by their work background as teachers with at least 2 years teaching experience when they began studying at UT, supported by the benefits of studying at UT until they gained additional knowledge and insights on subjects related to field of study taught in schools (Figure 1) as well as subjects related to teaching course. Based on UT Catalog (2009), subjects taught at UT for courses that are in shade FKIP UT can generally be divided into 2 groups, namely, that in accordance with the field of science studies and science teaching.

Teaching skills mastered by FKIP UT graduates were also supported by the improvement in the quality attitude aspect of confidence and self-development (Figure 2) as a result of self-learning during studying at UT. According to Guigelmino in Miller (1989), self-learning can foster learning skills such as reading, interpreting, explaining with one's own language and communicate well.

The percentage of graduates who consider the benefits of studying at UT to increase the skills to use technology ranked at the lowest (49.23%). This can occur as a result during a class at UT, graduates just rely on teaching materials provided by UT (module), as disclosed by Nugraheni and Pangaribuan (2006) from the results of this research, UT students relied on modules as the main learning materials.

Dominance of the printed media use as learning resources comparing with the use of other technology-based media could be caused by some matters; (1) as they studied at UT they had no skill in information technology (2) UT does not oblige its students for IT- based learning process (3) lack of facilities availability in the remote region associated with IT-based learning process (4) Students do not have enough time to obtain other *reference* related to learning material and learning to use IT, and (5) for the subjects that related to technology use (computer) as offered by PGSD program (Tabel 2), UT has not oblige the students to have much practice.

#### SUMMARY AND SUGGESTION

#### Summary

- Related to knowledge

The highest percentage of the graduates considered that study at UT was beneficial to the aspect of materi bidang ilmu and insight thought., meanwhile the lowest percentage were on aspects of technology and learning media.

- Related to Attitude

The highest percentage of the graduates considered that study at UT was beneficial on the aspects of self-confidence, self-development, and independent behavior,

meanwhile the lowest percentage was on the aspects of dicipline, creativity and honesty

- Related to Skills

The highest percentage of graduates considered that study at UT were beneficial to the teaching aspect, media utilization, and reading. Meanwhile the lowest percentage were on the technology use and communication.

- The most beneficial subjects for the graduates of 5 courses (study program) was Classroom Anction Research

#### Suggestions

To develop qualified graduates, UT should make improvement on the lowest percentage aspect, (technology, learning media, diciplin, creativity, honesty, technology use asd communication) by improving service quality and infrastucture required.

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