The Effectiveness of Tutorial as Learning Guidance Process to Enhance Students' Self-Directed Learning Readiness in UPBJJ-UT Bandung

Promoting Education for All

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Abstract

One indicator to achieve distance education students performance is the ability of their self-directed learning. Tutorial as a learning guidance process is an effort to enhance the ability of students self directed learning.

This article is based on a research conducted to gain a general view on tutorial effectiveness in the Elementary Teacher Education Program (ETEP) which is indicated by the increasing of the students' Self-Directed Learning Readiness (SDLR) and their learning performance.

The survey was conducted at UPBJJ-UT Bandung, one of the Universitas Terbuka's regional offices with n = 654 selected purposively based on their length of study. Research variables were students' SDLR and their learning performance. Primary data were collected using questionnaire and secondary data were down-loaded from UT's computer center. The data were analyzed using quantitative analysis.

The results of this research revealed that: (1) there was a significant increase in students' SDLR after being three semester length of study ; (2) there was a significant difference on the average final mark on tutored courses and the average final marks on untutored courses; (3) the entry behavior, the learning process and the motivation factors affected students' learning performance at the first, second and third semester respectively (4) the tutorial process has already shown the effectiveness of students' SDLR, and (5) the counseling services were suggested to be implemented. .

These study results suggested that the model and mechanism of tutorial have to be frequently socialized both to the tutors and students. Furthermore, these study results provide the direction of counseling activities for distance education students as a whole. Universitas Terbuka as a distance education institution should provide all possibility facilities needed in order to conduct counseling activities in all UT's regional offices.

Introduction

The establishment of Universitas Terbuka (UT, Indonesian Open University) which implements distance higher education system was intended to overcome the gap between the limited of educational resources and the increasing of higher education needs. Kompas daily news dated 22 June 2003 as quoted by Soekartawi (2004:7) stated that from the number of high school graduations showed that the capacity of universities in Indonesia relatively low, that was around 19%. Also, the capacity of universities outside Jaw was greater than in Java that was 25.96% compared to 5.04%. Finally, the number of higher school

graduations who wanted to enter into universities in Jawa was greater than those in outside Jawa., which was around 63,5%. Distance higher education system could expect to solve those problems mentioned above and would give a real contribution in increasing the access and equal chances to the higher education in Indonesia.

Indonesia government founded UT based on it's consideration that UT did not need many academic staff which was difficult to earn, as well as classrooms' facilities for a great number of students. In executing the government mission, UT applies the 'tata pamong' system which insists the utilization of the academic and other recourses of public universities as the partner. UT's operational network covers 35 regional offices (UPBJJ-UT) that spread in all over Indonesia to provide students' services; public universities to develop academic programs, content of course materials and examination items; Indonesian Postal Company (PT Pos Indonesia) to distribute course and other materials, Indonesian Peoples Bank (BRI) to receive students' tuition fees; and telecommunication, printed and electronic media industries for students' communication and interaction. Coordination and communication between UT' head office and all relevant parties performed by using printed matters as well as electronics (Zuhairi et al, 2004:27-28). To serve students need of library services as well as it' academic resources that spread out all over Indonesia, UT' library center had joined to the Indonesia Digital Library Network (IDLN) which is supported primarily by Bandung Institute of Technology (ITB). By using this network, it's expected that the access to the information source for UT's students and academic staff would become more widely.

UPBJJ-UT resides in the city that has a public university functioned as Assistance University. The scope of UPBJJ-UT's activities includes students recruitment and enrollment; managing and distributing course materials; providing learning services such as tutorial and practices; managing students' affair; conducting final exams, providing inaugurating certificates; managing general administration, finance and cooperation with the local government and other relevant parties; and public relation.

UPBJJ-UT Bandung, one of UT's regional offices covers 19 districts in West Java Province and has more than 12000 students to be served. In providing its services, UPBJJ-UT Bandung established a staff group, namely PJPM, which each member of the group responsible for students' services from each district. This group supported by other, actually works for administrative and academic services before and during enrollment period; during learning process, during and after the examination session

Administrative and academic services before the enrolment period started with the pre-enrollment counseling. Within this period usually explained things that related to courses offered with their prerequisite, the figure of time span to study, the consideration on available time for studying, as well as the guidance to do a correct enrollment.

UT implements distance learning system that insists students to apply self-directed learning. Within self-directed learning students are expected to have initiative in learning the course materials, doing the assignments, establishing the skill and implementing the work experience. Self-directed learning can do individually or by group using printed and non printed course materials as learning sources, and in many ways determined by the ability to learn efficiently. Consequently, students' success will be influenced by their discipline, creativities and learning concentration.

As mentioned before, the success of distance education students depend on their readiness and ability of self-directed learning, whereas tutorial is an effort provided by UT to increase their self-directed learning, and the result of it is their learning performance. As stated by Muhibin Syah (1995:132-159), the learning result is a product of a human effort to achieve a knowledge understanding and skill which is proven through a test.

The success factor of distance education students depend mostly by their self-directed learning ability (Paul, 1990; Wardani, 2000). Nevertheless, most of UT's students hadn't have the ability of self-directed learning yet due to some factor such as used to be depend on the information that directly conveyed by the teacher. Some research studies conducted by UT's academic staff on regular program students showed that the degree of UT students' self-directed learning

readiness was on average (Andriani et al, 2003; Islam, 2000; Darmayanti, 1993), while as research study conducted by Kadarko (2000) showed that the ability of UT students' self-directed learning was below of average level. Furthermore, research study conducted by Darmayanti (1993) showed that the degree of two semester length of study students' self-directed learning readiness was higher than those on the first semester length of study. This finding pointed out the potency of the distance higher education in forming students' self-directed learning. Also, others research studies showed that there was a positive correlation between students' self-directed learning and their learning performance (Islam, 2000; Sugilar, 2000; Darmayanti, 1993). This means that, students' self-directed learning readiness will contribute to their learning results. Based on this, UT was striving hard for enhancing the ability of students' self-directed learning through tutorial learning pattern.

The aim of tutorial is to cope with essential concepts which are difficult to understand, and to give a feedback of students' learning result. Within tutorial activities, tutors have important roles since the interaction between students and their course material is very essential in learning process. As mentioned by Moore and Kersley (1996) that within distance education system, tutors are particular course material experts that role to help students in interacting with their course material on an activity named by tutorial.

The Elementary Teacher Education Program (ETEP), Faculty of Teaching and Educational Sciences is a relatively a new program of study that was begined on 2002. This program was intending for elementary teachers who have Diploma II certificate on ETEP to develop their academic knowledge and professionalism for anticipating the need of elementary teacher qualification in the future. All ETEP' students were government employees and had worked for at least two years with interval of age 30 to 44 years old, which means that they were on the development age of human mature. At the stage of this age people are able to do many things included learning independently.

Learning process for ETEP included the mixture of learning by alone, face to face and online tutorial. The mechanism of face to face tutorial was specifically designed: eight sessions with two hour duration of time for each session, and there

was a three times quiz on the first, the third and the seventh session. Curriculum structure was designed for D-II level of entrance with 74 credit units spanned in five semesters. The number of courses offered in this program was 27 courses, only half of them were tutored, by average three tutored courses for each semester.

As a relatively new program, UT was having an interest to run the ETEP the best way it could be as the demand of teacher professionalism and also other society. Attempts to optimally the ETEP was necessary focused on three successful indicators, providing good quality standard of course materials, learning process through tutorial activities that fulfill academic standard, and conducting the examination properly (Thaib, 2004). If UT could prove that those indicators could be accomplished then it would be expected that UT would be trusted by the government and societies in running the ETEP. In order to prove it, UPBJJ-UTs had an important role in accomplishing that mission, since they were directly responsible for accomplishing those tasks.

When this researched was conducted, UPBJJ-UT Bandung was one of UT' regional offices that had the biggest number of ETEP students that was 1851 students. The successful in managing and running a good quality of tutorial activities as well as conducting the examination properly would be significant influence to UT's success in operating the ETEP.

As mentioned before, that one of the indicators of the successful learning of distance learning students can be found in their readiness and ability in self-directed learning. As a form of a guided learning process, tutorial can facilitate and enhance the productivity of self-directed learning

The majority of UT's students are workers, no freshmen high school graduation. Their self-confidence is quite low because they have not been learning for a long time. Consequently, their learning performance becomes low also. The drop out level of distance education students is quite high. Based on UT's statistic on the year 2000, the level of drop out in UT's students is almost 87%. Thus, the knowledge of self-directed learning readiness is become important in helping the development of distance education directly, both to the students and the institution.

B. Willen as quoted by Islam (2000) stated that the knowledge of self-directed learning readiness is useful to understand the method of the learning plan, process and result. The students might be able to use this knowledge in order to improve their strategy and style of learning. The institution, in other side, can also use this knowledge to plan and to improve their services to the students. Having self-directed ability becomes important since students who have directed ability can determine what priorities that has to be done.

Education has global purpose that emphasis to the development of self concept as an essential theme in cognitive development. This is also realized that academic development and progressiveness can not be ignoring from the human development aspects.

The explanation discussed above shows how important self-directed learning system on distance education system. Thus, the writer choose the title of this research as follow: The tutorial effectively in increasing students 'self-directed learning and their learning performance in the Elementary Teacher Education Program (Analytic study at UPBJJ-UT Bandung

The purpose of the research

In general, the purpose of the research is to gain a general view on tutorial effectiveness in the Elementary Teacher Education Program (ETEP) to improve students' Self-Directed Learning Readiness (SDLR) and their learning performance. In other words, the research seeks to know whether tutorial and academic administrative services provided by the institution have able to increase students' SDLR and their learning performance. Increasing students' learning performance is followed by no significant difference between the average final marks on tutored and untutored courses, after being three semester length of study.

The research hypotheses

The research hypotheses proposed are: (1) there is significant increase of students' SDLR after three semester length of study, (2) there is significant difference between the average students final mark on tutored and untutored courses in the first semester; and (3) there is no significant difference between the

average students final mark on tutored and untutored courses in conjunction with the increasing of students' SDLR.

The research methodology

The survey was conducted in 15 districts at UPBJJ-UT Bandung working areas. Data were gathered through sample of 654 ETEP' students which were selected purposively based on their length of study. The sample was classified into two groups, the second and fourth cohort students, who were being three and one semester length of study respectively.

The primary data were collected using questionnaire. The instrument which consisted of 43 statement items and divided into 14 indicators was adopted from the Self-Directed Learning Readiness Scale (SDLRS) instrument that had been developed by Guglielmino (1978). The detail of 14 SDLR' indicators with the number of statement items are shown by the table bellows.

Table 1 : SDLRS' Instrument Indicators

NO	INDICATORS	Statement item Number	Interval Value
1	Initiatives	8,32,43	1 - 15
2	Activeness	1,22,31	1 - 15
3	Intrinsic Motivation	5,23,38,39	1 - 20
4	Responsibilities	3,13,15,32	1 - 20
5	Ability to solve problems	4,11,26	1 - 15
6	Innovativeness	18,21,25	1 - 15
7	Self confidence	2,19,42	1 - 15
8	Ability to evaluate learning result	12,24,40	1 - 15
9	Critical thinking	29,30,33	1 - 15
10	Ability to manage time	14,27,37	1 - 15
11	Discipline	16,36,41	1 - 15
12	Independence	7,9,20	1- 15
13	Having many learning resources	17,35	1 - 10
14	Ability to plan	6,19,28	1 - 15

The secondary data were students' final marks that were down-loaded from UT's computer centre, and was converted to numerical number such as A=4, B=3, C=2, D=1, and E=0. The statistical t-test of both data was conducted to measure students' SDLR and their learning performance by using Minitab version 11 software packages.

Research Findings

SDLR' data measured by using questionnaire that had theoretic value interval from 43 to 215, whereas students' final mark had 0 to 4.00. Statistic description of SDLR' indicators and students' final mark is shown by the table bellows:

Table 2 : The statistic Description of Research Result

NO	VARIABLES	N	Mean	Dev. Stand	Min.	Max.
1	Initiatives	654	9,122	2,975	1	15
2	Activeness	654	10,205	3,045	2	15
3	Intrinsic Motivation	654	14,147	4,058	3	20
4	Responsibility	654	12,962	3,487	2	20
5	Ability to solve problems	654	8,566	2,820	1	15
6	Innovativeness	654	8,842	2,750	2	15
7	Self confidence	654	8,214	2,388	2	14
8	Ability to evaluate learning result	654	8,261	2,741	1	15
9	Critical thinking	654	9,108	2,981	2	15
10	Ability to manage time	654	19,963	3,26	2	15
11	Discipline	654	10,708	3,133	1	15
12	Independence	654	8,172	2,638	2	15
13	Having many learning resources	654	6,916	2,119	1	10
14	Ability to plan	654	10,203	3,536	2	15
15	SDLR	654	135,350	38,960	45	201
16	Final marks	654	2,297	0,448	0,57	3,71

Statistic description of SDLR' score for each cohort group is presented on table bellows.

Table 3: The Scores of Students ' SDLR

Cohort	Score			Categories		
	Average	Minimum	Maximum	Low	Middle	High
II (N=395)	160,29	85	201	1,77%	45,82%	42,41%
IV (N=259)	95,33	45	183	49,81%	45,17%	5,02%

Data on the table above showed that for the second cohort students, the mean score was higher than the median scale which was on 129, while it was contrast to the fourth cohort students'.

Based on each SDLR' indicator, the mean score of the second cohort students' SDLR was 3.73. The lowest indicator was pointed out by innovative factors and the highest indicator was pointed out by intrinsic motivation. The mean score of the fourth cohort students' SDLR was 2.27; with the lowest indicator was pointed out by activity factors and the highest indicator was pointed out by the self-confidence factors. Statistical t-test pointed out that for each indicator, there was a significant difference between the second and the fourth cohort students' mean score, as shown on the next table.

Table 4 : Mean of Each SDLR's Indicator for Each Cohort Students

NO	SDLR'S Indicator	The Mean		T-test Result
		Second Cohort	Fourth Cohort	
1	Initiatives	3.260	2.139	Significant Difference
2	Activeness	3.100	2.495	Significant Difference
3	Intrinsic motivation	4.001	2.548	Significant Difference
4	Responsibility	3.847	2.411	Significant Difference
5	Ability to solve problems	3.286	1.914	Significant Difference
6	Innovativeness	3.336	1.854	Significant Difference
7	Self confidence	4.192	2.189	Significant Difference
8	Ability to evaluate learning result	4.236	2.221	Significant Difference
9	Critical thinking	3.441	2.167	Significant Difference
10	Ability to manage time	3.970	2.352	Significant Difference
11	Discipline	3.576	2.466	Significant Difference
12	Independence	3.970	2.173	Significant Difference
13	Having many learning resources	4.117	2.546	Significant Difference
14	Ability to plan	3.536	2.243	Significant Difference

In terms of Students' learning performance, the final average mark of the second cohort students' learning performance and the result of the statistical test for each semester are shown by the table bellows

Table 5: The Second Cohort Students Achievement

Semester	The Average Mark		T-test result
	TC	UC	
I	2,70	2,07	Significant difference
II	2,97	1,98	Significant difference
III	2,27	1,97	Significant difference

Note: TC = Tutored Courses; UC= Untutored Courses

There was a significant difference between tutored and untutored courses average mark of the fourth cohort students in all researched districts except in district Cimahi.

The general view of tutorial activities in class rooms was observed by observers. One of those activities observed was in a physical sciences course in district Bandung on the fourth session. Such activities that observed on two hour length of time included:

a) 20 minutes for tutor presentation on topic of biotechnology, while student listened
b) 40 minutes for group discussion, tutor divided students into three groups. Each member of groups shared their experiences of how they thought that topic in their school. Tutor watched and assisted during that discussion.
c) 20 minutes for group assignment. Tutor gave the students assignment to analyze biotechnology development. Student done the assignments.
d) 20 minutes for presenting group results, tutor gave comments and made some corrections.
e) 20 minutes for giving deepest understanding and conclusion about the topic. Tutor also gave individual assignment and formative test.

The compliance of the plan written on the Tutorial Activities Design (TAD) with real activities that noted in classroom' agenda was evaluated, after the result of the examination was announced before the next tutorial activities were begun. The evaluation was presented in front of all tutors on a forum of coordination meeting.

Discussions

The achievement of students' SDLR after three semester length of study that was higher than those who just on the first semester length of study with significant difference, pointed out that the increasing of SDLR occurred in line with the increasing of their length of study. This result supported the acceptance of the first hypothesis, there was a an increasing of students' SDLR after three semester length of study , as well as Darmayanti's statement that on the second

year of study there was an increasing of students' SDLR. Furthermore, efforts to help students in learning through tutorial activities showed that the tutorial provided a positive contribution in enhancing students' SDLR, showed by the result of the second cohort students' SDLR.

However, the increasing of students' SDLR after three semester length of study did not follow by no significant difference in students' final marks on tutored and untutored courses at the same time length of study. This can be seen on t-test results on semester three compared to the result of the two semesters before. Thus, although this result supported the acceptance of the second hypothesis it was not support the third hypothesis. Perhaps there are other factors that altogether with students' SDLR contribute in enhancing students' learning performance.

One of such factors is the implementation of tutorial mechanism which was not properly applied yet. In one side, tutors were not understand and implement the nature of the tutorial as a whole since they were not fully free from the influence of a face to face lecturer. Most of tutors were lecturer from the assistance university. In other side, students were not also fully act as distance education students. As stated by tutors, students often asked them to teach. This condition made tutors difficult to implement tutorial models determined by UT.
From the observation of a tutorial activiy, it was more convincing the position of tutorial as a form of counseling service to enhance the effectiveness of students' self-directed learning. On distance education learning the factor SDLR plays an importan role. Students' have to realize that the high awareness should occure on their own self on social contac so they will get clues, informations on how to learn properly from others to achieve the best learning performance. Furthermore, students should have the activeness and resposiblity character on how they learn. Efforts to develop the ability of their SDLR to a good direction will influence their learning achievement. Here, the role of institution is needed in encouraging and helping students in order to increase their motivation and self-confidence

Conclusions

In brief, the objective of the research has been achieved, which is to gain a general view on tutorial effectiveness in the Elementary Teacher Education Program to improve students' Self-Directed Learning Readiness (SDLR) and their learning performance. In other words, the research seeks to know whether tutorial and administrative academic provided by the institution have able to increase students' SDLR and their learning performance.

Based on empirical findings some conclusions have been made. Firstly, there was a significant increasing for students' SDLR after three semester length of study. In other words, the first hypothesis was accepted. Secondly, based on its indicators, there was a significant increasing for students' self-directed learning readiness after three semester length of study. Thirdly, the highest average mark of the fourth cohort group was on intrinsic motivation factor and the lowest is on innovative factor. Fourthly, the highest average mark of the second cohort group is on the ability to evaluate the learning result and the lowest was on activeness factor.

Fifthly, based on the second cohort students learning results, the average mark of tutored courses was better than the average mark on untutored courses in a significant difference. In other words the second hypothesis was accepted. Furthermore, there was a significant increasing of the students' average marks from the first to the second semester, but there was a significant decreasing from the second semester to the third semester.

Also, there was a significant difference between the tutored and untutored courses in line with the increasing of the self-directed learning ability. In other words, the third hypothesis was rejected. Probably, tutors had not been fully understand or implement the nature of tutorial system yet since they were not fully free from the influence of face-to-face lecturers. Also, the students have not been fully acted as the distance education students.

Sixthly, entry behavior, learning process, and motivation factor influenced students learning result on the first, second and third semester respectively.

Seventhly, based on tutorial activities that observed in classrooms, it was more convincing the position of tutorial as a form of counseling service to enhance the effectiveness of students' self-directed learning.

Finally, based on student's characteristics and the condition of UT's regional offices, e-counseling is suitable to be implemented

Recommendations

Based on conclusions above, it is suggested that the tutorial models and these mechanisms are necessary to be socialized periodically both to tutors and students in order to get the same perception. Furthermore, the study also provides a new framework for the administration of guidance and counseling for students of distance learning programs. As a distance learning provider, Universitas Terbuka is required to provide facilities that will support the conduct of guidance and counseling through its Regional Offices.

References

Andriani, Durri.(2003). *Kemandirian Mahasiswa & Lulusan Perguruan Tinggi Tatap Muka & Jarak Jauh.* (Research Report). Jakarta: Universitas Terbuka; Pusat Studi Indonesia, Lembaga Penelitian.

Bates, A.W. (1995). *Technology, Open Learning, and Distance Education*. New York: Routledge.

Darmayanti, Tri. (1993). *Readiness for Self-directed Learning and Achievement of the Students of Universitas Terbuka (The Indonesian Open University)*. Unpublished master thesis, University of Victoria. Victoria B.C.

Darmayanti, Tri dkk. (2004). *Kemandirian Belajar pada Pendidikan Tinggi Jarak Jauh*. On Assandhimitra et al. (Eds.) Pendidikan Tinggi Jarak Jauh, Jakarta: Pusat Penerbitan, Universitas Terbuka.

Erisyani, Erin dan Thaib, Dina. (2004). *Evaluasi Tutorial Wajib Program Studi S-1 PGSD Masa Registrasi 2003.2 di UPBJJ-UT Bandung, Research Report* . Jakarta: Research Centre Universitas Terbuka.

Guglielmino, Lucy M. (1989). *Reaction to Field's Investigation for Your Readiness for Self-Directed Learning*. Pennsylvania: Organization Design and Development, Inc.

Guglielmino, Lucy M & Paul J Guglielmino, (1991), *Expanding for Your Readiness for Self-Directed Learning*, Pennsylvania: Organization Design and Development.

Islam, Samsul. (2000). *Prestasi Belajar, Kesiapan Belajar Mandiri dan Konsep Diri Mahasiswa pada Sistem Pendidikan Terbuka dan Jarak Jauh: Suaru Studi di Universitas Terbuka* (1997). Unpublished Master Thesis. Jakarta Postgraduate Program. University of Jakarta.

Kadarko, Wahyuni. (2000). Kemampuan Belajar Mandiri dan Faktor-faktor Psikososial yang Mempengaruhinya: Kasus Universitas Terbuka. *Jurnal P endidikan Terbuka dan Jarak Jauh vol. 1(1)*,2000.

Moore, Michael. (1986). Self-Directed Learning and Distance Education, *Journal of Distance Education*, vol. 1 No. 1, Fall, 1986, hh.12-15.

Muhibbin Syah. (1995). *Psikologi Pendidikan: Suatu Pendekatan Baru*. Bandung: PT Remaja Rosdakarya.

Paul, R. (1990). Towards *A New Measures of Success*: *Developing Independent Learners*. Open Learning, 5(1), 31 – 38.

Suparman, Atwi & Amin Z. (2004). *Pendidikan Jarak Jauh : Teori dan* Praktek. Jakarta: Universitas Terbuka.

Thaib, Dina. (2004). *Evaluation on Tuorial of Elementary TeacherEducation Program in UPBJJ-UT Bandung, on 2003.2*: Research Centre Universitas Terbuka.

Wardani,I.G.A.K.. (2000). *Tutorial Program In Distance Higher Education Journal on Distance and Open Higher Education. vol. 1(2),2000*.

Wardani, I.G.A.K, (2001). " *Remedial Tutorial Guidance* ", Paper, FKIP Universitas Terbuka, Jakarta.

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Zulkabir was the former head of UPBJJ-UT Bandung. He was also a senior lecturer in Faculty of Technical Education and Teaching Sciences on Indonesia Education University. He was born in Kisaran, North Sumatra on 4 August 1939. He got his sarjana and master degree from the same university