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## **E-learning System Transformation Policy through Universal Service Obligation Optimization to Interest in Student Learning in Bogor District**

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### **Abstract**

To improve students classified as powerless to be powerful, e-learning system development strategy through Universal Service Obligation optimization policy. The purposes of the research are: (1). Describing the Universal Service Obligation Optimization policies in rural areas. (2) Knowing the e-learning teaching system as the development of communication technology. (3) The existence of interest of student learning on e-learning system. (4) There is a relationship between E-Learning system transformation policies and necessity E-learning one way, so the E-Learning system transformation policies are wider, so the students' needs to E-learning also are increase. There is a relationship between E-Learning system transformation policies and advantages E-learning one way, so the E-Learning system transformation policies are wider, so the advantages of E-learning are also known to students increasingly. There is a relationship between the E-Learning system and the maintenance of one way modules, so the E-Learning system transformation policies are wider, so the maintenance modules are also required students increasingly. (5). It is formulated of e-learning system model and strategy.

**Keywords:** policy; e-learning system; optimization of universal service obligation interest in student learning.

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## **1. Introduction**

### **1.1. Background**

The development of science and technology is commonly obtained from tax book oriented, journal oriented, newspaper oriented, and other media, but it can't be ignored that tax book oriented, journal oriented, newspaper oriented, and other media have not guaranteed students ownership of the development of science and technology if the students don't understand the transformation of e-learning system. Indeed in urban areas the transformation of e-learning systems is very available, so the students in the city have more access to science and technology by e-learning system if compared the students in rural areas. To improve students classified as powerless to powerful. One way is development strategy of the e-learning system by optimization of Universal Service Obligation (USO) policies which in their application can be in the form of Info Kiosk, and others. It is expected that students' learning interest in rural areas will increase, so one day they will be able to optimize their potential in improving science and technology.

The concept of development strategy of e-learning system, enabling students can access science and technology. The main problem studied in the effort of developing e-learning system in rural areas is the students have difficulty to access knowledge to primary sources directly, it is caused the expensive of transportation from village to downtown, and the students have difficulty to go to library, internet cafe and the others. This phenomenon is considered important using the approach of Universal Service Obligation (USO) in Bogor District.

Constitutionally, the USO is the authority of the Ministry of Communications and Information Technology that has produced Law Number 36 Year 1999 on Telecommunications which is the legal basis for telecommunication development. The Optimization of USO in rural areas is anticipated to E-Community Services, whose core thinking is the development and utilization" Transformation of E-Learning Systems "to the interest in student learning to the Internet, Computers and Phones. E-Community Services have to provide public services faster and better, so there should be readiness (Readiness) through the fulfillment of three aspects as:

- A. **ICT utilization.** ICT networks (Internet, Computers and Phone) have to be widely available and have affordable prices in rural areas.
- B. **Utilization of ICT Program.** With the ICT students can use the program LINUX or WINDOWS.
- C. **Human Capital:** human resources must be able to apply E-Learning System Transformation

E-Learning Systems Transformation: can be implemented in various methods or ways, for example the provision of information resources. Especially, the information is often sought by students in kiosk info. The priorities of Application System methods or ways are:

#### **A. E-Procurement Application System and E-Auction**

Implementation of knowledge procurement and technology and the others that they are necessary by students in

rural areas using electronic, that aims to accelerate the process of accessing effectively and efficiently.

## **B. E-Learning Application System**

E-Learning is a form of information technology applied to schools that students are in the form of a virtual school, and is a type of learning process that enables delivery of learning materials using the Internet, Intranet or other electronic media quickly. E-Learning in this process involves the advantages of technological media, especially digital technology (internet, intranet or media computer network / the others electronic).

## **C. E-Service Application System**

E-Service Application System, it relates to information service of science and technology at the level of companion, manager and user (student).

### ***1.2. Purposes***

Based on the background, the purposes of this research are:

1. Describing the Universal Service Obligation Optimization policy in rural areas
2. Knowing the e-learning teaching system as the development of communication technology
3. Describing students' learning interest on e-learning system in rural areas
4. Analyzing the effect of e-learning system transformation on students' learning interest in rural areas
5. Formulating models and strategies of empowering students through the transformation of e-learning systems in rural areas

## **2. Materials and Methods**

### ***2.1. Research Location***

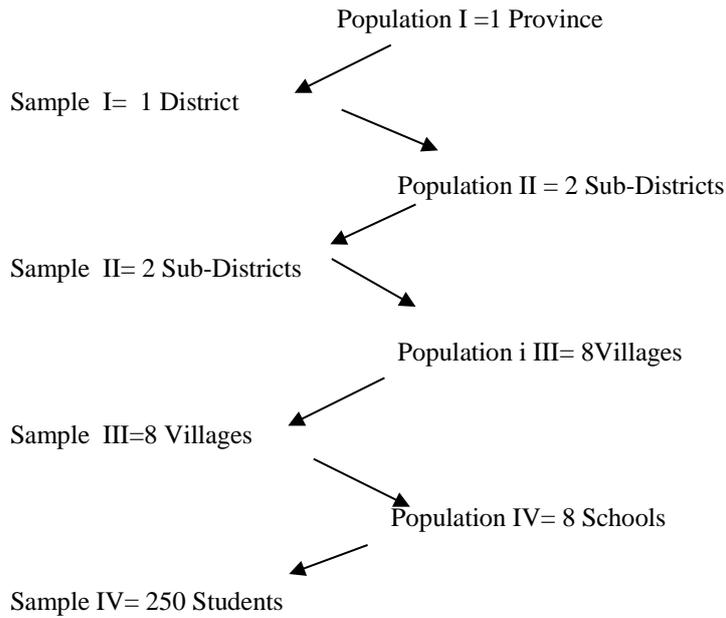
The location of the research was in Bogor District Ciampea and Sukamakmur Sub-District. The research was conducted for 8 (eight) months from March to October 2017.

### ***2.2. Research Approach***

The approach used in the research was descriptive, correlational analytics, and developmental

### ***2.3. Population and Sample***

The sampling technique was a gradual cluster. Sampling of two or more stepwise clusters could be separated the population according to layers randomly, so the sampling technique is Probability Sampling which sampling techniques that provide equal opportunities for each regional level of a population to be selected as samples [8]. Sampling according to [4].



The technique used was Proportionate Stratified Random Sampling, which was selected based on the sample element in Ciampea and Sukamakmur Sub-districts in Bogor District.

#### **2.4. Data Types and Data Collection Methods**

The type of data in the research was primary data and secondary data. Primary data were obtained by respondents, and secondary data were obtained by other parties concerned. Data analysis used quantitative and qualitative analysis. To know the transformation of e-learning system through USO was used content analysis, and quantitative data was analyzed by regression analysis with Microsoft Exel and SPSS software programs.

#### **2.5. Data analysis**

Data analysis used in two ways, they were quantitative analysis and qualitative analysis. For the expansion of the ICT network, the role of mentoring in applying ICT to managers and users, and training modules provided to mentors and managers were used content analysis with data reduction, display data and conclusion [2]. The qualitative analysis is referred as the flow model analysis.

The flow model analysis was accomplished with data reduction defined as the selection process. Focusing on simplification, abstraction, and "rough" data transformation was arising from notes in the field. Data reduction is not something separated from the analysis. It is part of the analysis.

The choices which dimensions and indicators are coded, which are discarded, which are used, which ones are compiled, and which are summarized, they are the analytical choices, so data reduction is a form of analysis of dimensions and indicators that sharpens, classifies, directs, discards unnecessary, and organizes data in such a way, so that the final conclusions can be drawn and verified. Furthermore, the presentation of data as a

collection of information is about dimensions and indicators that have been reduced to give the possibility of conclusion. The various data presentations on the dimensions and indicators have found, we will be able to understand what have been done, what are being done and what will have to do in the future.

The presentation of data on USO optimization in the narrative text was the core of analysis in the research which is supported by the presentations in form of: tables, matrices, graphs, and charts. It was still in connection with the reduction and display of data above, researchers begun to compose the meaning that arises from the reduction of data and display data to compile a number of conclusions. Basically, the way this analysis had been done the researcher since in the field and classified the data trends from the field notes. Especially when obtained from a particular theoretical study in relation to particular thematic findings, the researcher made possible a conceptual elaboration of the existing data trends.

The cases of thematic findings were combined with each other then made in the form of data summaries, that try to synthesize what were known from the data, and these were the way to make qualitative conclusions. The quantitative data concerning the factors that influence the optimization of USO could be analyzed through regression analysis with Microsoft Excel and SPSS software programs, so interviews, questionnaires and observations were very important in these analysis.

### 3. Results

#### A. Identity of Respondents

##### A.1. Educational level

the results showed that as many as 25.6 percent were elementary school students, and 25.2 percent were vocational high school students. In detail they can be seen in the table below

**Table 1:** Identification of Student Education Level

No	Education Level	Number of Respondents	Percentage
1	elementary school	64	25.6
2	Junior High School	62	24.8
3	Senior High School	61	24.4
4	Vocational High School	63	25.2
	Total	250	100.0

##### A.2. Level of Education and Grade

The results showed that as many as 24.0 percent were school elementary students, while 17, 6 percent were in grade 8 junior high school students, while 30.0 percent were grade 12 students of Senior High School /

Vocational High School. In detail they can be seen in the table below

**Table 2:** Identification of Level of Education and Student Class

No	Education Level	grade	Number of Respondents	Percentage
1	elementary school	5	4	1.6
		6	60	24.0
2	Junior High School	7	4	1.6
		8	44	17.6
		9	14	5.6
3	Senior High School / Vocational High School	10	22	8.8
		11	27	10.8
		12	75	30.0
Total			250	100.0

### A.3. Type of Education and Majors

The results showed that as much as 22.0 percent were the department of administrative office, while as much as 19, 6 percent were hospitality majors, while 33.6 percent were social studies major. In detail they can be seen in the table below

**Table 3:** Identify the Level of Education and the Student majors

No	Type of Education	Majors	Number of Respondents	Percentage
1	Vocational High School	Hospitality	49	19.6
		Office administration	55	22.0
		Accounting	12	4.8
		Nursing	2	.8
		Marketing	5	2.0
		TKJ	1	.4
		Total	124	49,6
2	Senior High School	Natural Sciences	42	16,8
		Social studies	84	33,6
		Total	126	50,4
Total			250	100.0

### A.4. Type of Education and Age

The results showed that as many as 12.8 percent were elementary school students with age 12 years, while as many as 17.2 percent were junior high school students with age 13, while 19.6 percent were vocational / senior high school students with age of 17 years. In detail they can be seen in the table below

**Table 4:** Identification of Level of Education and Age of Students

No	Type of Education	Age	Number of Respondents	Percentage
1	elementary school	10	6	2.4
		11	28	11.2
		12	32	12.8
2	Junior High School	13	43	17.2
		14	14	5.6
		15	26	10.4
		16	27	10.8
3	Senior High School / Vocational High School	17	49	19.6
		18	24	9.6
		19	1	.4
			250	100.0

#### **A.5. Gender of Student**

The results showed that as many as 36.0 percent were male students, while 64.0 percent were female students. In detail they can be seen in the table below

**Table 5:** Identification of Student's Gender

No	Gender	Number of Respondents	Percentage
1	Male	90	36.0
2	Female	160	64.0
	Total	250	100.0

The religion of the all students in Ciampea and Sukamakmur sub-districts are Moslem.

### **B. ICT Device Service Program and E-Learning System**

#### **B.1. Services Available**

The results showed that as many as 86.4 percent of students to internet café service, as many as 5.2 percent of students to the PLIK service, and as many as 4.8 percent of students to the Smart Village service. In detail they

can be seen in the table below

**Table 6:** Identification of Available Internet Services

No	Services	Number of Respondents	Percentage
1	Dring Village	9	3.6
2	Smart Village	12	4.8
3	PLIK	13	5.2
4	Internet Cafe	216	86.4
	Total	250	100.0

### **B.2. Student Access to Service**

The results showed that as many as 92.0 percent of students to Internet Cafe service, while as many as 4.0 percent of students to the PLIK service, while that as many as 4.0 percent of students to the Smart Village service. In detail can be seen in the table below

**Table 7:** Identification of Student Accessible Internet Services

No	Services	Number of Respondents	Percentage
1	Smart village	10	4.0
2	PLIK	10	4.0
3	Internet Cafe	230	92.0
	Total	250	100.0

### **B.3. Student Accessible Computer Programs**

The results showed that as many as 96.4 percent of students using WINDOWS program while as many as 3.6 percent of students using LINUX program. In Detailed they can be seen in the table below

**Table 8:** Identification of Student Accessible Computer Programs

No	Computer program	Number of Respondents	Percentage
1	LINUX	9	3.6
2	WINDOWS	241	96.4
	Total	250	100.0

#### B.4. Student Accessible Electronic Network

The results showed that as many as 93.2 percent of students using the Internet network, while as many as 5.2 percent of students using LAN network, in detailed they can be seen in the table below

**Table 9:** Identification of Student Accessed Computers

No	Electronic Network	Number of Respondents	Percentage
1	Internet	233	93.2
2	LAN	13	5.2
3	WAN	4	1.6
	Total	250	100.0

#### B.5. Student Learning by E-Learning

The results showed that as many as 44.4 percent of students learning were subjects, while as many as 41.2 percent of student learning were the curriculum. In detail they can be seen in the table below

**Table 10:** Identification of Student Learning

No	Learning	Number of Respondents	Percentage
1	Curriculum	103	41.2
2	Syllabus	8	3.2
3	Subjects	111	44.4
4	Private E-mail	14	5.6
5	Private Website	3	1.2
6	Never	11	4.4
	total	250	100.0

### C. Student's View of ICT Device and E-Learning System

#### C.1. Reasons E-Learning is implemented in School

The results showed that 50.8 percent did not have to go to other internet cafes, while 41.2 percent said they did not have to go to downtown. In detail they can be seen in the table below

**Table 11:** Reasons for E-Learning Performed by Students at School

No	Reason	Number of Respondents	Percentage
1	Not necessarily to the down town	103	41.2
2	No need to go to other cafes	127	50.8
3	Do not know	18	7.2
4	never	2	.8
	Total	250	100.0

### C.2. E-Learning Purposes Held In Village

The results showed that 29.6 percent E-learning needs were held in village so they could access ICT faster, while 28.4 percent said they could access information in the world, meanwhile, 15.6 percent said they could access IPTEKS faster. In detail they can be seen in the table below

**Table 12:** Reasons for E-Learning Performed by Students at School

No	E-Learning Needs in Village	Number of Respondents	Percentage
1	ICT access faster	74	29.6
2	Access IPTEKS faster	39	15.6
3	Lesson delivery faster	66	26.4
4	Access a variety of information in the world	71	28.4
	Total	250	100.0

### C.3. Socialization of LINUX, WINDOWS, Internet and others

The results showed that as many as 50.0 percent said that socialization LINUX, WINDOWS and others required assistance while as many as 41.6 percent said required consultants. In detail they can be seen in the table below

**Table 12:** Reasons for E-Learning Performed by Students at School

No	Socialization of LINUX, WINDOWS, Internet and the others	Number of Respondents	Percentage
1	Consultant	104	41.6
2	Assistance	125	50.0
3	never	19	7.6
4	Do not know	2	.8
	total	250	100.0

### C.4. Consultant Needs for Socialization LINUX, WINDOWS, Internet and others

The results showed that as many as 59.6 percent said that socialization LINUX, WINDOWS and others require consultants in their school, while as many as 23.6 percent said required consultants in the District education

authorities. In detail they can be seen in the table below

**Table 13:** The existence of the Consultant

No	Consultant Requirements	Number of Respondents	Percentage
1	District education authorities	59	23.6
2	Sub-District office	22	8.8
3	School in needed	149	59.6
4	others	20	8.0
	total	250	100.0

#### C.5. Need Assistance for Socialization LINUX, WINDOWS, Internet and others

The results showed that as many as 23.6 percent said that socialization LINUX, WINDOWS and others required assistance in every internet cafe, while 8.8 percent said they needed assistance in school. In detail they can be seen in the table below

**Table 14:** The existence of mentoring

No	Assistance needs	Number of Respondents	Percentage
1	every internet cafe	59	23.6
2	Every school	22	8.8
3	others	149	59.6
4	Do not know	20	8.0
	total	250	100.0

#### C.6. The Students Do When the E-Learning System is in School

The results showed that 33.2 percent said that typing assignments while as many as 38.0 percent said access to information, while 15.6 percent said printing assignments. In detail can be seen in the table below

**Table 15:** Activities Students Do When the E-Learning System is in School

No	Student Activities	Number of Respondents	Percentage
1	typing assignments	83	33.2
2	printing assignments	39	15.6
3	Facebook	23	9.2
4	Access information	95	38.0
5	Playing game	5	2.0
6	others	5	2.0
	total	250	100.0

### **C.7. Student Ability to Operate ICT**

The results showed that as many as 46.0 percent said that able to operate ICT, while as many as 9.2 percent said very capable of operating ICT, while 23.2 percent say do not know. In detail they can be seen in the table below

**Table 16:** Student Ability to Operate ICT in School

No	Student Ability	Number of Respondents	Percentage
1	very capable	23	9.2
2	capable	115	46.0
3	Un-capable	42	16.8
4	Do not know	58	23.2
5	Not know	10	4.0
6	Other Opinions	2	.8
	total	250	100.0

### **C.8. The Successful of Students Utilizing ICT Devices**

The results showed that as many as 44.4 percent said that they managed to utilize ICT, while as many as 9.2 percent said they were very successful utilizing ICT, while 17.6 percent said not successfully utilize ICT. In detail they can be seen in the table below

**Table 17:** The Success of Students Utilizing ICT in Schools

No	Student's Success	Number of Respondents	Percentage
1	very successful	23	9.2
2	successful	111	44.4
3	unsuccessful	44	17.6
4	Do not know	58	23.2
5	Other Opinions	14	5.6
	total	250	100.0

### **C.9. The Advantages of ICT Devices Helping Student Work**

The results showed that as many as 40.4 percent said that ICT Devices greatly assisted their work, while as many as 44.8 percent said that ICT Devices assisted their work, while 12.0 percent said they did not know. In detail they can be seen in the table below

**Table 18:** Utilizing ICT in School

No	Helping Student Work	Number of Respondents	Percentage
1	Very helpful	101	40.4
2	helpful	112	44.8
3	unhelpful	4	1.6
4	Do not know	30	12.0
5	Other Opinions	3	1.2
	total	250	100.0

**C.10. Positivity of ICT Devices Used by Students**

The results showed that as many as 61.6 percent said that the positivity of ICT was used by students at school, while 24.4 percent said that ICT devices were very positive for students in school, while 9.6 percent said they did not know. In detail they can be seen in the table below

**Table 19:** Positivity of ICT Devices in Schools

No	Positivity of ICT Devices	Number of Respondents	Percentage
1	Very Positive	61	24.4
2	Very Positive	154	61.6
3	Not Positive	6	2.4
4	Do not know	24	9.6
5	Other Opinions	5	2.0
	total	250	100.0

**C.11. Satisfaction of ICT Devices used by students**

The results showed that as many as 54.4 percent said they were satisfied with the performances of ICT used by students in schools, while as many as 26.0 percent said they were very satisfied with the ICT tools used by students in school. In Detailed they can be seen in the table below

**Table 20:** Satisfaction of ICT Devices used

No	Satisfaction of ICT Devices	Number of Respondents	Percentage
1	very satisfied	65	26.0
2	satisfied	136	54.4
3	unsatisfied	5	2.0
4	Do not know	38	15.2
5	Other Opinions	6	2.4
	total	250	100.0

### C.12. Student Agreement on E-Learning Has Advantages

The results showed that as many as 57.6 percent said they agree that ICT had advantages, while as many as 33.6 percent said agree that the ICT devices used by students in schools had advantages. In Details they can be seen in the table below

**Table 21:** Student Agreement on advantages ICT Devices Used

No	Student Agreement on E-Learning Has Advantages	Number of Respondents	Percentage
1	Strongly agree	84	33.6
2	agree	144	57.6
3	Not agree	6	2.4
4	Do not know	13	5.2
5	Other Opinions	3	1.2
	total	250	100.0

### C.13. Effectiveness of E-Learning System Implemented in School

The results showed that as many as 52.8 percent said the E-Learning system effectively **Implemented** in schools, while as many as 38.4 percent said it is very effectively applied in schools. In detail they can be seen in the table below

**Table 22:** Effectiveness of E-Learning System Implemented in School

No	Effectiveness of E-Learning System	Number of Respondents	Percentage
1	Very effective	96	38.4
2	effective	132	52.8
3	noy effective	9	3.6
4	Do not know	12	4.8
5	Other Opinions	1	.4
	total	250	100.0

### C.14. Procurement of E-Learning Systems Held in School

The results showed that as many as 52.4 percent said strongly agree E-Learning system held in schools while as many as 43.6 percent said agreed E-learning system held in schools. In detail they can be seen in the table below

**Table 23:** Procurement of E-Learning Systems at School

No	Procurement of E-Learning Systems	Number of Respondents	Percentage
1	Strongly agree	131	52.4
2	agree	109	43.6
3	Not agree	3	1.2
4	Do not know	4	1.6
5	Other Opinions	3	1.2
	total	250	100.0

**C.15. Socialization Needs of LINUX, WINDOWS and the others in School**

The results showed that 56.0 percent said they needed socialization in schools, while 38.4 percent said they very needed socialization in schools. In detail they can be seen in the table below

**Table 24:** Socialization Needs LINUX, WINDOWS and the others in School

No	Socialization Needs LINUX, WINDOWS and the others	Number of Respondents	Percentage
1	Very needed	96	38.4
2	needed	140	56.0
3	Not needed	7	2.8
4	Do not know	6	2.4
5	Other Opinions	1	.4
	total	250	100.0

**C.16. Module Requirements for Computer Maintenance and the other**

The results showed that as many as 56.0 percent said it needed a computer maintenance module at school, while as many as 38.4 percent said it was necessary module how to maintain computers at school. In detail they can be seen in the table below

**Table 25:** Module Requirements How to Maintain Computer and Others

No	Module Requirements How to Maintain Computer and Others	Number of Respondents	Percentage
1	Very needed	96	38.4
2	needed	140	56.0
3	not needed	7	2.8
4	Do not know	6	2.4
5	Other Opinions	1	.4
	total	250	100.0

**D. The Effect of E-Learning System Transformation Policies on Student Learning Interest**

**Table 26**

**Correlations**

		E-Learning Policies	E-learning requirements	Activities	Advantages of E-learning	E-Learning Effectiveness	Maintenance Module
E-Learning Policies	Pearson Correlation	1	.225**	-.051	.084	.100	.075
	Sig. (2-tailed)		.000	.424	.185	.114	.239
	N	250	250	250	250	250	250
E-learning requirements	Pearson Correlation	.225**	1	-.082	-.100	.001	-.112
	Sig. (2-tailed)	.000		.197	.113	.991	.076
	N	250	250	250	250	250	250
Activities	Pearson Correlation	-.051	-.082	1	.082	.043	-.104
	Sig. (2-tailed)	.424	.197		.196	.502	.100
	N	250	250	250	250	250	250
Advantages of E-learning	Pearson Correlation	.084	-.100	.082	1	.283**	.165**
	Sig. (2-tailed)	.185	.113	.196		.000	.009
	N	250	250	250	250	250	250
E-Learning Effectiveness	Pearson Correlation	.100	.001	.043	.283**	1	.118
	Sig. (2-tailed)	.114	.991	.502	.000		.063
	N	250	250	250	250	250	250
Maintenance Module	Pearson Correlation	.075	-.112	-.104	.165**	.118	1
	Sig. (2-tailed)	.239	.076	.100	.009	.063	
	N	250	250	250	250	250	250

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Interpretation**

The correlation coefficient number is 0.225, it means the relationship between E-Learning system transformation policy with E-learning needs very close. The correlation coefficient marked positive (+), it means that the relationship between E-learning system transformation policy with E-learning purposes is one way, so if the policy transformation system E-Learning increasingly widespread, so the students need to E-

learning also increase.

The correlation coefficient number is 0,283, it means the relationship between E-Learning system transformation policy with the Advantages of E-learning very close. The correlation coefficient marked positive (+), it means that the relationship between E-learning system transformation policy with Advantages of E-learning is one way, so if the policy transformation system E-Learning increasingly widespread, so the advantages of E-learning is also increasingly known to the students or users

The correlation coefficient number is 0,1655, it means the relationship between E-Learning system transformation policy with Maintenance Module very close. The correlation coefficient marked positive (+), it means that the relationship between E-learning system transformation policy with Maintenance Module is one way, so if the policy transformation system E-Learning increasingly widespread, so the Maintenance Module is also increasingly known to the students or users

The \*\* sign indicates that the correlation coefficient is significant at 99 percent confidence level

#### **4. Discussion**

Public policy studies are a growing study today, and have become a concern and involve various disciplines. The problem of policy formulation, implementation and evaluation, and methodological analysis are substantial aspect of public policy. [1] According to [9] defining "Very simple policy as a guide to action, the policy in its meaning is like a declaration on the basis of action, or direction of action, or an activity program or a particular plan". The political activities are described as a policy-assisting process and visualized as the most dependent set of stages that are organized by time: agenda preparation, policy formulation, policy adoption, implementation and policy assessment. The Public policies according to [3] are everything that does, why the government does, and the results that make a common life look different ". they can be concluded that everything that the government done is public polices as long series of more or less related choices, Including the decision not to act that made by offices or government agencies. "

The views expressed above are assumed that public policies are a series of interrelated decisions made by one or more government units which basic concepts or guidelines for a person / government agency with a purpose and specific purpose, in order to carry out government tasks.

The Policy implementation not only deals with the operational mechanisms of policies into bureaucratic procedures but it is also related to the issue of decision conflict. To observe the process of policy implementation, it is necessary to understand some concepts about the policy implementation. According to [3] in [6] it is formulated as follows "Implementation of a policy is a process of implementation of policy decisions" (usually in the form of Laws, Government Regulations, Judicial Decisions, Executive Movers, or Presidential Decrees).

This opinion indicates that policy implementation is a policy implementation process that is translated from legislation, judicial rules, and presidential decree. On the other hand, policy implementation needs to be done

wisely, situational, referring to the spirit of competition and insightful empowerment.

According to [7] put forward some key aspects of policy implementation, among others:

1. The existence of policies whose contents have to really contain, and it can answer about the growing public interest.
2. The existence of implementers which is the critical determinant of success and implementation running well.
3. Society which is the object as well as the subject of the target and the main goal of the policies.

The Implementation of the policies are intended to understand what will happen after a program is formulated and implemented, and what impact it has. In addition, the policies implementations are not only related to the administrative bureaucracy issue but also the environmental factors (outside the bureaucracy) such as community organizations, This is to avoid conflict between implementations (between bureaucratic and non-bureaucratic units) that influence the process of policies implementation.

The public policies to work properly they are required the reliability of public policy organizers, therefore the human resource factor must be improved through the functions of human resource planning, recruitment and selection, human resource development, development and career planning, compensation and welfare, occupational safety and health, and industrial relations.

Universal Service Obligation (USO) in the telecommunications sector is a commitment of countries around the world incorporated in the international telecommunication organization (ITU), especially in ITU-D (Development) as the commitment of several countries in Tokyo Declaration in 2003, Declaration Geneva in 2003, and Tunisian Declaration (World Summit on Information Society Declaration) in 2005.

The contents of the declaration in general is to realize the availability of telephone service access throughout in Asia Pacific region, and then realize the availability of Internet access services throughout in Asia Pacific region. The objective of the declaration is the expected development of telecommunication infrastructure that supports the spread of access to telecommunications services both telephone and internet services in urban areas and in rural areas, especially rural areas that are not profitable economically.

The legal basis of the Universal Service Obligation (KPU / USO) is [5]. This law has provided a vibrant change in the telecommunications organization from monopoly to competitive. However, telecommunication provision is still focused on commercial areas so that non-commercial areas get less attention although telecommunication operators still have an obligation to contribute universal services in the form of telecommunication facilities and infrastructure in non-commercial areas.

Clause 2 states that the telecommunications arrangement takes full account of the principle of national development by prioritizing the basis of benefits, fair and equitable principles, legal basis of fundamental and

fundamental beliefs in itself, as well as the principle of security, partnership, and ethics. To anticipate the widespread USO program in urban and rural areas in developing ICT, assistance is needed. Mentoring is done only in order to improve the knowledge and capacity and services for the managers in developing the telecommunication and informatics facilities that have been built. Mentoring for the community is directed to increase support and increase the active participation of the community to gain awareness of the importance of telecommunication and informatics services for the improvement of welfare

The e-learning application system is related to the service of the lesson information to the students. E-learning system is followed by various educational facilities along with the development of technology, especially in the field of communication that began to be sophisticated then e-learning which is the process of teaching and learning electronically and remotely without face to face. E-learning is just about any teaching and learning that uses electronic (LAN, WAN, or the internet) to deliver learning content, interaction or independent mentoring by students or between students and teachers.

In a broad sense, e-learning can include learning done in electronic media (internet) both formally and informally. E-learning formally such as learning with the curriculum, syllabus subjects and tests that have been arranged and arranged according to the schedule agreed by the relevant parties (managers of e-learning and self-learners). Such these learners are usually high level of interaction and required by the company on its employees or distance learning managed by universities and companies (usually consulting firms) who are engaged in providing e-learning services to the public.

E-learning can also be informally conducted with simpler interactions, such as mailing lists, e-newsletters or personal websites, organizations and companies that want to socialize certain services, programs, knowledge or skills to the general public (usually free of charge). The advantages and disadvantages of e-learning learning system have shortened the learning time and made the study cost more economical. E-learning makes easier the interaction between learners with materials, learners with teachers and fellow learners. The learners can share information and can access learning materials at any time and repeated with these conditions the learners can further strengthen their mastery of learning materials.

In e-learning the teacher attendance factor automatically becomes reduced or even absent, because the teachers are replaced by the internet, computer and telephone (ICT) and electronic guides designed by "contents writer" e-learning designer and computer programming. With the e-learning the teachers will be easier (1) updating the learning materials that become the responsibility in accordance with the demands of the development of knowledge, (2) developing themselves or conducting research in order to improve insight, (3) controlling the learning activities of students.

Mastery of science, knowledge and technology is not the monopoly of a person, an area, or a territory, but belongs to everyone, including students in rural areas. In Bogor district, there are hundreds of villages whose inhabitants are spreading to these villages, so it is important that students have service informatics technology (E-Community Services), consequently optimizing the USO in developing information and communication technology (Internet, Computer and Telephone) that can open isolation areas through the flow of information

and knowledge with telephone and internet networks.

Students using telephone means can communicate without having to travel. Likewise with the internet, students can access information and knowledge from various sources around the world so that physical "separation" does not limit the thinking in advancing student's life. At a more advanced stage, the internet can become a "cover" of chasms for students to start interacting with the outside world. This will foster new alliances and networks between individuals, as well as with groups, and other formal organizations.

Moreover, the communication facilities will grow up the mechanisms that enable bottom-up and top down articulation and share information about local needs and knowledge. The existence of internet facilities through the USO program, in a virtual manner, will include students in the global information network. Students have the facility to access and obtain unlimited information, data, knowledge and networks by telephone and internet communications. The Operational Internet facilities are expected to meet the students needed, continuously and can grow to follow the advancement of technology.

Based on the above, it is very important that the program of development, development and empowerment of telecommunication access services USO from all aspects by involving various elements, they are: government, society, universities and private institutions. One of the activities improving the operational and internet facility services is the existence of optimization activities and the empowerment of telecommunication access services USO by the development of the mentoring concept. In the implementation of this mentoring program, it is necessary for the services of trainers (consultants) to provide assistance to the managers and the users, so the physical aspects of Internet, Computer and Telephone (ICT) are built are not neglected and can be used by audience correctly. The participation of trainers (consultants) in the mentoring process is expected to identify the needs of students and link the interests of students with the interests of the government through ICT infrastructure that has been built in each region.

## **5. Conclusions**

The conclusions of the research are:

1. There is a policy of Optimizing Universal Service Obligation in rural areas
2. E-learning teaching system as the development of existing communications technology in rural areas.
3. There is interest in student learning to e-learning system in rural areas
4. There is a relationship between E-Learning system transformation policies and necessity E-learning one way, so the E-Learning system transformation policies are wider, so the students' needs to E-learning also are increase. There is a relationship between E-Learning system transformation policies and advantages E-learning one way, so the E-Learning system transformation policies are wider, so the advantages of E-learning are also known to students increasingly. There is a relationship between the E-Learning system and the maintenance of one way modules, so the E-Learning system transformation

policies are wider, so the maintenance modules are also required students increasingly.

5. It is formulated of e-learning system model and strategy.

## **References**

- [1] Ahmat. B. Adam. 2015. Pengaruh Kompensasi dan Disiplin Kerja Terhadap Kepuasan Kerja dan implikasinya ter hadap Kinerja Pegawai di Dinas Cipta Kabupaten Paser.Tesis Pasca Sarjana Administrasi Publik Universitas Tridarma Balikpapan
- [2] Huberman, .A.M, & Miles M.B, 1992. Analisis Data Kualitatif. Penerbit Universitas Indonesia, Jakarta.
- [3] Nugroho, Ryant, 2004. Kebijakan Publik: formulasi, implementasi, dan evaluasi, Jakarta: Elex Media Komputindo.
- [4] Palte J.G.L, 1978. Metode Penelitian Sosial Ekonomi (terutama survai). Catatan Kuliah Stensilan
- [5] Undang-undang Nomor 36 Tahun 1999 Tentang Telekomunikasi
- [6] Putera, Fadilah 2001. Paradigma Kritis dalam Studi Kebijakan Publik, Perubahan dan Inovasi Kebijakan Publik dan Ruang Partisipasi Masyarakat dalam Proses kebijakan Publik. Surabaya: Pustaka Pelajar.
- [7] Suryadi, Soleh, 2009. Administrasi Publik dan Otonomi Daerah, Bandung: Prisma Press.
- [8] Sugiyono. 2010. Metode Penelitian Administrasi. Alfabeta, Bandung
- [9] Wahab, 2002. Analisis Kebijakan Publik, Jakarta: Rineka Cipta.