

Proceeding International Conference on Islamic Education  
“Integrated Science and Religious Moderation in New-Paradigm in Contemporary Education”  
Faculty of Tarbiyah and Teaching Training  
Universitas Islam Negeri (UIN) Maulana Malik Ibrahim Malang  
October 17<sup>th</sup>, 2022  
P-ISSN 2477-3638 / E-ISSN 2613-9804  
Volume: 7 Year 2022

**SIKULON E-LEARNING ANALYSIS:  
POLICY DETERMINATION ANALYSIS OF E-LEARNING IMPLEMENTATION AT IAIN  
SURAKARTA**

**Mujtahid\*<sup>1</sup>, Triyo Supriyatno\*<sup>2</sup>, Sutiah\*<sup>3</sup> Andik Rony Irawan\*<sup>4</sup>Faisal Rois Fatahillah\*<sup>5</sup>**  
UIN Maulana Malik Ibrahim Malang; Gajayana Street No.50 Malang, East Java, Indonesia  
e-mail: \*<sup>1</sup>[mujtahid@pai.uin-malang.ac.id](mailto:mujtahid@pai.uin-malang.ac.id), <sup>2</sup>[triyo@pai.uin-malang.ac.id](mailto:triyo@pai.uin-malang.ac.id),  
<sup>3</sup>[sutiah@pai.uin-malang.ac.id](mailto:sutiah@pai.uin-malang.ac.id) <sup>4</sup>[andik@psi.uin-malang.ac.id](mailto:andik@psi.uin-malang.ac.id), <sup>5</sup>[frfatahillah82@uin-malang.ac.id](mailto:frfatahillah82@uin-malang.ac.id)

**Abstract** It has become an important requirement of every university to formulate and implement policies related to e-learning. IAIN Surakarta in this case is still new in terms of implementing e-learning. Even the carrying capacity ranging from policies, infrastructure, and so on is still not fully available. This study aims to analyze the process of policy formulation on e-learning at IAIN Surakarta. This study uses a descriptive qualitative approach. The qualitative approach is more emphasized the process of extracting data from primary sources, namely policymakers and policy documents that have been formulated and implemented. This research was conducted at the IAIN Surakarta campus. The data collection technique used data taken from subjects and informants, as well as document data related to e-learning policies and implementation. To test the validity of the data, this study used source triangulation and Focused Group Discussion (FGD). Data analysis uses an interactive model from Miles and Huberman. This study found that the formulation of e-learning implementation policies at IAIN Surakarta was carried out with a pragmatic and top-down situational approach. The main considerations used in policy formulation are health and safety aspects, in addition to other considerations, namely economic technology, psychology, and experience. The timing of the formulation of e-learning-based learning implementation policies found the right momentum with the presence of the Covid-19 pandemic. While the policy targets for implementing e-learning include all parties including academic managers at the Tarbiyah Faculty level, PAI study programs, related units, lecturers, and students.

**Keywords** Sikulon; Policy Analysis; Policy Determination; E-Learning; Policy Target

#### A. INTRODUCTION

The rapid development of Information Systems and Technology today causes the various activities and communications that have felt far and slow to become increasingly narrow. Various applied information technologies that exist today are increasingly diverse that can be felt by various groups, there is almost no space left that has not been touched by the development of this information technology. Toffler in Muhadjir (2007: 1), points to the era of the third wave or the information age. For hi-tech processing to produce quality work, it is necessary to process quality data. It's not that the data adjust to the system, but how to use the system in hi-tech to help us make quality works. The results of a 2018 study entitled Open Learning System (OLS) based Distance Learning Development Model for Master Program in IAIN Surakarta to Improve the Institution Reputation in Globalization Era, (Adrian, 2018) concluded that: Distance learning is highly possible to be implemented in IAIN Surakarta. The Open Learning System (OLS) based distance learning

prototype at a master program of IAIN Surakarta can be implemented in less than 50% of the total amount of available subjects. Permenristekdikti No 44 of 2015 concerning National Standards for Higher Education has set up a combination lecture model that combines several forms of learning. One of them can be done in the form of blended learning, which combines face-to-face lectures with field practice lectures or seminars/workshops, and e-learning-based lectures. The e-learning-based course itself is based on Law no. 12 of 2012 concerning Higher Education Article 31 concerning distance education (ie the teaching and learning process using various communication media), and Permendikbud No. 109 of 2013 concerning the implementation of distance education in higher education. In its implementation, this combination model combines conventional learning with distance education with a composition of 55% conventional (Classroom) and 45% based on an open learning system.

One of the innovations that can be done with e-learning is the implementation of Distance Education (PJJ). PJJ is a teaching and learning process that is carried out remotely through the use of various communication media (Permendikbud No. 109/2013). PJJ evolved from correspondent education to education through e-learning across space and time. E-Learning can be defined as individual/independent or group learning using ICT and networks. Currently, many higher education institutions have implemented e-learning-based learning policies. This has even become one of the assessment indicators in the accreditation of study programs and institutions. For this reason, it has become an important requirement for every university to formulate and implement policies related to e-learning. IAIN Surakarta in this case is still new in terms of implementing e-learning. Even the carrying capacity ranging from policies, infrastructure, and so on is still not fully available. For this reason, this research is very urgent to contribute to the development of policies and implementation of e-learning more optimally. The focus of the study in this research is on policy analysis which is limited to policy determination which includes the process, considerations, timing, and objectives of the formulated policy

## **B. METHODS**

This study used a descriptive qualitative approach where the object under study tries to be described objectively through various sources and using various methods, then the analysis is carried out. This is in line with the opinion of McMillan and Schumacher (2001) that the purpose of qualitative research is concerned with understanding social phenomena from the participant's perspective. In this study, the qualitative approach is more emphasized the process of extracting data from primary sources, namely policymakers and policy documents that have been formulated and implemented. This approach is preferred because it is not possible to make observations. After all, the policy-making process is related to events that have occurred in the past.

In William N Dunn's theory (2004), this research used an empirical approach, which is to analyze how the process of formulating a policy. Therefore, the situation and events are tried to be understood from the documentation found and strengthened by the results of extracting interview data from the parties directly involved in the policy-making process. The subject of this research is at the IAIN Surakarta campus from July to October 2022 which includes the stages of preparing research plans and instruments, implementing data collection and data analysis, and compiling research reports. This study used data taken from subjects from subjects and informants to add to e-learning policies and implementation.

This study used the subject as the key informant, the policy makers starting from the Dean of Tarbiyah, Deputy Dean of Tarbiyah, and units directly related to the implementation of e-learning at IAIN Surakarta. While the informants involve lecturers, students, and employees who are users and managers of e-learning programs. After the data was collected using the interview and documentation method, it was explored and validated using triangulation and Focused Group Discussion (FGD) techniques. This FGD involves research subjects and informants as resource persons or discussants. After the data has been validated, it is then analyzed using the interactive model from Miles and Huberman (2007).

## **C. RESULT & DISCUSSION**

### **1. Analysis of Education Policy Determination**

Policy analysis is one of the important stages of the policy-making process. William N Dunn (2004) understands that policy analysis is a problem-solving discipline that draws on theories, methods, and substantive findings of the behavioral and social sciences, social professional, and political philosophy, as is usual with complex activities. The focus of policy analysis includes policy determination and policy content. Policy determination is an analysis related to how policy is made, why, when, and for whom policies are made (Wayne Parson, 2001: 56).

1) Education policy formulation process. Education policy is one of the public policies. In every public policy, a public policy circle commonly known as the public cycle applies which consists of agenda setting, policy formulation, policy implementation, policy evaluation, policy change, and policy termination (McPhail, 2003). This cycle is also similar to that delivered by other experts such as Dunn (2004) and others.

Each step must be carried out to the fullest. This stage means that every policy is made through optimally controlled stages and processes to produce policies that are right on target (Alamsyah et al, 2020).

2) The parties involved in making education policy. In the process of determining education policy, it is strongly influenced by environmental factors. The point is that those who are around policymakers and decision makers will also influence the direction and content of the policies set (Arwildayanto, et al, 2018). Regarding the involvement of various actors in policy-making, especially in the policy formulation stage, the education policy formulation stage is expected to involve various policy-making actors with fewer participants than in the agenda-setting stage. This stage is expected to be more work in formulating alternative education policies by taking place outside the public's attention (Sidney, 2007: 79). This policy formulation process is usually carried out in the workspace of the policymakers (Parsons, 1997).

3) Considerations in Education Policy Making. The policy-making process needs to consider various related aspects so that the policies that are set can be appropriate and implemented properly. Policies are sometimes formulated because of a need or situation and conditions that force strategic actions to be taken immediately.

In mapping education policies, referring to the criteria of Bernard Berelson (1976) five things need to be considered, namely; 1) must lead to important educational issues that attract the attention of the community, 2) must be doable, 3) must consider the time dimension, so that the policy is useful for now and in the future, 4) must be a synthesis of various points of view, so that it is more comprehensive, 5) must show the responsiveness of education policies that emphasize crucial and sensitive issues or problems and become the attention of many parties.

4) Targets of educational policies. The targets of this policy when using the term Smith (1973) can be understood as target groups. This group is the target who will implement the policies that have been set. Thus, it is expected to be able to adjust the pattern of behavior with the policies that have been formulated. Usually, a policy is made at the top management level, then various regulations are made at the middle management level, and are binding on all members of the organization below it.

## 2. Implementation of E-Learning

Regarding the use of e-learning in the 2010s, it only refers to online-based learning by utilizing a computer or similar device that is connected to the internet network. This is as stated by Munir stated that, in general, the term e-learning is used for a learning process carried out through the use of the internet, although several experts specialize in the term i-learning (internet learning) or virtual learning (Munir, 2010). 2010: 202). There are several important definitions regarding e-learning. Ruth Colvin Clark and Richard E. Mayer (2003: 13) define e-learning as the delivery of instructions carried out using a computer utilizing a CD-ROM, internet, or intranet with the criteria that the content delivered is relevant to the object being studied, using the instruction method. examples or practical guides to making it easier for students, using written and image media in conveying content and methods, and finally building new knowledge and abilities in individuals or organizations. Meanwhile, according to Allan J. Henderson (2003: 2), e-learning is distance learning using computer technology (usually the internet).

E-learning has several categories. Rosenberg (2001) categorizes e-learning into 3 (three) basic criteria, namely: (a) E-learning is networked, which makes it able to quickly repair, store or

retrieve, distribute, and share learning and information. Rosenberg called it an absolute requirement because of the importance of this condition. (b) E-learning using a computer with internet technology standards. Thus, although CD ROMs, Web TV, Web Cell Phones, pagers, and other personal digital aids can prepare learning messages, they cannot be classified as e-learning. (c) E-learning focuses on the broadest view of learning, learning solutions that outperform traditional paradigms in training. One of the e-learning methods is the use of a blended or hybrid model. According to Harding, Kaczynski, and Wood (Charman, 2005) blended learning is a learning approach that combines conventional learning (face to face) and distance learning with online learning resources that have many media options such as text, images, diagrams, sound, and videos. which can be accessed by educators and students from the internet. Harriman (2004) and Williams (2003) define blended learning as combining learning with several delivery methods to provide an effective and efficient experience for students. In this case, what is combined can be in the form of teaching technology, such as face-to-face learning teaching, teaching with video, with CD-Rom, and with film, the source of which is downloaded from the internet. Presentation in class can be online or mobile.

#### 1. E-Learning Implementation Policy at IAIN Surakarta

The data analysis used in this study is based on the theory of Wayne Parson (2001) which states that the analysis of policy determination is related to the way (process) of policy-making, why (consideration) of policy formulation, when (time) of policy formulation, and for whom (target). The policy is created. For this reason, the data are classified and analyzed using this categorization.

This data analysis process begins with a Focused Group Discussion (FGD) process and is also attended by leaders of IAIN Surakarta starting from leaders at the faculty, institutional, implementing unit, head of study programs, academic sub-sections, and e-learning admins. In this FGD, the findings of the data that have been included in the description and discussion are presented to obtain responses, validation, and enrichment of the findings and discussion data from the FGD participants. This activity was held on June 28, 2022, and resulted in the following discussion; 1. Policy formulation process Based on the data that has been collected through documentation and interviews, it can be seen that the policy formulation process is a top-down process.

The central government was the first to issue general policies that were set starting from the President's instructions which were followed up by the issuance of Four Ministerial Decrees related to learning during the COVID-19 pandemic. Judging from the process, it can be said that the approach used in formulating policies is situational (Arwildayanto, et al, 2018). In this case, policy formulation is made with a pragmatic approach. The arrival of a pandemic that was never predicted before, has forced all education actors to take quick steps to overcome educational problems, namely by implementing online-based learning.

Data findings, both in the form of values, facts, and educational actions have been followed up with practical programs to get out of the problems faced. The involvement of all components on campus to formulate policies and implement them has changed the mindset of some lecturers who consider online learning to be ineffective. Involvement in the policy-making process is a separate strength of the resulting policy. Psychologically, people or parties involved in decision-making will tend to provide support and try to carry it out seriously. This involvement is also designed systematically and periodically so that e-learning can quickly become the knowledge and skills of lecturers, staff, and students. From the policy formulation process carried out at IAIN Surakarta, it can be said that it is following the theoretical principles of policy-making with a pragmatic approach.

The data from the documentation and interview studies are also corroborated by the findings in the FGDs which show that the top-down policy-making process takes place in a structured manner starting from policies at the institute level with the Rector's Decree, then down to the faculty, postgraduate, and other units. related. Document data also shows that there is a fairly good and complementary policy process. The findings from the FGD also indicated that the policy documents were considered sufficient, although there were policy documents that were considered incomplete in regulating technical matters in the implementation of online lectures, especially in

the aspect of assessment at UTS and UAS. It was still found that the assessment process was less programmed and systematic because it was left to their respective lecturers with a format, standard, and assessment system which was also very flexible to the lecturers. This then became one of the recommendations that needed to be improved on the quality assurance document for the implementation and assessment of online lectures (FGD, 28 June 2022).

#### 4. Policy formulation considerations

From the data collected above, it can be found that in general, the e-learning implementation policy formulation process at IAIN Surakarta uses a pragmatic approach. This approach, according to Arwildayanto, et al, (2018) formulated a policy if it felt needed to overcome the problem. In the current context of e-learning-based learning, the problem that must be resolved is the Covid-19 pandemic. Education which is usually carried out offline or face-to-face in class cannot be carried out due to strict restrictions from the government and WHO. In other words, if the Covid-19 pandemic does not occur, then this e-learning policy has not been established and implemented in a short time and is directly binding on all parties related to the implementation of education. The process of determining this policy is also carried out on a top-down basis, where the central government is in direct control by setting general policies regarding the implementation of education during the pandemic. The instructional approach was chosen by the government to accelerate the handling of education nationally, massively, and binding. This approach when viewed from the time of its use can be considered very appropriate, because it requires fast steps. Meanwhile, if you use a bottom-up approach, the process will take longer and will not necessarily be able to address problems nationally quickly and comprehensively. This top-down approach is also implemented at the institutional level, with the formulation of e-learning implementation policies stipulated by the Decree of the Chancellor of IAIN Surakarta. This policy is followed by the establishment of implementation guidelines, and its derivative regulations at each faculty and institution.

Thus, the top-down pattern is still applied. Among the documents that support the implementation of e-learning-based lectures are the guidelines for the implementation of online guidance, seminars, and *munaqasyah*. In FEBI, there is even an application specifically made to provide online tutoring and examination services. Meanwhile, the online exam process has also been facilitated in the Sikulon LMS application. This facility has been prepared and designed by PTIPD to provide online services in the field of seminar exams and thesis and thesis *munaqasyah* (FGD, 28 June 2022).

#### 5. Policy formulation time

An ideal policy must be formulated at the right time. The timing of policy formulation can take into account various aspects. For example, adjusting the momentum, as happened during the Covid-19 pandemic. The government at the same time as the pandemic formulated many policies. These policies may not continue to be issued if there is no pandemic. For example online learning or learning from home. Without a pandemic, perhaps until now, the desire to utilize technology massively in education in Indonesia has not materialized. IAIN Surakarta has pioneered a policy to implement e-learning-based learning as a distance learning service (PJJ). This can be seen from the data found that 2 years ago an e-learning-based learning workshop was carried out. At that time, Moodle-based LMS had also been prepared which were trained for lecturers and Siakad operators. However, the development plan does not seem to be running optimally. This can be seen from the developments for about 2 years where there is no firmness related to the regulations issued and the LMS has not yet been developed.

However, when the Covid-19 pandemic came, precisely at the beginning of 2020, when the lectures were already running for half a semester, the IAIN Surakarta Chancellor's policy was issued to implement online learning by utilizing a Moodle-based LMS as the main platform. This initial policy is still not binding, because it is still a recommendation. A firmer policy determination is when entering the beginning of the odd semester of the 2020/2021 academic year with the preparation of Sikulon (online lecture information system) developed by PTIPD, and the readiness of the Siakad admin team to be upgraded to an e-learning admin team in each faculty and postgraduate. The policy at that time set Sikulon as the main platform in lecture administration, and if it was still needed additional platforms could use other platforms.

Judging from the process of determining the policy, from the aspect of the time chosen it can be said to be very appropriate. This is because when it was established, the conditions needed the policy, and all parties related to the implementation of education in the IAIN Surakarta campus including the stakeholders had been waiting for the policy to be issued. It can be formulated here that the timing of policy stipulation is considered appropriate because the policies established will be useful at this time and will continue to be used in the future. This is in line with what was conveyed by Bernard Berelson (1976) that one of the criteria that need to be considered in setting policy is to consider the time dimension so that the policy is useful for now and in the future.

In the view of leaders from the institute level to the faculty and institutional level, the momentum of the Covid-19 pandemic is also the right momentum to start implementing online learning, utilizing LMS, and forcing lecturers, staff, and students to be familiar with learning technology. It also forces lecturers and students to know and learn the form of platforms used during online learning. Not only that but they are also forced to become familiar with some of the features that exist in every platform used for online learning. Even the leaders generally agree that the implementation of this e-learning-based lecture policy will continue but with a blended scheme. Blended schemes may be an effective learning model during this pandemic. The combination of face-to-face lectures and online lectures is also considered to be one of the most appropriate alternatives for organizing lectures for the Independent and Independent Learning Campus (FGD, 28 June 2022).

#### 6. Target of e-learning implementation policy

The target of this policy by Smith (1973) is called the target group. In an educational organization, this target group can come from internal or external elements. From the data collected in this study, it is known that the internal target group that is the target of the e-learning implementation policy is a group of lecturers, administrative staff, and students. The group of lecturers is the target of this policy as the main actors in the learning process. In this case, it is the lecturers who must develop online-based learning designs, prepare online classes, facilitate synchronous and asynchronous interactions, and carry out assessments of learning processes and outcomes through LMS Sikulon. This group of lecturers also has the greatest responsibility in the implementation of learning.

The second group that is the target of e-learning-based learning policies is the administrative staff. Before the existence of e-learning, these admin staffs were in charge of managing the Siakad portal in each faculty and postgraduate. Then when there is an online lecture policy, they are empowered by being upgraded to e-learning admins. This is not without its problems. From the results of data analysis in the field, it was found the fact that not all of these Siakad admin staff have a scientific base in the field of information technology or computer technology.

Thus, they must be given competency upgrades so that they can carry out their duties as e-learning admins. The task of this group is also quite heavy, because they are the ones who have to prepare classes at Sikulon, input lecturers, enter students, and in some faculties also have to make meeting rooms for each course, including preparing attendance menus for students as well. Of course, this requires a long time and adequate skill. The third group is students. This group is the most numerous and has the most diverse conditions, both related to their competence in technology and ownership of devices that support the implementation of online lectures. Even though they have many limitations in several ways, such as where they live far from the city, difficult signals, and limited devices, they have advantages as millennials who quickly adapt to technology.

Therefore, the process of socialization and understanding students is also quite easy and fast. Institutionally, the target of this e-learning policy gives PTIPD a great mandate and responsibility. As a technical implementing unit that is responsible for facilitating all technological needs, this unit is directly a policy target and must be ready to take strategic steps to implement the policies set by the Chancellor. When viewed from the data obtained, it was found that PTIPD also issued several guiding documents and manuals needed to accelerate the implementation of the policy.

#### D. CONCLUSION

From the discussion above, several conclusions can be drawn as follows:

1. The process of formulating e-learning implementation policies at IAIN Surakarta is carried out with a pragmatic and top-down situational approach. This is in line with the national policy, which began with the establishment of an instructive SKB of four Ministers, followed by all government and non-government agencies. Although the legal basis is instructive, at the institutional level, the policy formulation process is participatory by involving various elements of leadership in stages starting at the institute, faculty, postgraduate, institutional, and UPT levels.

2. The main considerations used in policy formulation are; aspects of health and safety, in addition to other considerations, namely economic technology, psychology, and experience.

3. The timing of the formulation of e-learning-based learning implementation policies found the right momentum with the presence of the Covid-19 pandemic. This policy is not carried out all at once but is carried out in stages by considering the right time. The time stages are divided into two, namely the implementation of e-learning in the first semester of the pandemic, which is still optional, then in the second semester, a stricter policy is set by requiring the use of the *Sikulon* e-learning platform as the main portal for online lecture administration.

4. The targets of this e-learning implementation policy include all parties including; academic administrators at the institute, faculty, postgraduate, study program, and related unit levels. Lecturers and students are also the targets of policies that directly implement the online learning process. Then the next target is the administrative staff as *Sikulon* e-learning admins, the ICT management team (PTIPD) which develops the e-learning platform, and other administrative staff who provide direct services to lecturers and students by utilizing technology.

#### REFERENCES

- Alamsyah, K., Hidayat, T. R., & Bustomi, T. (2020). Implementasi Kebijakan Deteksi Dini Pelayanan Dasar Masyarakat Di Kota Bekasi. *Khazanah Multidisiplin*, 1(2), 72-89.
- Ali Imron, (2002), *Kebijaksanaan Pendidikan di Indonesia: Proses, Produk, dan Masa Depan*, Ed.I, Cet. II, Jakarta: Bumi Aksara.
- Allan J. Henderson. (2003). *The E-learning Question and Answer Book*. USA: Amacom
- Arwildayanto, dkk. (2018), *Analisis Kebijakan Pendidikan; Kajian Teoritis, Eksploratif, dan Aplikatif*, Bandung: CV. Cendekia Press.
- Badru Zaman, dkk. (2007). *Media dan Sumber Belajar TK*. Jakarta: Universitas Terbuka
- Berelson, B. (1976). Social science research on population: A review. *Population and Development Review*, 219-266.
- Carman, Jared M. (2009). *Blended Learning Design: Five Key Ingredients*, Director, Product Development Knowledge Net, October 2002. [www.brandon-hall.com](http://www.brandon-hall.com). Erişim tarihi: 15 February 2009 dalam [http://www.ubicc.org/files/pdf/1\\_355.pdf](http://www.ubicc.org/files/pdf/1_355.pdf)
- Goerzt, E Margaret. (2001). The Finance of America Public Education Challenges of Equity, Adequacy, and Efficiency. Dalam Gregory J Cizek (Ed) *Handbook of Education Policy*.
- Harriman, G. (2004). What is Blended Learning? *E-Learning Resources*. [http://www.grayharriman.com/blended\\_learning.htm](http://www.grayharriman.com/blended_learning.htm),
- Henni Marsani, dkk. (2021), Model Perumusan Kebijakan Pendidikan, *JRTI (Jurnal Riset Tindakan Indonesia)*, Vol. 6, No. 1, 2021, pp. 89-94.
- Indra Gunawan, (2014), *Pedagogi dan Teknologi dalam E-Learning; Studi Kasus Pengembangan E-Learnig di Fakultas Tarbiyah dan Keguruan IAIN Raden Intan Lampung*, *Jurnal Ilmiah Pendidikan Fisika Al-Biruni*, Vol. 3 No. 2 (2014).
- La Hadisi dan Wa Muna, (2015), *Pengelolaan Teknologi Informasi dalam Menciptakan Model Inovasi Pembelajaran*, *Al-Ta dib*, Vol. 8 No 1. (2015), hlm: 117-140.
- Marzuqi Agung Prasetya, (2015), *E-Learning sebagai Sebuah Inovasi Metode Active Learning*, *Edukasia*, Vol. 10 No 2 (2015). Hlm: 319-338.
- McPhail, B. A. (2003). A feminist policy analysis framework: Through a gendered lens. *The Social Policy Journal*, 2(2-3), 39-61.
- Munir. (2010). *Kurikulum Berbasis Teknologi Informasi Dan Komunikasi*. Bandung: Alfabeta.

- Parsons, Wayne, (1997), *Public Policy: An introduction to the theory and practice of policy analysis*, Edward 27 Edgar Publishing, LTD and Lansdown Place, Cheltenham, UK, Lyme, US.
- Prasojo, Lantip Diat. (2011), *Financial Resources Sebagai Faktor Penentu dalam Implementasi Kebijakan Pendidikan*. Yogyakarta: Jurnal Manajemen Pendidikan, FIP UNY.
- Purbo, Onno W. dan Antonius AH. (2002). *Teknologi e-learning Berbasis PHP dan MySQL: Merencanakan dan Mengimplementasikan Sistem e-learning*. Jakarta: Gramedia.
- Riant Nugroho, (2008), *Kebijakan Sosial Sebagai Kebijakan Publik*, (Bandung: CV. Alfabeta, 2008), hal. 36
- Rosenberg, Marc J. (2001), *e-learning; Strategies for Delivering Knowledge in the Digital*. New York: McGraw Hill.
- Sidney, M. S. (2007). *Policy formulation: Design and tools*. In F. Fischer, G. J. Miller, & M. S. Sidney (Eds.), *Handbook of public policy analysis: Theory, politics, and methods* (pp. 79-87). New Brunswick, NJ: CRC Taylor and Francis.
- Smith, T. B. (1973), *The Policy Implementation Process*. *Policy Sciences*, 4(2), 197-209.
- Sofian, E. (2001), *Pelatihan Analisis Kebijakan Publik*. Yogyakarta: MAP-UGM.
- Sugiyono, (2008), *Metode Penelitian Kuantitatif, Kualitatif dan R&D*, Bandung: Alfabeta.
- Syaiful Syagala, (2008), *Administrasi Pendidikan Kontemporer*, Bandung: Alfabeta.
- Weimer, David L. dan Vining, Aidan R, (1992), *Policy Analysis; Concepts and Practice*, New Jersey: Prentice Hall Englewood Cliffs.
- William N Dunn (2004), *Pengantar Analisis Kebijakan Publik*, Terjemahan UGM, Yogyakarta: Gajah Mada University Press