

Analysis of Smartphone Policy as a Learning Media on Community Health Study Program in STIKES Nauli Husada Sibolga

Mei Yati Simatupang^{1,*} Sri Ngayomi Yudha Wastuti¹ Lely Desi Uli Basana²
Tinawati Nainggolan³

¹ Education Management Program Doctoral, Postgraduate School, Universitas Negeri Medan

^{2,3} Universitas Negeri Medan

* Corresponding author. Email: meiyatis1965@gmail.com

ABSTRACT

Educational policy is a policy in the field of education, to achieve the nation's development goals in the education sector, as one of the goals of our nation. Education policy must be in line with public policy. Technological advances and the widespread development of global information infrastructure have changed the pattern of activities of human life, especially students in the field of health education as smartphone users that allow students to easily access information. The purpose of this study was to analyze whether smartphones can be accepted as a learning media and the impact of smartphone use on students. The research methodology used is the mixed method with a qualitative descriptive approach, in May 2020, with a sample of 50 people. Data collected through questionnaires concluded that: (1) The application of learning media through the use of smartphones in the learning process is a lecturer's innovation in the learning process according to the appropriate consideration of learning media (2) The application of learning media has a positive effect on students' understanding ability in learning. This can be indicated because they have broader knowledge, furthermore they are critical, it can be seen when they dare to express their arguments. The recommended policy is to take a family approach, because the family is a very important part in monitoring the use of smartphones, doing prevention by counseling about the benefits of using smartphones, doing positive activities such as student self-development, implementing regulations for using smartphones on campus and at home.

Keywords: Smartphone policy, learning media, public health.

1. POLICY ANALYSIS OF SMARTPHONE AS A LEARNING MEDIA FOR STUDENTS OF S1 PUBLIC HEALTH STUDY PROGRAM STIKES NAULI HUSADA SIBOLGA

Education policy is part of public policy or state policy in general. H.A.R Tilaar & Riant Nugroho (2008:267) explained that education policy is the key to excellence, even existence, for the nation in global competition, so education policy needs to get top priority in the era of globalization. Education policy is understood as a policy in the field of education to achieve the nation's development goals in the field of education. The element given the authority to make policy is the head of the Study Program, as well as educators who have the authority to manage policies. Learning media in the form of aids in the learning process are used to convey the subject matter. It is clearly emphasized that the existence of learning media is very important to help deliver subject matter to

students. Therefore, all learning processes that take place require the role of learning media used to help lecturers deliver the material. Researchers assume that only using blackboards and books in learning has not had a significant impact on the ability to understand lecture material and support learning references. When only the media is used, the learning process that takes place is not effective because it does not cause students' interest in learning and also inhibits students from understanding the subject matter. One of them is shown with an indifferent attitude. In addition, there are limitations of learning media that prevent students from obtaining wider learning references. Therefore, to be able to meet learning references and learning resources, students use their smartphones to help the learning process, to access information related to the subject matter, and to complete assignments. This problem becomes relevant to research that also utilizes smartphone media to support the learning process. Based on the background above, the formulation of the

problem can be drawn as follows: How is the policy of implementing learning media through the use of smartphones in learning. Based on the formulation of the problem, the purpose of this study is to analyze whether smartphones can be accepted as a learning medium for students of S1 Public Health Study Program Stikes Nauli Husada Sibolga, to determine the impact that occurs related to the use of smartphones and analyze whether smartphones can be accepted as learning media for students of Public Health Study Program.

“Learning media are also defined as educational facilities that can be used as intermediaries in the learning process to enhance effectiveness and efficiency to achieve learning objectives. In a broader sense, learning media are tools, methods, and techniques used in order to more effectively communicate interaction between lecturers and students in the learning process in the classroom” Sanaky, (2009: 4) "Consideration of choosing the right learning media, namely by using the term ACTION (Access, Cost, Technology, Interactivity, Organization, Novelty). Access, meaning that ease of access is the first consideration in media selection. Cost, meaning cost considerations. The costs incurred for the use of a learning media must be balanced with its use. Technology, meaning the availability of technology and ease of use. Interactivity, which means being able to present two-way communication or interactivity. Novelty, meaning the novelty aspect of the selected media. Sanaky (2013: 222) argues that several things need to be considered, namely; Environmental factors include: (1) educational institutions and the community. (2) Learning, includes; age, background, culture, language mastery, and various learning styles. (3) Lecturers include; background, age, teaching style, experience, and personality. (4) Technological factors include; computers, software, networks, connections to the internet, and various skills needed related to the application of smartphones in the campus environment. Anitah (2009: 13) states that this view of constructivism is opposite to behaviorism, if behaviorism considers that learning is a change in behavior that can be observed and measured, then constructivism places students in the position of actively building their own knowledge. Another constructivism assumption is that lecturers should not teach in the sense of delivering lessons in the traditional way to a number of students.

2. RESEARCH METHODS

This research is a descriptive qualitative research with a step-by-step approach in the policy analysis process as well as a mixed sequential exploratory method, namely the use of sequentially

combined methods. The initial phase is the collection and analysis of qualitative data and followed by the collection and analysis of qualitative data. Data collection techniques with interviews, observations, questionnaires and documentation. The process of collecting data for the analysis needs of the policy of using smartphones as learning media is used to examine certain samples, data collection using research instruments, data analysis is descriptive qualitative. The approach used in this study is the role of students, namely examining problems based on the implementation of the Smartphone policy model as learning media for students of S1 Public Health Study Program STiKes Nauli Husada Sibolga Semester II, IV, VI.

The activities that will be carried out in the smartphone policy analysis are determining initiation, estimation, selection, implementation, evaluation and follow-up. At this stage, the formulation of the existing problem is carried out. This stage will also determine the need for the necessary concepts as well as the need for information from the field, in this case Study Program. The second step is literature study. This stage is the stage where a literature study is carried out. In this literature study, we searched for literature on the use of smartphones and methods of technology acceptance. The third stage is the stage of preparing the instrument. At this stage, the preparation of the instrument used is carried out. The fourth stage is collecting data. In this stage, data from students about smartphone use is collected. The next stage is data analysis. The data that has been collected is then analyzed and formulate conclusions.

3. RESULTS AND DISCUSSION

3.1. Results

The results of the research on policy analysis of learning media through the use of smartphones in the learning of Stikes Nauli Husada Sibolga Public Health students, namely: (a) The application of smartphones as learning media through the use of smartphones in Stikes Nauli Husada Sibolga public health students is still partially or not applied in learning (b) The results of researcher interviews found that students in the learning process had participated in learning activities with the application of media and used their smartphones to access the internet network. During the learning process, the majority of students use smartphones in the learning process. The results of the researchers' observations also found that six students still could not access the internet with smartphones due to limited facilities, namely not having a smartphone, limited funds, data quota and wifi, namely on behalf of Hemro Simamora, Agus Zendarto, Aprianus, Sanggam Situmorang, Syukur Selamat

Lawolo, Tenty Kurniawan Zega. The results of the document analysis that the researchers did in the Learning Implementation Plan owned by the lecturers both applied learning media in a planned learning process from the start. So that learning with the use of smartphones is not merely incidental, this learning media is applied to learning planning and one of the innovations in carrying out the learning process. In general, lecturers have implemented learning media through the use of smartphones and students are also able to follow the learning process well.

The impact of the application of learning media through the use of smartphones in learning public health courses are (a) The results of interviews that the application of learning media through smartphones in the learning process have an impact on students' thinking and ability to build understanding using language that is simpler and easier for students to understand (b) The application of lecture media through the use of smartphones in the learning process is one of the innovations and plans chosen as the lecture process. (c) The application of lecture media using smartphones is one of the media chosen for students in order to facilitate learning, especially in expanding the content of the material received, although there are notes that students also feel that they must be selective in taking learning materials from sources in the media.

Considering that internet-based media is applied, it has a positive and negative influence on students. (d) The learning process in the classroom and outside the classroom comes alive and students are enthusiastic in participating in learning, some of which can be seen, namely where students dare to argue, criticize one another's opinions (e) Based on the results of observations made by researchers, there are some students, 6 people have not used smartphones as a learning media (f) Based on document analysis, students have a good record, students have a fairly good GPA which is assessed from several things like being brave in presenting their arguments in front of the class. In addition, students also dare to criticize the opinions of other friends when the lecturer applies group learning, active discussions, and also self-presentations.

From the results of the research, the authors get the results: 1) the application of smartphone media in public health lectures has been carried out well by students and lecturers at stikes Nauli Husada Sibolga, 2) The use of smartphones can improve the learning process with the indicators: students are increasingly interested in attending lectures because with the media is easier to understand because by seeing, and doing students it is easier to understand, understand and appreciate public health courses. Sibolga's research results show that the use of smartphones by public

health students after using smartphones is to have a learning pattern in the form of individuals and study groups. The results of this study support research conducted by Anang Suharmono (2017) Citizenship Education and Law, Yogyakarta State University, regarding the Use of the Internet as a Media in Pancasila and Citizenship Learning. With several research results showing that: (1) The use of smartphones as a media in lectures has been carried out optimally, because communication between lecturers and learning resources, communication between students and learning resources that occur in learning runs smoothly; (2) The model of using smartphones in lectures carried out with assignments by lecturers, students are given the task of searching, studying, and expressing during learning to enrich the limitations of the material. (3) Almost all materials in lectures can be delivered using smartphones, examples of public health materials that are commonly discussed using smartphones as learning media are about public health science, surveillance, environmental health, health promotion, pharmacology, pathophysiology, health anthropology, economics health, health planning and evaluation, public health system thinking leadership, nutrition and infectious diseases, infectious disease epidemiology, (4) lecturers and campus efforts include improving internet networks, procurement of computer laboratories and multimedia laboratories, rejuvenation of network components, implementation of campus wifi logins and lecturers take a personal approach to direct and provide understanding when students access sites that are not relevant.

The policy step is the estimation of the second stage of the policy process, where the problems that have been included in the policy agenda are then discussed by policy makers. The problems were defined to then find the best solution for the problem. Solving these problems comes from various alternatives or existing policy options. At the policy formulation stage, each alternative can be chosen as the policy taken to solve the problem. The process of determining alternatives or solutions to problems in the third stage is alternative assessment (a) Assessing alternatives is the activity of assigning weights (prices) to each alternative, or the shortcomings of each or the consequences of each alternative (both positive and negative), (b) The purpose of get a clearer picture of the level of effectiveness, efficiency, and visibility of each proposed alternative in achieving the stated goals. In accordance with the Viana model, the steps in smartphone investigation are as follows: Problem Investigation; The concentration of learning decreases because students only prioritize smartphones rather than studying, especially for those who always play games, without paying attention to students who are teaching, students are busy picking up cellphones, especially if the phone is from their parents

even though they are in the teaching and learning process, so it often happens debate between lecturers and students.

3.2. Discussion

From the application of the smartphone policy as a learning medium for the Student Health Study Program of Stikes Nauli Husada Sibolga, in its application it has been in accordance with the principles and considerations of choosing the right learning media, known as ACTION (Access, Cost, Technology, Interactivity, Organization, Novelety). Although in its implementation and implementation there are several factors that have not played an optimal role, such as access and technology factors. In the application of the Access factor, it means that ease of access is the first consideration in the selection of media, but based on interviews and observations, not all students can have easy access to the internet network with campus facilities. Second, the Technology factor, meaning the availability of technology and the ease of use, that the availability of devices already exists but the ease is not evenly distributed in all classes, there are some classes that are easy to access and some are not at all affordable to be able to access. In its application, based on indicators of the application of learning media through smartphones on campus, there is one indicator that is not met, namely technological factors, such as: computers, software, networks, connections to the internet, and the various capabilities needed related to the application of the internet in the campus environment that are not optimal.

The application of smartphone-based learning media in learning researchers relates that this media meets 4 aspects as stated by Wahyu, Harpani M et al (2014: 531) that, learning media consists of aspects (1) Materials (materials), in its application this internet-based media meets aspects material in the form of software that is used to find learning references and learning resources, (2) the device (device) in the application of smartphone media, lecturers and students use hardware in the form of smartphones as a tool to process and obtain learning references that contain information related to learning materials, (3) Techniques, or routine procedures used to use material and environmental tools, techniques in applying this are usually done with applied learning methods in the form of independent discussions and presentations, (4) Environment or setting, where students learn, in this case is learning which is applied when the learning media with Smartphone media is usually applied both inside and outside the classroom. Besides that, the use of learning media through smartphones has a positive effect on students' understanding abilities with indicators of students having broader knowledge, and

being able to have a critical attitude which is shown by students having more courage in conveying their arguments in class.

4. CONCLUSIONS AND SUGGESTIONS

The conclusions from the results of this research are as follows:

1. The application of smartphones as learning media is an innovation created by lecturers and has been in accordance with the principles and considerations of choosing the right learning media, known as ACTION (Access, Cost, Technology, Interactivity, Organization, Novelety) although it is not yet optimal in access and technology.

2. The impact of smartphones as the application of learning media through the use of smartphones has an influence on students in attending lectures, namely positive and negative impacts with the following explanation: Positive impact, namely providing the ability to build student thinking. Students become more selective readers, given the existence of a wider range of material. The negative impact is the high intensity of interacting with smartphones, students become dependent, reluctant to look for offline literature such as reading books, easily distracted from accessing applications that are not related to learning and viewing inappropriate news or advertisements when accessing the internet.

Suggestion: The policy proposal given is to approach religion: through this approach, students make better use of smartphones, and do not open pornographic sites, create haters, bully people. Other policies are by;

- a. Take a family approach, because family is a very important part in monitoring the use of smartphones
- b. Conduct prevention by counseling about the benefits of using smartphones.
- c. Doing positive activities such as self-development of students
- d. Make rules for using smartphones on campus and at home

AUTHORS' CONTRIBUTIONS

The authors confirm contribution to the paper as follows: concept & research questions: Mei Yati Simatupang, Tinawati Nainggolan. Analysis and interpretation of results: Tinawati Nainggolan & Lely Desi Uli Basana. Report writing by Mei Yati Simatupang also devised the project, the main conceptual ideas and proof outline. Sri Ngayomi Yudha

Wastuti helped supervise the work. All authors reviewed the results and approved the final version of full paper.

ACKNOWLEDGMENTS

I would like to express my deep thanks to members of Department of Postgraduate Program Education Management and team of Nauli Husada Sibolga for their kindness and helps to my livings and studies in Medan State University.

REFERENCES

- [1] L. Agustino. *Dasar-Dasar Kebijakan Publik*. Bandung: Alfabeta, 2008.
- [2] Amazine, *Apa Itu Smartphone? 5 Perbedaan Smartphone Dengan Ponsel* (<http://www.amazine.co/23760/apa-itu-smartphone-5-perbedaan-smartphone-dengan-ponsel/>).
- [3] M. Musdalifah, N. Indriani, *Pengaruh intensitas penggunaan smartphone terhadap interaksi sosial mahasiswa politeknik negeri samarinda. Prosiding Snitt Poltekba*, 2017, 2(1), pp. 143-147.
- [4] S. Anitah, *Media Pembelajaran*. Surakarta: Mata Padi Persindo, 2009.
- [5] S. Arif, Sadiman dkk. *Media Pendidikan: pengertian, pengembangan dan pemanfaatannya*. Jakarta: Rajagrafindo Persada, 1996.
- [6] S. Arifin, *Pengaruh Pemanfaatan Gadget Smartphone dan Fasilitas Belajar Sekolah Terhadap Prestasi akademik Ekonomi Siswa Kelas XI I is Sman 6 Malang*. Skripsi, Jurusan Pendidikan Ekonomi Fakultas Ekonomi Universitas Negeri Malang, 2014.
- [7] S. Arikunto, *Prosedur Penelitian Suatu Pendekatan Praktek*. Jakarta: Rinika Cipta, 2006.
- [8] G. Augusta, *Pengaruh Penggunaan Smartphone Terhadap Prestasi Belajar Mahasiswa Melalui Motivasi Belajar. Program Studi Pendidikan Ekonomi Bidang Keahlian Khusus Pendidikan Akuntansi Jurusan Pendidikan Ilmu Pengetahuan Sosial Fakultas Keguruan Dan Ilmu Pendidikan Universitas Sananta Dharma Yogyakarta.*, 2018.
- [9] A. Aziz, *No Mobile Phone Phobia di Kalangan Mahasiswa Pascasarjana. KONSELI: Jurnal Bimbingan dan Konseling (E-Journal)*, 2019. 6(1), pp. 1-10.
- [10] G. Brewer, DeLeon.. *The Foundations of Policy Analysis*, 1983. Brooks//cole-pub.co
- [11] Barker, et al., *A Proposed Theoretical Model For M-Learning Adoption In Developing Countries*. South Africa: Rhodes University, 2005.
- [12] H. Dale, Schunk, *Teori-teori Pembelajaran Prespektif Pendidikan*. Yogyakarta: Pustaka pelajar, 2012.
- [13] Deni, Darmawan, *Pendidikan teknologi informasi dan komunikasi*. Bandung: PT. Remaja Rosdakarya, 2013.
- [14] Daryanto, *Media Pembelajaran Peranannya Sangat Penting dalam Mencapai Tujuan Pembelajaran*. Yogyakarta: Gava Media, 2013.
- [15] Dewi, Diandra, *Pengaruh Handphene Terhadap Pelajar SMA Sewon*, 2012.
- [16] D. Pratiwi Barakati, *Dampak penggunaan smartphone dalam pembelajaran bahasa inggris (persepsi mahasiswa)*. Jurnal, Universitas Sam Ratulagi Fakultas sastra
- [17] H. Nur, *Berbagi Ilmu: Pengaruh Penggunaan Handphone Terhadap Prestasi Belajar Siswa Kelas X SMA Negeri 9 Makasar*, 2011.
- [18] Indiahono, *Dwiyanto Kebijakan Publik yang Berbasis Dynamic Policy Analysis*. Yogyakarta: Penerbit Ombak, 2009.
- [19] D. Indriana, *Ragam Alat Bantu Media Pengajaran*. Yogyakarta: Diva Press, 2011.
- [20] Nugroho, Riant, *Kebijakan Publik, Formulasi, Implementasi, dan Evaluasi*. Jakarta: PT. Elex Media Komputindo, 2008.
- [21] N. Nursina, *Penggunaan Smartphone dalam mengembangkan pola belajar siswa SMA Negeri 1 Kalisusu Utara Kabupaten Buton Utara*. Skripsi. Universitas Halu Oleo Kendari, 2016. dari <http://www.ojs.uho.ac.id>
- [22] R. Ridjalaludin, I. Ratnamulyani, A. Kusumadinata, *Pengaruh penggunaan layanan aplikasi digital google play dalam smartphone terhadap pemenuhan kebutuhan informasi mahasiwa*. Jurnal komunikatio, 2017, 2(2).
- [23] Sanaky, H. (2009). *Media Pembelajaran*. Yogayakarta: Safaria Insania Perss Sanaky, H. (2013). *Media Pembelajaran Interaktif-Inovatif*. Yogayakarta: Kaukaba Dipantara
- [24] Sugiyono. (2019). *Metode Penelitian & Pengembangan Research and Development*. Bandung: Alfabeta
- [25] Wahyu, M. Harpani, T. Diah, *Hubungan Penggunaan Media Pembelajaran Dengan Hasil Belajar PKn Pada Siswa Kelas X dan XI Di SMA Muhammadiyah 1 Banjarmasin*. Jurnal Pendidikan Kewarganegaraan. Universitas Lambung Mangkurat, 2013.
- [26] I. Zaiyuna, *Pemanfaatan Smartphone Sebagai sarana pengembangan informasi Mahasiswa KPI*. Skripsi. Universitas Walisongo Semarang, 2014.