Attribute of Thematic Learning Innovation on Elementary School (A Diffussion Of Innovation Research)

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Abstract : The purpose of this study is to describe thematic learning innovations that can be defined within a certain period of time to a social system using certain communication channels. The research method used is difussion research. Data collection techniques used were questionare with Likkert scale models. The sampling technique used was purposive sampling by setting research target schools in accordance with the research objectives. Analysis of the data used is descriptive quantitative. The results showed that thematic learning innovations were positively perceived by Elementary School teachers with low levels of difficulty and had benefits, appropriateness, trials and observables, so that thematic learning could be diffused in a social system in elementary schools.

Keywords: Diffusion Research, Thematic Learning Innovation, Elementary School.

1. Introduction

Thematic learning is one of the innovations in primary school learning. In elementary school age children, their learning ability is built constructively from a theme developed, so that the learning theme provides ease of presentation of subject matter for students. This psychological foundation is based on the Gestalt theory of holistic learning. The existence of learning themes illustrates the holistic way of thinking that is suitable for the learning abilities of students of primary school age children. Elementary school-age students can easily understand the lesson if learning is directed meaningfully learning, in accordance with their environment, clear the direction of behavior change, and contextual. Meanwhile, these criteria are inherent in thematic learning.

Thematic learning innovations in elementary schools are in line with the implementation of the latest curriculum in Indonesia, called the 2013 curriculum. Thematic learning innovations are developed in the form of teacher books and student books that guide the implementation of thematic learning in elementary schools. In the teacher's book and the student book illustrates the thematic learning model developed in the Forgatty perspective which is the Integrated learning model and the webbed learning model. The integrated learning model requires thematic learning processes to be carried out in an integrated manner and does not show the identity of the subjects but emphasizes the learning themes discussed in the framework of learning activities since introduction, core and authors. The Webbed thematic learning model is illustrated in the teacher's book which illustrates the attachment of concepts, facts, principles, procedures and metacognitive between all subjects captured by the learning theme so that the teacher can still show the identity of the subject being taught.

The problem is that as an innovation, thematic learning is not easily accepted by a social system that adopts thematic learning, namely elementary schools. This could be due to teacher resistance to innovation, it could also be because thematic learning innovation is innovation centric so that it becomes a barrier for members of the social system to be able to adopt thematic learning innovations and or may be caused by not having the opportunity to learn it or other underlying causes.

Therefore it is necessary to conduct a research study that can illustrate the process of adopting a thematic learning innovation by an elementary school social system. Diffussion research is the right choice for conducting innovation research, because the term diffusion is only attached to innovation or a new idea. Therefore diffusion research is defined as research that describes an innovation that is communicated in a span of time, in a particular social system [1]. In the context of this research, the diffusion of thematic learning innovations.

There is not yet a result of diffusion research on thematic learning innovation, but there are many diffusion innovations in research including diffusion of contextual learning innovation by Komalasari [2], Tayo Abass & Ayo [3] diffusion of technological innovation, Diffusion of technological innovation in integrated language education by Thayer[4], and William's [5] research on the diffusion of Instructional Management by Parent Community and Teachers (IMPACT) innovation. However, there are many studies on the implementation of thematic learning but it is not positioned as an innovation and moreover researched using diffusion research methods, such as research on the implementation of thematic learning as conducted by Chumdari, Sri Anitah, Budiyono, & Nunuk Suryani [6], Narti, Setyosari , Nyoman Sudana Degeng, & Dwiyogo [7], John's Research[8].

The significance of the diffusion research of thematic learning innovation can describe an innovation in a particular social system. Diffusion research can explain thematic learning innovations received by the teacher from time to time, or an innovation that is rejected by the teacher, or it could be that the teacher experiences dissonance and discontinuation of thematic learning innovations or even is quickly adopted by a particular social system and can also caused by teacher resistance to change.

Many factors can be the cause of the diffusion of an innovation or the rejection of an innovation. Meanwhile, thematic learning is an innovation that is appropriate and in accordance with the needs of students at the moment because of the flexibility of learning and giving meaning to the lives of learners from the material studied requires a scientific study of the diffusion of thematic learning innovations in an elementary school social system. So it is hoped that the results of research can provide an empirical picture and can be a reinforcement of the innovation needs process of a social system, so that the adoption of learning innovations can be quickly accepted by a social system.

Therefore, this research is about the diffusion of thematic learning innovations in South Tangerang Elementary School. Furthermore, the results of this study are also expected to be a relevant research base for conducting diffusion research on the same aspects of a different social system. In the diffusion research design there are four main research elements namely innovation, communication channels, time and social systems. In this research, it will be examined the diffusion of thematic learning innovations from an Innovation element. In diffusion research, the rate of adoption of innovation is determined by the teacher's perception of innovation itself, if the innovation is economically profitable, cheap, according to need, simple, can be tried and can be easily promoted the assumption that the rate of adoption will be quickly adopted by a social system.

Tto find out, innovation diffusion research is carried out. The research question is how is the diffusion of thematic learning innovations in South Tangerang Elementary School? based on these questions, the purpose of this study is to describe the diffusion attributes of thematic learning innovation in South Tangerang Elementary School.

2. Literature Review

The diffusion of thematic learning innovation is a process of thematic learning innovation communicated within a certain time span in a social system [1] Thus there are four elements in the thematic learning innovation diffusion research namely thematic learning innovation, communication channels used in the diffusion of thematic learning innovation, the time span needed for the diffusion of thematic learning innovation and social systems that are the target of diffusion of thematic learning innovation.

Underlying this diffusion research there are many research results that use this diffusion research design including Lazar Stosic[9], Spiering & Erickson[10], Meeplat [11], Shea & Pickett [12], Alshmrany & Wilkinson [13] as well as those of states that thematic learning as an innovation in learning is John [8] and Narti, Setyosari, Nyoman Sudana Degeng, & Dwiyogo [7].

3. Methodology

The method used in this research is diffusion research. Rogers [1] explains that diffusion research is research on the generalization of the process of innovation diffusion involving elements of innovation, communication, the time span of adoption and a social system adopting innovation. In a diffusion is determined by the quality of an innovation. Meanwhile the quality of an innovation is built based on user satisfaction of an innovation. Meanwhile the underlying criteria are called the attributes of innovation which consist of relative advantage, compatibility, complexity, triability, and observability. Therefore, in the context of this study, it will be examined the diffusion of thematic learning innovations from the aspects of thematic learning innovation attributes. Because this aspect is a factor that can determine the diffusion process of thematic learning innovation.

Data collection techniques used were questionare with Likkert scale consisting of strongly agree, agree, neteral, disagree and strongly disagree. Data analysis was performed as a quantitative descriptive method by simplifying the data in the form of tabulation, generalizing and making the percentage then qualitatively described by comparing to the generalization standard developed by Rogers. The data collected was then analyzed descriptively, by calculating the average score on each statement item, processing it based on its aspects, dimensions, and arriving at the focus of the research, and then calculating the overall average score of the research on the diffusion of thematic learning innovations subsequently converted into a presentation and presented in graphical form. The research sample consisted of teachers who were at elementary school level. The sampling technique used was purposive sampling technique. Purposive sampling is done by setting schools that are knowledgable informants or schools that are seen by strategic researchers as a source of information and can produce accurate information.

4. Attribute Of Innovation

An innovation has certain characteristics that can be used as a basis for innovation adoption, hereinafter referred to as innovation attributes. Rogers [1] explains the five attributes of innovation consisting of, namely: 1). Relative advantage, 2). Compatibility, 3). Complexity, 4). Triability, and 5). observability. An innovation that has these innovation attributes can be quickly adopted by a social system.Based on the results of the study it can be stated that the diffusion of thematic learning innovation based on its attributes 93% is perceived to be positive. As the details are illustrated in the graph below:



Figur 1. Attribute of Thematic Learning Innovation

A. Relative Advantage

In the context of the diffusion of thematic learning innovation, relative advantage as one of the attributes of innovation is used as one of the standards for the diffusion of thematic learning innovation. These thematic learning innovation attributes subsequently as a standard of perception of the diffusion of the implementation of thematic learning.

Thus based on the results of research from the above data it is known that thematic learning is stated by 52% of teachers having a relative advantage. This means that thematic learning innovation has economic advantages in its implementation, can represent the quality of the teacher, fun, obtained psychological satisfaction, can streamline the learning time, and can make the teacher's effort effective in learning.

In he other word, the South Tangerang elementary class teachers, on average they agreed that the application of thematic learning required a lot of money, on average they agreed that

the application of thematic learning could represent the quality of the teacher, that the application of thematic learning was fun learning, that the application of thematic learning could encourage psychological satisfaction in increasing students' high-level abilities, that the application of thematic learning could make learning time effective and that the implementation of thematic learning made the teacher's effort effective in learning activities.

B. Compatibility

Based on the research data above it is known that 53% of elementary school teachers state that thematic learning innovation has positive compatibility attributes. This means that thematic learning is compatible with existing values, compatible with previous learning experiences, and is needed to improve the quality of learning.

In the other words the South Tangerang elementary class teachers, on average they agreed that the application of thematic learning was consistent with the values of the elementary environmental character, that the implementation of thematic learning was consistent with the values of the elementary school environmental character, that the implementation of thematic learning experience, and that the implementation of thematic learning was consistent with the teacher's previous learning experience, and that the implementation of thematic learning.

C. Complexity

Based on the above data, it is clear that thematic learning innovation has a low level of complexity, as stated by 48% of elementary school teachers stated the attributes of thematic learning innovation are very simple. This means that the level of difficulty of thematic learning innovation to understand its concepts, planning and implementation is very low or thematic learning innovation is an innovation that is not difficult for teachers.

In the other words, the South Tangerang elementary class teachers, the average states are neutral that the thematic learning innovation is difficult to understand the concept, that the planning of thematic learning was difficult to understand, and that thematic learning innovation was difficult to apply in elementary school.

D. Triability

Based on the data above, that thematic learning innovation has positive triability attributes, as stated by 52% of teachers in elementary schools. This means that thematic learning can be trialled within a certain time frame and updates can be made to the concepts, planning, and implementation of thematic learning.

In the other oter words, the South Tangerang elementary class teachers, on average they agreed that thematic learning could be tried within a certain time frame, that thematic learning could be tried by updating the concept, that thematic learning can be tried by updating their plans, and that thematic learning can be tried by updating the implementation.

E. Observability

Based on data from the above research results show that 51% thematic learning innovation states that thematic learning perceived positively can be observed by elementary school teachers. This means that thematic learning conceptually, its planning and implementation can be promoted and know its superiority.

Then thus from South Tangerang elementary class teachers, the average states are neutral that thematic learning can be seen from the characteristics of the concept, that the thematic

learning could be seen by other elementary teachers from their planning characteristics, and that the thematic learning could be seen by other Madrasah Ibtidaiyah teachers by their performance characteristics.

However, the rate at which innovation is adopted between social systems can differ depending on the members of the social system. The characteristics of a member of a social system in adopting innovation are classified in the social groups of innovators, early adopters, early majority, late majority and laggard.

Innovative social members can quickly adopt an innovation if it is known that the innovation has a positive investment attribute, generally this group is only no more than 5%. This group can also be called venturesome.

Early adopter social system members are groups that follow the steps of innovators who are dominated by economically profitable innovation attributes. This group generally consists of 13% of the total members of the social system.

Members of an early majority social system are those who follow their predecessors, usually consisting of 34%, as well as those who are late majority. Members of laggar social systems are social groups that are passive to an innovation, may even adopt or change the view that has adopted not to adopt or stop adopting innovation.

Besides that, a social system can have a rapid adoption rate of innovation or even slow. This can be based on the innovation decision process of a system member based on known innovation attributes. Social system members who are quick to know the attributes of positive innovation, can quickly adopt it, but after knowing it is not necessarily also to adopt innovation. Therefore in the process of adopting an innovation it cannot be guaranteed that those who know must adopt but there is a long process to be able to adopt an innovation. This process is called the innovation decision process.

The innovation decision process consists of knowledge, persuasion, decision, implementation, and confirmation [1]. In the knowledge stage, a social system to the attributes of an innovation is at the stage of trying to find information, understand the need for information, approve an information, and find out the effectiveness of adopting innovation. This means that in the context of this research has not yet reached the decision to adopt the thematic learning innovation.

At the stage of persuasion, after knowing the attributes of innovation, a social system may feel attracted to an innovation, interested in discussing a new thing with others, interested in accepting an innovation, forming a positive image of an innovation and getting support for an innovative behavior from a system social.

In the decision stage, after being attracted to innovation based on its attributes, a member of the social system can try to find information, understand the need for information, approve information, and know the effectiveness of adopting innovation.

In the confirmation stage, a member of the social system based on the innovation attributes that he knows recognizes the benefits of using an innovation, an innovation is made as a routine activity, promotes an innovation to another, stops adopting an innovation, and can just replace a previous innovation with better, or even refuse to continue because they are not satisfied with an innovation

5. Limitations And Future Research

The data of this study are only on a small scale conducted at the South Tangerang elementary school, Indonesia. Meanwhile there are a number of elementary school-level educational institutions in the territory of Indonesia that can be used as research samples for

the diffusion of thematic learning innovations. Therefore in further research it is recommended that diffusion research be carried out in a large sample size so that conclusions can be obtained about the diffusion of thematic learning innovations in primary education in elementary schools. In addition, the diffusion of thematic learning innovations other than in this study can be followed up by examining the role of social system members as change agents, the use of communication channels, and the consequences of adopting thematic learning innovations.

6. Conclusions

Thus, the results of this study indicate that thematic learning is diffused in primary school with a positive perception by South Tangerang elementary school teachers, Indonesia. The positive perception is seen from the aspects of its usefulness, suitability, difficulties, trials and observability. In other words, thematic learning is economically beneficial, better than other learning, represents teacher quality, convenience, psychological satisfaction, effective, efficient, valuable, as needed, can be applied, is flexible, can be proven and has a low level of difficulty in its application.

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References

- [1] M. E. Rogers, *Diffusion of Innovations*, Fifth Edit. Amerika: Free Press, 2003.
- [2] K. Komalasari, "Difusi Inovasi Pembelajaran Kontekstual dalam Pendidikan Kewarganegaraan," *J. Ilmu Pendidik.*, vol. 17, no. 3, pp. 218–224, 2010.
- [3] B. Tayo Abass and O. Ayo, "The Diffusion of Information and Communication Technology in Nigeria Primary Schools: Problems and Prospects," vol. 5, no. 2, pp. 23–34, 2012.
- [4] K. K. Thayer, "The diffusion of innovations in education: A study of secondary English Language Arts teachers' classroom technology integration," *ProQuest Diss. Theses*, p. 149, 2013.
- [5] K. William, *Low-Cost Primary Education: Implementing anInnovation in Six Nations*. Canada: International Development Research Centre, 1986.
- [6] C. Chumdari, S. A. Sri Anitah, B. Budiyono, and N. Nunuk Suryani, "Implementation of Thematic Instructional Model in Elementary School," *Int. J. Educ. Res. Rev.*, vol. 3, no. 4, pp. 23–31, 2018.
- [7] Y. Narti, P. Setyosari, I. Nyoman Sudana Degeng, and W. D. Dwiyogo, "Thematic Learning Implementation in Elementary School (Phenomenology Studies in Pamotan SDN 01 and 01 Majangtengah Dampit Malang)," *Int. J. Sci. Res.*, vol. 5, no. 11, pp. 1849–1855, 2016.
- [8] Y. J. John, "A 'New' Thematic, Integrated Curriculum for Primary Schools of Trinidad and Tobago: A Paradigm Shift," Int. J. High. Educ., vol. 4, no. 3, pp. 172– 187, 2015.
- [9] I. S. Lazar Stosic, "Diffusion of innovation in modern school," Int. J. Cogn. Res. Sci. Eng. Educ., vol. 1, no. 1, pp. 5–13, 2013.
- [10] K. Spiering and S. Erickson, "Study abroad as innovation: Applying the diffusion

model to international education," Int. Educ. J., vol. 7, no. 3, pp. 314-322, 2006.

- [11] N. Meeplat, "Assessing Teachers" Attitude toward ICT Diffusion in Rural Primary School of Thailand," *Int. J. Inf. Educ. Technol.*, vol. 5, no. 6, pp. 414–417, 2014. P. Shea and A. Pickett, "Increasing access to Higher Education: A study of the
- [12] diffusion of online teaching among 913 college faculty," vol. 6, no. 2, pp. 1–27, 2005.
- [13] S. Alshmrany and B. Wilkinson, "Factors Influencing the Adoption of ICT by Teachers in Primary Schools in Saudi Arabia," Int. J. Adv. Comput. Sci. Appl., vol. 8, no. 12, pp. 143-156, 2018.