

International Journal of Educational Review

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Teachers' Stage of Concern in Implementing Elementary School Curriculum Innovation

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Abstract: The purpose of this study was to describe of teacher' stages of concern in applying curriculum innovation. The approach used in this study was a descriptive study. The number of population of this study were 500 primary school teachers. Meanwhile, the research sample were 50 teachers. A random sampling technique in the form of the lottery was used to get samples. Data were collected, classified, processed and analyzed by using the norms of the group in the calculation of percentile. The findings of this study were 42 % of teachers in a stage of concern called at the stage of awareness, 0 % of teachers have a stage of concern at the stage of I stage of information; 18 % of teachers have a stage of concern at the stage of personnel; 10 % of teachers have a stage of concern at the stage of management); 16 % of teachers have a stage of concern at the stage of consequence; 6 % of teachers have a stage of concern at the stage of collaboration; and 12 % of teachers have a stage of concern at the stage of refocusing. The overall respondents have an average score of 2.06 (two point zero six). This means that their stage of concern for the implementation of the curriculum innovation is still low. They experience uncertainty in making decisions to adopt it. It was caused by (a) the lack of understanding of primary school teachers on information received, (b) lack of examples and evidence of the benefits of accepted curriculum innovation in school practices, (c) lack of training by trainers in applying new curriculum, (d) so complex in evaluating and (e) the curriculum is continuously changing.

Keywords: Concern; Awareness; Curriculum Innovation; Stage of Concern

1. Introduction

Curriculum innovation can be defined as deliberate actions to improve a learning environment by adopting a method of presenting material to students that involve human interaction, hands-on activities, and student feedback. Changes in the curriculum may involve innovation, but in general, change in terms of the curriculum involves adapting a new educational philosophy, the goal of education, the structure of the curriculum, educational method, and evaluation system.

Research on elementary school teachers shows that teachers who are eligible to teach only 42.2%, teachers from private primary schools who are eligible to teach only 39.5%, junior high school teachers who fit their scientific background and are eligible to teach only 49.4% and, not worth teaching

31.7%, inappropriate and worth 10.7%, inappropriate and unfit to teach 9.0% of total teachers 283715 teachers (Departemen Pendidikan Nasional, 2012)

In 2013, the Government of Indonesia has launched a new curriculum called the Curriculum 2013. The implementation of this new curriculum has made many complaints in the community. The complaints are, among others, related to (a) the number of new curriculum components that all teachers have not fully understood; (b) number of teachers who do not yet understand the authentic assessment system; (c) number of teachers who have not attended the new curriculum training; (d) there is still a textbook whose contents need to be improved; (e) there is a book whose material is sensitive to society; (f) the unavailability of teacher and student handbooks to schools; (g) number of local

governments who rebel against new curriculum changes; (h) the number of schools that are still undecided in applying the new curriculum; (i) number of teachers who are less concerned about new curriculum innovation (Harian Nasional, 2014).

This phenomenon gives us the idea that not all elements of society, including teachers, have a positive response and concern for the introduction of a new curriculum (curriculum innovation). In terms of teacher's concern for curriculum innovation will be crucial to the successful implementing of curriculum innovation. In relation to the case, to achieve the successful implementation of the 2013 curriculum it seems that we need to know how the teacher's stage of concern towards the implementing of curriculum innovation

2. Research Method

This research was conducted in the form of using descriptive research approach (Issac, Stephen & Michael, William, B., 1982). Population in this study were primary teachers amounting to 500 teachers. Sampling is done by random sampling which amounted to 10% of the population. Data on the learning plan collected through inventory techniques, while data on the identity of elementary school teachers gathered through technical documentation. Grating inventory is based on the aspects that must be considered in the planning of learning. These aspects include: (a) mapping core competencies in the curriculum, (b) creation of a network theme core competencies, (c) syllabus, (d) the constructing of the lesson plan, and (e) the manufacturing student activity sheet. Inventory arranged in stages of the teacher's concern developed by Hall, G., & Hord, S. (2011) on CBAM (Concerns-Based Adoption Model). The model provides ways to study teacher change in the process of applying a curriculum innovation in the form of teachers' stages of concern in applying curriculum innovation. The stages of concern are constructed in a set of seven categories. It

includes awareness, information, personal concerns, management, consequence, collaboration, and refocusing. Based on the inventory constructed in the form of stages of teachers concern we can see each of the teachers' expression. If a teacher in the stage of *Awareness* (Zero stage): He/she is not concerned about it. *Informational* (the first stage): He/she would like to know more about it. *Personal* (second stage): How will using it affect him/her? *Management* (third stage): he/she seems to be spending all of his/her time getting materials ready. *Consequence* (the fourth stage): How is my use affecting clients?. *Collaboration* (the fifth stage): He/she is concerned about relating what he/she is doing with what his/her co-workers are doing. And *Refocusing* (the sixth stage): He has some ideas about something that would work even better.

Another reason for the use of CBAM in this study is The selection of problems concerning teachers' concern towards curriculum innovation is in line with reference (Miller, G.W. John P. and Seller, Wayne, 1985; Hall, G. E., & Hord, S. M., 1987; Hall, G. E., & Hord, S., 2011) on CBAM (Concerns-Based Adoption Model). Even CBAM can be used as a conceptual basis with the following considerations: (1) CBAM has a concept that can provide a description of the teachers' concern to the implementation of innovation curriculum; (2) CBAM can specifically describe the teacher's "concern" level on curriculum innovation; (3) CBAM can identify difficulties in implementing curriculum innovation; (4) CBAM may develop strategies related to the implementation of curriculum innovation; (5) CBAM can assist teachers in describing teacher behavior in the learning process; (6) CBAM can be used to analyze teacher's position toward new programs that occur in education.

In addition, the selection of CBAM as a theoretical foundation is also based on several assumptions, among others: (1) change is a process, not an event. Change occurs when new programs are introduced to teachers; (2)

the process is a change of personal experience and every teacher needs to experience it; (3) individuals or members of institutions must first experience before their own institutions change; (4) change is seen as a development process that includes: (a) Growth of knowledge, skills, values, and attitudes used; (b) Growth attitudes toward innovation.

Once the instruments (inventory items) composed and performed judgment by experts, then tested and analyzed to determine the validity and reliability of the instrument. Instruments which have sought the validity and reliability, are used by researchers to collect data about the stages of concern of teachers in preparing lesson plans and applying learning processes.

3. Results and Discussion

Based on the results of the research showed that the stage of concern of teachers in applying elementary school curriculum innovation as follows: 42 % of teachers in a stage of concern called at the stage of 0 (stage of awareness), 0 % of teachers have a stage of concern at the stage of information; 18 % of teachers have a stage of concern at the stage of personal); 10 % of teachers have a stage of concern at the stage of management; 16 % of teachers have a stage of concern at the stage of consequence); 6 % of teachers have a stage of concern at the stage of collaboration; and 12 % of teachers have a stage of concern at the stage of refocusing. The results of this research indicated that the overall respondents have an average score of 2.06 (two point zero six). Based on data inventory were found that the lack of implementing of curriculum innovation as a result of the lack of understanding of primary school teachers on information received, no examples and evidence of the benefits of accepted curriculum innovation, lack of training by trainers in applying new curriculum, complex in evaluating and still changing. This causes teachers to experience uncertainty in making decisions to adopt it.

As showed in the results of the research, indicated that the overall respondents have an average score of 2.06. This average indicates that the stage of concern of elementary teachers in the implementation of curriculum innovation is at the stage of personal. This means that elementary school teachers have been concerned about innovation in the implementation of curriculum innovation, although still relatively low.

The results of this study indicate that there is a gap between "What" is done by primary school teachers with "What" should be done by elementary school teachers in the implementation of curriculum innovation. The next question "why does the gap occur? Why do elementary school teachers not adopt curriculum innovation?" According to Rogers, E.M. (2003), adoption is a decision of "full use of an innovation as the best course of action available" and rejection is a decision "not to adopt an innovation" (Rogers, E.M., 2003). Rogers defines diffusion as "the process in which an innovation is communicated through certain channels over time among the members of a social system" (Rogers, E.M.,2003). As expressed in the definition, innovation, communication channels, and social system are the four key components of the diffusion of innovations.

Innovation is an idea, practice, or project that is perceived as new by an individual or other units of adoption" (Rogers, E.M., 2003). Innovation may have been invented a long time ago, but if individuals perceive it as new, then it may still be an innovation for them. It is the same as the case being in the curriculum innovation. The innovation of the curriculum called the curriculum 2013 had been executed four years ago, but a lot of elementary teachers have not adopted or concerned to implement the new curriculum yet. The lack of implementing of curriculum innovation as a result of the lack of understanding of primary school teachers on information received, no examples and evidence of the benefits of

accepted curriculum innovation, lack of training by trainers in applying new curricula, complex in evaluating and still changing. This causes teachers to experience uncertainty in making decisions to adopt it.

The newness characteristic of adoption is more related to the three steps (knowledge, persuasion, and decision) of the innovation-decision process. The unwanted to adopt the new curriculum is related to uncertainty. Uncertainty is an important obstacle to the adoption of innovations. An innovation's consequences may create uncertainty: "*Consequences* are the changes that occur in an individual or a social system as a result of the adoption or rejection of an innovation" (Rogers, E.M., (2003). To reduce the uncertainty of adopting innovation, teachers should be informed about its advantages and disadvantages to make them aware of all its consequences. The lack of adoption to implement the curriculum innovation might be as a consequence of the elementary teachers feel less information concerning the advantage or disadvantage of the curriculum innovation for them.

Communication is "a process in which participants create and share information with one another in order to reach a mutual understanding" (Rogers, E.M., 2003). This communication occurs through channels between sources. A *source* is an individual or an institution that originates a message. A channel is the means by which a message gets from the source to the receiver" A diffusion is a specific kind of communication and includes these communication elements: an innovation, two individuals or other units of adoption, and a communication channel. On the other hand, "diffusion is a very social process that involves interpersonal communication relationships" (Rogers, E.M., 2003). Thus, interpersonal channels are more powerful to create or change the strong attitudes held by an individual. In interpersonal channels, the communication may have a characteristic of *homophily*, that is, "the degree to which two or more

individuals who interact are similar in certain attributes, such as beliefs, education, socioeconomic status, and the like," but the diffusion of innovations requires at least some degree of heterophily, which is the degree to which two or more individuals who interact are different in certain attributes. In fact, "one of the most distinctive problems in the diffusion of innovations is that the participants are usually quite heterophilous" (Rogers, E.M., 2003). Related to the curriculum innovation, the low understanding of the curriculum of primary school teachers may be due to the lack of effective interaction or communication between primary school teachers and instructors. This is a possibility as a barrier to the increased awareness of primary school teachers to apply curriculum innovation.

Communication channels also can be categorized as *localite channels* and *cosmopolite channels* that communicate between an individual of the social system and outside sources. While interpersonal channels can be local or cosmopolite, almost all mass media channels are cosmopolite. Because of these communication channels' characteristics, mass media channels and cosmopolite channels are more significant at the knowledge stage and localite channels and interpersonal channels are more important at the persuasion stage of the innovation-decision process (Rogers, E.M., 2003). All these communication channels might be as the cause of the lack of knowledge concerning with the curriculum innovation as really is, disadvantage and advantage of it, then all these to be the cause of the low willing to implement the curriculum innovation by elementary teachers.

The social system is the last element in the diffusion process. Rogers, E.M. (2003). defined the social system as "a set of interrelated units engaged in joint problem solving to accomplish a common goal". Since the diffusion of innovations takes place in the social system, it is influenced by the social structure of the social system. According to

(Rogers, E.M. (2003), the structure is "the patterned arrangements of the units in a system". He further claimed that the nature of the social system affects individuals' innovativeness, which is the main criterion for categorizing adopters. In this research finding is not correspond to the case of implementation of curriculum innovation as either the central, provincial, county or municipality government have quite often socialized the curriculum of innovation. The lack of implementation of curriculum innovation might be lighted from the process of innovation. In this case, the lack of implementing of curriculum innovation as a result of the lack of understanding of primary school teachers on information received, no examples and evidence of the benefits of accepted curriculum innovation, lack of training by trainers in applying new curricula, complex in evaluating and still changing.

Rogers, E.M. (2003) described the innovation-decision process as "an information-seeking and information-processing activity, where an individual is motivated to reduce uncertainty about the advantages and disadvantages of an innovation". According to Rogers, E.M. (2003), the innovation-decision process involves five steps: (1) knowledge, (2) persuasion, (3) decision, (4) implementation, and (5) confirmation. These stages typically follow each other in a time-ordered manner.

The innovation-decision process starts with the knowledge stage. In this step, an individual (elementary school teacher) learns about the existence of innovation and seeks information about the innovation. "What?" "how?" and "why?" are the critical questions in the knowledge phase. During this phase, the elementary school teacher attempts to determine "what the innovation is and how and why it works" (Rogers, E.M., 2003). According to Rogers, the questions form three types of knowledge: (1) awareness-knowledge, (2) how-to-knowledge, and (3) principles-knowledge.

Awareness-knowledge represents the knowledge of the curriculum innovation's existence. This type of knowledge can motivate the elementary school teacher to learn more about the curriculum innovation and, eventually, to adopt it. Also, it may encourage an elementary school teacher to learn about the other two types of knowledge.

How-to-knowledge: The other type of knowledge, how-to-knowledge, contains information about how to use an innovation correctly. Technology is not used at an expected stage since they need help in how to use the technology effectively in teaching and learning processes (Spotts, T.H., 1999). To increase the adoption chance of curriculum innovation, in this case, an elementary school teacher should have a sufficient stage of how-to-knowledge prior to the trial of this curriculum innovation. Thus, this knowledge becomes more critical for relatively complex innovations.

Principles-knowledge: the last knowledge type is principles-knowledge. This knowledge includes the functioning principles describing how and why an innovation works. A curriculum innovation can be adopted without this knowledge, but the misuse of the curriculum innovation may cause its discontinuance. Sprague, D., Kopfman, K., & Dorsey, S. (1999) said that the biggest barrier to faculty use of technology in teaching-learning processes was that faculty lack a vision of why or how to integrate technology in the classroom. So the biggest barrier to elementary school teachers use of technology in teaching-learning processes was that the teachers lack a vision of why or how to integrate technology in the classroom.

To create new knowledge, technology education and practice should provide not only a how-to experience but also a know-why experience (Seemann, K., 2003). Unfortunately, based on research, elementary school teachers have not fully understood the nature of the curriculum innovation, so they

lack adopting the curriculum innovation, even some of them reject it.

The persuasion step occurs when the individual has a negative or positive attitude toward the innovation, but "the formation of a favorable or unfavorable attitude toward an innovation does not always lead directly or indirectly to adoption or rejection" (Rogers, E.M.; 2003). In this case, the elementary school teacher shapes his or her attitude after he or she knows about the curriculum innovation, so the persuasion stage follows the knowledge stage in the innovation-decision process. Furthermore, something that should be remembered is that while the knowledge stage is more cognitive- (or knowing-) centered, the persuasion stage is more affective- (or feeling-) centered. Thus, the individual is involved more sensitively with the innovation at the persuasion stage. The degree of uncertainty about the innovation's functioning and the social reinforcement from others (colleagues, peers, etc.) affect the individual's opinions and beliefs about the curriculum innovation. Close peers' subjective evaluations of the innovation that reduce uncertainty about the innovation outcomes are usually more credible to the individual: "While information about a new innovation is usually available from outside experts and scientific evaluations, teachers usually seek it from trusted friends and colleagues whose subjective opinions of a new innovation are most convincing" (Seemann, K., 2003). Individuals continue to search for innovation evaluation information and messages through the decision stage.

At the decision stage in the innovation-decision process, the individual chooses to adopt or reject the innovation. While adoption refers to "full use of an innovation as the best course of action available," rejection means "not to adopt an innovation" (Rogers, E.M., 2003). If an innovation has a partial trial basis, it is usually adopted more quickly, since most individuals first want to try the innovation in their own situation and then come to an adoption

decision. The vicarious trial can speed up the innovation-decision process. However, rejection is possible in every stage of the innovation-decision process. In these findings, the elementary school teachers lack examples and evidence of the benefits of accepted curriculum innovation, lack of training by trainers in applying new curriculum.

At the implementation stage, innovation is put into practice. However, an innovation brings the newness in which "some degree of uncertainty is involved in diffusion" (Rogers, E.M., 2003). Uncertainty about the outcomes of the innovation still can be a problem at this stage. Thus, the implementer may need technical assistance from change agents and others to reduce the degree of uncertainty about the consequences. Moreover, the innovation-decision process will end, since "the innovation loses its distinctive quality as the separate identity of the new idea disappears" (Rogers, E.M., 2003). In these findings of the research, the elementary school teachers lack examples and evidence of the benefits of accepted curriculum innovation, lack of training by trainers in applying new curriculum. So it is the cause the elementary school teachers are quite low in the implementation of curriculum innovation.

The innovation-decision already has been made, but at the confirmation stage, the individual looks for support for his or her decision. According to Rogers, E.M. (2003), this decision can be reversed if the individual is "exposed to conflicting messages about the innovation" (Rogers, E.M., 2003). However, the individual tends to stay away from these messages and seeks supportive messages that confirm his or her decision. Thus, attitudes become more crucial at the confirmation stage. Depending on the support for the adoption of the innovation and the attitude of the individual, later adoption or discontinuance happens during this stage.

Discontinuance may occur during this stage in two ways. First, the individual rejects the innovation to adopt a better innovation

replacing it. This type of discontinuance decision is called *replacement discontinuance*. The other type of discontinuance decision is *disenchantment discontinuance*. In the latter, the individual rejects the innovation because he or she is not satisfied with its performance. Another reason for this type of discontinuance decision may be that the innovation does not meet the needs of the individual. So, it does not provide a perceived relative advantage, which is the first attribute of innovations and affects the rate of adoption. In this case, The low level of implementing of the curriculum by teachers is due to the lack of understanding of primary school teachers on information received, (b) lack of examples and evidence of the benefits of accepted curriculum innovation in school practices, (c) lack of training by trainers in applying new curriculum, (d) so complex in evaluating and (e) the curriculum is continually changing.

4. Conclusion

Based on the above discussion, the overall respondents have an average score of 2.06 (two point zero six). This average indicates that the stage of concern of elementary teachers in the implementation of curriculum innovation is at the stage of (personal). This means that the stage of concern of elementary school teachers has been concerned about innovation in the implementation of curriculum innovation, although still relatively low. They experience uncertainty in making decisions to adopt it. It was caused by (a) the lack of understanding of primary school teachers on information received, (b) lack of examples and evidence of the benefits of accepted curriculum innovation in school practices, (c) lack of training by trainers in applying new curriculum, (d) so complex in evaluating and (e) the curriculum is continuously changing.

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References

- Departemen Pendidikan Nasional. 2012. *Hasil Penelitian Balitbang Dikbud*. Jakarta: Departemen Pendidikan Dasar dan Menengah. (t.p.)
- Hall, G. E., & Hord, S. (2011). *Applicating change: Patterns, principles, and potholes*. Boston, MA: Allyn and Bacon.
- Hall, G. E., & Hord, S. M. (1987). *Change in schools: Facilitating the process*. Albany, NY: State University of New York Press.
- Hall, G., & Hord, S. (2011). *Applicating change: Patterns, principles, and potholes*. Boston, MA: Allyn and Bacon.
- Harian Nasional. (2014). *Kurikulum Diterapkan Bertahap*. Jakarta: 14 Desember 2014: 12.
- Issac, Stephen & Michael, William, B. (1982). *Handbook in Research and Evaluation*. California: Edits Publisher.
- Miller, G.W. John P., and Seller, Wayne. (1985). *Curriculum Perspectives and Practice*. New York & London: Longman.
- Rogers, E.M. (2003). *Diffusion of innovations* (5th ed.). New York: Free Press.
- Seemann, K. (2003). Basic principles in holistic technology education. *Journal of Technology Education*, 14(2), 28-39.

- Sprague, D., Kopfman, K., & Dorsey, S. (1999). Faculty development in the integration of technology in teacher education courses. *Journal of Computing in Teacher Education*, *14*(2), 24-28.
- Spotts, T.H. (1999). Discriminating factors in faculty use of instructional technology in higher education. *Educational Technology & Society*, *2*(4), 92-9