



Educational Innovation

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Abstract: The progress and changes in human life are fast-paced, are new challenges or problems in the world of education. How should we prepare our students so that they can face modern life and how they can develop it so that they can compensate for these changes. Therefore, the teacher as a facilitator must be able to utilize electronic equipment facilities as a medium to be able to streamline the learning process, the teacher must also be able to choose methods, strategies, and learning models that suit their teaching needs. To answer all these challenges or problems, it is necessary to have an educational innovation. Discussions in the field of education must always be carried out to improve the quality of human resources in Indonesia. The purpose of this paper is to describe educational innovation, educational innovation processes, educational innovation strategies, characteristics of educational innovation, and barriers to educational innovation. The research method used is library research by recording all findings related to educational innovation. Educational innovation is a renewal in education that is carried out deliberately to improve educational goals, be it the renewal of ideas or ideas, renewal in educational practice, or renewal of methods or objects.

Keywords: Educational Innovation, Processes, Strategies, Characteristics, Barriers.

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INTRODUCTION

The progress and changes in human life are fast-paced, are new challenges or problems in the world of education. How should we prepare our students so that they can face modern life and how they can develop it to be able to compensate for these changes. Therefore, teachers as facilitators must be able to utilize electronic equipment facilities as a medium to be able to streamline the learning process, teachers must also be able to choose methods, strategies, and learning models that suit their teaching needs, and many more problems in education will never run out because life challenges will also always change and develop. To answer all these challenges or problems, it is necessary to have an educational innovation.

Discussions in the field of education must always be carried out to improve the quality of human resources in Indonesia. Law (UU) No. 20 of 2003 concerning the National Education System (sisdiknas) defines education as a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious-spiritual strength, self-control, personality,

intelligence, noble morals, and skills. which is needed by himself, society, nation, and state. By definition, it can be concluded that in fact, students as academic beings by nature have the potential for their development. Then in its growth and development, it is necessary to prepare an adequate atmosphere and learning process towards self-quality as true and independent learners. One of these reforms is in the learning process. Hunting or innovation must be done to improve the quality of learning and in the end, it will be able to improve the quality of human resources. The word innovation is often associated with change, but not every change can be categorized as innovation.

Innovation is often defined as renewal, discovery, and there is something related to modernization. Change and innovation are both the same in terms of having new or different elements from before. Innovation differs from change because innovation it is intentional. Renewal, for example, in terms of educational policy reform contains an element of deliberation and in general, the term renewal can be equated with innovation (Suryo Subroto: 1990). The word "innovation" (in English) is often translated



as anything new or renewal (Hamijoyo, 1996), but there are those who make the word innovation into the Indonesian word, namely "innovation". Innovation is sometimes also used to express inventions because new things are inventions. The word invention is also often used to translate the English words "discovery" and "invention". There is also a link between the notions of innovation and modernization because they both discuss renewal efforts (in Kusnandi's Journal). Huberman (1973) defines innovation as a creative process in selecting, organizing, and utilizing human and material resources in new or unique ways that will result in higher achievement for predetermined goals and objectives. According to Nicholls (1982, pp. 2), the use of the words changes and innovation often overlaps. Innovation is an idea, product, event, or method that is considered new to a person or group of people or another adoption unit, both the result of invention and discovery. Innovation is an idea, practice, or object that is considered new by an individual or group of individuals (Rogers 1983, pp. 11), it also provides a limitation that what is meant by innovation is an idea, practice, or object that is considered new by someone or another adopter group. The word "new" is very relative, either because someone just found out, or it could be because they just want to accept it even though they have known it for a long time. To determine the difference between innovation and change, the following is the definition expressed by Nichols (1983, pp. 4). education that is considered a normal part of the activity. According to him, innovation refers to an idea, object, or practice of something new by a person or group of people who intends to improve the expected goals.

Educational innovation is a new and qualitative change that is different from what existed before and is deliberately attempted to increase the ability to achieve certain goals in education (Suryobroto, 1990, pp. 127). Educational innovation is a renewal in education involving ideas, practices, methods, or objects and is qualitatively different from previous things and is deliberately made to improve the ability to

achieve educational goals and solve educational problems (Sani, 2009, pp. 160).

METHOD

The research method used is library research by recording all findings related to educational innovation in general in each research discussion obtained from various literature, sources, and/or recent discoveries. Furthermore, the results of the notes are analyzed and combined with all findings, both theories or recent findings that are relevant to the focus of this study.

RESULTS AND DISCUSSION

The definition of innovation according to Law no. 18 of 2002, Innovation is a research, development, and/or engineering activity that aims to develop practical applications of new values and scientific contexts, or new ways of applying existing science and technology to products or production processes. Huberman (1973) defines innovation as a creative process in selecting, organizing, and utilizing human and material resources in new or unique ways that will result in higher achievement for predetermined goals and objectives. Miles defines innovation as specific changes that are intentional, new, and deliberate, which are considered more effective in achieving system objectives. According to Nicholls (1982, pp. 2), the use of the words changes and innovation often overlaps. Innovation is an idea, product, event, or method that is considered new to a person or group of people or other adoption units, either the result of invention or discovery. Innovation is an idea, practice, or object that is considered new by an individual or group of individuals (Rogers 1983, pp. 11), it also provides a limitation that what is meant by innovation is an idea, practice, or object that is considered new by someone or another adopter group. The word "new" is very relative, either because someone just found out, or it could be because they just want to accept it even though they have known it for a long time. To determine the difference between innovation and change, the following is the definition expressed by Nichols (1983, pp. 4). education that is considered a normal part of the activity. According to him, innovation refers to an



idea, object, or practice of something new by a person or group of people who intends to improve the expected goals. Elly (in Kristiawan: 2018). Innovation is the idea of gaining social recognition and new ways or means of achieving social recognition. Zaltman (in Kristiawan et al, 2018) innovation is an idea, practice, or artifact that is considered new by the relevant unit. Innovation is changing objects. Change is part of a response to a situation. A situation requires a creative process to produce an invention. However, not all reforms are called innovations, because not all groups of individuals, both formal and informal, consider this to be something new. Innovation is defined as an idea, idea, practice, or object/object that is recognized and accepted as new by a person or group for adoption. Innovation is essentially the result of a brilliant thought characterized by novelty, it can be in the form of certain practices or the form of a product of a process of thinking and processing of technology applied through certain stages. This is intended to solve problems that arise and improve certain conditions or certain processes that occur in society (Nawang Sari, 2010). Innovation is creating and implementing something into a single combination. With innovation, one can add value to products, services, work processes, marketing, delivery systems, and policies, not only for the company but also for stakeholders and society (De Jong: 2005). Ellitan and Anatan (2009) define innovation as a system of organizational activities that transforms technology from ideas to commercialization.

Thus, it can be concluded that innovation is a renewal of both ideas or ideas, practice reform, and object renewal that aims to improve or refine the previous one. Suryobroto (1990) states that educational innovation is a new and qualitative change that is different from what existed before and is deliberately made to increase the ability to achieve certain goals in education. "New" in this sense are things that are not yet understood, accepted, or implemented by the recipient of the innovation, even though they may not be new to other people. Meanwhile, "qualitative" means that

innovation allows reorganization or reorganization of elements in education. So, it's not just the addition or addition of the previously existing component elements. Innovation is more than the total of the components. Sani (2009) states that educational innovation is a renewal in education whether it concerns ideas, practices, methods, or objects and is qualitatively different from things that existed before and deliberately tries to increase the ability to achieve educational goals and solve educational problems). Educational innovation is a process that will always occur because of several external factors and factors from within humans themselves and the interaction between the two. Internal factors such as wants and needs as well as the potential to increase and fulfill their daily needs. While external factors are changes that occur in the environment of human life itself (Kadi 2017). Educational innovation is a change that is new and qualitative, different from what existed before, and deliberately endeavors to increase the ability to achieve certain goals in education.

Innovation in education is divided into two models, namely: (1) Top-down, namely a model of educational innovation created by certain parties as leaders/superiors applied to subordinates; as well as educational innovations carried out by the Ministry of National Education so far. (2) Bottom-up, namely an innovation model that comes and comes from below and is implemented as an effort to improve the implementation and quality of education (Kusnandi, 2017).

From some of the experts above, it can be seen that there is no fundamental difference in the definition of innovation from one another. Thus, educational innovation is a renewal in education that is carried out intentionally to improve educational goals, be it the renewal of ideas or ideas, renewal in educational practice, or renewal of methods or objects that aim to improve or perfect the previous ones. Kristiawan (2018) said that the educational innovation process is a series of activities carried out by individuals/organizations, starting to become aware of innovations until



implementing (implementing) educational innovations. The word process implies that the activity is carried out by taking the time and changes will occur every time. How long the process takes will vary from person to person or organization depending on the person's or organization's sensitivity to innovation. Likewise, during the innovation process, there will always be a continuous change until the process is declared to end. From the above opinion, it can be concluded that the innovation process is a series of activities carried out by individuals or groups to implement educational innovations.

Syafaruddin (2015) defines strategy as a stage in activities carried out to achieve the goals of educational innovation. The strategic patterns that are usually used are design, awareness and attention, evaluation, and experimentation. Several educational strategies are as follows.

1. Facilitative Strategy

The implementation of a social change program by using a facilitative strategy means that to achieve the predetermined goals of social change, prioritizing the provision of facilities with the aim that the social change program will run easily and smoothly. This facilitative strategy will be implemented appropriately if the following points are considered.

- a. Facilitative strategies can be used appropriately if they are implemented in conjunction with programs that raise awareness in clients of the availability of necessary facilities or assistance.
- b. Appropriate facilitative strategies are also used to compensate for low motivation for social change efforts;
- c. Providing various facilities will be very beneficial for social improvement efforts if the client wants a variety of needs to meet the demands of change as expected
- d. The use of facilitative strategies can also involve creating a new role in the community if it turns out that the existing roles in the community do

not match the use of the necessary resources or facilities

- e. Efforts to change by providing various facilities will run smoothly if the center of the organization's activities implementing social change is located in the location where the target (client) lives.
- f. Facilitative strategy by providing funds and personnel will be needed if the client is unable to continue social change efforts due to a lack of resources and manpower.
- g. The different subsections within the client will lead to different facilities needed to suppress a particular change at a particular time
- h. Facilitative strategies are less effective when used in conditions where the target of change is less challenging for social change, change does not run quickly, and there is no open attitude from the client to accept change.

2. Re-educative strategies

According to (Zaltman; 1977) the educational strategy as a re-education or social change in education is used to achieve social change. For the educational strategy to take place effectively, it is necessary to consider the following points. Educational strategies can be used appropriately in the following circumstances and situations.

- a. If the desired social change does not have to occur in a short time or does not want to change quickly
- b. If the target of change (client) does not yet have the skills or certain knowledge needed to implement a social change program.
- c. If according to the forecast there will be strong resistance by the client to the expected change.
- d. When a fundamental change is desired from an existing behavior pattern to a new one.
- e. If the reason or background for the need for change is known and understood from the client's point of view, it is necessary to have control from the client.



3. Persuasive Strategies

Persuasion strategies are strategies used by persuading the targets of change to follow the social change. This persuasion strategy will work if the reasons provided are rational, the facts are accurate. Usually, this strategy is used during a campaign or a marketing advertisement from the company. But sometimes this persuasion strategy appears when communicating with each other without realizing it. The success or failure of a strategy is influenced by the following factors.

- a. The persuasion strategy is appropriate when the target changes.
- b. Not participating in social change processes.
- c. Being at the stage of legitimacy in deciding to accept or reject social change
- d. Invited to allocate supporting resources.

4. Power Strategies

The coercion strategy is a strategy used in implementing social change programs by forcing clients (change targets) to achieve change goals. What is forced is the intended target outcome. The use of strategy needs to consider the following matters.

- a. A coercive strategy can be used when the client's participation in the social change process is low and does not want to increase his participation. When the client does not feel the need to change or is not aware of the need for social change.
- b. A coercive strategy is ineffective if the client does not have the supporting means to bring about change.
- c. A coercive strategy is appropriate when the expected social change is to materialize.
- d. Appropriately used to deal with efforts to reject the social change. Can be used if the client is difficult to accept social change.

- e. Can be used to ensure the safety of the planned social change experiment.

From the above opinion, it can be concluded that there are four strategies in educational innovation, namely facilitative strategies, re-educative strategies, persuasion strategies, and power strategies. a combination of various strategies. This is adjusted to the implementation stage, the situation, and conditions during the decision-making process to accept or reject the change.

Kristiawan (2018) states that the characteristics of educational innovation can be interpreted as characteristics or characteristics possessed by an idea, item, method that is felt or observed as something new to a person or group of people (society) either in the form of an invention or discovery that is used to achieve educational goals to solve educational problems. Sa'ud (2012) states that the characteristics of educational innovation include relative advantage, meaning that it is relatively useful compared to what has been there before; compatibility, meaning whether the innovation will be consistent with the values, experiences, and needs of adopters; testability, which means how far the innovation can be tested in schools or educational institutions; observability, means whether the innovation can be shown in real terms to students and whether we can see variations when applying these innovations; complexity, meaning whether teachers need the training to apply these innovations and whether to add to the work tasks of teachers. According to Rogers (1983), the characteristics of educational innovation are as follows;

1. Relative advantage, namely the extent to which innovation is considered beneficial for the recipient. The level of profit or benefit of innovation can be measured based on its economic value or form factors of social status, pleasure, satisfaction, or because it has a very important component. The greater the relative advantage perceived by the adopters, the faster the innovation can be adopted.



2. Compatible (compatibility), namely the level of conformity with the values, past experiences, and needs of the recipient. For example, if educational technology innovation, which is an educational concept that has similarities with classical education about the role of education in conveying information. Between the two there are differences. In educational technology, priority is the formation and mastery of practical competencies or abilities, not the preservation and maintenance of old culture.
3. Complexity (complexity), namely the level of difficulty in understanding and using innovation for recipients.
4. Trialability, namely whether innovation can be tried or not by the recipient.
5. Can be observed (Observability), which is easy to observe or not an innovation result by the recipient.

From the above opinion, it can be concluded that the characteristics of educational innovation include relative advantage, which means that it is relatively useful compared to what has been before; compatibility means whether the innovation will be consistent with the values, experiences, and needs of adopters, testability, meaning how far the innovation can be tested in schools or educational institutions; observability, meaning whether the innovation can be shown in real terms to students and whether we can see variations when applying the innovation; complexity, meaning whether teachers need the training to apply these innovations and whether to add to the work tasks of teachers. Trialability, which is whether innovation can be tried or not by the recipient.

Kristiawan (2018) revealed that six factors become obstacles to the success of educational innovation, including:

1. the improper estimate of innovation. Here it means that inaccurate planning is carried out in the innovation process so that there is an inaccurate consideration in implementing the innovation.
2. The existence of conflict and unhealthy motivation, where these obstacles arise due to personal problems, for example,

the occurrence of conflicts between implementing members in innovation, lack of motivation to work, and various personal characteristics that interfere with the smoothness of innovation.

3. Weak supporting factors, so that the resulting innovation does not develop, which is related to very low income, unaware of natural resources, unsupportive climate, too far away, lack of information and communication facilities, and lack of attention from the government.
4. Unfulfilled finances include inadequate regional financial assistance, delays in the delivery of funds, inflation, and more national economic priorities in other fields.
5. Refusal from certain groups in innovating, where the factor is groups that have authority in traditional society against the existence of these innovations. There are ideological conflicts in innovation, very slow implementation of innovation projects, and objections to innovation because of the interest in a group.
6. Lack of relationship between social and publication, including problems in social relations between one another, disharmony and poor relations between members in innovating, and a lack of atmosphere that can lead to an exchange of ideas.

Rusdiana (2014) states that there are three kinds of barriers to educational innovation, namely:

1. Psychological barriers

This obstacle is found when the individual's psychological condition becomes a factor of rejection. Psychological barriers were and are key frameworks for understanding the events that occur when people and systems resist attempts to change. We will illustrate this type of barrier by choosing, for example, the dimension of trust/security versus mistrust/insecurity because this factor is a very important element of innovation. Other psychological factors that can lead to rejection of innovation are reluctance



because they feel that they have had enough with the existing situation, do not want to be bothered, or do not know about the problem. We can assume that in a social system, organization, or group there will be people whose past experiences are not positive. According to psychologists, this development will affect his ability and courage to face changes in his job. If an innovation implies a lack of control (for example the introduction of a team leadership model or the independence of individual parts), the leader will perceive change as negative and threatening. He felt the change as a decline, not an improvement.

2. Practical obstacles

Practical obstacles are more physical resistance factors. Factors that are often indicated to prevent or slow down changes in organizations and social systems, namely time, resources, systems. The program of teacher training centers places great emphasis on these aspects of this field. This indicates that there is particular attention to practical expertise and methods which have an immediate practical use. Therefore, innovations in this area may give rise to practical resistance. That is, the more practical the nature of a field, the easier it is for people to ask for an explanation of practical resistance. On the other hand, it can be assumed that the real practical obstacles many people have experienced in their daily teaching activities are hindering the development and renewal of practice. Insufficient economic, technical, and material resources are often mentioned. When it comes to implementing change, the time factor is often underestimated. Everything takes time. Therefore, it is very important to allocate a lot of time when making innovation planning. Experience has shown that unexpected problems, which may not be predictable at the planning stage, are likely to occur. Second, problems in the field of expertise and economic resources as examples of practical constraints. In planning and implementing innovations, the level of knowledge, and the number of funds

available must be considered. This is true when something very different from past practice is to be carried out. In other words, if there is a big difference between the old and the new. In such cases, additional resources in the form of expertise and finance are required. Experience shows that funds are urgently needed, especially at the start and during the spread of innovative ideas. This may be related to the fact that outside assistance, new equipment, reallocation, textbooks, etc. Required during the initial phase. The sources of funds allocated for amendments are often not provided from the annual budget. Media information and its follow-up are often required during the dissemination phase of innovation ideas. Apart from funds, another factor needed to make improvements in practice is the resource of expertise, such as the knowledge and skills of the people involved. In other words, it is seldom possible to choose between one type of source or another, even though we need all kinds of sources.

3. Barriers to power and value.

Value barriers involve the fact that innovation may be in tune with the values, norms, and traditions of certain people, but may conflict with the values held by others. If the innovation contradicts the values of some participants, a clash of values will occur and resistance to innovation will emerge. Whether we speak of resistance to change or to different values and opinions, in most cases, depends on the definition used. Many innovators experience clear conflicts with others, but on further exploration, they find that deals and alliances can be formed.

From the above statement, it can be concluded that the obstacles in educational innovation are psychological barriers, practical barriers, and barriers to power and value.

CONCLUSION

Innovation is a renewal of either the renewal of ideas or ideas, renewal of practice, or



renewal of objects that aim to improve or perfect the previous ones. Educational innovation is a renewal in education that is carried out deliberately to improve educational goals, be it the renewal of ideas or ideas, renewal in educational practice, or renewal of methods or objects. the innovation process is a series of activities carried out by individuals or groups to implement educational innovations. strategies in educational innovation, namely facilitative strategies, educational strategies (re-educative strategies), persuasion strategies (persuasion strategies), and coercive strategies (power strategies). the characteristics of educational innovation include relative advantage, which means that it is relatively useful compared to what has been there before, compatibility means whether the innovation will be consistent with the values, experiences, and needs of adopters, testability, meaning how far the innovation can be tested in schools or educational institutions; observability, means whether the innovation can be shown in real terms to students and whether we can see variations when applying these innovations; complexity, meaning whether teachers need the training to apply these innovations and whether to add to the work tasks of teachers. Trialability, namely whether innovation can be tried or not by the recipient. barriers to educational innovation, namely psychological barriers, practical barriers, and barriers to power and value.

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