Teachers’ ability analysis of developing innovative instructional design

N Umamah\(^1\)*, Sumardi\(^1\), Marjono\(^1\), R A Surya\(^1\), E Muffida\(^2\)

\(^1\)History Education, University of Jember, Kalimantan Street 37 Jember, Indonesia
\(^2\)SMA Negeri 2 Jember, Jember, Indonesia

*nurul70@unej.ac.id

Abstract. Instructional design is a systematic procedure in practicing instructional activities. Developing instructional design is a complex series that require creativity, activity, and components interaction. Considering globalization stream and immense technology advance, educators need to improve their knowledges and abilities in instructional design. Therefore, learning design should always be innovative, adaptive, responsive towards era development and based on life skill. New perspective understanding in developing instructional design requires smart ethic in process. This research is qualitative study which examines lesson plans (RPP) which were developed by educators in senior high schools (SMA) within Jember district. The study aims to analyze innovation rate of teachers in instructional activities through examining lesson plans being developed. Innovative lesson plan indicators were adapted from “Measuring Innovation in Education 2019” by Vincent-Lancrin et al, namely learning purposes, media, models, evaluation, and content. Research results show that 90% history teachers has formulated innovative learning purposes, 10% was considering lack of innovative. Learning materials that have been developed 81.1% innovative, 18.9% was considered lack of innovative. Learning models selected 68.8% have been facilitating students to be innovative, while 31.2% has not meet innovative level. Learning media engaged provide opportunities for students to express their innovative way and creativity is 57%, while 43% has not accommodated students being innovative. For evaluation aspect within lesson plan 47% has provided students to be innovative in reflecting their knowledges, experiences, and skills, while 63% has not. This research will be engaged as considering factor for researchers in designing models and learning media that innovative, adaptive, responsive based on life skill.

1. Introduction

Education institution as schools is place where pedagogy being applied. School provide society service as tools in generating young people with skills and talents. Teachers, industry, and stakeholder do believe that students must be supported with facilities through various teaching and learning models to improve intellectual ability [1].

Learning design is systematic procedure in improving teaching and training programs with reliable and consistent pattern. Learning design is complex series, creative, active, as well as interactive [2]. The complexity means sizes, scopes, and techniques. Spector and Ohrazda [3] emphasize the needs of automation of the complexity with providing deep understanding. New perspective awareness upon design learning means appreciating that learning design establishment needs a long way process, This process leads to extreme complexity and requires excellent manner. However, learning design represents task collection and challenges [3].

Innovative term could be define as ideas implementation or improvement for things in specific purposes. Relating education, innovation is sort of deviation from standard practice that obtains greater learning outcomes for students compared to regular or standard practice given equal amounts of resources and time. However, innovation does not always involve a mechanical, electronic or digital devices, it also could be teaching and learning. Innovative in pedagogical aspect means creativity and novelty which teacher changes style and method. Most countries have their educational institution implementing new ideas, methods,
technology based on innovation to enhance students potential. Innovation in teaching is significant for present and future education to preserve students to their full skills [4]. Learning process has become significant notion for early scholars and philosophers that continues until today. Education institutions have been existed since Greek philosophers started wondering about the world and human beings existence. So far, constructivism is more complex in designing instructional design process. Constructivism performs more open-ended learning experience that is not easily assessed, yet the results are varied for every student as constructivism judges every learner is different based on experiences [4].

In the second half of 20th century, history education successively extended its scope in many countries, from narrow cultural space into broader view. Eventually, history learning adjusted to deliver a new task in fostering citizens that align in a multicultural sphere. Many officials and countries have proposed intercultural educational programs which attempt to involve minorities and transnational identities within community nation. However, in history teaching, preserving intercultural understanding sounds vague and ambiguous than fostering nationalism [5].

In 21st century, history subject experiences not so massive but significant issues need to be dealt. Many students do not consider history as valuable subject upon their lives, they do not see the learning values, they are likely not to study history as well as they should. Furthermore, most history classes has been the amount of time teaching and re-teaching the similar content, since students possibly could not remember what they have learned in previous years [2]. Furthermore, recently countries such as UK, Australia, and European possess issues into practical concern towards history teachers in higher education, namely critical reading and thinking, active learning, skills developments, as well as employability [5].

Public assumption upon teaching history mostly concerns on knowing history or the acquisition process of substantive knowledge; students should know the facts that are considered important. However, research indicates that many teachers of history in daily practice finds it hard to combine knowing and doing history (Wineburg, 2001; Havekes et al; 2012). In addition, while establishing a historical context, teachers have tendency to begin lesson with focusing towards substantive historical knowledge as a foundation, before addressing doing history [4].

The importance of creativity and innovation within economic, social, and political issues have been acknowledged by most countries [5] [6]. Indonesian policy of education, as Kampus Merdeka tries to strengthen and improve innovation ability and establishes knowledge-intensive economy based. Current education is interactivity within learning and teaching. Students are supposed not only what is being learned, but also have ability to learn from experience [7] [8].

They serve as an innovative teacher who will make learners have a good character, such as critical thinking ability, creative and able to solve the problem and have a high learning achievement [9]. Majority of teachers only create instructional design to complete administrative requirements [10]. High learning outcomes can be achieved by conducting inference and implementation of innovative changes. Teachers, however should be able to display their capability in creating innovative learning environment. Teachers are expected to enhance students creativity upon learning process, which is designed through lesson plan. Innovative lesson plan (RPP) is the key to promote innovative learning process and encourage students to release their full potential in learning. This paper attempts to examine teachers’ lesson plan within Jember district to identify their level of innovative.

2. Method
This research engaged qualitative research. Qualitative research comprises of several
methods, namely logic, ethnography, discourse analysis, case study, open-ended interview, participant observation, counseling, therapy and etc [11]. Case study is a form of social attempt that emphasizes in how people interpret and make sense of their experiences to acquire the social reality among individuals [12]. The sample of the study was 15 lesson plans that were selected randomly within high school of Jember district. The lesson plans were assessed using 6 innovative indicators with 30 statements. Innovative lesson plan indicators were adapted from “Measuring Innovation in Education 2019” by Vincent-Lancrin et al [13], namely learning purposes, media, models, evaluation, and content. The total number than converted to percentage to identify the innovative level of lesson plan.

3. Results and Discussion

Figure 1. Percentage of innovative rate of history lesson plans

| Percentage          | Value    |
|---------------------|----------|
| Learning Purposes   | 90%      |
| Learning Materials  | 81.10%   |
| Learning Models     | 68.80%   |
| Learning Media      | 57%      |
| Learning Evaluation | 47%      |

3.1 Learning Objectives

Learning objective deals with learning goals or objectives that a specific pedagogical targets. The complete spectrum of innovative varied from well-defined knowledge acquisition goals to the development of 21st century skills, namely creative, critical thinking, collaborative, and communication. Many literature and research examine of why learning objectives are necessary for students and proposed many reasons. The learning objectives in classrooms could be used to assess undergraduate performance. Then these measurement could describe whether and how well students are learning. Learning objectives utilization improves the higher education experience for the students [14].

Learning objective deals with learning goals or objectives that a specific pedagogical targets. The complete spectrum of innovative varied from well-defined knowledge acquisition goals to the development of 21st century skills, namely creative, critical thinking, collaborative, and communication. Based on the research result, indicates that that 90% history teachers has formulated innovative learning purposes, 10% was considering lack of innovative.

3.2 Learning Materials

In educational institutions, the development of teaching-learning materials is regarded as one of the major aspects that would promote student learning and help in the achievement of academic goals and objectives. The educators need to focus upon bringing about developments in the teaching-learning materials. They need to conduct research and promote
modern and innovative methods to enrich the system of education [15].

Material means any form of a textbook, a workbook, video, handout, modules, and etc. Tomlinson states that material means anything could be engaged to support the learning process. Learning materials should achieve impact, means have a noticeable effect of learners. Learning materials also should help students to feel ease that could do in many ways. In addition, materials should help students to develop their confidence [16]. Based on the research result, learning materials that have been developed 81.1% innovative, 18.9% was considered lack of innovative.

3.3 Learning Models

Learning model is a description of the mental and physical mechanisms that are involved in the acquisition of new skills and knowledge and how to engage those mechanisms to encourage and facilitate learning. Silberman states that active learning and teaching methodologies could enhance students active experience. The active learning model could initiate action learning, self-regulated learning, problem-based learning, peer-learning and experiential learning. By engaging active learning models, a proper supported learning atmosphere assists students to develop key skills [17]. Learning models selected within lesson plans 68.8% have been facilitating students to be innovative, while 31.2% has not meet innovative.

3.4 Learning Media

Learning media is a way of communication. This term refers to anything that contains information between source and receiver. Learning media definition emphasizes on utilization of technology, concept, and context. Media is a tool used to transmit messages. Regarding teaching and learning, means to deliver content towards students to achieve learning goals.

Effective learning media utilization in formal situation, students would be able to learn independently or work together with peers. Media plays significant part of education. Generally, media is used within learning process as supporter to improve learning quality. Research suggests that people learn abstract, new, and novel concepts more easily when they are presented in both verbal and visual form. Other empirical research shows that visual media make concepts more accessible to a person than text media and help with later recall [18]. Learning media engaged provide opportunities for students to express their innovative way and creativity is 57%, while 43% has not accommodated students being innovative.

3.5 Learning Evaluation

Education is considered as an investment in human beings in terms of development of human resources, skills, motivation, knowledge and the like. Evaluation helps to build an educational programme, assess its achievements and improve upon its effectiveness. Evaluation has been defined as a process of making judgement about students learning and their achievement, performance, competence, and educational programs according to assessment data [19].

Evaluation provides valuable feedback on the design and the implementation of the programme. Thus, evaluation plays a significant role in any educational programme. For evaluation aspect within lesson plan 47% has provided students to be innovative in reflecting their knowledges, experiences, and skills, while 63% has not.

4. Conclusion
Based on the result research, there some points could be concluded. Some aspects of lesson plan developed by history teachers are considered innovative, while other are not. The results indicating that teachers need more proper training in developing innovative instructional design that meet 21st challenges. This research will be engaged as considering factor for researchers in designing models and learning media that innovative, adaptive, responsive based on life skill. For future research, this research could be developed into broader and deeper aspect.

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