Competency of innovative thinking of case study teachers at SMPN 10 Singkawang

Noni, Indri Astuti, Afandi*
Universitas Tanjungpura, Indonesia
afandi@fkip.untan.ac.id

Abstract: The educational process carried out must run optimally, therefore the teacher has an important role in developing and designing a lesson in order to provide a maximum learning experience for students. Innovative teacher competencies must be owned by today's teachers. This study aims to see and assess the competence of innovative teachers at SMPN 10 Singkawang. The sample in this study was 15 teachers who taught at SMPN 10 Singkawang by filling out an innovative teacher competency questionnaire. The questionnaire consists of 4 indicators, namely observing, asking questions, networking ideas, and experimenting. Innovative competency assessments are very helpful in providing an overview of the qualities possessed by teachers so that improvements can be made for the better. The quality of teachers at SMPN 10 Singkawang is clearly reflected in the results of the study, teachers at SMPN 10 Singkawang have innovative teacher competencies with good criteria. (Average: 73.03).

Key Words: Competence; Innovative; Teacher; Questionnaire.

Introduction
Updating is very important in the midst of the rapid development of technology and information. These developments affect the field of education so an effort is needed to bridge the current and future situations by introducing reforms that focus on efficiency and effectiveness. (Susanto & Surya, 2022). The need for learning has encouraged the emergence of various kinds of reforms in the world of education. (Wahyu et al., 2020). This aims to help students and improve the teaching and learning process so as to facilitate and provide a pleasant atmosphere for students. (Allawiyah & Syafril, 2022).

Therefore, all educational institutions must try and be able to anticipate developments that occur by continuously creating a program that is in accordance with the child's development, the times, the situation, and the needs of students. To be able to anticipate this requires a teacher who has sensitivity and innovation. (Eliza et al., 2022). The teacher is a very important component in creating a learning atmosphere that provides an unforgettable and enjoyable experience for students. The teacher is a facilitator of learning but the teacher must also be ready to become a source of information in learning, meaning that the teacher must have the capacity and quality to be able to carry out his duties and functions. (Almujtaba, 2021)

A qualified teacher must be able to become an inspiration in learning(Zahro & Mellinda, 2021). The teacher must be able to pay attention to the student's learning climate so that it can provide optimal results in learning. (Anugrah M.N, Tareze. M.A.H, Afandi, 2022). The teacher has a very vital role in organizing learning in the classroom. The innovations made by the teacher will greatly affect student learning activities.

In the current era, teachers must have the ability and skills to adapt to existing developments. (Balakrishnan, 2016). Teachers must be familiar with the changing atmosphere in the learning process so that teachers can create innovations that continue to
move according to changes and developments in science and technology. To be able to adapt to existing situations, teachers must have the competence to think innovatively. (Balakrishnan, 2019). The teacher must be sensitive and ready to all the changes found in the learning process. Teachers must be able to continue to upgrade themselves and upgrade information so that they can have an impact on students. (Rastogi, 2018). teachers who continue to innovate so that it will stimulate students to also be able to continue learning and adapt to existing situations (Arsyad, 2013).

Innovative thinking competence in teachers is very important for teachers to have. With this competence, teachers can continue to make improvements and updates in the world of education so that they can have a significant influence on developments in media and teaching methods. (Nurdin, 2017). Teachers must make improvements in teaching methods and styles according to existing developments. For this reason, we need to know the description of teachers' innovative thinking competencies so that they can provide input and get an overview of the competencies possessed by teachers in educational institutions. Innovative thinking competence will be very important in presenting the overall picture of the teacher. (Nurbayenti, 2021). Teachers who have innovative competence will continue to make changes and improvements to learning media and methods. Teachers who have this competence will continue to learn and adapt to existing demands. Teachers who have innovative competencies will have a good impact on an educational institution because they will continue to provide innovation and renewal.

Based on some of these problems, this research is intended to see an overview of innovative thinking competencies for teachers at SMPN 10 Singkawang. It is hoped that this will provide evaluation material and input for schools as an initial basis for making improvements in the future if deficiencies are found regarding the teacher's innovative thinking competence.

**Method**

The quantitative is the method used in this research. All teachers at Singkawang 10 Junior High School were involved in the questionnaire filling process and 15 Singkawang 10 Junior High School teachers filled out the questionnaire provided for this research process. The research instrument uses the Measuring Educational Innovative Thinking Competencies instrument (Morad et al., 2021). This instrument can be used for research related to teachers' innovative thinking competencies. There are 4 indicators asked in this instrument, namely observing, asking, a network of ideas, and experiments. The use of this questionnaire was adapted from Morad et all (2021) research. Details regarding these instruments are shown in the following table:
Table 1. Examples of Indicators in Question

<table>
<thead>
<tr>
<th>No</th>
<th>Indicator</th>
<th>Number of</th>
<th>Question Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Observing</td>
<td>4</td>
<td>I regularly observe things around me to get new ideas. With regard to my daily experience always gets new ideas.</td>
</tr>
<tr>
<td>2</td>
<td>Asking</td>
<td>5</td>
<td>I always ask all the things I came across. I often ask questions to understand things in depth.</td>
</tr>
<tr>
<td>3</td>
<td>Idea Network</td>
<td>4</td>
<td>There are people who are me believe in bringing new perspectives and perfecting new ideas. I have a network that I interact with a lot to get new ideas.</td>
</tr>
<tr>
<td>4</td>
<td>Experimenting</td>
<td>4</td>
<td>There are people who are me believe in bringing new perspectives and perfecting new ideas. I have a network that I interact with a lot to get new ideas.</td>
</tr>
</tbody>
</table>

The analytical method used is descriptive analysis. The data collection process was carried out and converted using a Likert scale. This relates to the teacher’s perspective where descriptive analysis always describes and describes the data as it is. The formula used is:

\[ Dp = \frac{S}{N} \times 100 \]

Information:
- \( Dp \) = Descriptive Rating
- \( S \) = Score obtained
- \( N \) = Total Score of Respondents

<table>
<thead>
<tr>
<th>Number of</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>81 – 100</td>
<td>Very good</td>
</tr>
<tr>
<td>61 – 80</td>
<td>Good</td>
</tr>
<tr>
<td>41 – 60</td>
<td>Fairly good</td>
</tr>
<tr>
<td>21 – 40</td>
<td>Not good</td>
</tr>
<tr>
<td>0 – 20</td>
<td>Not very good</td>
</tr>
</tbody>
</table>

Results and Discussion

Teachers Need Innovation in Learning

All teachers must try to create and encourage innovation in learning methods when teaching and learning activities are carried out in class. This is intended so that the learning process can run well and effectively and that it can lure students to be more active. Learning must be of high quality so that students can achieve the competencies in accordance with what has been determined. It is not an easy thing to achieve a quality learning process. It takes energy, thought, time, and sometimes even substantial funds in designing the desired learning. (Saumantri, 2022). Quality learning is the responsibility of all teachers. Innovation in learning will make it easier for students to capture material well, meaning that teachers must have the ability to innovate.

Innovative thinking competence in teachers becomes very important in the process of updating media and teaching methods. (Saylendra et al., 2022). Therefor it is necessary to look at each teacher about the innovative thinking competence they have as an illustration of creating learning, if the teacher’s innovative competence is very good it will help students achieve learning goals. The teacher’s innovative thinking competence also plays an important role in the mastery and development of learning. Innovative teachers are needed to create...
students who have fun and enjoyable learning experiences. Based on this understanding, innovative teachers are determined by 4 main factors based on Morad’s research. S., Ragonis. N., & Barracks. M., (2021). The four factors are the observing factor, questioning factor, idea network factor, and experimenting factor. Teachers of SMPN 10 Singkawang filled out a questionnaire to measure these four factors to see an overview of teachers’ innovative competencies. The results are shown in the following table:

Table 3. Results of the teacher’s innovative competence at SMPN 10 Singkawang

<table>
<thead>
<tr>
<th>No</th>
<th>Factor</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Observing</td>
<td>78.66</td>
</tr>
<tr>
<td>2</td>
<td>Inquire</td>
<td>70.13</td>
</tr>
<tr>
<td>3</td>
<td>Idea network</td>
<td>73.00</td>
</tr>
<tr>
<td>4</td>
<td>Experiment</td>
<td>70.33</td>
</tr>
<tr>
<td></td>
<td>Overall Total</td>
<td>73.03</td>
</tr>
</tbody>
</table>

Obtaining data in this study showed that the indicators on the observing factor obtained a result of 78.66, the questioning factor obtained a result of 70.13, the idea network factor obtained a result of 73.00 and the experimental factor obtained a score of 70.33. These four factors get an average of 73.03. So that the results of the teacher’s innovative competency assessment at SMPN 10 Singkawang are good. Teachers at SMPN 10 Singkawang already have good competence related to teacher innovative competence. Learning should take place in an exciting and fun way to see the results obtained from the research, although it still needs to be improved to maximize it.

The Role of Innovation in the teaching and learning process.

Innovation is a breakthrough to change the system from a bad to a better one. (Alvarez-Garrido, 2022). Then learning is an activity or an activity carried out to make the learning process happen to students. Learning must be designed creatively and dynamically according to the needs of the times so as to create an effective and enjoyable learning atmosphere for students. (Sulthon, 2017). So innovation in learning is a learning process that involves students who are designed, then developed, and managed dynamically and creatively and applying approaches with a better aim, to create an effective and enjoyable learning atmosphere for students. Innovation is very important so that students can enjoy the learning process more because the purpose of innovation is to make improvements and facilitate the learning process towards a better direction. To be able to create fun and creative learning requires teachers who have innovative thinking. (Sunarti, 2021). Teachers must master technology and keep abreast of scientific developments so that it makes it easier for these teachers to develop their competencies.

The purpose of conducting an assessment of teacher innovative competence is to provide an overview of teacher innovative competence and serve as input material in improving teacher quality so that it is hoped that teachers can adapt to existing developments because teachers are an important factor in creating and designing fun learning. and provide learning experiences that help students understand learning as a whole. The results of
research on the factors of observing, asking, networking of ideas, and experiments describe the innovative competence of teachers. The following is a graph of research results on teacher competence at SMPN 10 Singkawang:

**Diagram 1. Innovative Competence in Singkawang 10 Middle School Teachers**

The results of the research on the innovative competence of teachers at SMPN 10 Singkawang are based on 4 factors that become a reference, namely observing, asking, network of ideas and experimenting, the results are obtained, namely the observing factor at 78.66, the questioning factor at 70.13, the idea network factor at 73.00 and the experimenting factor at 70.03. so that if the overall average of these four factors is obtained an average of 73.03. so that the results of the assessment of the teacher's innovative competence can be said to be good. This illustrates that the innovative competence of teachers at SMPN 10 Singkawang is good and must be continuously improved so that students can continue to receive fun and activity-filled lessons that apply many new innovations in teaching and learning. Teachers must have innovative competence so that education can continue to move forward according to the times so that teachers must be required to continue to be able to develop themselves so that in the process of implementing learning all knowledge, innovation in learning and new things that teachers have can be shared with students. . (Fitriani & Maulida, 2020). Thus we as teachers have helped facilitate and design fun learning for students.

**Conclusion**

The innovative competence of teachers at SMPN 10 Singkawang can be seen from the survey results on the four factors which show an assessment of innovative competence with an average of 73.03 so the innovative competence of teachers at SMPN 10 Singkawang is good. Teachers at SMPN 10 Singkawang already have innovative teacher competencies that pay attention to observing, asking questions, networking ideas, and experimenting. This will assist teachers in innovating in the learning process which will assist students in obtaining maximum knowledge according to needs in an era of increasingly rapid development of technology and knowledge.
References


