

# Teachers' Strategies in Fostering Students Critical Thinking in SMAN 1 Guguak

Jacky Ardiyan<sup>1\*</sup>

*Universitas Negeri Padang, Padang, Indonesia*

\*Author. E-mail: [jackyardiyan@gmail.com](mailto:jackyardiyan@gmail.com)

## ABSTRACT

This research was to examine the strategies utilized by teachers of English in SMA N 1 Kec. Guguak in fostering the critical thinking of students. This research focused on the kinds of critical thinking based strategies utilized and also how they are implemented by English teachers. The researcher observed and analyzed if there would be nine strategies like the problem-posing, the frame, the question-generating, the believing and doubting, the evidence-finding, the case approach, the norming-session, the rough draft workshop, and the metacognitive. The design of the research is qualitative by doing observation, interview and documentation. The result of this research shows that there are four strategies found that can foster the critical thinking of students. The strategies found are Case strategy (37,5%), Problem-posing strategies (25%), Evidence finding strategy 25% and the last strategy implemented by teacher is Question generating strategy 12,50%.

**Keywords:** *Teachers' strategies, Critical thinking*

## 1. INTRODUCTION

Critical thinking enables students to ruminate over and evaluate the way they think and behave in daily life. It also enables them to direct, transform, manipulate concepts, knowledge, processes and ideas in making decision, challenging norms and finding solutions to solve their obstacles and problem. Critical thinking is all about the potency to analyze an argument, draw inference by means of reasoning, judging, evaluating, and making decisions or solving problems[1]. Critical thinking skills play an important role for students in order to be successful inside and outside the classroom. Moreover, The student are required to compete in this 21<sup>st</sup> century and have decent knowledge and insight[2]. Not only working with ideas and concepts, they have to have the ability to manipulate them and see how well they work. a critical thinker requires academic assertiveness [3] which means involving a willingness to implement idea of self awareness, behaviour of others, techniques and the abilities development, to yourselves, to take lesson from them and change where it is needed. Moreover, the ability to think critically should occur in classrooms daily. This will equip students with a set of skills that will aid them to deal with any kind of circumstances with responsibility and greater easiness in their life. Besides that, Students with high critical thinking skill will be better at solving problems. Hence, it should be developed through learning in school[4].

It can be implemented in traditional or conventional classes through nine strategies which is hoped to be able to help students to broaden their way of thinking; such as the strategy to pose the problem to students, the strategy to ask students to organize topic through framing, the strategy to probe student to generate questions, the strategy to make students see things on both sides through believing and also doubting, the strategy to find the evidence through small research, the strategy to see how students handle certain case, the strategy to justify untagged assignments from the previous planned lesson , the strategy to use peer review to give students stimulus, and the last one is the strategy to utilize students' metacognitive through probing or making consensus decision[5].

Teacher should be a pedagogical model. It is attainable to teachers in the field of professional literature and deserves a notable position in academic thinking of every instructors. It brings reputability and self-worth to their job.

We cannot call teaching a job or profession without any instructional methods or pedagogies involved in it. Therefore, their role as pedagogical model is to provide any suitable teaching strategies for the students[6]. Indonesian schools mostly have large classrooms. Therefore, applying appropriate strategies in fostering students' critical thinking is also another challenge for teachers.

## **2. LITERATURE REVIEW**

### **2.1 Critical Thinking**

Critical thinking is the ability of a person and their tendency to conduct an assessment and draw the conclusions according evidence there is[7]. In the 21st century learners are required to have a broad knowledge to compete in real life, especially during a slugfest global competition as of today. Nowadays, fostering language learners to think critically is considered as advantageous particularly in teaching English as a foreign language (EFL), somehow to attain the goals will always be ahead of us to be perfected. To attain the advancement of EFL learners' ability to think critically, it can be advanced through guidance and training[8]. Therefore, it is a call for teachers to explore critical thinking pedagogies. As pedagogical models, teachers must have understanding about how to pick and provide a suitable and right teaching strategies for the students and make use of those strategies in fostering critical thinking later on.

### **2.2 Teaching Strategy**

The consideration of choosing the right strategies for students and classes is the call of every teachers. As stated in Oxford Dict; teaching is teachers' profession, as strategy is a planned intention set to bring about particular purposes. The strategy in teaching is important as it is an utmost component of pedagogy consists of serial of approaches and methods to gain the goals intended in the point of view of philosophy or other certain learning theories[9]. According to the explanation, we may conclude that teaching strategy is an organized and detailed plan to help students achieve academic success.

It is needed for us to probe ourselves with question if our practices in teaching have been a good example for being the serve of forming, testing, accurate evaluation. Alternatives can easily be explored from many references nowadays. If we aim to foster the students' metacognition. Lead them to weigh the essential quality and succession of the processes of thinking[10].

### **2.3 Strategies in Fostering Critical Thinking**

There are nine strategies to foster students' critical thinking according to Bean such as the strategy to pose student to problem, the strategy to ask students to organize topic through framing, the strategy to probe student to generate questions, the strategy to make students see things on both sides through believing and also doubting, the strategy to find the evidence through small research, the strategy to see how students handle certain case, the strategy to let students justify each other's work using given assignments from the previous planned lesson, the strategy is to use peer review to give students stimulus, and the last strategy is the strategy to

utilize students' metacognitive by analyzing probing or consensus decision making.[11].

#### **2.3.1 The Problem-Posing Strategy**

The teacher probes students an open-ended question regarding disciplinary problem or issue for them to justify and come up with an answer. Students may use in various strategies in formulating new problems in accordance with different situation such as challenging the them in a situation with "What if" or "What if not". Those questions can change the problem's component like numbers, objects etc. under the study. The second one is modifying or paraphrasing, regenerating statement, analogy and inductive reasoning. Analogy and inductive reasoning are important on a given condition, add new conditions. The third one is exposing the student with cases or issues to make them able to reproduce cases alongside the whole process. This is called imitating strategy. The last one can be conducted through questions-generating. Any gainful questions can be used to be the sample of questions to be generated by them like, "what is the important idea can be concluded from the problem?", "Where else did you see the similar ideas?", "Could it be used in a different way to solve it?", "Have you got enough data or information to solve it?"

#### **2.3.2 The Frame Strategy.**

This is aimed at helping students organizing the topic, main ideas and supporting details given to them found in their reading tasks. It also provides opportunity for teacher to supervise and measure the understanding of students and then later the instruction can be conformed to suit tstudents. It also includes what is called a "frame" through basic hierarchic graphic organizer in order to aid them to think, talk and discuss on the matter of the topic or other substantive information.

#### **2.3.3 The Question-Generating Strategy.**

This strategy assists the students in comprehending text. They learn how to formulate and respond to questions regarding the situations, ideas and facts through the process of understanding the text.

#### **2.3.4 The Believing and Doubting Strategy.**

This strategy aids students to understand and see situation from another point of view that they probably do not concord with. This is to let them stand and see how if they were in both sides of arguments. Sometimes both sides are often right. The doubting strategy on the other hand, is a stimuli to be uncertain as well analytic with every ideas we encounter. Through this, we can reveal any hidden oppositeness, wrong analytic thinking, or any other flaws within an idea that seems to be truthful.

#### **2.3.5 The Evidence-Finding Strategy.**

The aim of this strategy is to find facts and other evidences to support a scenario or assumption. It can be done by look up details from writings, news, novels or dramas. Students can also use data from library, field

research or laboratory for arguments. It teaches students how experts use discipline-appropriate evidence to support their assertions.

The students are asked to analyze internal and external information from text. Then, they are asked to find evidence in the text. Keep in mind that during collaborative learning, this strategy could be impotent if students merely glance over their books or notes during a collaborative session. Therefore, data-finding assignments should be assigned to the students a few days prior so that they can ruminate it over and evaluate every evidence they found in advance.

#### **2.3.6 The Case Strategy.**

This approach focuses on students or student-centered. it enables students to utilize their critical thinking skill as well as interpersonal skills in communication. Providing them with an intricate and equivocal substantial problem will draw them into action perspective instead of analyzing one. Doing research is a requirement to work on cases to gain data and foster them to be evaluated. It will also help them to cope with real world problems. It needs decent skills like organizational and time-management.

#### **2.3.7 The Norming Session Strategy.**

The activity in this strategy is done through essay-making from previous lesson. The teacher distributes three or four essays of students from the last meeting or previous classes. Keep in mind that the names should be removed. Let them work in group to rank those essays and coach them arguments to justifying their grades. Then, teacher unveil his or her own grade and commences a discussion about criteria for grading the essays. (in plenary session). The students are asked to give their academic feedbacks for the other task.

#### **2.3.8 The Rough Draft Workshop Strategy.**

The rough-draft workshop is usually used in a collaborative writing class by dividing student into small groups. This strategy uses peer review to give them stimulus about draft revision to improve sentence structure, content organization and ideas. Finally, the students read it aloud to the class and let their peer respond to their work by turns.

#### **2.3.9 The Metacognitive Strategy.**

The task in this strategy is designed to analyze and probe meticulously the consensus decision making. The purpose is to deepen their comprehension and knowledge about the creation of a knowledge, not to merely believe and memorize the right answer given by the teacher. The experts believe that an answer is not mere an instant product but gained through disciplinary conversation process which includes experiment, analysis, inquiry, conceptualizing and solving problems. But most students struggle to understand the principles of analysis, inquiry and problem solving used by the experts to arrive at their

views. They consider an answer is not just a product but also the process of disciplinary conversation. Therefore, students need to be taught how to think like experts. The most important demonstration can be done through the way teacher thinks through problems, instead of just provide students with answers. This is to model the students' mindset on how to think like expert. The teacher has to show interest in approaches or ideas that students represent to solving problematic topics, as well as recognize and embrace their difficulties(12).

### **3. METHOD**

The method of this research will use descriptive qualitative method. It will be used to describe the data. Therefore, it will be categorized into descriptive study which refers to how the researcher address and identify a multiple description of people, objects, events, places, conversations and so forth. The main affinity in this research will be describing teachers' strategies in fostering students' critical thinking as in the research questions. The researcher's description and explanation is made according to the analysis and from quotation to clarify data. This research also produces data mostly in written words, rather than numbers and statistics. A descriptive research is designed portray and explain about any variables of something in a certain situation [13]. Therefore, this research describes about the teaching strategies implemented by English teachers.

This research will be conducted at SMAN 1 Kec. Guguak located in Jl. Tan Malaka, Tiakar. The researcher chooses this school is because it is near from the researcher's place, more importantly the school is known to be the best senior high school in Guguak subdistrict. As also stated in the background of the research. The subjects of this research are all qualified English teachers in SMA N 1 Kec Guguak. The researcher chose the subjects because the researcher wanted to know what strategies could have been used in English classes of a senior high school by teachers.

Participants will be all teachers of English of SMAN 1 Kec. Guguak who fulfills 5 years of teaching experience and are certified teachers. There are 3 qualified teachers to be the participants of the research.

Collecting data is important in a research because the data used to get the result of the research. The instruments in this research are interview, observation, documentation.

The data in this research will be analyzed through descriptive qualitative data analysis. Qualitative data analysis comprises of components like the reduction of data, the data display, and the drawing conclusion or verification. They are not to be separated from each other[14].

4. FINDING

This table showed the results of critical thinking strategies by teacher to foster the students.

Table 1. The critical thinking strategies percentage.

No	Strategy	Frequencies	Percentage	Teachers
1	Problem-posing strategy	2	25%	1 and 3
2	Frame strategy	0	0%	-
3	Question-Generating Strategy	1	12.5%	4
4	Believing-Doubting Strategy	0	0%	-
5	Evidence Finding Strategy	2	25%	3 and 4
6	Norming Session Strategy	0	0%	-
7	Case Strategy	3	37.5%	1,2 and 4
8	Rough Draft Workshop Strategy	0	0%	-
9	The Metacognitive Strategy	0	0%	-
	Total	8	100%	

The table shows that it can be inferred that the teacher only use three strategies out of nine in fostering their students' critical thinking. The frequency of teacher strategy in fostering students critical thinking were: Problem-posing strategy was implemented by 2 teachers (25%), Question-generating strategy by 1 teacher (12,5%),

The Evidence-Finding Strategy by 2 teachers (25%), The case strategy by 3 teachers (37,5%), meanwhile The Norming Session, Frame, and Metacognitive, Believing and Doubting, Rough Draft Workshop Strategy done by 0 teachers (0%). The figure explains that Case strategy has the biggest implementation percentage at 37,5%. Then the second and third strategies are Problem-posing strategies and Evidence finding strategy at 25%. The least strategy implemented by teacher in SMA N1. Kec. Guguk is Question generating strategy at 12,50%.

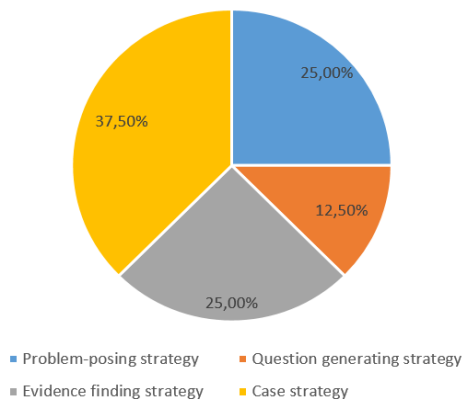


Figure 1. The result of the strategies in fostering students' critical thinking utilized by teachers.

5. DISCUSSIONS

According to the result of the research, in Problem-Posing Strategy, teacher chose a starting point by telling them about a problem and a situation. Then teacher asked them "do you know anything about it?" or "what do you know about it". After giving a sufficient time for them to think and convey their opinions about the given problem and situation. Teacher asked them back with "what if and what if not?" such as "What if each attributes were not and didn't exist, then what could it be?" after the problem and situation have been posed teacher asked every students to write their own answers.

In Evidence-finding strategy, teacher has actually made several groups of students and assigned data-finding task a week in advance to find the evidence as a homework from a story text. Then teacher asked students to find textual details from a story passage to support their arguments in the class. The groups then worked together to evaluate and decide the evidences. English teachers created a questioning situation during conducting question-generating. It was according to what they have read from a given text. Then teacher provided them some feedbacks and open a discussion session after that.

In Case Strategy, It was started by giving students a simple case problem, Then, allowing students to group themselves while establishing discussion and also let them take their time for a while to present the narrative then revealed the case's facts. Then teacher told them to not be afraid of any kinds of error in this task. And lastly, giving students a chance to present their reactions and feedback.

## 6. CONCLUSIONS

The conclusion according to the research findings is it was found that teachers indeed implemented strategies whether they knew or not that it was to foster students' critical thinking. The strategies are Problem-posing implemented by 2 teachers (25%), Question-generating strategy by 1 teacher (12,5%), The Evidence-Finding Strategy by 2 teachers (25%), The case strategy by 3 teachers (37,5%), The rest of the strategies such as The Norming Session, Frame, and Metacognitive, Believing and Doubting, Rough Draft Workshop Strategy done by 0 teachers (0%). This research is hoped to give insight to teachers about strategies there are in improving their students' critical thinking. The second one is to be used as reference for the next researcher in carrying a deeper research about fostering students' critical thinking. The last one, it can be used in seminars or teaching training program to let more instructors know and embrace each strategies in this research.

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