



## Profile of SETS Approach to Improve Student's Critical Thinking Skills During 2015 to 2022

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### ABSTRACT

Critical thinking skills are one of the skills needed by students in the 21st century. The research aims to describe and analyze the application of the SETS approach in improving students' critical thinking skills in Indonesia. The method used in this study is a qualitative method of secondary data in the form of a literature study based on the results of previous research. The sample in this study was 60 published scientific articles. Based on the analysis of 20 articles analyzed, it can be seen that the SETS approach can improve students' critical thinking skills which include increasing the N-gain value, positive student responses during learning, and student activity. Further research should integrate other innovative learning models with the SETS approach so that they can be used to develop other 21st-century skills.

### INTRODUCTION

The 21st century is marked by very rapid developments in various fields, both in the field of technology and in the field of education as well. Education certainly cannot be separated from efforts in developing quality human resources. The characteristics of quality human resources are being able to manage, use, and develop thinking skills (Nuraini, 2017). Critical thinking skills are one of the skills that are the demands of the 21st century that must be possessed by students (Redhana, 2019). Critical thinking skills are needed in life to analyze and find solutions to problems that exist in the present and future. Critical thinking skills are basic abilities in problem-solving. John Dewey argues that critical thinking is essentially an active process of someone thinking deeply, asking various questions, and finding relevant information rather than just waiting for information (Ariyana et al., 2018). Critical thinking according to Muglia is described as a process of using higher-order thinking skills possessed by students to understand problems, analyze, synthesize and evaluate ideas logically (Tumanggor, 2021).

Critical thinking skills can be trained through learning, a set of teaching materials, and assessment instruments that reflect critical thinking skills. However, the facts on the ground show that students' critical thinking skills are still low, according to the 2018 PISA survey, the value of the science ability of Indonesian students is 396, ranking 71st below the rankings of Thailand and Malaysia (Schleicher, 2019). The score shows that the science ability of students in Indonesia is low due to the lack of optimal problem-solving and reasoning abilities (Lestari & Annizar, 2020). Students' low critical thinking skills are due to a lack of reasoning ability in responding to problems that arise. Based on research of Suratno & Kurniati (2017) the lack of students' reasoning ability is due to a lack of interest in proving principles or concepts, investigations, and generalizations of problems are lacking. One of the causes of the lack of student interest is that the

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