



## Improving Science Attitude and Character of High School Students Using the INSETS Learning Model Based on Local Wisdom Sopi of East Nusa Tenggara

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### ABSTRACT

**Objective:** This study examines the success of the INSETS model learning tool based on the local wisdom of Sopi culture of the Dawan tribe of East Nusa Tenggara to improve the science attitude skills and character of high school students. **Method:** This study applies the Instructional Design Model (IDM). Data were obtained from two observers who provided an assessment of the science attitude and character behavior of students shown by students during teaching and learning activities. **Results:** The results showed that the INSETS learning model based on the local wisdom of Sopi culture of the Dawan tribe of East Nusa Tenggara was effective in improving the science attitude skills and character of students, as evidenced by the results of the assessment of science attitudes and character of students during learning took place in the good to very good category. **Novelty:** Students' science attitude skills and character can be trained by integrating the INSETS learning model based on the local wisdom of Sopi culture of the Dawan tribe of East Nusa Tenggara to equip students in 21st Century education.

### INTRODUCTION

21<sup>st</sup> Century Education requires educational institutions to produce quality resources. 21<sup>st</sup> Century Education emphasizes the importance of developing students scientific attitudes and character as part of efforts to prepare a generation that is able to compete in an increasingly dynamic world (Maison et al., 2021). To achieve this, science attitudes are important for learners to have. Science attitudes, which include curiosity, perseverance, conscientiousness, are essential to prepare learners to face global challenges in the era of Industrial Revolution 4.0 and towards the era of Society 5.0 (Sakurai et al., 2019). Science attitudes, which include curiosity, openness to evidence, and critical thinking ability, are very important skills in science learning (Maison et al., 2021). Science is a basic knowledge that includes products, processes, and applications (Retnowati et al., 2021).

Science attitude is one of the important aspects in science education, which includes students' interest, motivation, and ability to think critically about scientific concepts (Gordon et al., 2020). At the high school level, this attitude plays a significant role in determining the success of science learning, which not only affects the understanding of scientific concepts, but also the application of the scientific method in everyday life (Wang et al., 2021). In addition, learners' character, such as integrity, responsibility and ethics, is also important in education. Strong character building at the high school level is essential to form individuals who are ready to face future social and academic challenges (Snyder et al., 2019). Natural Sciences (IPA), especially biology, plays an important role in developing a positive attitude towards science (Rakhmawan et al.,

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