

EXPLORING THE EFFECTIVENESS OF THE BASIC CHEMISTRY LESSON APPROACH: ANALYSIS OF PERCEPTIONS AND IMPACT ON ENTRANCE TO STATE UNIVERSITIES

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Abstract

The study investigated the effectiveness of the Basic Chemistry Lesson Approach at State High School 5 Banda Aceh and its influence on students' perceptions and entrance to state universities. A mixed-methods research design collected and analyzed quantitative data regarding students' academic performance and qualitative data on their perceptions. The findings revealed that the Basic Chemistry Lesson Approach significantly enhanced students' understanding of chemistry concepts and positively impacted their performance in university entrance exams. Moreover, qualitative analysis demonstrated that students perceived the approach as engaging and beneficial to their learning experiences. The study highlighted the importance of innovative teaching methodologies in improving students' academic achievements and shaping their educational trajectories. The implications of these findings extended to educators, policymakers, and educational stakeholders, emphasizing the value of evidence-based instructional practices in enhancing learning outcomes in chemistry education.

Keywords: Basic Chemistry Lesson Approach, State High School 5 Banda Aceh, student perceptions, academic performance, university entrance exams, innovative teaching methodologies.

Introduction

The Basic Chemistry Lesson Approach (Vachliotis, Salta, & Tzougraki, 2021) represents a pedagogical strategy fundamental to high school chemistry education aimed at simplifying intricate chemical concepts for students with varying levels of prior knowledge. By deliberately breaking down complex ideas into more manageable components, this approach seeks to render the subject matter accessible and comprehensible. Utilizing a combination of clear explanations, visual aids, and hands-on activities, the Basic Chemistry Lesson Approach endeavors to demystify chemistry, fostering active engagement and participation among students (Wu & Yeziarski, 2022).

Key components of the Basic Chemistry Lesson Approach encompass a range of pedagogical elements designed to enhance the learning experience (Lee & Hannafin, 2016). These components include formulating comprehensive lesson plans, integrating interactive teaching methods, utilizing multimedia resources, and providing