

## WU Social Engagement projects: Promote STEM Education in Schools in Nakhon Si Thammarat Province



The Center for Academic Services and the School of Science at Walailak University, led by Lecturer Acting Sub-Lieutenant Jiraphat Namkaew, organized a community service academic mission project to enhance the quality of life for communities surrounding Walailak University. This project, which is an education outreach activity, is titled "Promoting STEM Education in schools in Nakhon Si Thammarat Province". It involves collaboration with education students and faculty from the School of Science at Walailak University, the project aims to develop STEM-based learning methods that emphasize the engineering design processes. These methods are designed to enhance integrated problem-solving skills in conjunction with the high school chemistry curriculum for 30 high school students from Moklan Prachasarn School. The aim is to improve their understanding of complex chemistry topics and difficult chemistry content more easily through thinking processes, hands-on practice, and the application of skills in real-world situations.



The programmed project involves developing and promoting chemistry education through STEM education activities on the topic of chemical reactions and reaction rates. These activities are conducted beyond campus at Moklan Prachasarn School. Students participating in this project learn through hands-on experiences, connecting knowledge from their experiences, and building upon that knowledge. The project encourages students to think analytically, logically, and systematically. Hands-on activities make learning more enjoyable, enhancing the effectiveness of STEM Education compared to traditional education systems that focus on rote memorization or teacher-centered instruction. Additionally, the

project integrates collaboration with local partners to provide students with opportunities to develop their communication skills within the community.



Additionally, in collaboration with Assistant Professor Dr. Upsorn Boonyang, a career guidance and self-awareness activity was organized in the form of multiple intelligences activities for high school students at Moklan Prachasarn School. This tailored lecture approach allows students to discover their aptitudes and interests through the development of various skills according to Howard Gardner's theory of multiple intelligences.



