

Science Lesson – Optical Communication

Introduction

Can understand!

Advantage

Wavelength Division Multiplex

Polarization Division Multiplex

Electrical communication

Optical communication

Switching Speed

Experiment

digital audio player

earphone

LED

solar cell

electrical signal

optical signal

electrical signal

And more

Input

Output

optical switch

Two-photon absorption

Improvements

- We taught our topic step by step.
- We used many gestures.
- We prepared interesting experiment.
- We spoke slowly and loudly, especially the main theme of research.



Students' reaction

- "It was very difficult but very exciting!"
- "I have never taken the lesson before!"
- "It was very fun!"
- "very exciting!"
- "I want to study physics more!"
- "The lesson was very useful!"

Achievements and Problems

Achievements

- We all tried to communicate with students, teachers and friends in Thailand in a positive way.
 - It deepened to mutual understanding and friendship.
- Our students could understand the contents of our lesson.
 - We could make our lesson easy to understand from the students' perspective with visuals and instruments.

Problems

- Some students look boring when we talk about two-photon absorption.
- Because of the pronunciation problem, students sometimes can't understand what we want to explain.

Extra activity

State Railway

We get many new friends !!

There are many beautiful and great temples in Thailand.

We practiced Muay Thai. It was so hard.

Summary

- We taught optical communication for high school students in English and we gained confidence of speaking English.
- We recognized the significance of our research again.
- We interacted Thai people and culture. It was so interesting for us.