

R&D Theme

Realization of schools that protect individuality

Progress until FY2025

1. Outline of the project

This project focuses on "schools," where diverse children live together, to promote learning based on inherent curiosity and to achieve a high level of mental well-being for children. Kanazawa University and Kaga City are collaborating on this research project with three main themes: "visualization of children's mental well-being and intellectual curiosity in schools," "examination of educational systems," and "ELSI for developmental disabilities.

In what situations in school life is the child relaxed or nervous?

OTarget

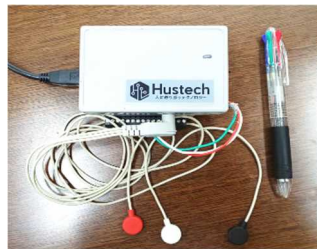
Students enrolled in regular elementary school classes and special-needs classes

OMethod

Students will be asked to wear a wearable high-precision electrocardiograph and face-to-face detection application while at school to acquire heart rate data and activity volume data.

2. Outcome so far

Device 1: Wearable high-precision ECG



A prototype device was created to improve the accuracy of heart rate and autonomic nerve measurement in daily life and to enable long-term measurement.

Device 2: Face-to-Face Inspection Synchronicity Detection Application



A system was introduced to evaluate the body movements during individual body activities and group synchronization by means of an acceleration sensor built into a small smartphone.

Research Implementation System

We regularly hold collaborative meetings composed of educators from the staff council, special education advisors, and researchers to share information regarding the adaptation and support status of

students requiring assistance in schools.

Selection for Research Collaboration with Schools in Kaga City

For one school, with the cooperation of the Kaga City Board of Education and the target elementary school, a preliminary experiment was conducted using small smartphones to measure individual body movements during physical activities and group synchronization.



3. Future plans

We will continue to hold information sharing meetings between Kaga City and researcher's in university to grasp the current state of education in the community and share information about the adaptation and support situations for students requiring assistance, including those with developmental disabilities. We will conduct surveys on activities of strong interest and prepare for "Curiosity Exploration Time." Symposiums and other events will be organized to promote understanding of inclusive education among citizens and provide opportunities for comprehension. (YOSHIMURA Yuko: Kanazawa University)