

Research theme title	Educational activities for solving transportation problems in high schools in mountainous areas
Background and objectives	<p>Osaka Prefectural Toyonaka High School, Nose Branch, is located in a mountainous area. This school has been designated as a Super Global High School by the Ministry of Education, Culture, Sports, Science and Technology, and is engaged in a variety of educational activities from a global perspective, while many students in the area are interested in continuing their education in the area. One of the school's challenges is the "commuting issue," and in recent years, the number of students enrolling in the school has been declining and the school has been losing capacity, as applicants for higher education have given up on enrollment due to the commute to school. Currently, there are several means of commuting to school, such as walking, taking the local bus, or driving to and from school, but other than that, bicycle commuting is the final means of getting to school. However, bicycle commuting to school poses many safety issues unique to mountainous areas.</p> <p>Therefore, in FY2021 and FY2022, we implemented a government/organization collaborative project to provide high school students with a new means of transportation, the electrically power assisted bicycle (e-bike), to improve their problem-solving skills by supporting their learning about transportation and developing them into solutions to overall regional issues. Specifically, the students' driving behavior was recorded as image data, analyzed for risk behaviors, and so on, and education on traffic safety was conducted based on the results of the analysis. The high school students were also asked to think about the road environment on their way to school and discuss what kind of environmental improvements were necessary.</p> <p>Based on the results of the two-year research, this social contribution project aims to develop a traffic safety education program for high school students and implement it with elementary and junior high school students.</p> <p>Based on the results to date, the high school students themselves will compile a "proposal on traffic safety" and submit it to the Nose Town Office. To compile such recommendations, workshops will be held with local residents and government officials to discuss traffic safety from diverse perspectives. Finally, based on the recommendations compiled in this project, we hope that traffic safety measures in the Nose area will be improved in the future.</p> <p>Furthermore, grounded in the results of the research project that has been conducted since FY2021 and the social contribution project to be implemented in FY2023, the project aims to analyze the factors that enable high school students to proactively engage in traffic safety education and collaborate with the government and local community. The goal is to present the results as a model that can be applied to other schools and communities.</p>
Expected results	<p>Based on the results of the research conducted to date, it is expected that high school students will develop their own traffic safety education programs, which will help them understand and act on measures to solve traffic problems as if they were their own. Therefore, the most important result of this project is that high school students will increase</p>

their awareness of traffic safety and adopt safe driving behaviors, thereby reducing the number of accidents on their way to school.

In fact, the implementation of the research project in FY2021 and FY2022 has confirmed that the Nose Branch School has witnessed a decrease in the number of accidents that occur while students are commuting to and from school compared to FY2020. Through this social contribution project, the project aims to analyze the factors that have led to the decrease in accidents, as well as to further raise traffic safety awareness among students.

The high school students will also submit a "proposal on traffic safety" to the Nose Town Hall. By having high school students make traffic safety recommendations to town halls, local residents, and local industry, we can expect practical results, such as increased awareness of traffic safety among local residents and safer road maintenance by the local government.

It is essential to create a forum for the regular exchange of opinions among high school students, town halls, local residents, and local industries to share information and awareness of traffic safety issues. The establishment of such a forum, that is, the Nose Traffic Safety Forum (tentative name), is also a possible outcome of this project.

Furthermore, through these community-based activities by young people, we can expect results in terms of foresight, such as the development of models that can be applied in other regions, especially in the mountainous areas where depopulation is progressing, as is the case in the Nose area.

Finally, the results of this project will be published as a book, with the participation of high school students as authors, and disseminated to society.