

Contribution of IATSS to Motorcycle Safety Researches in Asia

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- 1962 born in Niigata, Japan
- 1985 graduate from Department of Urban Engineering, the University of Tokyo
- 1987 Master of Engineering, the University of Tokyo
- 1991 Doctor of Engineering, the University of Tokyo
- 1992 Assistant Professor, **Asian Institute of Technology, Thailand**
- 1995 Associate Professor, Yokohama National University (**YNU**), Japan
- 2004-2021 Professor, YNU
- 2011 Visiting Professor, **PPGTU, PUCPR (Curitiba, Brazil)**
- 2018-now Representative Director, Japan Consortium for Mobility as a Service (JCoMaaS)
- 2021-2026 Project Professor, the University of Tokyo
- 2024-2026 Designated Professor, Nagoya University
- 2024-now Executive Technical Supervisor, Japan Transportation Planning Association
- 2025-now Vice President, IATSS
- 2026-now Professor, The Open University of Japan
- Research Fields
 - Urban Transportation Planning, Public Transportation Policies, Bus Transport Planning / Management,
 - Urban Planning in Developing Countries, Mobility Design, Smart Mobility and MaaS, Smart Cities

Overview of IATSS

Philosophy



Soichiro Honda / Takeo Fujisawa
Founder / Co-Founder of
Honda Motor co.,Ltd.

Established in 1974.

Mission of helping to realize
an ideal mobility society through research, with a focus on traffic
and safety.

(extract from founding prospectus)

1. Overview of IATSS

Goal

>Contributing to the realization of an
ideal mobile society

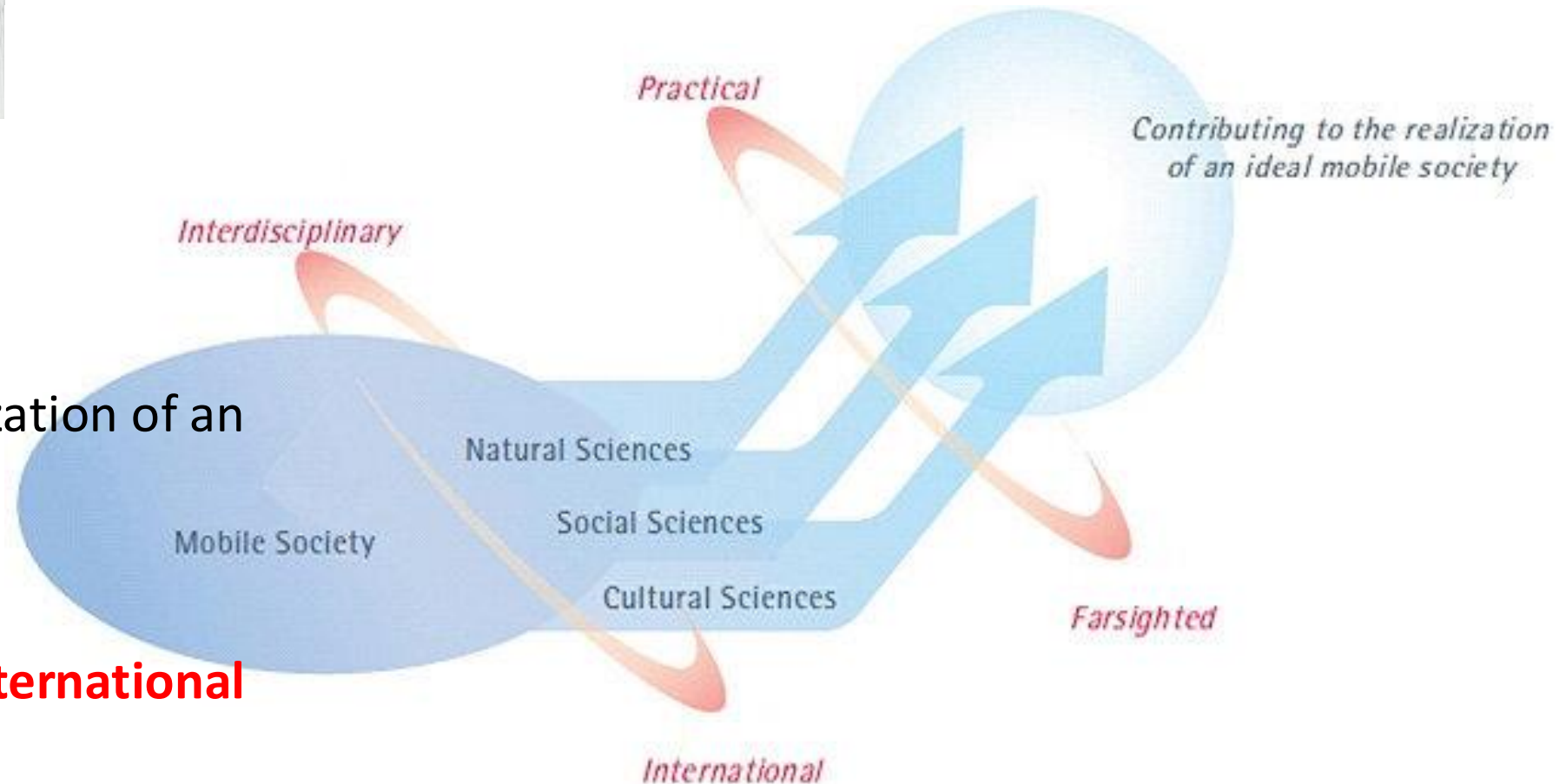
Features

>Approach:

Interdisciplinary and international

>Outputs:

Practical and farsighted



IATSS VISION 2024 (Announcement on the 50th anniversary)

1. Overview of IATSS

We take a mutual responsibility to realize a safe, sustainable, and positive mobility society in which no one is left behind, both domestically and internationally.

Co-create new value by overcoming negative factors such as serious traffic accident, environmental impact, and ill-health. Furthermore, we will transform the mobility society into a more positive one. To achieve this goal, strategic initiatives are needed.

● MOBILITY

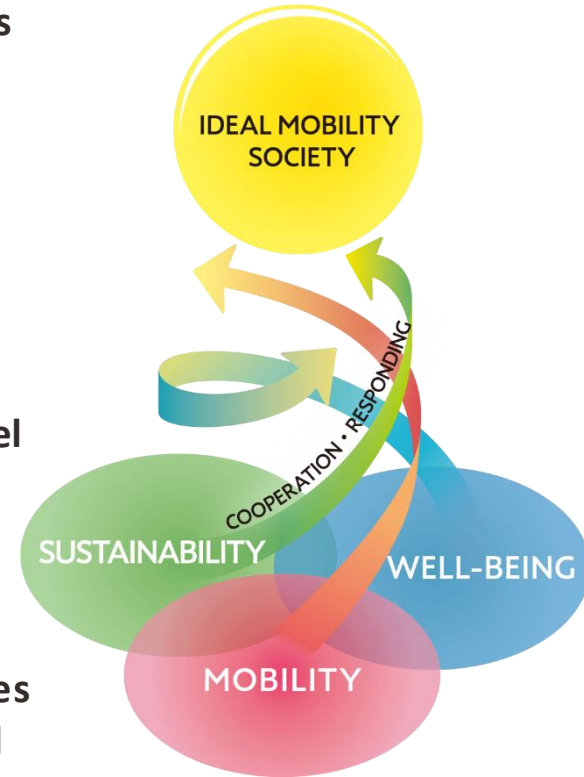
First, the elimination of serious traffic accident will increase the number of situations in which people can move around safely, enjoy going out, and contribute to improving their physical and mental health, as well as making the city more vibrant. This will also greatly contribute to walkable community development, which has been the focus of much attention in recent years.

● SUSTAINABILITY

A smaller environmental impact will contribute significantly to a sustainable society, both at the global level and at the level of daily life in the local community. The realization of a sustainable society will lead to the resolution of issues not only from an environmental perspective, but also from a social and economic perspective.

● WELL-BEING

Overcoming the factor of ill-health not only directly leads to improved individual wellbeing, but also creates opportunities to create new value for society by making individuals more energetic. This creates additional enjoyable mobility situations and further development to form a more positive mobility society.



As described above, we aim to overcome negative factors such as serious traffic accident, Environmental impact, and ill-health, and promote our activities for the next 10 years to create a positive cycle of mobility, sustainability, and well-being in response to each other, and to realize the Common Vision described at the beginning of this document.

International Journal Publication

1. Overview of IATSS

IATSS RESEARCH (Electronic Publishing from Elsevier)

Journal Impact Factor: 3.3

<https://www.sciencedirect.com/journal/iatss-research>



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Guide for authors

About the journal

The official Journal of the International Association of Traffic and Safety Sciences

First published in 1977 as an international journal sponsored by the International Association of Traffic and Safety Sciences, *IATSS Research* has contributed to the dissemination of academic research and findings ...

[View full aims & scope](#)

Membership of IATSS

1. Overview of IATSS

Research Field with 61 designated members.

Traffic, Transportation, Civil, Architecture Engineering	Electrical, Electronics, Informatics Engineering	Mechanical Engineering
Environmental, Natural- Resources & Energy, Regional- Geography Science	Medical, Pharmacy, Chemical, Biotechnology Science	Psychology, Pedagogics, Ergonomics
Economics, Sociology	Law, Administration	Culture, Journalist, others

Recent contribution of IATSS to researches on motorcycle safety

List of research examples in IATSS on motorcycle safety

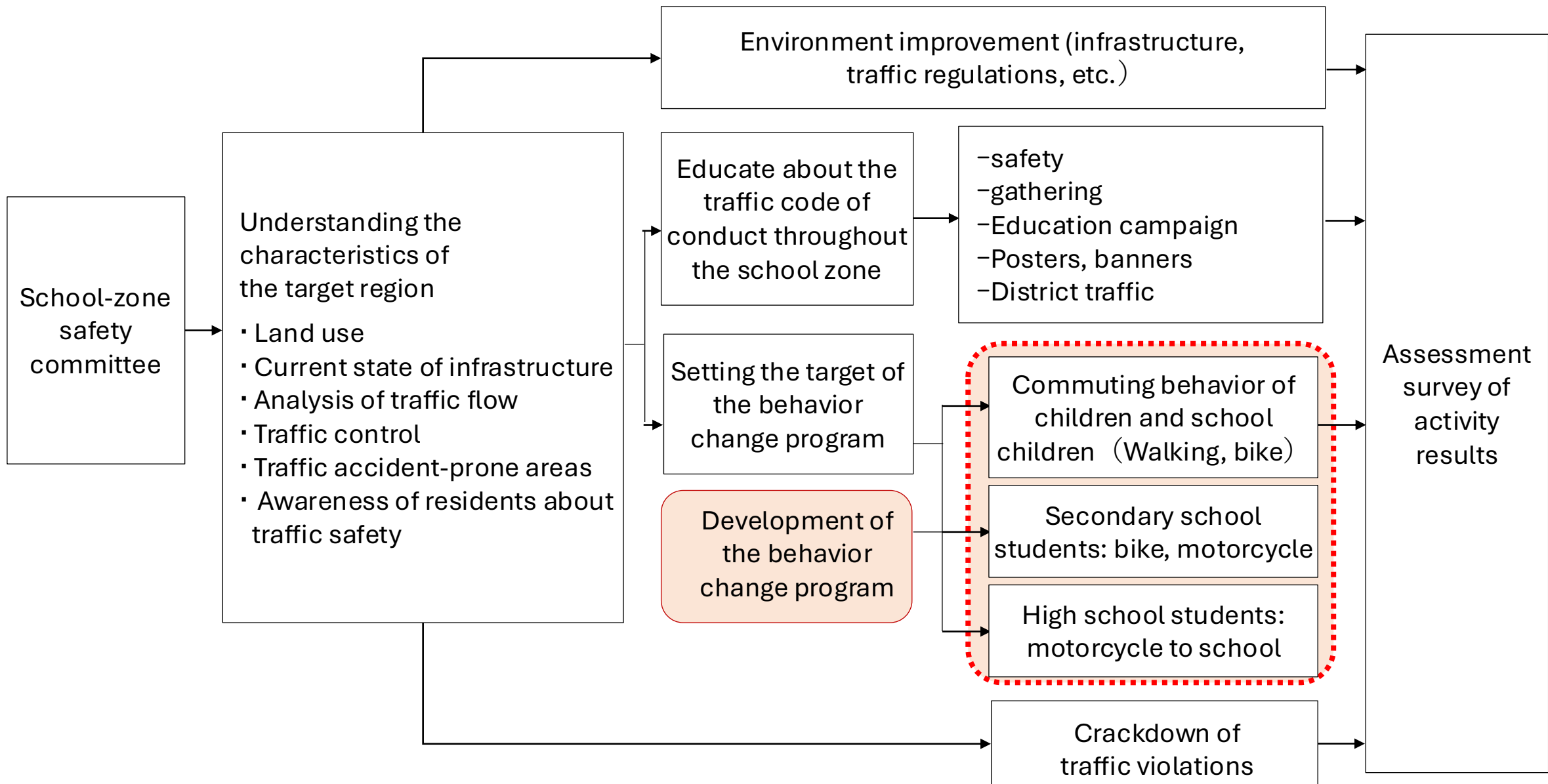
1. Developing and implementing a **traffic safety program** in Cambodia (2022-2024)
 - Meta-design of sustainable urban and transport development focusing on safer motorcycle use in ASEAN-Toward the spread of “Honda model” as meta-design (2018-2021)
2. Creation of cooperative cross-sector model to realize a safe transportation society in Cambodia: Formation of normative consciousness and **promotion of appropriate driving behaviors** (2015-2018)
3. Developing an Evaluation Method of **Road Safety Education for Primary Schools** (ATRANS 2024)
 - Using a safety system approach to explore strategies for reducing serious bike accidents in Thailand (2024-)

Case 1

Developing and implementing a traffic safety program in Cambodia (2022-2024)

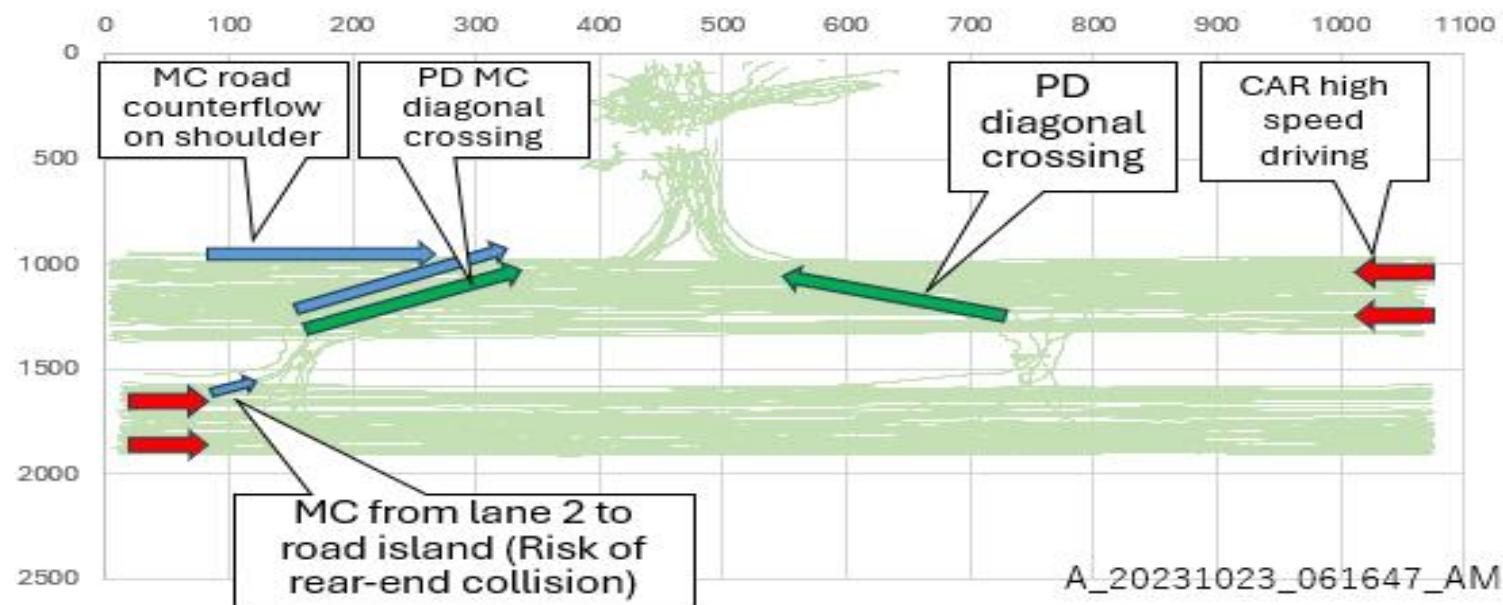
《 Background and Objectives 》

- In Asian developing countries, rapid motorization and road construction have progressed as they have achieved economic growth, and an increase in traffic accidents due to higher driving speeds has become a common issue in suburban areas of large cities and rural areas.
- In Cambodia, similar issues have become apparent with the construction and upgrading of the trunk road (National Highway No. 5).
- As one of the measures, **traffic safety education and behavior change programs** have been positioned in the government's action plan, and **a traffic safety technical cooperation project** by JICA has also started.
- This project aims to develop and implement a road safety behavior change program in collaboration with the IATSS Forum Cambodian Alumni Association (CIAA) and JICA.





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《Overview》

- The effectiveness of the traffic behavior change program was analyzed based on pre- and post-surveys.
- It was confirmed that it was **extremely effective for students who were not originally conscious of traffic safety**.
- However, **no clear improvement in behavior, such as road crossing**, was observed.
- It is hoped that the program will be continued even after the project ends, with further strengthened collaboration between CIAA and local expert teams.

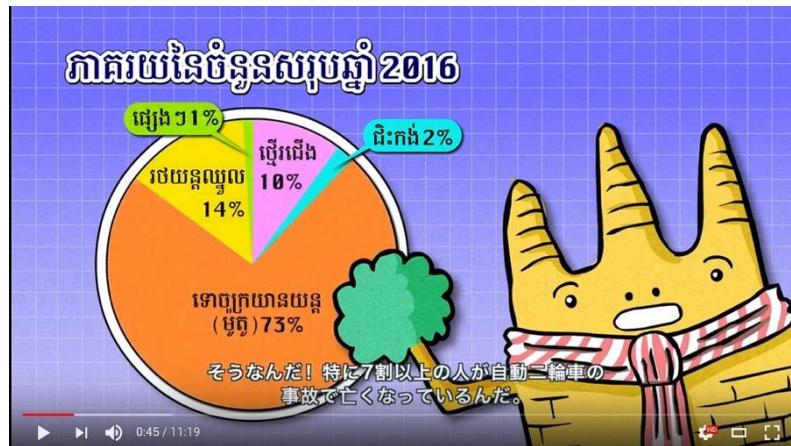
Case 2

Creation of cooperative cross-sector model to realize a safe transportation society in Cambodia: Formation of normative consciousness and promotion of appropriate driving behaviors (2015-2018)

▼ Instructor training workshop



▼ Creation of motorcycle safety awareness videos



▼ High school and university student workshop (classroom and practical training)



- With the cooperation of CJCC (Cambodia-Japan Cooperation Center), IATSS Forum Cambodia Alumni Association, JICA Phnom Penh Office, NCX Honda Safety Riding Center, and Social Compass Association, which had built partnerships over the three years, the following activities were implemented:
 - **Implementation of classroom and practical motorcycle safety workshops for young people** (high school and university students) in Phnom Penh, and effectiveness evaluation through pre- and post-workshop surveys
 - **Practical training and instruction point workshops for NCX instructors**
 - **Creation of awareness video materials** that can actually be used in traffic safety education settings for young people at high schools and universities in urban areas.
- Regarding the completed videos, we requested cooperation in dissemination, including having the above-mentioned partner organizations and the Ministry of Public Works and Transport of Cambodia and the Ministry of Education, Youth and Sports of Cambodia post links on their websites.

Case 3

Developing an Evaluation Method of Road Safety Education for Primary Schools (ATRANS 2024)

《 Background and Objectives 》

- **Road Safety Education (RSE) in primary schools** lacks formal evaluation methods, making it difficult to measure its effectiveness in accident reduction.
- Evaluation ensures that students acquire essential knowledge, skills, and behaviors for safe traffic interaction.
- It also helps improve educational interventions and justifies investments in RSE programs.
- RSE varies significantly across schools, necessitating a systematic evaluation approach at both national and local levels.
- This study aims to **develop a practical evaluation method for RSE in primary schools**.
- The method should be simple and easy for both students and teachers to implement.
- The evaluation focuses on **process assessments** (whether the program functions effectively) and **outcome assessments** (its impact on students' knowledge and behavior).



**Safety training in a primary school
in Bangkok, Thailand**



**Safety training in a primary school
in Chiba, Japan**

- The study reviewed existing RSE evaluation methods and best practices from developed countries, mainly applied in Europe.
- Trials were conducted in two schools in Thailand and two in Japan, using **a combination of student self-evaluation forms and observational assessments**.
 - In Thailand: The initial evaluation form including **psychological questions based on behavioral theories** were difficult for students to understand.
 - Process evaluations showed that students enjoyed the activities, while outcome evaluations indicated **increased knowledge but no clear behavioral change**.
 - In Japan: The simplified evaluation form was effective in capturing students' knowledge and awareness.
 - **Behavioral changes were observed through video recordings and checklists**, showing that a combination of self-evaluation and observation was a practical assessment method.
- Recommended methods include **a mix of quantitative (evaluation forms) and qualitative (observations and interviews) approaches**, with assessments conducted before, during, and after RSE activities, as well as **annual follow-ups** to measure long-term effects.
- Future evaluations should include student interviews for deeper insights.

- **International approaches by IATSS**
 - test fields in South-East Asian regions
- **Interdisciplinary approaches by IATSS**
 - education, engineering, economics, statistics, psychology and so on
- **Enforcement + Engineering + Education**
 - According with cultural and institutional context in each country
- **Effective educational methods and tools have been developed.**
- **However,**
 - More trial implementation cases should be delivered and deployed.
 - Trainers and teachers should be educated as well.
 - Quantitative and Qualitative data acquisition and analysis is more expected to make tools more effective and powerful.
- **Collaboration among stakeholders is highly appreciated as well as experience and knowledge sharing among us.**

Thank you

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