

New innovative educational method to prevent accidents involving young road users (aged 15-24) – European Road Safety Tunes

Dagmara Jankowska-Karpa ^{1,*}, and Justyna Wacowska-Ślęzak ¹

¹Motor Transport Institute, Road Safety Centre, Warsaw, Poland

Abstract. The article presents a new teaching method designed to improve road safety among young road users. Developed under “European Road Safety Tunes”, this international project was co-funded by EU DG MOVE. Its main aim is to improve road safety and minimize the number of road accidents, injuries and fatalities among road users who are 15-24 years old. The Safety Tunes method contains a series of workshops addressed to young vocational school students: cyclists, moped and motor riders and car drivers. The workshops incorporate peer and emotive education, and delivery of road safety related messages through different types of artistic forms. The topics tackled during class address awareness of possible risks and risk-behaviour, prevention of distraction and reduction in young fatalities and serious injuries on the road. All actions within the project are evaluated, both in terms of the impact of the workshops on students’ attitudes towards road safety problems and in terms of process assessment.

1 About the European Road Safety Tunes project

The project European Road Safety Tunes (short: Safety Tunes) is delivered by an international consortium composed of eight Partner countries: Austria, Belgium, Czech Republic, Hungary, the Netherlands, Poland, Slovenia and Spain. The project is co-financed by EU DG MOVE and refers to EU policy orientations on road safety 2011-2020 from the EC 2020 strategic objective N7 to protect vulnerable road users. Each year more than 4,000 young people aged 15-24 are killed in road accidents across Europe. They are the reason why Safety Tunes is focusing on the target group of young road users – cyclists, moped-riders, motorcyclists and car-drivers [1].

Safety Tunes uses emotive and peer-oriented measures to teach road safety topics in vocational schools and addresses:

- awareness of possible risks and risk-behaviour of the general prospective driving population concerning vulnerable road users,
- prevention of distraction,
- reduction in young drivers’ fatalities and serious injuries on the road.

There is a cross connection between young people with vocational level education, unsafe driving behaviour and a higher accident rate. During the past years European secondary schools have introduced road accident prevention topics. Moreover, risk management is often taught in a cognitive way by showing facts and figures. However, research suggests that a

* Corresponding author: dagmara.jankowska@its.waw.pl

more emotive transfer of social know-how is by far more effective. Emotional and creative methods can trigger a feeling of happiness and hence the learned experiences are more memorable [2].

Safety Tunes methodology intends to transfer road safety know-how through peers in an emotive way by utilising “tunes”. These tunes convey sentiments, like enjoyment, harmony, conscience and vibrations framed within creative arts (i.e. music, painting, writing). Emotive know-how transfer, peer-education and measures that are highly accepted by the target group, proved to be successful in changing attitudes and behaviour [3].

The general objective of the project is to improve the road safety level by reducing accidents, injuries and fatalities among young drivers through raising awareness of responsible and social behaviour in traffic.

The impact of the Safety Tunes methodology will be assessed with quantitative before and after surveys, measuring the attitudes of young drivers towards road safety issues before and after the implementation of the methodology. The project will also compare accidents, seriously injured and fatalities, as well as other road safety indicators within the age group of 15-24 in the Safety Tunes regions before and after the implementation. There will also be process evaluation with qualitative observations of the workshops including feedback of students and teachers. The aim is to optimize the training units and to see if the method has been accepted.

Another objective of the project is to transfer the method to other European countries. By evaluating the process of implementation in eight partner-countries, the extent of transferability will be demonstrated. To ensure transferability an input from the ITIM 5-D Model on intercultural differences will be used [4].

The specific objectives of the project are to:

- implement Safety Tunes in eight countries: Austria, Belgium, the Netherlands, Poland, Spain, Hungary, Czech Republic, Slovenia;
- reach 3,500 students through direct involvement in workshops;
- change attitudes towards risky behaviour of at least 70% of the students;
- reach 8,000 students indirectly, as audience of social-arts outputs (music, paintings, writing, etc.);
- reach 8,000 students through social media (Facebook / YouTube / Twitter / Soundcloud, etc.);
- decrease fatalities within Safety Tunes regions by 5% within the age group of 15-24;
- transfer the methodology to five other European countries [5].

2 Implementation of the Safety Tunes method

Safety Tunes is a methodology that contains a series of workshops reaching the target group of young drivers with a creative peer-approach. In each participating country, workshops are implemented in vocational schools by Safety Tunes teams to create road safety related messages through different types of artistic forms. Also, national and European competitions will be organized to motivate and award the best results [3].

Safety Tunes combines peer approach, an emotive know-how transfer and social art with road safety. Social art focuses on an active involvement of participants. The students have to deal with road safety topics in an interactive and creative way. If learned with creative methods, the content is more memorable. The methodology also demands the participants to reflect their own experiences and feelings, so that the emotional level is reached. Reaching the emotional level as well as learning from a peer, whose messages are more accepted than appeals made by institutions, have proven to be successful in changing attitudes and behaviour.

Safety Tunes teams guide student groups from different schools regarding the choice of theme and message, development of their social-art output and dissemination among peers and on social media. The team consists of road safety experts (consortium Partners), artists, teachers, social workers, students, etc. The workshops follow three steps [3]:

1. *Facts and Figures* – Students not only inquire about accident statistics, but are also confronted with the risks involved in cycling, using mopeds, motorcycles or cars. They learn about social behaviour in traffic, their responsibility towards other vulnerable road users and the risks of distraction. They also reflect their own experiences by e.g. using dilemma stories.
2. *Feel it!* – Production of social-art output. While working on messages, slogans, music and acting, the emotional level can be reached and a sustainable, responsible attitude can be anchored. Students also know best how they can convey their message in a direct and appealing way to their peers.
3. *Do it!* – Students are encouraged and motivated to present their art, talk about their experiences with friends and share the social-art output via social media (Facebook / Youtube / Twitter / Soundcloud, etc.).

It is expected that in each Partner country 20-60 workshops will be implemented in different regions and at least 24 social-art outputs with a road safety message will be produced. Planned social-art outputs include music videos, songs, paintings, sculptures, street performances, graffiti, theatre shows, short films, dilemma stories, poetry-slams, stand-up shows, etc.

The best and most effective social-art outputs (selected by social media and a jury) will be honoured in a national awards ceremony. The winner of the national competition will be invited to the European awards ceremony, that will take place during the final project conference in Warsaw in 2017 and during which the outcomes of different road safety actions in each country will be presented and discussed [5].

3 Evaluation of the project and its impact

One of the tasks within Safety Tunes Project is the evaluation of the Safety Tunes method and workshops, during which the ST method is implemented. The assessment consists of two parts:

- impact evaluation,
- process evaluation.

The impact of the Safety Tunes method is measured with quantitative surveys (with at least 3,000 questionnaires) measuring the attitudes of young people aged 15-24 attending vocational schools towards road safety issues before and after the implementation of the ST methodology. Additionally, there are questions about the general level of road safety knowledge [4].

The impact is also assessed by comparing accidents, fatalities and other performance indicators in ST Partners' countries before and after the implementation of ST.

The process is measured using specially developed questionnaires. This evaluation is carried out among students who participate in the ST workshops, trainers who run the workshops, school teachers who assist during the workshop (even if they do not actively participate) and ST project partners.

The process assessment with qualitative observations of Safety Tunes workshops aims to optimize the training units using ST and also to show whether the method has been accepted.

The evaluation methodology is mostly based on the pre and post assessment. Fig. 4 shows the whole process of assessment by process and impact evaluation.

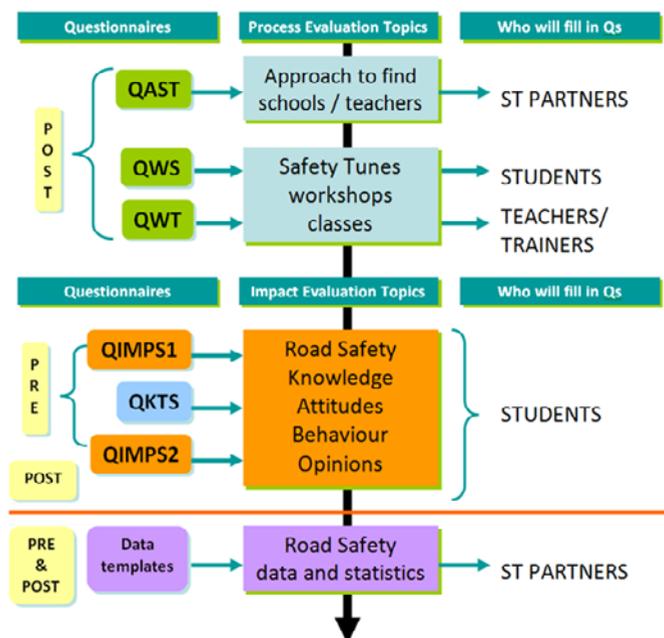


Fig. 1. Impact and process evaluation within Safety Tunes project [4].

3.1 Impact assessment

The overall objective of the impact assessment within the Safety Tunes project is to prove that the implemented ST method was effective in reaching the goal of change in attitudes/opinions of young people aged 15-24 attending vocational schools.

The impact evaluation in general:

- assesses the changes that can be attributed to a particular intervention (project, programme or policy),
- answers the question: how would outcomes such as participants' attitudes have changed if the intervention had not been undertaken,
- looks at the long-term, deeper changes that have resulted from the action.

The impact evaluation within the Safety Tunes project is targeted at vocational school students, who participate in the ST workshops during which the ST method is used. The outcomes of the pre assessment and post assessment will be then compared in order to show the effects of the project's impact on knowledge, opinions and perceived behaviour of the participating students.

The impact evaluation measures:

- change in attitudes/opinions of students regarding road safety issues,
- change in road safety data and performance indicators.

All data will be collected before and after the implementation of the ST method.

In order to assess a road safety situation, it is important to observe and monitor the number of road accidents and indicators such as road deaths by population. These data will be provided as soon as they become available. The source of the data will be the European database CARE – Community Road Accident Database and IRTAD – International Road Traffic and Accident Database, as well as EuroStat [4].

3.2 Process assessment

The main goal of process evaluation is to measure the actual development and implementation of a particular action and to establish whether the targets and implemented strategies have been achieved as planned.

Qualitative evaluation (by means of questionnaires) of the workshops after the implementation of ST method includes:

- feedback from students,
- feedback from trainers/trainers,
- feedback from ST Partners.

The aims are to:

- optimize the training units,
- show the acceptance of the ST method.

All the stakeholders (students, teachers/trainers and ST Partners) are asked to share their opinions/comments/remarks on the implemented ST workshop. This gives an overview on the work done with the target group and how the process is perceived by the target group, teachers and ST Partners.

Students and teachers fill in QWS and QWT post questionnaires and give their feedback on the ST workshop.

ST Partners are asked to share their experiences regarding the approach they used in order to find participating schools and teachers/trainers; who was contacted; etc. by filling in a QAST questionnaire [4].

All data received after the implementation of Safety Tunes workshops will be analysed and conclusions drawn in order to see how effective this method was in making vocational school students aware of different road safety problems among this group of users.

4 Conclusions

Methods such as Safety Tunes should become more popular and implemented on a wider scale in other regions as well. This innovative approach has been so far positively evaluated and the level of acceptance is quite high in the first year of implementation. The evaluation process is still in progress, as the project ends in 2017 and then the full results of the impact and process assessment will be available. All Partner countries run their activities and disseminate the project through various channels, such as the European Road Safety Charter and social media such as Facebook, Twitter, Soundcloud to gain more recognition and raise awareness of road safety problems among young road users.

References

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