

KEY PRINCIPLES

FOR TRAFFIC SAFETY AND MOBILITY EDUCATION



This publication is part of the LEARN! project. The project is coordinated by ETSC and supported by Fundación MAPFRE and the Flemish Foundation for Traffic Knowledge (VSV).

www.trafficsafetyeducation.eu

Expert Panel

ETSC, Fundación MAPFRE and VSV would like to thank the following experts for providing invaluable guidance and support for this project:

Eva Aigner-Breuss, Anita Eichhorn & Daniela Knowles, Road Safety Board (KFV), Austria

Martine Aitken, Spain

Alain Areal, Prevenção Rodoviária Portuguesa (PRP), Portugal

Jesús Monclús González & Susana de la Antonia Perez, Fundación MAPFRE, Spain

Vassiliki Danelli-Mylona & Evangelos Makris, Road Safety Institute Panos Mylonas, Greece

Lise Heiner Schmidt, Danish Road Safety Council (Rådet for Sikker Trafik), Denmark

Wilma Slinger, CROW-KpVV, the Netherlands

Michael McDonnell, Road Safety Scotland – Transport Scotland, United Kingdom

Kristin Eli Strømme, Norwegian Council for Road Safety (Trygg Trafikk), Norway

Satu Tuomikoski, Finnish Road Safety Council (Liikenneturva), Finland

Veronika Valentová, Transport Research Center (CDV), Czech Republic

Werner de Dobbeleer, Flemish Foundation for Traffic Knowledge (VSV), Belgium

ETSC, Fundación MAPFRE and VSV gratefully acknowledge the contributions of the experts who provided additional best practice examples for their respective countries.

Photo credits: All pictures by Trygg Trafikk / Eivor Eriksen, except for p. 26, by VSV / David Legrève.

For more information

European Transport Safety Council

20 Avenue des Celtes

B-1040 Brussels

Tel: +32 2 230 4106

frank.mutze@etsc.eu

www.etsc.eu

©2020 European Transport Safety Council



**KEY PRINCIPLES
FOR TRAFFIC SAFETY AND
MOBILITY EDUCATION**

More best practice examples
can be found on
www.trafficsafetyeducation.eu/key-principles

INTRODUCTION

Education is an essential part of the Safe System approach to traffic safety. European countries have committed to providing traffic safety and mobility education, notably in schools at all levels. However, the previous LEARN! report showed that the provision of such education differs widely across Europe, with most countries not following through on their commitments.¹

This publication therefore sets out recommendations that should be implemented in all European countries, in order to ensure that everyone – and especially children and youngsters – receive high quality traffic safety and mobility education.² They are accompanied by best practice examples that illustrate how these principles can be applied in practice.

These key principles focus on the provision of education to all children and youngsters up to the age of 18 years old, notably those in kindergarten, primary and secondary school.³

This list of principles is primarily aimed at decision makers and authorities at national and local level, to be taken into account when developing new policies or revising current ones related to traffic safety and mobility education.

The principles can, nevertheless, also be implemented by other actors. For example, head teachers should implement a traffic safety policy at their school, appoint a traffic contact teacher, and use the principles on high quality education when deciding on ordering new educational material.

Before setting out the key principles, this report will first define traffic safety and mobility education and set out why it is important to provide such education.

The key principles recommended in this publication were drawn up by the members of the LEARN! project expert panel. The expert panel consists of some of Europe's leading experts on road safety education.



A NOTE ON KINDERGARTENS

As the LEARN! project focuses primarily on primary and secondary education (6-17 year olds), the key principles in this report refer to schools. However, the key principles apply to all children and are therefore recommended as the basis for kindergartens as well.

¹ ETSC (2019), The Status of Traffic Safety and Mobility Education in Europe. <http://bit.ly/LearnStatus>

² For more information on the LEARN! project's definition for traffic safety and mobility education, see page 6.

³ The target age group of the LEARN! project does not include driver and rider education. For more information on the LEARN! project's target age group, please see Part I of ETSC (2019), The Status of Traffic Safety and Mobility Education in Europe. <http://bit.ly/LearnStatus>

COMMITMENTS

Countries in Europe have, on multiple occasions, committed to providing traffic safety and mobility education.

VIENNA CONVENTION (UNECE)



The overwhelming majority of European countries have signed the UNECE's Convention on Road Traffic (also known as the "1968 Vienna Convention") and have thereby committed to provide road safety education for everyone.⁴

"Article 3(5bis). Contracting Parties will take the necessary measures to ensure that road safety education be provided on a systematic and continuous basis, particularly in schools at all levels."



SUSTAINABLE DEVELOPMENT GOALS (UN)

In the UN's Sustainable Development Goals, targets are set for improving road safety (target 3.6), sustainable mobility in urban areas (target 11.2), and education (target 4, notably target 4.7 on ensuring that all learners acquire the knowledge and skills needed to promote sustainable development).⁵

VALLETTA DECLARATION ON ROAD SAFETY (EU)

In May 2017, EU Member State transport ministers committed to promote, together with the European Commission, a Europe-wide road safety culture based on shared values, and to improve road user behaviour through continued and effective education and training targeting different groups.⁶



⁴ United Nations Economic Committee for Europe (1968/2006), Convention on Road Traffic (2006 Consolidated Version). <http://bit.ly/2RRMK0b>
Cyprus, Iceland, Ireland, Kosovo* and Malta have not signed the Convention on Road Traffic. *This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ opinion on the Kosovo declaration of independence.

⁵ UN Sustainable Development Goals. Available online at: <http://bit.ly/2mxBLmZ>

⁶ EU Transport Council (2017), Valletta Declaration on Road Safety. <https://bit.ly/3toeOf0>

DEFINING TRAFFIC SAFETY AND MOBILITY EDUCATION

Traffic safety and mobility education covers all measures that aim at positively influencing traffic behaviour patterns, with an emphasis on:

- Gaining knowledge and understanding of traffic rules and situations;
- Developing and improving skills through training and experience;
- Strengthening and/or changing attitudes and intrinsic motivations towards risk awareness, personal safety and the safety of other road users in order to contribute towards a safety-minded culture;
- Providing the tools necessary for a well-informed choice of transport mode.

The aim of traffic safety and mobility education is to positively influence behaviour patterns that result in safer traffic. The transfer of knowledge and gaining an understanding of traffic rules and situations are the basis of traffic safety and mobility education, as is the development and improvement of the skills needed to participate safely in traffic through training and experience.

Traffic safety education also encompasses those measures that strengthen or change one's attitude and intrinsic motivation towards safe participation in traffic, with the aim of bringing about a safety-minded culture. Self-insight and reflection on one's own and others' attitudes, motivations and behaviours are important factors.

Lastly, traffic safety and mobility education can help young road users make informed decisions about which mode of transport to take. The promotion of active and sustainable transport modes is relevant here, as active mobility enhances the skills needed for participating in traffic as a pedestrian, a cyclist or as a driver.

The LEARN! definition for traffic safety and mobility education includes all the mentioned elements, and is explained in greater detail in Part I of the LEARN! Status Report. <http://bit.ly/LearnStatus>



The LEARN! project (Leveraging Education to Advance Road safety Now!) by the European Transport Safety Council (ETSC), Fundación MAPFRE and the Flemish Foundation for Traffic Knowledge (VSV), aims to improve the quality of traffic safety and mobility education in Europe by providing information, tools and resources to education experts as well as policy recommendations to decision makers.

The project focuses in particular on the education of children and youngsters, as they have a right to grow up safely, and traffic safety should therefore be an important and natural part of their everyday life.

As a first step, the **'LEARN! Status Report'** set out the status of traffic safety and mobility education in Europe. It showed that the provision of such education differs widely across Europe, with most countries not fulfilling their commitment to provide traffic safety and mobility education on a systematic and continuous basis, notably in schools at all levels.

This publication, the **'LEARN! Key Principles Report'**, sets out 17 recommendations that should be implemented in all countries in order to ensure that everyone – and especially children and youngsters – receives high quality traffic safety and mobility education.

The **'LEARN! Manual'** is handbook for developing and evaluating activities and programmes for traffic safety and mobility education. It sets out recommendations, criteria and guidance to develop and implement sound educational activities in an accessible way.

The LEARN! project also organises **events and webinars** where road safety education experts present and discuss best practices and interesting projects.

All the project's resources are freely available on the **LEARN! website** at:

www.trafficsafetyeducation.eu

WHY TRAFFIC SAFETY AND MOBILITY EDUCATION IS IMPORTANT

In order **to achieve Vision Zero** in road safety, the EU and its Member States need to implement an integrated approach to road safety. **Education is considered an essential part of this integrated approach**, alongside measures focusing on, inter alia, vehicle safety, infrastructure safety, enforcement and awareness-raising.

If good habits are established when children are still small, it is likely that they will **grow up to become responsible road users**. Road safety education therefore helps in laying the groundwork for the realisation of Vision Zero. It furthermore prepares young people to navigate the streets safely when they are young adults, the high-risk age group between 18 and 30 years old.



Children and youngsters have **a right to grow up in safety**. Traffic safety should be an important and **natural part of everyday life**. After all, every person, including children and youngsters, is a road user every day: as a passenger, as a pedestrian, as a cyclist, or as a user of nascent modes of transport such as electric scooters.

Road safety involves everyone and should therefore be a **shared responsibility**. Adult road users have to be educated to understand the limitations of child behaviour in traffic and **the responsibility for keeping children in traffic safe has to be directed towards adults**. After all, young children have physical and cognitive limitations that make them more vulnerable in road traffic than adults.⁹

⁷ European Commission (2018), Fatalities by age for 2017. <http://bit.ly/2RIXwhX>

⁸ For more road safety statistics on children and youngsters under 18: ETSC (2019), The Status of Traffic Safety and Mobility Education in Europe. <http://bit.ly/LearnStatus>

⁹ ETSC (2018), Reducing child deaths on European roads. <http://bit.ly/ChildPinFlash>

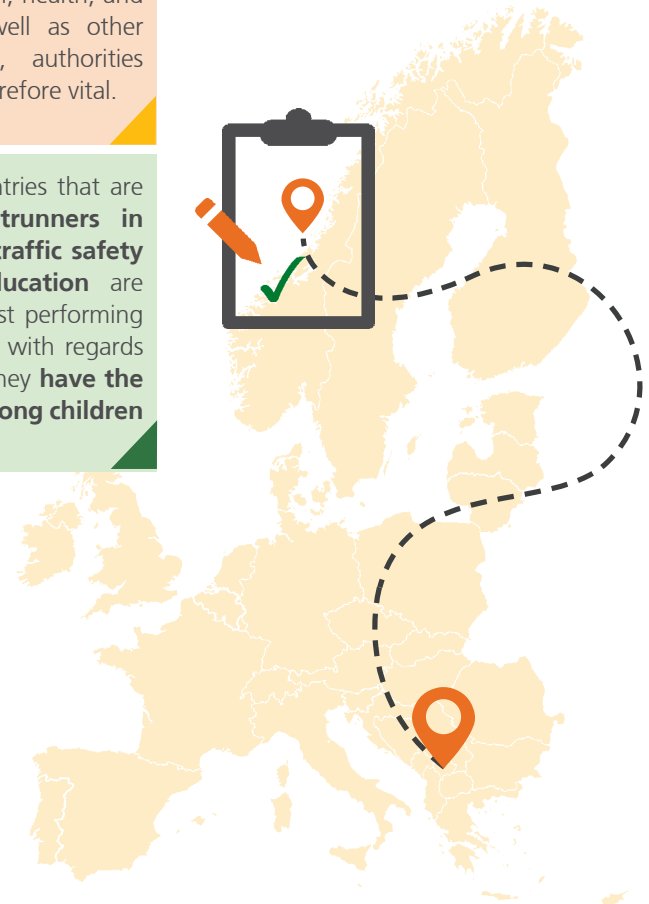
Adults are also important role models. The choice of form of transport to the day-care centre and to school, work and leisure time activities affects the child's mobility education. Schools and kindergartens must also consider traffic safety and mobility as part of their health and safety work, their cooperation with parents, and the implementation of activities scheduled throughout the year.

Road safety also interlinks with many other policies, such as mobility, sustainability, and health. Synergies between the topics allow for education on one topic to also cover the other related topics, and **cooperation between the ministries** of transport, education, health, and sustainability (as well as other relevant ministries, authorities and agencies) is therefore vital.

Traffic safety and mobility education is important to the **implementation of the Safe System approach**¹⁰, as it helps develop safe road users. Human behaviour is a key cause of collisions and education can teach safe behaviour and correct unsafe behaviour.

The European countries that are regarded as **frontrunners in the provision of traffic safety and mobility education** are also among the best performing European countries with regards to road safety, as they **have the fewest deaths among children and youngsters.**

Traffic safety and mobility education is **a life-long learning process.** Each age group may face different challenges, yet all should benefit from gaining more knowledge, improving their skills and contributing towards a safety-minded culture. **Education is therefore a broad approach that reaches everybody** and should be seen as long-term work and long-term investment.



¹⁰For more information on the Safe System approach to road safety: OECD/International Transport Forum (2016), Zero Road Deaths and Serious Injuries: Leading a paradigm shift to a Safe System. <http://bit.ly/2QF2shw>

KEY PRINCIPLES FOR TRAFFIC SAFETY AND MOBILITY EDUCATION



ENSURE THE RIGHT TO RECEIVE TRAFFIC SAFETY AND MOBILITY EDUCATION



1. All children and youngsters should receive high quality traffic safety and mobility education with continuity and progression
2. Integrate traffic safety and mobility education in the curricula for schools, including a minimum amount of teaching hours
3. Set strategic, tactical and operational goals
4. Allocate sufficient resources for traffic safety and mobility education



ENGAGE AND SUPPORT SCHOOLS



5. Engage and support school management
6. Motivate schools to have a traffic safety and mobility policy
7. Appoint a traffic contact teacher at school
8. Strengthen teachers' competence and support them



ENSURE HIGH QUALITY EDUCATION

9. Ensure that traffic safety and mobility education is about knowledge, skills, attitudes and motivations as well as training in traffic
10. Keep traffic safety and mobility education up to date
11. Use quality standards
12. Undertake tests, process and/or outcome evaluations
13. Assess pupils and let pupils evaluate themselves



FACILITATE FRAMEWORK CONDITIONS

14. Use interdisciplinary material as a means to teach traffic safety and mobility education
15. Educate student teachers about traffic safety and mobility education during their training
16. Follow-up to ensure traffic safety and mobility education is taught



INVOLVE ALL RELEVANT STAKEHOLDERS

17. Involve pupils, students, parents and all relevant stakeholders



**ENSURE THE RIGHT TO
RECEIVE TRAFFIC SAFETY
AND MOBILITY EDUCATION**

01

ALL CHILDREN AND YOUNGSTERS SHOULD RECEIVE HIGH QUALITY TRAFFIC SAFETY AND MOBILITY EDUCATION WITH CONTINUITY AND PROGRESSION

Traffic safety and mobility education is a life-long process and everyone, regardless of age, should therefore have access. Road safety is a shared responsibility and education on the topic is therefore the responsibility of everybody, especially parents, governments, education authorities, local authorities, and schools.

Road safety education is especially important for children and youngsters up to the age of 18 years old at kindergartens and schools. Children need to learn what is safe and what is hazardous to help them avoid harm in traffic. Road safety education will also prepare them to become safe road users, notably from the age of 13 years old, when they are traveling unaccompanied and progressively acquire access to powered two wheelers and cars.

Traffic safety and mobility education at schools is a structural road safety tool with which all children can be reached. It ensures that all children are taught, and that they are taught the same knowledge, skills, attitudes and behavioural values – regardless of their parents' parental and socio-economic resources.

It is furthermore important that high quality educational material and interventions, adapted to age and maturity, are used.

Ideally, traffic safety and mobility education utilises full suites of education programs which have been designed on a cumulative learning basis with each resource following on from the learning of the previous, in order to ensure continuity and progression.

To have a positive effect, projects should be well planned and evaluated. Projects that are poorly designed can have an adverse effect, and are therefore a waste of resources. Especially for schools it is important that they use the right material, as they only have limited hours and financial resources for lessons in road safety.



BEST PRACTICE EXAMPLES

Only in Ireland, Germany and the Czech Republic is traffic safety and mobility education given at all four levels of education (pre-primary, primary, secondary and tertiary). Therefore, from kindergartens through to elementary schools, high schools and thereafter, pupils and students receive lessons in being a safe road user. These three countries also perform better than the EU average when it comes to annual road deaths amongst children and youngsters under 18 years.¹¹

¹¹ ETSC (2019), The Status of Traffic Safety and Mobility Education in Europe. <http://bit.ly/LearnStatus>

INTEGRATE TRAFFIC SAFETY AND MOBILITY EDUCATION IN THE CURRICULA FOR SCHOOLS, INCLUDING A MINIMUM AMOUNT OF TEACHING HOURS

Traffic safety and mobility education should be integrated in the curricula for schools at all levels as well as kindergartens. This should be reflected in the documentation on the curricula at both national and school level.

In order to achieve the educational goals set out in the curricula, as a minimum, a specific number of teaching hours should be dedicated to traffic safety and mobility education every year.

Lessons on traffic safety and sustainable mobility can either be integrated into other subjects (see also Principle #14) or can be taught as a separate and dedicated subject.

In grades 1 – 2 (7 – 8 year olds) attention is paid to independent and safe mobility in the child's surroundings, the use of protective and safety equipment, and to improving skills and knowledge as pedestrians and cyclists.

In grades 3 – 6 (9 – 12 year olds) the focus is on independent mobility in a wider area and in public transport. Particular attention is paid to skills in safe cycling and ensuring safety of the child and others on the road. The pupils are guided in using appropriate safety and protective equipment and taught to recognise key symbols related to safety.

In grades 7 – 9 (13 – 15 year olds) the pupils are also guided to act sustainably and responsibly in various situations in traffic (particularly when riding a bicycle or a moped), to use protective and safety equipment, and not to drive under the influence of intoxicants.



BEST PRACTICE EXAMPLES

FINLAND

TRAFFIC SAFETY EDUCATION IN THE CURRICULUM FOR BASIC EDUCATION

Traffic safety education is included in the core curriculum for basic education in Finland, which is a document schools must follow. Introduced in 2014, the core curriculum includes traffic safety education in various subjects as well as in one of the transversal competences called 'taking care of oneself and managing daily life'.¹²



FLANDERS

TRAFFIC SAFETY INTRODUCED IN THE CURRICULUM FOR SECONDARY EDUCATION

In 2019, traffic safety was added to the regional curriculum for secondary education in Flanders. The educational goal set in the curriculum requires pupils to know the traffic rules and risk factors for pedestrians and cyclists, as well as strategies to safely move around in traffic. The goal is for pupils

¹² Opetushallitus / Utbildningsstyrelsen (2014), Perusopetuksen opetussuunnitelman perusteet 2014 / Grunderna för läroplanen för den grundläggande utbildningen 2014. <http://bit.ly/2t625Uc> (FIN) / <http://bit.ly/34fGq8a> (SWE)

to behave based on a personal framework in which values, notions, behaviour, experiences and information are internalised, although attention still needs to be paid to finding a balance between conflicting aspects. Traffic safety was already part of the curriculum for pre-primary and primary education in Flanders.¹³



NORWAY

ROAD SAFETY IN THE CURRICULUM FOR KINDERGARTENS

Since 2017, the Norwegian national curriculum states that through work with the local community and society, kindergartens should help ensure that children “explore different landscapes and become familiar with institutions and places in the local community and learn to safely orient themselves and get around.” Life skills and health are core values addressed in kindergarten.¹⁴



GREECE

TRAFFIC SAFETY DURING THE THEMATIC WEEK AT SECONDARY SCHOOLS

In Greece, a ‘thematic week’ has been introduced for the first three grades of secondary school, during which the teacher can choose out of four subjects related to health, including traffic safety. For the last three grades in Greece’s secondary schools, traffic education activities are also a possibility during a dedicated teaching day in the last four months of the school year.¹⁵



PORTUGAL

ROAD SAFETY AS PART OF THE CITIZENSHIP AND DEVELOPMENT CURRICULUM

Road safety education at Portuguese schools is a complementary part of the curriculum on citizenship education, and is therefore not a separate subject.¹⁶ The road safety education competency framework, a guidance tool identifying the skills, knowledge, attitudes and behaviours that individuals must adopt to be safe on the road, consists of objectives separated by levels of education. The objectives, which are sub-divided into (i) knowledge and skills and (ii) behaviours and attitudes, aim to ensure that students know and adopt appropriate behaviour as pedestrians, passengers and drivers by the end of secondary school.¹⁷



GERMANY

FRAMEWORK RECOMMENDATIONS FOR HARMONISATION ACROSS FEDERAL STATES

The Council of Education Ministers of the Federal States developed framework recommendations for traffic safety education at primary schools. In Germany, education is the responsibility of the Federal States. To achieve a harmonised standard and content of traffic safety education across Germany, the Ministers of Education agreed on a minimum set of framework conditions that could be applied by the Länder.¹⁸ The implementation of traffic safety education differs therefore between the Federal States.

¹³ Traffic safety is included as goal 1.13 in the list of competencies regarding physical, mental, and emotional awareness/health for secondary education.

All educational goals in Flanders can be found at: <http://bit.ly/2sBZpg0>

¹⁴ Norwegian Directorate for Education and Training (2017), Framework Plan for Kindergartens, p.56. <http://bit.ly/2qs0x1K>

¹⁵ Ministry’s Circular number Φ20.1/192356/Δ2/8-11-2017. <http://bit.ly/2YkxFZ5>

¹⁶ Decree-law no. 55/2018 of 6 July. <http://bit.ly/33Vfl4v>

¹⁷ Ministério da Educação e Ciência (2012), Referencial de Educação Rodoviária para a Educação Pré-Escolar e o Ensino Básico. <http://bit.ly/2RpJnjJ>

¹⁸ Sekretariat der Ständigen Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland (2012), Empfehlung zur Mobilitäts- und Verkehrserziehung in der Schule, Beschluss in der Fassung vom 10.05.2012. <http://bit.ly/2TFIG4Q>

03 SET STRATEGIC, TACTICAL AND OPERATIONAL GOALS FOR TRAFFIC SAFETY AND MOBILITY EDUCATION

Specific goals for traffic safety and mobility education should be set. These specific goals should be set for each level of education and for each type of road user. These goals should be strategically set at national level as minimum learning requirements, based upon which the individual intervention's operational objectives can be established.

The goals should not only be about attaining knowledge regarding traffic safety and mobility, but also ensure that the pupils learn the skills and behaviour necessary to participate safely in traffic (see also Principle #9). The goals should also take into account and reflect new developments, such as new safety risks and new modes of mobility.

Setting goals is of great importance for the proper evaluation of both national strategies and individual interventions.



BEST PRACTICE EXAMPLE

THE NETHERLANDS THE DUTCH LEARNING GOALS FOR LIFELONG ROAD SAFETY EDUCATION

A policy document initially set out core aims - providing a broad description of the traffic education approach that should be taken - for six target groups (0-4 years old; 4-12; 12-16; 16-25; 25-60; 60+).¹⁹

The Dutch Ministry of Transport subsequently ordered a document setting out concrete learning and educational goals based on those core aims, to guide and be used by both regional policy makers and developers of educational material.²⁰ The document underlines that the goals were designed to be carried out by multiple entities; not only education in schools, but also at home or in social clubs.

In the context of lifelong learning, it also underlines the importance of seamless continuity between the different learning goals of different target groups.

¹⁹ Van Betuw & Vissers (2002), Naar een succesvolle invoering van Permanente Verkeerseducatie. <http://bit.ly/2m8hMpr>

²⁰ Van Betuw, Vissers, Nägele, Kooistra & Harteveld (2007), Learning goals for lifelong road safety education. <http://bit.ly/38xZKko>

04 ALLOCATE SUFFICIENT RESOURCES FOR TRAFFIC SAFETY AND MOBILITY EDUCATION

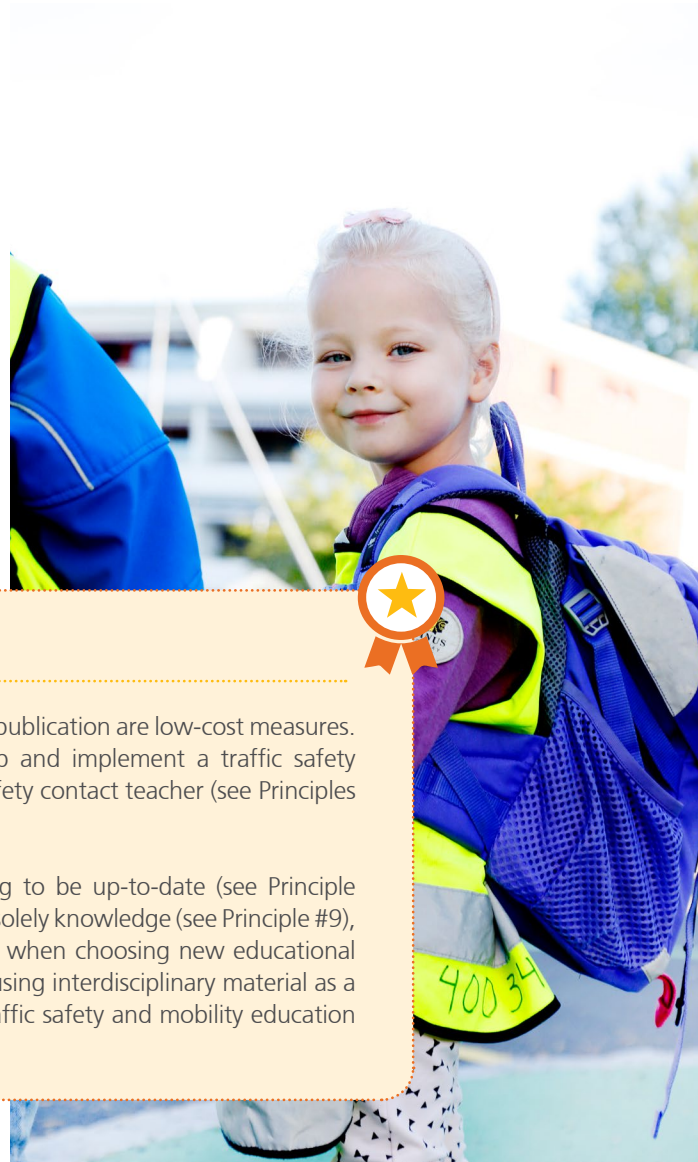
Sufficient resources should be allocated to traffic safety and mobility education. Not only in terms of financial resources, but also with regards to the availability of time and human resources. The allocation of resources should allow for sufficient possibilities to teach road safety and sustainable mobility. The allocated resources should meet and reflect the political priority given to improving road safety and sustainable mobility.

Sufficient resources should be allocated at all levels: from allocation in national budgets and strategies, to regional policy makers and organisations, to the budgets and strategies of schools and organisations at local level.

LOW COST MEASURES

Many of the principles listed in this publication are low-cost measures. Schools can, for example, develop and implement a traffic safety policy plan and appoint a traffic safety contact teacher (see Principles #6 and #7) at little to no cost.

The principles of materials needing to be up-to-date (see Principle #10) as well as covering more than solely knowledge (see Principle #9), can be used as assessment criteria when choosing new educational materials, as can Principle #14 on using interdisciplinary material as a means for pupils to learn about traffic safety and mobility education while teaching other subjects.





ENGAGE AND SUPPORT SCHOOLS

ENGAGE AND SUPPORT SCHOOL MANAGEMENT

The management of schools and kindergartens should be encouraged by policymakers at national and local level to implement national policies in their own schools and kindergartens. The management should also be encouraged to ensure that pupils are taught about traffic safety and mobility, and that the teachers are actually providing those lessons in practice. Schools and kindergartens

should furthermore be encouraged to develop and implement traffic safety policies (see Principle #6 below).

Policymakers at all levels should provide the necessary support to managers in the planning, organisation, implementation, leadership and monitoring of traffic safety and mobility education and policies at schools.

MOTIVATE SCHOOLS TO HAVE A TRAFFIC SAFETY AND MOBILITY POLICY

All schools and kindergartens should have a traffic safety and mobility policy. This policy should include an education plan setting out, for the school year, what road safety lessons they will teach in which grade.

A traffic safety and mobility policy also outlines, for example, how parents are involved in traffic safety education, how traffic safety around the school is ensured and how safe and environmentally-friendly transportation can be ensured for school trips. It should also cover the wider perspective on school

ethos and environment, for example, by taking into account how traffic safety attitudes are influenced (e.g. underlining the importance that school staff model appropriate road safety behaviours and attitudes).

The policy should be revised and updated every year, and should be developed in cooperation with all relevant partners, such as the municipality, police, community, parents and students. The policy should be publicly available, for example by publishing it on the school or kindergarten website.



BEST PRACTICE EXAMPLES FOR PRINCIPLES 5 & 6

THE NETHERLANDS ROAD SAFETY LABELS FOR SCHOOLS

In order to encourage and support schools, nine provinces in the Netherlands have implemented a programme that rewards primary schools with a 'road safety label' when they implement road safety education as well as traffic safety measures in and around the school.

'SCHOOL op SEEF' is the programme in South Holland.²¹ Schools are expected to:

- Give theoretical and practical lessons to all pupils every year;
- Have structurally incorporated traffic safety education and traffic safety itself in the school's policy;
- Communicate extensively with parents/caretakers about all activities as well as their role as educator;
- Communicate extensively with the municipality regarding traffic problems around the school;
- Have a sound organisational structure in place, with clear tasks and responsibilities for school management, a traffic contact person, the teachers, and parent-helpers.



'SCHOOL op SEEF' provides educational materials as well as tools for schools to plan and implement traffic safety measures. It emphasises the cooperation between, and shared responsibility of, the school, municipality and parents. 'TotallyTraffic' is a similar programme for secondary education in South Holland, and is used in other regions of the Netherlands as well.²²



NORWAY CHILDREN'S TRAFFIC CLUB

The Children's Traffic Club, an initiative of the Norwegian Council for Road Safety (NCRS; Trygg Trafikk) focuses on day-care centres, because if good habits are established when the children are still small, it is likely that they themselves will become responsible road-users. Many day-care centres and families with small children are engaged in the topic of traffic safety, but not all.

The Children's Traffic Club aims to ensure that day-care centres include traffic in a natural way during the implementation of activities scheduled throughout the year, and that traffic is a topic in the cooperation with parents. The NCRS regards the day-care centre as a public arena where they meet everyone and thereby can ensure a greater provision of training on an equal basis.

The Children's Traffic Club for day-care centres started in 2016, and about 50% of all day-care centres in Norway had become a member by 2019.²³



²¹ Regionaal Ondersteuningsbureau Verkeersveiligheid Zuid-Holland (n.d.), School op Seef. <http://bit.ly/2XtS8tV>

²² Regionaal Ondersteuningsbureau Verkeersveiligheid Zuid-Holland (n.d.), TotallyTraffic. <http://bit.ly/33EjVcE>

²³ Trygg Trafikk (n.d.), Barnas Trafikkklub. <http://bit.ly/33GNn1D>



DENMARK

MAJORITY OF DANISH SCHOOLS HAVE A TRAFFIC POLICY

In its National Action Plan, the Danish Road Safety Commission recommends that all schools teaching children and youngsters aged 5-15 years old (Danish primary schools) develop a traffic policy, and that they should be supported by municipalities.²⁴ In order to facilitate this recommendation, the Danish Road Safety Council (Sikker Trafik) provides information on how to create a traffic policy on their website. This includes the creation of a working group to investigate what the school is already doing, what is working well and not so well, and what challenges the traffic policy needs to address. A template and examples are also provided on the website.²⁵ A majority of Danish schools have a traffic policy and surveys show that schools with traffic policies have more children that travel to school by themselves.

All Danish municipalities are furthermore encouraged to put traffic safety education on the agenda of regular meetings between head teachers and the responsible administrative body at the municipalities. This allows municipalities to be informed whether traffic safety education is done at the schools and whether the schools fulfil the national goals for traffic education.



FINLAND

TRAFFIC SAFETY PLANS AS A GUIDE FOR SYSTEMATIC TRAFFIC SAFETY EDUCATION

To support systematic and long-term traffic safety education, a school-specific traffic safety plan is drawn up. To achieve the best results, the Finnish Road Safety Council (Liikenneturva) recommends schools pay attention to the following topics: a safe traffic environment that is evaluated on the basis of the capabilities and needs of the pupils, the use of safety equipment, traffic safety education, and influencing other road users, especially car drivers. They furthermore recommend that school-specific traffic safety plans comprise four parts: the journey to school and the surrounding traffic environment, traffic safety education, role models, and collaboration and networking. The plan should be drawn up by teachers, students and their parents, and acts as a guide for systematic traffic safety education.

An example of a traffic safety plan developed in cooperation with the Finnish Road Safety Council can be found at: <http://bit.ly/36um7oZ>

²⁴ Danish Road Safety Commission (2013) National Action Plan 2013-2020. <http://bit.ly/2X8xpMj>

²⁵ Sikker Trafik (n.d.) Trafik Politik. <http://bit.ly/36WyyuL>



BULGARIA

ROAD SAFETY COMMITTEES REQUIRED AT SCHOOLS AND KINDERGARTENS

Since 2016, a new Ordinance has been enacted that requires every school, kindergarten and youth centre for personal growth and development in the country to appoint its own Road Safety Committee.²⁶ This Committee has to support the head teacher in:

- i. executing control over the quality of the road safety education in the institution;
- ii. making sure road safety education is effective and addresses the specific risks in road traffic for children and youngsters attributable to the urban surroundings of the specific institution and their specific path home; and
- iii. organising public initiatives aimed at raising awareness among their pupils and the public regarding the risks inherent to road traffic safety.

The committees have to develop yearly road safety plans, which include all measures and intervention areas and have to report to the pedagogical council annually about the initiatives and measures taken. The Ordinance furthermore requires educational institutions at the pre-primary, primary and secondary level to make the urban area surrounding their location more safe via several measures. Good results have been reported since the inception of the road safety committees.



Since 2016, a new Ordinance has been enacted that requires every school, kindergarten and youth centre for personal growth and development in the country to appoint its own Road Safety Committee.

²⁶The Ordinance can be downloaded (in Bulgarian) from: <http://bit.ly/2FEYtLb>

07 APPOINT A TRAFFIC CONTACT TEACHER AT SCHOOL

All schools should have a teacher that acts as a coordinator or central point of contact for traffic safety and mobility education. On the one hand, this teacher would motivate, inspire, guide and support the other teachers in providing proper lessons in road safety and sustainable mobility. Alternatively, the teacher could (also) be responsible for teaching and conducting part of the education, for example the theoretical and practical cycling tests.

On the other hand, this teacher would be the central contact person for the school advising and guiding the school's head teacher and other teachers with regards to traffic safety and mobility education. They would also be the school's link to the municipality, the police and road safety organisations.

This designated teacher, whether a dedicated road safety teacher or a regular teacher responsible for a class, should receive training in order to stay up-to-date.

Appointing a regular teacher as a traffic safety contact teacher is furthermore a low-cost measure, as the teacher would already receive a salary, yet would ensure that the provision of traffic safety and mobility education is improved at the school. Experiences in Norway and Denmark show that pupils of schools that have appointed such teachers receive more traffic safety and mobility education.

BEST PRACTICE EXAMPLES



DENMARK

COURSES AND MATERIALS FOR TRAFFIC CONTACT TEACHERS

The Danish Ministry of Education recommends appointing a traffic contact teacher at all schools that teach pupils aged 6-16 years old. They are also encouraged to participate in the traffic contact teachers' courses organised by the Danish Road Safety Council (Sikker Trafik), which are held yearly for new and 'old' traffic contact teachers. These two-day courses provide information on available teaching materials and include exercises and discussions on how to be a "good" traffic contact teacher.²⁷



FLANDERS

CONTACT PERSON IN TRAFFIC WORKING GROUPS

The Flemish Foundation for Traffic Knowledge (VSV) promotes the use of traffic working groups at schools in Flanders.²⁸ Such working groups consist of teachers and parents, with one person functioning as contact point. It is however not uncommon that a prevention advisor acts as contact person for traffic safety at secondary schools (and sometimes at primary schools), due to their expertise with regards to safety in general. Nevertheless, the traffic safety lessons are usually given by teachers actively engaged with the topic.

²⁷ On its website, the Danish Road Safety Council provides more information and inspirational material for traffic contact teachers (<http://bit.ly/33MF5q5>) as well as a teaching guide (<http://bit.ly/34TJGH8>)

²⁸ Vlaamse Stichting Verkeerskunde (VSV) (n.d.), Verkeersouders. Werkgroep Verkeer. <http://bit.ly/363TVJm>

STRENGTHEN TEACHERS' COMPETENCE AND SUPPORT THEM

Lessons should be provided to teachers in order to ensure that they feel confident to give traffic safety and mobility education lessons and to ensure that they remain up-to-date.

Support can, for example, be given by having road safety education experts show teachers how such lessons could be done. These experts can also play a key role in motivating teachers to give road safety lessons to children and pupils.

Head teachers should ensure they give ample support to teachers on traffic safety and mobility education.

Activity sheets that help teachers incorporate traffic safety in their specific subjects, such as mathematics, physics and social sciences are also included. Moreover, KROS developed a virtual reality application with road safety scenarios. The project furthermore promotes a school-wide approach to road safety, including its integration in the curriculum and school organisation as well as parental engagement and support.²⁹

SCOTLAND

ANNUAL UPDATE OF A GUIDE ON AVAILABLE RESOURCES

The Curriculum for Excellence is the philosophy underpinning the Scottish Education System and, to ensure credibility within the learning and teaching profession, Road Safety Scotland has aligned all its resources with it. A guide for teachers provides an overview of the available resources and how they support the curriculum. Road Safety Scotland collaborates with Education Scotland (the Scottish Government's Executive Agency for Education), to review and update this publication every year. As well as being made available online, it is distributed to all educational establishments across Scotland, and throughout the road safety community as well.³⁰

BEST PRACTICE EXAMPLES



EUROPEAN UNION

KROS: AN ERASMUS+ PROJECT ON TRAFFIC SAFETY



'KROS: Knights for Road Safety' is an EU-funded ERASMUS+ programme. It focuses on open education and innovative practices in the digital

age, aiming to integrate traffic safety principles and best practices at primary and secondary schools in Austria, Greece, Ireland, Poland and Spain. In addition to training activities and workshops for teachers, the project also provides resources and training materials online.

²⁹ The KROS Project, an ERASMUS+ programme under KA2 - Cooperation for Innovation and the Exchange of Good Practices: Strategic Partnerships for school education, is coordinated by RSI Panos Mylonas and more information can be found at: www.kros-project.eu

³⁰ Road Safety Scotland (2019), Road Safety within Curriculum for Excellence 2019-20. <http://bit.ly/2srqm5T>



SPAIN

TEACHER GUIDES FOR DIFFERENT AGE GROUPS

Fundación MAPFRE has developed guides for teachers in Spain.³¹ These tools aim to help and guide teachers in successfully carrying out lessons, by providing teaching guidelines as well as the learning goals and content, the methodology, resources and evaluation assessments for the activities. The guides are adapted to different age groups, with guides for 3-5 year olds, 6-8 year olds, 9-11 year olds and 12-16 year olds available for teachers.



CZECH REPUBLIC

GUIDELINES FOR KINDERGARTEN TRAFFIC EDUCATION

The Transport Research Centre (CDV) in the Czech Republic has developed guidelines for traffic education in kindergartens consisting of five chapters: child collisions; the psychometric competence level of pre-school children; good practices related to children in traffic; and kindergarten traffic education in the context of the national curriculum framework. In addition to seminars for teachers, a website designed for both teachers as well as the general public contains free materials, manuals and other safety-related information for kindergartens as well as elementary schools, and is continuously updated. The website also contains ten videos providing support on the practical use of the guidelines.³²



BELGIUM

FREE COURSES, INFORMATION AND MATERIALS FOR TEACHERS

The Flemish Foundation for Traffic Knowledge (VSV) provides free courses on traffic safety and mobility education to both teachers and those studying to become a teacher at pre-primary and primary schools as well as those teaching physical education at secondary schools in Flanders. They furthermore support them with information through newsletters focused on traffic safety education and through free educational materials, such as lesson manuals and example lessons.³³

Belgium's Walloon region also provides free courses and free educational materials, not only to school teachers but also to staff at NGOs and the police who give traffic safety and mobility education in schools and receive government subsidies to do so.³⁴



PORTUGAL

TRAINING TEACHERS TO TRAIN OTHER TEACHERS

Teachers in preschool and basic education in Portugal have access to road safety training as part of systematic lifelong learning on the road safety education competency framework. This includes 'training of trainers' which, by the end of the programme, enables teachers to train other teachers. They also have online support to develop road safety projects.³⁵ This training will soon become available for secondary school teachers in Portugal.

³¹ Fundación MAPFRE (n.d.), Guías Didácticas de educación vial. <http://bit.ly/2DToil3>

³² Centrum Dopravního Výzkumu, v.v.i. (CDV), Děti v dopravě. <http://bit.ly/2NSfohw>

³³ Vlaamse Stichting Verkeerskunde (VSV) (n.d.), Verkeer op School. <http://bit.ly/2r3P0Jq>

³⁴ Wallonie mobilité (n.d.), Education Mobilité et Sécurité routière (EMSR). <http://bit.ly/302jicM>

³⁵ Information on teacher training in Portugal, provided by the Directorate-General for Education, is available at: <https://bit.ly/3C2qEyO>



FINLAND

THE IMPORTANCE OF THE HEAD TEACHER'S SUPPORT

Every year, the Finnish Road Safety Council (Liikenneturva) offers teachers further education in traffic safety, in which teachers review the basics of traffic safety education and can try out different action models. Teachers are also offered an opportunity to network with other teachers and share good practice. The Finnish Road Safety Council also publishes an electronic newsletter for teachers four times a year, which highlights current issues and introduces materials and action models for traffic safety education. According to a teacher survey, the support of the school's head teacher is a significant factor for teachers to actually teach traffic safety.



GERMANY

SUPPORT FOR TEACHERS AT VOCATIONAL SCHOOLS

The German Road Safety Council, supported by the German Social Accident Insurance, develops a comprehensive set of materials for teachers of vocational schools every year. The materials focus on a different topic related to the prevention of road collisions each year.³⁶ The set includes, amongst others, a power point presentation, a handbook with practical advice how to implement the contents in practice, videos, and exercise sheets.

³⁶ Deutscher Verkehrssicherheitsrat (DVR) (n.d.), Allein Unterwegs. <http://bit.ly/2t0DUGe>







BERGEN



ENSURE HIGH
QUALITY EDUCATION

ENSURE THAT TRAFFIC SAFETY AND MOBILITY EDUCATION IS ABOUT KNOWLEDGE, SKILLS, ATTITUDES AND MOTIVATIONS AS WELL AS TRAINING IN TRAFFIC

Traffic safety and mobility education should not only be about gaining knowledge and understanding of traffic rules, but also about developing and improving skills as well as strengthening and changing attitudes and motivations.

Lessons should furthermore teach pupils about hazard perception and risk factors, anticipating the actions of other road users, and saying 'no' to others' risk behaviour. They should also teach the pupils to reflect on their own and others' attitudes, motivations and behaviours.

Lessons should not only take place in the class room, but also include training and experience in practice – in both protected and real-world environments, connected to real life problems in their environment and adapted to the role they have in the traffic system.

The LEARN! definition for traffic safety and mobility education includes all the mentioned elements, and is explained in greater detail on page 6 of this report.

BEST PRACTICE EXAMPLES



EUROPE CYCLING TESTS

In many European countries children participate in cycling tests. These tests usually combine theory and practice: they do not only focus on ensuring that the pupils have sufficient knowledge, but also sufficient skills and the right behaviour to safely ride their bikes. See Principle #13 for more information on these cycling tests.



NORWAY AN ELECTIVE COURSE AT SECONDARY SCHOOLS

The elective subjects in Norway are practical subjects, contributing to increased motivation and more varied training for the pupils. An elective course in traffic knowledge can be chosen by pupils aged 14-16 years. The course helps pupils move safely in traffic by providing knowledge, skills and attitudes, and aims to motivate the pupils to reflect and think critically. About 25% of schools offer this course and an evaluation of the course done by the Norwegian Centre for Transport Research showed good results.³⁷

³⁷ Johansson & Bjornskay (2018), TØI Report 1660/201. Evaluation of the elective subject traffic. <http://bit.ly/2kC5ZzD>



GREECE

“DO IT RIGHT” IN SECONDARY EDUCATION

The “Do It Right” programme for adolescents focuses not only on developing skills, but also promotes ‘safety minded’ behaviour by changing false beliefs and unhealthy attitudes. The programme, implemented in Greece by RSI Panos Mylonas, focuses on key risk factors on the road: drink driving, non-seatbelt use, reaction time and stopping distances, and psychological factors affecting driving. It includes both theoretical and interactive learning approaches, such as role playing, where students learn how to say ‘no’ to unsafe behaviour and peer pressure. Moreover, it includes training in a safe environment using advanced simulator equipment (roll-over car, impact simulator, alcohol goggles, distraction game activity, etc).³⁸



³⁸ RSI Panos Mylonas (n.d.), Do It Right. <http://bit.ly/ZOSMChZ>

10

KEEP TRAFFIC SAFETY EDUCATION UP TO DATE

Traffic safety and mobility education should be kept up to date. This applies to every aspect of education and applies to all actors involved.

On the one hand, the content of the educational material should be kept up to date in order for new road safety and mobility trends to be covered. For example, the risks of the use of smartphones in traffic and the pros and cons of nascent modes of transport, such as e-bikes and e-scooters.

On the other hand, traffic safety and mobility education should also be updated to reflect the latest knowledge. This not only includes the evaluation results of other road safety education interventions, but also knowledge coming from outside the road safety community, such as developments in neuroscience and psychology, technological innovations and solutions, and improved pedagogical and didactical methods.

Traffic safety and mobility education should furthermore keep up with developments in school systems, the methods used, and their way of thinking.

Traffic safety and mobility education in kindergartens and schools must also be renewed to make it relevant for the future. It cannot be predicted what present-day children will need in order to be safe in traffic in the future, so they also have to learn how to learn to behave safely.

BEST PRACTICE EXAMPLES



AUSTRIA WORKSHOP ON DISTRACTION

As raising awareness for distraction in traffic should already start at an early stage, a workshop for 12 and 13 year old pupils was developed by the Austrian Road Safety Board (KFV).³⁹

The workshop is part of KFV's Risi & Ko education concept (see Principle #14) and uses five characters to introduce students to the topic in a suitable way. Since personal involvement and public commitment are important for changing attitudes, the workshop uses methods (e.g. quizzes, experiments) that stimulate active participation and personal contribution. Particular attention is given to the topic of smartphones in traffic, multitasking and the associated myths in order to enhance awareness and enable students to realistically assess the risks caused by texting or making a phone call while participating in traffic.

³⁹ KFV (Kuratorium für Verkehrssicherheit) (n.d.), Risi & Ko - Ablenkung im Straßenverkehr. <http://bit.ly/34JuBll>



NORWAY

USING NEW TECHNOLOGIES: EYE-TRACKING AND VIRTUAL REALITY FOR YOUNG CYCLISTS



Based on the latest research in neuroscience, a Go/No Go inhabitation control test for young cyclists was developed. Three flashing lamps were placed on a test track to attract the pupils'

attention; for the Go test the pupils were asked to look at the lights, whereas for the No Go test the young cyclists were asked not to. Using wearable glasses with eye-tracking sensors, their gaze was mapped. While most pupils indicated they had easily passed the No Go test, the results showed that only half had managed to follow the given instructions.

The results were used to establish an attention training program for the most critical traffic situations, which is being evaluated by studying cyclist behaviour in a virtual reality (VR) scenario. Teachers from three counties conducted the training program with 30 pupils in SINTEF's VR laboratory. The pupils sit on a bike with VR goggles with integrated eye-tracking and ride in a very lifelike scenario. The task is to behave like they practiced during the attention training. A control group rides the same scenario, having received only regular bike training. The results show a distinct difference between the groups, as the experiment group is orientating better in risk situations at the intersection and have a more conscious movement of their gaze.⁴⁰

⁴⁰ A paper on the results of the study is available at: <https://bit.ly/3v5MAa1>

⁴¹ For more information, please visit the website of Fundación MAPFRE: <http://bit.ly/2OX9cEP>

⁴² Liikenneturva (n.d.), Filla & Rilla. <http://bit.ly/384PZd0>



SPAIN

VIRTUAL TRAINING BIKE INITIATIVE

Virtual reality (VR) goggles and a static bike allow people to pedal through a virtual Madrid, in order to not only learn about the applicable cycling regulations, but also the potentially dangerous situations that the cyclist may encounter on the five pre-programmed routes and how to prevent them. The initiative, a collaboration between the Madrid City Council and Fundación MAPFRE, furthermore aims to promote healthier, sustainable and cleaner transport by promoting the use of bicycles.⁴¹



FINLAND

DIGITALISATION THROUGH THE CURRICULUM

Digitalisation is a major theme in Finland's new core curriculum (see Principle #2). The Finnish Road Safety Council (Liikenneturva) has therefore designed Filla&Rilla, a digital learning environment for safe cycling for 9 -12 years old pupils.⁴² The structure includes levels aimed at different grades and includes a module where pupils can practice anticipation in virtual reality.

11

USE QUALITY STANDARDS

The quality of traffic safety and mobility education materials can vary greatly. The principle “there is no harm in trying” should not be applied to traffic safety education. Projects that are poorly designed can, in fact, have an adverse effect. The money and time could better be spent on well designed and evaluated projects and measures instead.⁴³

It is therefore necessary to have quality standards for educational material and activities on traffic safety and mobility.

Such material and activities should define specific goals for the intervention as well as be adapted to, and have the right content for, the target group they are meant for. They should be based on scientific research and sound academic models, and should both be pre-tested as well as evaluated. The interventions themselves should motivate teachers to use them, while at the same time attract the target audience.

In short, the same quality standards that are expected for maths, languages and other subjects taught in schools should be applied to traffic safety and mobility education material as well.

The **LEARN! Manual** contains guidelines for developing and evaluating activities and programmes for traffic safety and mobility education. It sets out recommendations, criteria and guidance to develop, implement, and evaluate sound educational activities in an accessible way. For more information, see page 50.

⁴³ SWOV (2017), Factsheet Verkeerseducatie. <http://bit.ly/2EejM60>

BEST PRACTICE EXAMPLES



NORWAY

THE NORWEGIAN COUNCIL FOR ROAD SAFETY'S MODEL FOR BEHAVIOUR MODIFICATION

The Norwegian Council for Road Safety (NCRS; Trygg Trafikk) noted a need for gaining a better understanding about which training programmes produce a positive impact in the short and long term and what elements contribute to this effectiveness. However, a number of potential issues need to be taken into account.

Firstly, education has a long-term perspective but programmes tend to be assessed over a shorter time.

Secondly, measuring the impact of a single training programme is difficult, because both those who are exposed to it and the control group are under the influence of several other factors in parallel, including the media, their families, schools and other traffic education programmes.

Thirdly, when measuring attitudes before and after interventions, it often turns out that most adolescents have appropriate attitudes and behaviour, complicating any demonstration of progress. And finally, knowledge is far easier to measure than attitudes and behaviour.

To respond to these issues and provide recommendations for the associated efforts, the NCRS established an advisory group in the spring of 2015. The group includes three external and three internal members. The external members are researchers in the areas of traffic safety and education and have experience in the application of qualitative as well as quantitative methods.

With the aid of analyses of the most recognised and applied theories of behaviour modification, the NCRS developed a new, joint model suitable for the NCRS's work. The model, which was named NCRS' Model for Behaviour Modification (MBM), is considered to be a tool for optimal planning and implementation of programmes and for what can be evaluated.⁴⁴



THE NETHERLANDS TRAFFIC EDUCATION CHECKLIST

The knowledge institute CROW developed a traffic education checklist that assesses certain elements of traffic education interventions in 10 steps.⁴⁵ These steps consist of assessing the problem analysis, target group specification, educational goals, didactical principles, content of the material, assessment and evaluation during the intervention, the manual, the implementation, process and outcome evaluations of the intervention. The results of the assessment provide a first indicator of quality. It also stimulates improvements, and delivers the latest developments, insights as well as behaviour and educational expertise to the producers.



⁴⁴ Trygg Trafikk (2017), The Norwegian Council for Road Safety's model for behaviour modification. <http://bit.ly/nrcs-mbm>

⁴⁵ CROW (n.d.), Checklist (English). <http://bit.ly/349N4Nf> Checklist verkeerseducatie (explanation and examples). <https://bit.ly/3l0Zmlv>

12

UNDERTAKE TESTS, PROCESS AND/OR OUTCOME EVALUATIONS

Evaluations should be a central part of any traffic safety and mobility education intervention.

Evaluations should be part of the plan from the intervention's inception and should be conducted properly. The evaluation results of other interventions should furthermore be taken into account during the design of an intervention.

While evaluations should be part of the intervention, the scale of the evaluation should be proportionate to the scale of the activity. The results of the evaluation should also be used to improve the intervention itself.

DENMARK

AN OVERVIEW OF DIFFERENT EVALUATION METHODS

All the teaching materials provided free-of-charge to the schools by the Danish Road Safety Council (Sikker Trafik) have been evaluated to make sure that they meet the national goals for traffic safety education and have the desired effect. As a minimum, the evaluations include an online mobile survey to be filled in by pupils immediately after the lesson.⁴⁷

Other evaluation methods include similar online mobile surveys for teachers, observations of the teaching materials being used by teachers at different types of schools (geographically, public/private, socioeconomic), and interviews with pupils and teachers.

All new and revised teaching materials are (pre)tested. Focus groups are conducted with teachers from different types of schools, where they are introduced to the material and the teacher's guidelines, and adjustments are made based on the gathered inputs and insights. The material is subsequently tested at different schools using the same methods previously mentioned for the evaluations. All tests and evaluations are conducted by the Danish Road Safety Council's evaluation experts.



BEST PRACTICE EXAMPLES

SCOTLAND

INDEPENDENT EVALUATION AS A CRITERIA FOR FUNDING

The Road Safety Framework Fund is designed to promote and encourage further partnership to ensure the delivery of road safety commitments in Scotland, including through education. There are two rounds of funding each year. The scheme developers can bid for funding and, as part of that, they must include plans for independent evaluation. There is also an evaluation fund which allows those who have been running schemes for two years or more to commission an independent evaluation.⁴⁶

⁴⁶ Further information on Scotland's Road Safety Framework Fund can be accessed here: <http://bit.ly/2L3cGok>

⁴⁷ The pupils have to send a short text (for example "traffic") to a number, after which they receive a link to a survey which they can answer on their phone. The surveys usually include questions on liking (what they liked/disliked), what they have learned (new knowledge and reflection), what their (former) traffic behaviour was and what their intended behaviour in traffic is after the lesson.

The Danish Centre for Social Science Research has also conducted a randomised controlled trial (RCT) study of the Danish Road Safety Council's LIVE ambassador visits, a programme for schools with pupils aged 13-25 years.⁴⁸ Half of the schools in the study received LIVE ambassador visits while the other half (the control schools) did not. The study showed the effect on the pupils' knowledge, attitudes, intended behaviour and actual behaviour. While this kind of effect evaluation is "state of the art", it is also time consuming, expensive and requires the involvement of a qualified research centre. Valuable insights and knowledge can nevertheless also be achieved with fewer resources when using the other described evaluation methods.

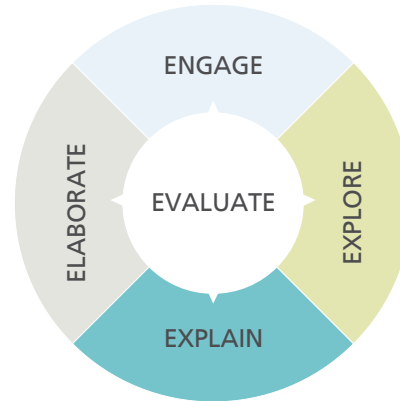


The Danish Centre for Social Science Research has also conducted a randomised controlled trial (RCT) study of the Danish Road Safety Council's LIVE ambassador visits, a programme for schools with pupils aged 13-25 years.

⁴⁸ Documents on the results of the study are available in English: <http://bit.ly/34LLwKm>

13 ASSESS THE PUPILS AND LET PUPILS EVALUATE THEMSELVES

Assessments should be part of traffic safety and mobility education at schools in order to guarantee that the pupils have gained the right knowledge, skills, behaviour and attitudes necessary to behave safely in traffic. This will furthermore allow for appropriate action to be taken if this is found not to be the case.



BEST PRACTICE EXAMPLES



NORWAY

STUDENT ASSESSMENT AS PART OF THE 5E-MODEL

The Norwegian Council for Road Safety's Model for Behaviour Modification (see Principle #11) promotes the so-called 5E model, which is a tool to support teachers in planning, implementation and evaluation of learning for the actively participating pupil.⁴⁹ It is called the 5E model because all five pedagogical concepts start with the letter E: engage, explore, explain, elaborate, evaluate.

The word 'evaluate' is placed in the centre of the model because the purpose of the evaluation is to promote learning, and because evaluation occurs in all phases of teaching. The term evaluation covers three types of assessment: continuous evaluation (formative assessment), final evaluation (summative assessment) and self-assessment.

Evaluations must be conducted continuously, be varied and a natural part of the instruction given. It can be given orally and in writing. The pupils are to evaluate their own learning and understanding, as well as the quality of their own work. The teacher is to evaluate the pupils' learning in relation to the learning outcomes in a given topic or project. The evaluation is to be related to the objectives in the curriculum, and it must provide feedback that supports the pupils' learning.

⁴⁹ Trygk Trafikk (2017), The Norwegian Council for Road Safety's model for behaviour modification. <http://bit.ly/ncrs-mbm>

EUROPE CYCLING TESTS

All across Europe, pupils are tested for their skills in safely riding a bicycle. Each spring in the Netherlands, pupils in the penultimate or final year of primary school are tested for both their theoretical knowledge about traffic, safety, and behaviour as well as their practical skills when riding a bicycle in traffic as part of a national cycling test.⁵⁰ More than 85% of Dutch primary schools participate in the national cycling test. Data are collected via a score application and are valuable for schools as they can immediately get insights into what the pupils can still be taught with regards to traffic education.



In Flanders, pupils can attain gradual bicycle diplomas starting with a diploma for balance bicycles for kids in kindergartens, via bronze and silver, to finally the golden bicycle diploma, which is awarded to pupils in the final year of elementary school that pass the 'Grand Cycling Test'. A similar graduated diploma scheme is available for pedestrians.⁵¹ Cycling and pedestrian

tests and certificates also exist in Belgium's Walloon region, albeit not as part of a graduated scheme.⁵²

Cycling tests are also done in Austria⁵³, Denmark⁵⁴, the Czech Republic⁵⁵, and Germany⁵⁶ amongst others. In Norway, four organisations have collaborated to set up a website providing teachers with all the essential content on practical training as well as theoretical and practical tests.⁵⁷

REPUBLIKA SRPSKA (BOSNIA AND HERZEGOVINA) NATIONAL ROAD SAFETY CONTEST "CHILDREN IN TRAFFIC"

Every year, the Automobile Association of the Republic of Srpska, together with other road safety stakeholders, organises the national road safety contest "Children in traffic". The contest includes a theoretical test assessing the pupil's knowledge of the road safety rules as well as a practical test in which the pupils' skills are assessed on a training ground. In 2019, 194 teams totalling 776 pupils from 154 primary schools participated in the contest. The best teams were presented with a reward.

⁵⁰ VVN (n.d.), Het Nationaal VVN Verkeersexamen. <http://bit.ly/2khOLHm>

⁵¹ Vlaamse Stichting Verkeerskunde (VSV) (n.d.), Het Grote Fietsexamen. <http://bit.ly/34Ga47D>

⁵² Wallonie mobilité (n.d.), Education Mobilité et Sécurité routière (EMSR). <http://bit.ly/302jicM>

⁵³ Österreichisches Jugendrotkreuz (n.d.), Freiwilligen Radfahrprüfung. <http://bit.ly/2OSRt2t>

⁵⁴ Sikker Trafik (n.d.), Cyklistprøven (5. - 6. klasse). <http://bit.ly/2KaU1qe>

⁵⁵ BESIP (n.d.), Dopravní soutěž mladých cyklistů (10 – 16 years). <https://bit.ly/2rMoBje>

⁵⁶ Deutsche Verkehrswacht (n.d.), Radfahrerziehung in der Schule gewährleisten und weiter verbessern. <http://bit.ly/2Na30tf>

⁵⁷ Trygg Trafikk, NAF, NCF, and SLF (n.d.), Sykkeldyktig. <http://bit.ly/385oErb>





FACILITATE FRAMEWORK CONDITIONS

14

USE INTERDISCIPLINARY MATERIAL AS A MEANS TO TEACH TRAFFIC SAFETY AND MOBILITY EDUCATION

Traffic safety and mobility education should not only be taught via dedicated materials, but should also be integrated in the teaching materials of other subjects (such as maths and physics), especially in secondary schools.

The suggested lessons allow students to reflect on their own and others' attitudes, motivations and behaviours. The lessons currently cover the topics "risk and peer pressure", "social competence in traffic", "distraction in traffic" and "traffic modes and their potential". A key element of the concept are five archetypal comic figures, of which each acts according to its given character. They illustrate different ways of adjusting and reacting to traffic situations and allow an active and critical examination of different mobility topics.

BEST PRACTICE EXAMPLES



AUSTRIA

RISI & KO: A MODULAR APPROACH FOR SECONDARY SCHOOLS



Although road safety education is not an obligatory part of the Austrian curriculum for secondary schools, it should (where possible) be integrated into other subjects. To support teachers in this task, the Austrian Road Safety Board (KfV) developed the

mobility education concept "Risi & Ko".⁵⁸ With a flexible, modular approach and corresponding teaching materials, Risi & Ko provides lesson descriptions for different subjects and can be easily adapted to the needs of individual schools and teachers.

⁵⁸ KfV (Kuratorium für Verkehrssicherheit) (n.d.), Risi & Ko. <http://bit.ly/2OLV8iA>

SCOTLAND

TRAFFIC SAFETY AS PART OF PHYSICS AND MEDIA STUDIES

Working with curriculum specialists, Road Safety Scotland investigated opportunities to embed road safety within traditional subjects in the curriculum. Science lessons were developed which focussed on speed and provided reaction timers to local road safety teams for use in schools. Road Safety Scotland also developed a physics experiment kit, also speed-related, with schools able to borrow the necessary equipment directly from the Scottish authority. Both are referenced in "Road Safety Within Curriculum for Excellence" Guide (see Principle #8). A module for the Media Studies Higher Qualification (for 16-18 year olds) was furthermore also developed by Road Safety Scotland.





PORTUGAL

TRAFFIC SAFETY AND MOBILITY EDUCATION AS PART OF GEOGRAPHY AND PHYSICS

In Portugal, traffic safety and mobility education is included in the lessons of other subjects as well. As part of lessons on citizenship and development, pupils in the first and second grade learn to apply road safety norms, such as how to walk and cross roads safely, as well as the meaning of signs. Networks and modes of transport are addressed in geography lessons during the eighth year, while movements and forces are taught during physics and chemistry lessons in the ninth year.



FINLAND

THE ANNUAL CLOCK

The Finnish Road Safety Council (Liikenneturva) offers traffic safety materials and action models (plans for teachers that include goals, instructions and lists of materials) that have been integrated into various subjects.⁵⁹ An “annual clock” tool has been developed as a planning aid for schools, teachers and students to plan traffic safety education while keeping local conditions in mind. The annual clock is based on the idea that there are 4 hours of traffic safety education in every grade of basic education with attention paid to seasons and current issues. The planning tool thereby makes traffic safety education long-term and systematic.⁶⁰

The Finnish Road Safety Council (Liikenneturva) offers traffic safety materials and action models (plans for teachers that include goals, instructions and lists of materials) that have been integrated into various subjects.

⁵⁹ Interdisciplinary material offered by the Finnish Road Safety Council can be found at: <http://bit.ly/36tNNue>

⁶⁰ Liikenneturva (n.d.), Liikennekasvatuksen vuosikello. <http://bit.ly/36rol2Y>

15

EDUCATE STUDENT TEACHERS ABOUT TRAFFIC SAFETY AND MOBILITY EDUCATION DURING THEIR TRAINING

All student teachers should gain knowledge about traffic safety and mobility education during their training.

The LEARN! Status Report showed that traffic safety and mobility education is not structurally addressed during the education of future teachers. In some countries it is addressed only to a limited extent, while in other countries it depends on the college whether such education is provided, and if it is, whether or not it is provided as an elective course. In other countries, NGOs or authorities organise training or information days for student teachers.⁶¹

Addressing traffic safety and mobility education structurally during teacher training will help strengthen competences from the first day in the classroom.

BEST PRACTICE EXAMPLES



POLAND

POST-GRADUATE COURSE WITH ELEMENTS ON TRAFFIC SAFETY

In Poland, road safety at schools is taught mainly by the techniques teacher. These teachers are either alumni of pedagogical studies with techniques specialization (which also includes elements of road safety) or alumni of other studies. The latter group should therefore also do a post-graduate course in 'techniques with elements of road safety education'. In addition, teachers who prepare pupils for a "bicycle licence" need to have completed a 1- or 2-day course.



NETHERLANDS

BOOK FOR STUDENT TEACHERS

In the Netherlands, a book has been developed focusing on student teachers, aiming to inform and inspire them to give practice-focused traffic safety education in classes.⁶² The book pays particular attention to the role of language during the lessons and the possibilities to integrate traffic safety and mobility education in other topics. The book can also be used by teachers at primary schools as well as those teaching the student teachers.

⁶¹ ETSC (2019), The Status of Traffic Safety and Mobility Education in Europe. <http://bit.ly/LearnStatus>

⁶² Westerik & de Gooijer (2012), Verkeer en meer. <http://bit.ly/2mePMR6>



PORTUGAL INITIAL TRAINING FOR STUDENT TEACHERS

Introduced in 2018, the initial training program on road safety is a full day training session held for student kindergarten, primary and elementary teachers. The training addresses road safety education, the curriculum - as part of the citizenship education area (see principle #2), sustainable mobility, phones and driving, as well as practical activities such as using road safety simulators and the measurement of road environmental indicators.⁶³



DENMARK INTRODUCTION COURSE AT TEACHERS' SEMINARS

In Denmark, student teachers attending teachers' seminars (organised for teachers teaching 5-15 year old pupils in primary schools) are given the option of a 3-hour free-of-charge introduction course to traffic safety education. The course addresses questions such as "Why teach traffic safety at schools?" and "What should pupils learn?", and provides an introduction to the different teaching materials, practical exercises and discussions.

⁶³Information on the initial training for future teachers in Portugal, provided by the Portuguese Directorate-General for Education, is available on the following website: <https://bit.ly/3C2qEyO>



1 FOLLOW-UP TO ENSURE THAT TRAFFIC SAFETY AND MOBILITY EDUCATION IS TAUGHT

National and local authorities should follow-up with schools to ensure that traffic safety and mobility education is being taught and that such education achieves the goals set out for it.

Authorities should ensure that an appropriate framework for follow-up is in place, for example by including traffic safety and mobility education in the school's accreditation audit. Authorities should also consider supporting measures if schools are found to not teach traffic safety and mobility education or when the quality of the education does not allow for the defined objectives to be achieved. Authorities could also implement a reward system, in which role model schools are rewarded.

It should be underlined that this principle has a long-term aim, which moreover might not be easily implemented or achieved. It is nevertheless an aim that should be pursued by all relevant actors.

BEST PRACTICE EXAMPLES



FLANDERS SCHOOL INSPECTION VISITS TO ENSURE THAT TRAFFIC SAFETY AND MOBILITY EDUCATION IS TAUGHT

In Flanders, the compulsory regular school inspections carried out by the Department of Education include the inspection of the learning areas related to the final attainment levels (official learning goals). Since traffic safety and mobility education is part of the final attainment levels, schools can be inspected on this topic. Schools that fail to meet the minimum requirements for one or more learning areas during an inspection will receive a negative report with proposals for improvement. If a school fails repeatedly, the Department of Education can impose sanctions.



CZECH REPUBLIC IN-DEPTH TRAFFIC EDUCATION SURVEY

The Czech School Inspectorate in cooperation with Road Safety Department of the Ministry of Transport prepared a survey about traffic education in primary schools in the school year 2018/2019.⁶⁴ The survey is unique in its detail, as usually more general surveys are conducted where traffic education is only a part. This time however, the whole survey was about traffic education. Pupils, teachers and school directors were involved.

The results showed that the general situation could be better and some shortcomings were identified in more than a third of the schools. Some topics defined in the framework education program were found lacking in practice and the effectiveness of traffic education was evaluated only in half of the schools.

Schools with the best results used traffic playgrounds, project activities, cycle tourism and cycling competitions and a larger number of educational materials. More often they also had a coordinator for traffic education. Pupils of these schools had better results in knowledge tests.

Almost all schools (95 %) collaborated in traffic education with other institutions (mostly with the traffic police and regional road safety coordinators).

The report on the survey contains recommendations for schools, school management and for the Ministry of Education, Youth and Sport. The most important ones are about better education of older pupils (12-15 years), inclusion of traffic education into more school subjects, and preparing materials for education of teachers.

⁶⁴ Česká školní inspekce (2019), Dopravní Výchova Na Zš Ve Školním Roce 2018/2019. <http://bit.ly/2ORcn29>





**INVOLVE ALL RELEVANT
STAKEHOLDERS**

17 INVOLVE PUPILS, STUDENTS, PARENTS AND ALL RELEVANT STAKEHOLDERS

Traffic safety and mobility is a shared responsibility, and all relevant stakeholders at all levels should therefore be involved in education related to this topic.

At a local level, traffic safety and mobility education is not only the responsibility of schools and kindergartens. Pupils and students, parents and other relevant actors, such as municipalities, the police, local road safety authorities and sport clubs, should also be involved.

Parents have a vital responsibility, as they are important role models for children. The choice of the form of transport to the day-care centre and to school, work and leisure time activities affects the child's future mobility behaviour.

Student participation and involvement is furthermore important in order for traffic safety and mobility education to be effective. If students are able to also participate in the planning of traffic safety education activities in schools, it will be easier for them to connect what they have learned at school to real traffic situations.

At a local level, traffic safety and mobility education is not only the responsibility of schools and kindergartens. Pupils and students, parents and other relevant actors, such as municipalities, the police, local road safety authorities and sport clubs, should also be involved.

THE MODEL OF THE LEARN! MANUAL FOR DEVELOPING AND EVALUATING TRAFFIC SAFETY AND MOBILITY EDUCATION ACTIVITIES

The LEARN! Manual sets out guidelines for developing and evaluating activities and programmes for traffic safety and mobility education. The manual presents recommendations, criteria and guidance that should ensure qualitatively sound educational activities in an accessible way.

It is envisaged as a starting point for those who design, test, implement and evaluate educational activities on traffic safety and mobility, and are embarking upon the creation of new, or updating existing, activities.

The LEARN! Manual can also prove useful to ministries, authorities, schools and organisations when deciding on which activities and projects to buy or fund, as the guidelines reflect a list of minimum criteria that should be included or be given thought to, in order to ensure qualitatively sound material.



ANALYSE

Analyse how the problem manifests itself. What are the target group's conditions and needs? Link the problem area to your strategic plan and identify the factors that contribute to unsafe behaviour.

1



DEFINE OBJECTIVES

Specify the objectives for the activity. Take a first look at the test and evaluation designs and a glance at the costs.

2

3

ACHIEVING CHANGE

By now you have decided whether the activity's outcome is related to actual behaviour or intentions to engage in the behaviour, and whether the outcome will be knowledge, skills, attitudes or (intended) behaviour. Define what you seek to modify and how you will modify it.



4

DESIGN

Based on the previous steps and taking into account the 5E model (engage, explore, explain, elaborate and evaluate), design your activity. Finalise the evaluation plan, specify what will be evaluated, and determine the design and method of the evaluation. Make a plan for production and implementation.



5

PRE-TEST

Make a pre-test design and test your activity. Based on the results, make changes if needed. You may therefore have to go back to Step 2, 3 or 4.



6

PRODUCTION

Produce the materials necessary for the activity, whether digital, printed or both.



7

IMPLEMENT

Make a communications strategy with both bottom-up and top-down approaches. Include cooperation with other actors, like communities, schools, parents, police, and others.



8

EVALUATION

Execute your evaluation plan by conducting process and outcome evaluations. Ensure the quality and relevance of your activity over time, and write a final report.



DOWNLOAD THE LEARN! MANUAL FOR FREE AT:
www.trafficsafetyeducation.eu/manual

European Transport Safety Council

20 Avenue des Celtes
B-1040 Brussels
frank.mutze@etsc.eu
Tel: +32 2 230 4106
www.etsc.eu
🐦 @ETSC_EU

