Informing you about the

SCHOOL PATH

MANUAL

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Every day over 530 000 children, between the ages of 7 and 15, commute to school.

CONTENTS

1

INTRO

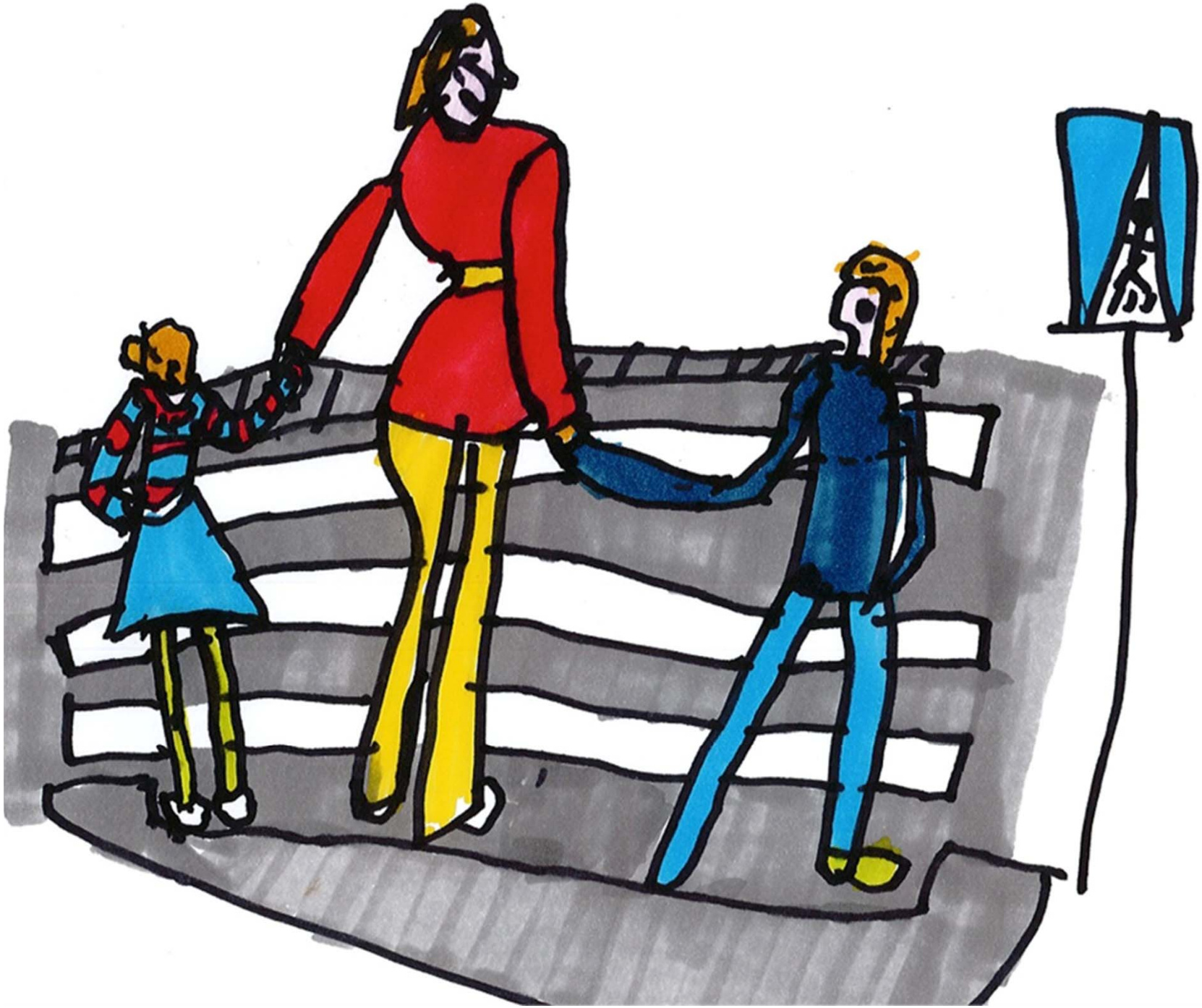
Introduction

Goals

Methods

Manual

Research



INTRODUCTION

We chose the School Path, because we were all interested in children's safety and found it to be an important subject.

Initially we had the idea that we would map out the School Path, plan a Traffic Awareness event or inform the public about the School Path. We split the project with another team. They took on mapping the School Path and we took the informing part.

GOALS

The aim of our project is to design an efficient **method of informing and educating** parents, children, schools and the public about the School Path and of traffic safety.

METHODS

In this report we have researched children's traffic environment, how children are able to cope in the traffic and how the traffic environment could be safer.

We have conducted our own research on what kind of information can be found concerning children's traffic safety. By observing children on their morning and afternoon school commute, we have been able to get a firsthand idea of common problems.

We will create a website to inform and children, school, parents, and public. The purpose of this website is to inform about the School Path and improve child safety. In addition we will design a pamphlet and poster that will inform the public about the website and the School Path.

This manual explains the website, pamphlet and poster, and gives background information on the research we have done.

MANUAL

This manual is made for the group or person who is responsible for informing the public of the School Path. This manual contains our ideas on methods how to inform children, schools and parents about the School Path.

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RESEARCH

For the purpose of our research we have studied how children behave in traffic and what are the risks that children encounter when they move in traffic. We have examined several reports that address different aspects of children's active commuting, traffic safety and school commuting.

The significance of school commutes has not received widespread attention although the increased significance of physical activity amongst children and young people is regarded an important issue. The increase of traffic and social fears has reduced in many European countries how much children independently move outdoors. This has also reduced children's active commuting to schools. We examine traffic around schools and how the school route could be made safer for children. The background research for our project is examined from both a Finnish and a Global point of view, concentrating however on Finnish viewpoints.

II

SCHOOL COMMUTE

On the School Route

Children as Commuters

Independent and Active Commuting

Children's Behaviour and Ability to Cope in Traffic

ON THE SCHOOL ROUTE

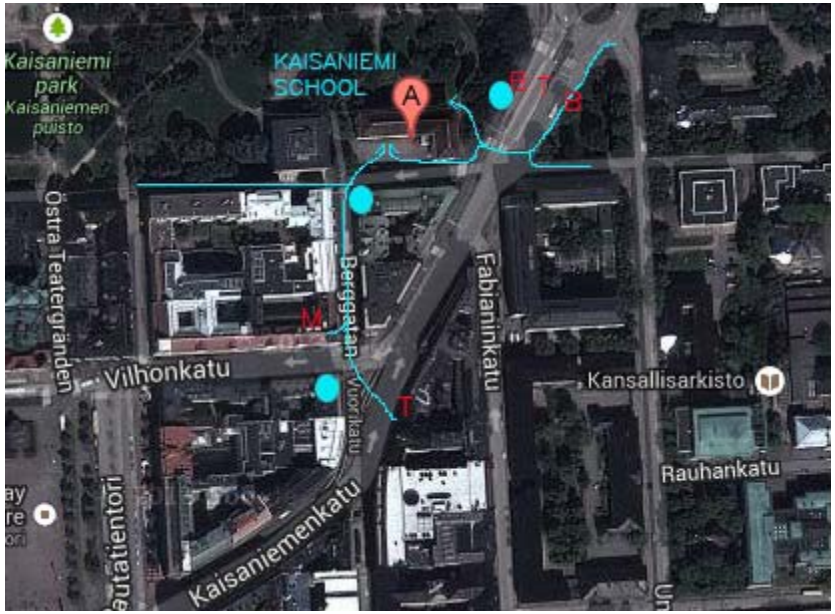
To get a better idea on how children behave in traffic we studied a number of reports on the subject. In addition to this we conducted our own research. This chapter combines our findings with studies made on children commuting. We picked two schools that we monitored during the times when children commute to and from school. We chose the two schools to represent different urban types of areas in which children have to commute.

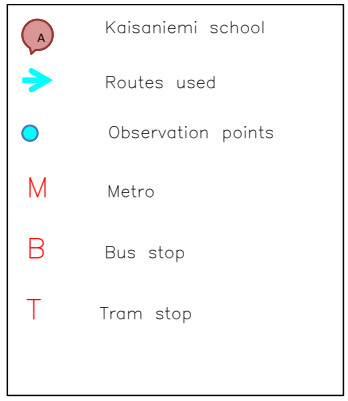
METHOD

We chose three spots near the school to monitor children going to and leaving school. One monitoring spot was near the school area entrance. The purpose of this monitor was to see how many children commuted to school by car and how many parents accompanied their children to or from school. The two other monitoring spots were at, what we thought, crucial traffic areas where the children had to cross roads or switch from or to a bus, tram or metro. We monitored the children arriving at school before 8am and 9am. The afternoon monitoring was done when school ended at 12pm, 1pm and 2pm. We left 10am school starts out of this research, as with children leaving the school at 3pm, 4pm and 5pm. It should be taken into consideration that 1st and 2nd grade children may go to afternoon clubs at the school or nearby the school until 3-5pm.

URBAN AREA: KAISANIEMI ALA-ASTE

The first school we chose, Kaisaniemen ala-aste (lower comprehensive school), represents an urban school in the center of Helsinki. Kaisaniemi lower-comprehensive school, established in 1924, is situated on Puutarhakatu in Kaisaniemi, Helsinki. The school has about 390 students. The school is the local school for students living in Kaisaniemi and Kruunuhaka. The school is specialized in music and modern dace, which means that children from other areas of Helsinki also attend the school.





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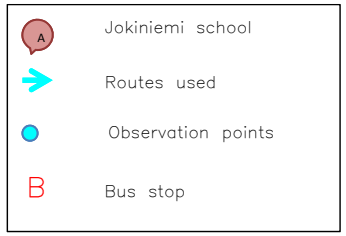
LARGE SUBURBAN AREA: JOKINIEMI SCHOOL

The second school, Jokiniemen koulu, represents an suburban school in a larger center of Vantaa. This school is situated near Tikkurila. Jokiniemi lower and upper comprehensive school has about 660 students. The school consists of three different buildings and is situated at Valkoisenlähteentie 51.



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RESEARCH FINDINGS

We had made a list of items that we felt were of importance to our observations. First point, is it a boy or a girl. How does he/she go to school, is that with the bicycle, scooter, bus, tram, metro or on foot or brought by the parents by car. Are they alone, are they with friends or is there a parent come along. If they come by bicycle or scooter wear they safety equipment? And when they cross the road they look to the left and right, they stop at red traffic lights and pay they attention at the traffic. These are points which we have given to these two different schools in three different places at different times of the day.

Based on our observations at the Kaisaniemi lower-comprehensive school we noticed that a fair amount of children were accompanied to school by a parent either by foot or by car. We saw immediately with the observation in Helsinki is that almost no children cycle to school. The large group will walk to school and there are some that go by bus and metro. Most children come alone and some of the children come to school with a parent. We observed a small group of children walking to school with friends. This happened both in the morning and in the afternoon.

For the observation in Vantaa we used the same checklist as in Helsinki, again we all took a different place. We saw a big difference with bicycle use. Here we saw more children go to school by bicycle or scooter. Many children walked to school. And less children came by bus. The environment is still busy, but less crowded than in Helsinki. Here they ignore the red traffic lights. We saw this happen when they arrived late for school. In Vantaa more children brought by parents by car. In this environment, almost every child used safety equipment when they go by bicycle or scooter. That is a big different with the safety equipment in Helsinki. We also saw that most of the children came to school alone.

We have seen a lot of children's behavior in traffic. You notice that when kids are too late somewhere they pay less attention to the traffic and run faster throught a red light. Even if they are in a group, this happens more often than when the kids are alone or with a parent. The difference with Helsinki and Vantaa is big. In Vantaa you see more children travel by bicycle or scooter to school. Everyone used a helmet and other safety equipment.

In Helsinki many children came from buses or metro stations. In Helsinki there were more children placed by parents, maybe because this is a dangerous environment then Vantaa.

CHILDREN AS COMMUTERS

Children's ability to move in traffic change as motor and mental skills develops. The differences within an age group differ vastly and depend on many aspects. The different school stages are reflected on the quality and size of a child's environment of moving. A child's height effects how visible the child is and how they are able to perceive the traffic environment. The average six year old is 120cm tall compared to the height of an average car being 135cm. Children make on average 3 journeys a day, the same amount as an adult. The distances children travel are, however, shorter.

All over the world road traffic injuries are one of the top two causes of death. The most accidents occur to children. Accident research shows that boys are almost twice as likely as girls to be involved in road traffic crashes. This difference starts at a young age and the risk grows with age until adulthood. About 5% of children have an accident during their school commute. Most accidents are never recorded as they are minor. Traffic safety or lack of it affects mostly children's active commute to schools.

There are legal age limits that effect how children move in the traffic.

- You can transport a child of maximum 10 years of age on a moped
- Under 12 year olds are allowed to cycle on the sidewalk
- A 15-year old is allowed to get a moped or tractor driving license
- A 15-year old is allowed to transport a child of maximum 10 years of age on a bicycle
- A 16-year old can get a light motorcycle driving license

For the purpose of examining children's mobility environment and how they behave, a child can be subcategorized as follows.

- 0-6 year olds: under school age
- 7-9 year olds: Independently moving in their close neighborhood by foot, bicycle or school transportation
- 10-12 year olds: Independent area expands
- 13-15 year olds: School routes become longer, public transport, mopeds
- 16-17 year olds: Independent area expands, light motorcycles

INDEPENDENT AND ACTIVE COMMUTING

The following restrict children's independent and active commuting

- Increased Traffic in the vicinity of schools
- Busy roads
- Size of the locality and efficiency of construction in the area
- Social fears (stranger danger)
- Schools may restrict how a child commutes to school
- The parents attitudes and poor habits

The following encourage children's independent and active commuting

- Good building planning that produce a socially and physically safe environment
- Good public transport networks
- Freedom to move in the nearby environment
- Diversity of the environment
- Parent's positive attitude towards physical exercise
- Other children in the area actively commuting to school

We examine children's independent and active commuting in the traffic environment, what subjects influence children's freedom to independently commute and what are the drawbacks of restricting children.

Finnish children along with other Northern European children have much more freedom to move independently in their neighborhood and surroundings, also after dark, compared to children in many other countries. In Finnish studies 99% of children return home from school independently, usually by foot. In the ideal situation a child's territory expands as the child grows and develops. The size of the locality and efficiency of construction in the area also affects a child's freedom to roam. Children who live in cities commute less independently. However building planning can produce a socially and physically safe environment in which it is not necessary to restrict children's independent moving.

Children's environment consists of interesting places and different possibilities that routes combine together. A child does not move from one place to another, but he is also interested in his environment and it is important for him to move. Two important factors in a child friendly travel environment are freedom to move in the nearby environment and the diversity of the environment. The more a child moves in his environment the more diverse he finds it. This motivates the child to move even more.

During the last few decades traffic has increased. Motor traffic has increases in the vicinity of schools, day care centers and places where hobbies are pursued adding to the parents' safety concerns. Schools may also restrict how a child commutes to school. Usually restrictions concern younger students. In many schools and municipalities, 1st and 2nd grade children are asked not to cycle to school on their own.

Social fears have become a central reason to restrict independent commuting. Stranger danger fears have increased, however in Finland fear is generally related to traffic.

A family's' habits and attitudes affect greatly how children commute. Children are more likely to actively commute if their parent's actively commuted to school as children or if they actively commute to work. Parents' positive attitude towards physical exercise increase children's mobility. Another motivator is if other children in the area actively commute to school. Restricting children's independent travel has a broader social effect. As children's area of independent commuting decreases, parents have to transport children to schools and hobbies by car. Chauffeuring children decreases a parent's free time and increases traffic.

CHILDREN'S BEHAVIOUR AND ABILITY TO COPE IN TRAFFIC

It is assumed that children who are properly trained can remain as safe as adults on the road. However,

- Children never behave as their parents have taught them
- Children's field of vision is narrower than an adults. This weakens a child's perception.
- Children find it harder to estimate a car's distance, speed and the sound of noise correctly
- Small children are not as visible to drivers due to their small size
- Children don't understand road signs
- Children are impulsive in the traffic and can't estimate danger correctly yet.(Helsinki University 2013.)

UNDERSTANDING

The traffic environment should be planned to allow user errors and not to encourage dangerous risk taking. Like adults, a child will take shortcuts, not using for example under passes. It is important for parents to teach by example. Children could be in a dangerous situation if they do not understand road signs. Children may misunderstand the road signs, for example the "children playing" could be misinterpreted to mean that children should run when they see the sign. In addition to the misunderstanding of signs, some children do not understand common traffic terms like: walk against traffic, vehicle, and refuge. If children do not understand these signs and terms they may put themselves in danger because of a misinterpretation.

VISION

Children cannot see objects approaching the side as quickly as adults. Children do not process what they see and hear as well as adults do. Their lack of experience causes perceptual difficulties resulting in uncertain reactions when confronted with traffic. Children have a third narrower peripheral vision than an adult. They also have trouble judging the speed and distances of approaching vehicles and some very young children cannot differentiate between moving and stopped or parked vehicles.

HEARING

Children may struggle when trying to localize sound coming from the traffic. Children cannot accurately detect sounds from the side. The side is where most traffic noises come from on the road so children could have a difficult time detecting a dangerous situation that an adult could easily hear.

III

WEBSITE

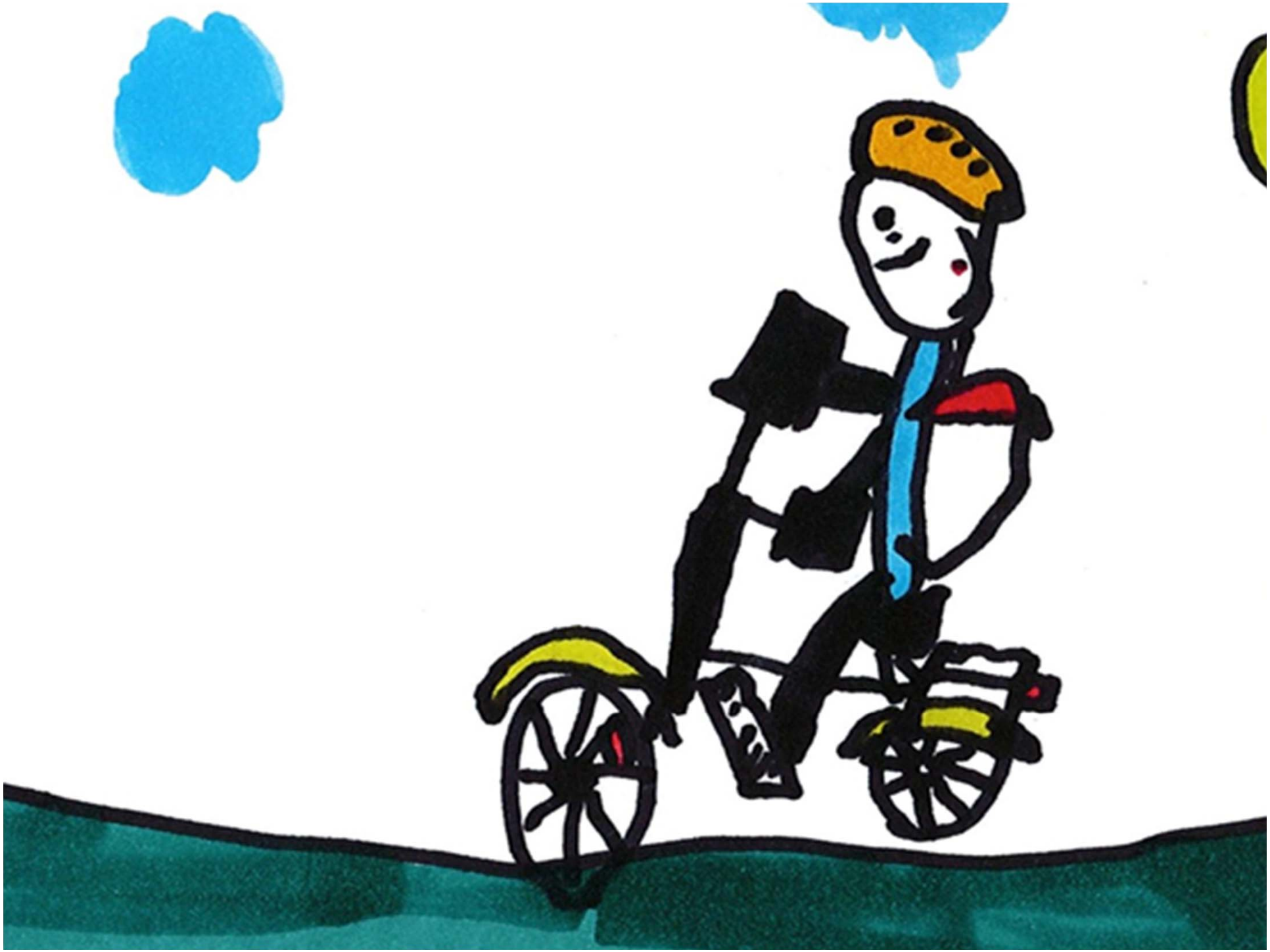
Why a Webpage?

Koulupolku.fi

Website Layout and Design

Traffic Awareness Websites and Research

School Path, Kids, Parents and Schools



WHY A WEBPAGE?

The webpage was the first method to inform the schools., children and parents about the School Path. In the age of information technology, it is expected that information is found on-line. When we started planning the website we decided, that the webpage needs to have more information than just the School Path. We wanted to make the website interesting for children, so that they will return many times to the website. Therefore we wanted a kids page with games. We also wanted something for parents. If they are coming to view the school path, they will want to find information about making their child's school commute as safe as possible. The schools are an important group to inform children and families about the School Path, so they should have their own page.

We made a website prototype with some examples of the pages. Our website prototype can be view at http://monicacot0.wix.com/schoolpath

KOULUPOLKU.FI

The webpage is divided into four parts: Students, Parents and Schools, and the School Path.

Students

- Informing children of dangerous areas and how to be safe
- Videos
- Games
- Traffic club
- Songs

Parents

- Advice for parents
- LAD -link
- Research on traffic safety
- Planning information in the area

Schools

- Traffic school
- Material to use for traffic education

School Path

- What the School Path is
- How it is used
- Different School Paths by area with a Map and information

The purpose of the website is to inform about the School Path. In addition the website should also educate children, parents and road users on how to make children's school commute as safe as possible. The reason for this is to have a one stop website where it would be possible to obtain all the necessary information that is needed. This way the webpage would be visited more frequently. The website also provides teachers and schools with material and useful links to be used in traffic education events. The Koulukierros 2002 website for the Jämsä area is similar to the website that we are planning. It has area specific information combined with general traffic safety information.

The website would be maintained jointly by Vantaa City and the schools. Vantaa City would maintain the general pages, the school would maintain the pages exclusive for that's schools School Path.

The website consists of four parts. There is an info page about the School Path, what it is, how it is used and specific information on the areas School Path. This part of the website would be maintained by the schools. The other three are generic pages for school children, parents and the schools. These pages could be used by anyone in any region.

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WEBSITE LAYOUT AND DESIGN

Clear information
clean and simple
Easy navigation
Happy mood
Bright colors
Interaction

When making a child friendly website certain elements keep children interested. The website should inform visitors clearly where they are, what they can do there and why they should stay. The design should be clean and simple. The navigation is the most important thing you design and should be detectable as soon as the web page loads.

Kids will remember and return to a website if it creates a happy mood. This can be achieved by using bright colors, elements from nature and design that lets a child's imagination run wild in a world that looks and feels real. Navigation needs to be oversimplified. Children want to interact by playing and being entertained. Videos, games and printable elements entertain and educate children.

The Marja-Vantaa city planning want to take children into the development of the area. This would be visible in the webpages by having children's drawings as a big part of the graphic image. There is also an element of school in the graphic image of the website as the main pages on the site are set up to look like whiteboards and blackboards.

TRAFFIC AWARENESS WEBSITES AND RESEARCH

Several organizations have webpages that inform and educate the public on road safety. They have materials for schools, parents and children. The idea of the School Path website is not to replace any of these websites or to compete with them. The purpose of the website is to inform about the School Path. The website would have links to good traffic education websites and useful information and documentation. The idea is, that it is possible to find all the information from the School Path website and use material that is already available.

Liikenneturva has a vast website about traffic safety concerning children. They have information and material for teachers and schools to use in education children. Children have their own Turvapupu.net and Vili Vyötiäinen websites with games and information. They advise children and parents on how to make children's school routes safer.

Poljin is a website that promotes cycling. On their website there are lots of links to other websites and projects concerning children's safety on their school route. The links however have not been updated and a lot of the foreign material can not be accessed.

There are several Finnish researches that have investigated children in the traffic, how they behave and their safety. The Finnish Transport Agency conducted a research called "Uudenmaan tiepiirin koulujen liikenneturvallisuusselvitys" on the traffic safety around schools. They completed a research on 1st to 6th grade elementary schools' traffic safety in 2004. The aim was to improve children's traffic safety especially on school routes in light traffic areas. The research concentrated on problems on roads in the vicinity of the school area. The main point was to suggest cost-efficient ways to improve road safety in a short time span. The most common suggestions concerned lowering the speed limits and using speed bumps and painting attention stripes on to the road. Another efficient way to improve safety is to have higher pavements, painted pavement sides and a pedestrian crossing island.

Vantaa city conducted their own investigation concerning the road safety around school areas using Suunnittelukeskus Oy. In the research they investigated elementary schools in the Vantaa region that were not in the tiepiiri investigation. They found more than 200 improvements, half of which were of high priority. The research concentrated on improving already existing roads. The improvements included pedestrian crossings, parking areas, drop off zones and turn points. Suggestions included adding road signs, clearing vegetation to improve visibility, adding speed bumps, traffic lights and islands by pedestrian crossings.

On the Move – programme conducted by LIKES (Foundation for Sport and Health Sciences) researched how to incorporated one hour of physical activity into the school day. The project has many different aspects to it from theme days and day trips to activity clubs and recess activities. The programme planned campaigns to encourage commuting to school by foot or by bicycle. In the pilot schools school travel theme days were organized.

At present the School Path is planned for the Marja-Vantaa area, but we are designing the website to accommodate several routes. Each school or route would have it's own page under the School Path drop selection that takes the user to that particular School Path. The page would include a map of the School Path with information and pictures of the route. There would be information of walking school buses in the region. With the possibility for users to inform others of walking or cycling school buses that they are running. The page is designed to be interactive, so that people can write comments and exchange views. It would be a way to inform the public of construction work or anything else that might disrupt children's commute.

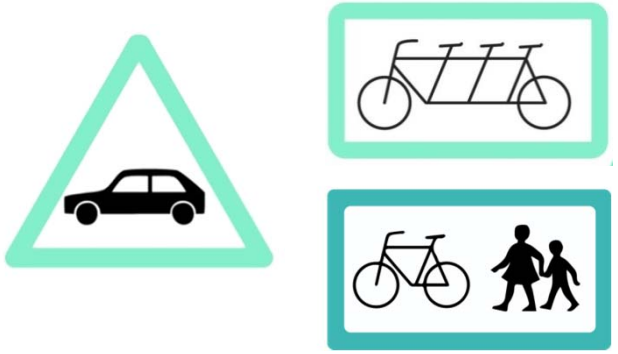
SCHOOL PATH

KIVISTÖ SCHOOL PATH

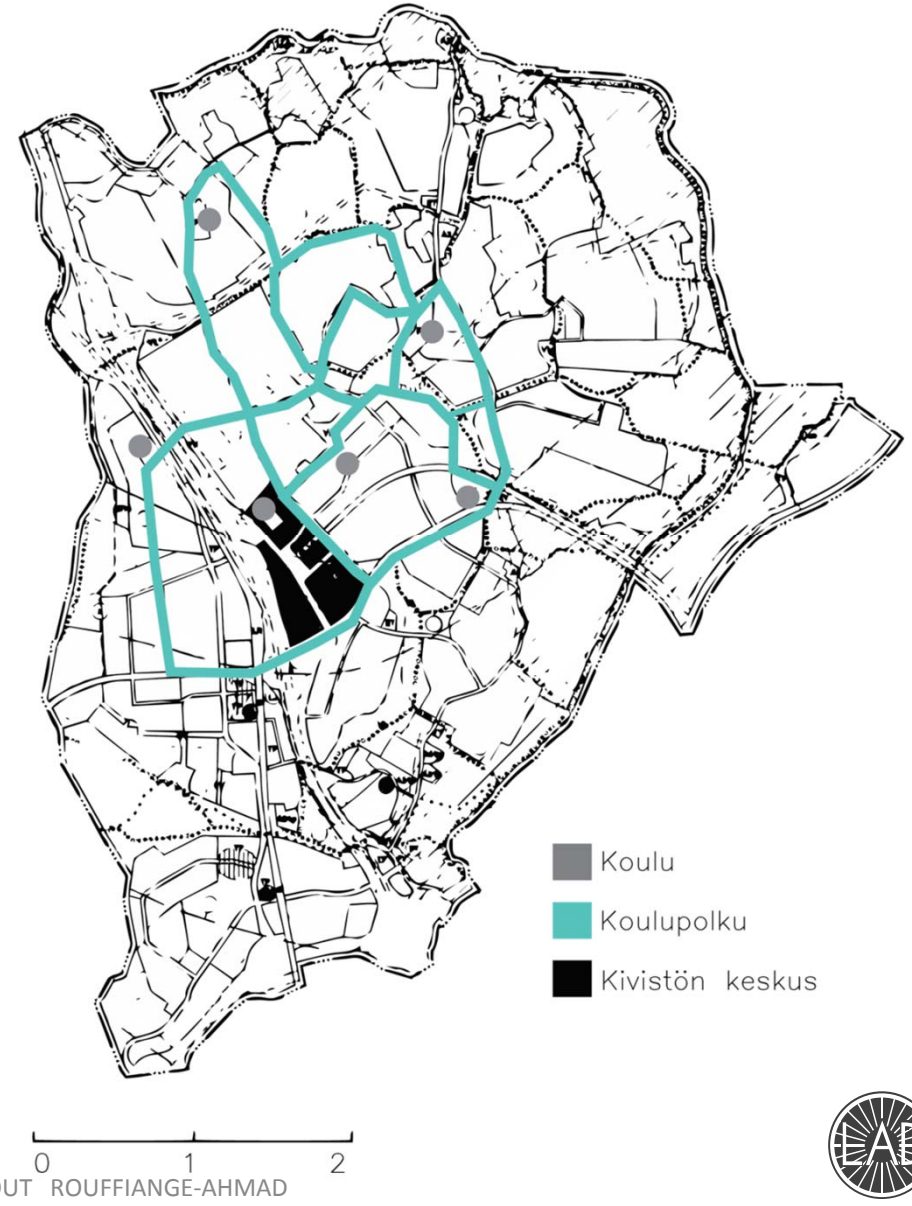
The School Path page informs the public about the school path, what it is and how it is used.

The School Path is a service designed for the lower comprehensive schools, Kivistö and Kannisto schools, and future schools in the Kivistö area. It ensures a safe and enjoyable school route all year round. The School Path is a cycle route that can have a pedestrian walk way connected to it.

Although the School Path is primarily mean for lower comprehensive school aged children, the School Path can also be used by other users: elderly people and people doing sports.



Kivistö school path, simplified 16847m



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PLANNING A SAFER SCHOOL ENVIRONMENT

PLANNING THE ENVIRONMENT

The location of the school, how it is governed and it's operational culture can affect how much children actively commute to school. The distance to the school is important factors encouraging or hindering active commuting. When planning new schools the location of the school in respect of traffic routes and residential areas is important. About 40% of the traveling that children do is to and from school.

Children's traffic safety can be improved in several ways. Firstly it can be improved by planning the environment so that it will be safe for children to use. The area around the home is the most important area where a child moves. The importance of planning a safe traffic environment is highlighted near homes, daycares, schools and sports facilities. The best situation would be to take children into account when making the zoning plan. To improve traffic safety both the improvement of the traffic environment and attitudes is needed.

Independent travel can be supported by improving public transport routes, improving the school route lighting and with better winter and summer maintenance. During the winter months it is important that snow clearing from school routes is a top priority and making sure the walk ways are safe to use.

PAVEMENTS

Pavements are used by pedestrians, cyclists and people driving with scooters. Safety is improved by making walk ways wider without obstacles. Visibility and clarity need to be improved. In the summer this means cutting bushes, in the winter clearing away the snow. Cycling and moped lanes should be separated from pedestrian lanes due to the differences in speed .

In suburban areas there should be safe school routes with in a 3-5 kilometer radius of the school. If a pupil's school, preschool or supportive study journey is longer than 5 kilometers or if the child's age or other factors make the journey too difficult, strenuous or dangerous, the student has a right to receive free school transportation.

SPEED LIMITS AND SIGNS

The stopping distance of a car is longer when the speed is higher. Therefore there is less opportunity to avoid an accident. The speed limits near schools and daycares are often dropped to 30-40 km/h. Children are our most vulnerable road users, when they have an accident with a car that drives 30 km/h the chance of survival is bigger than if the car drives 50 km/h. Because of children's unpredictability and their small stature, they can be hard to see, there for speed needs to be reduced to 30 km/h in areas where children play.

Speed can be controlled by adding speed bumps, making the roads narrower in places and adding islands. Islands can also stop cars from overtaking buses when a bus is at a bus stop. In areas where the speed limit is 50 km/h there should be traffic lights. Minimizing children's need to cross roads would be ideal.. Signs of children playing are used to draw attention to the change in speed.

CAR DROP OFF ZONES

Children's independent travel can be encouraged by designing school areas so that the car drop off zone is further from the school. This will not only improve the safety around the school area, but will enable children to walk a short part of the school journey independently.

With the School Path in place, parents could drop their children off at a safe place by the route instead of taking children all the way to school, thus increasing children's mobility and reducing traffic around the school area.

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CYCLING AND WALKING SCHOOL BUSES

A cycling or walking school bus is a group of children travelling the school route together by foot or by bike with an adult leading the group. The shared journey is called a “school bus” because the route is predetermined and has a timetable. The “bus” travels past meeting point “stops” from which children can join the “bus”. The aim is to improve children’s physical activity and to make the school route safer. In addition children learn how to move safely in their environment and encourage healthy and sustainable ways of travelling. This system is also used for travelling to and from hobbies. The school bus system is run by parents, grandparents, teachers and activity organizers. The Liikkuva Koulu program's has a cycling school bus pilot program.

On the School Path there are walking and cycling school bus stops where children and adults can meet up with one another. The stops are marked with the school bus sign.

KIDS

Children are able to navigate on their own, so the page is simple and easy to use.

Children can interact by playing and being entertained

The page includes:

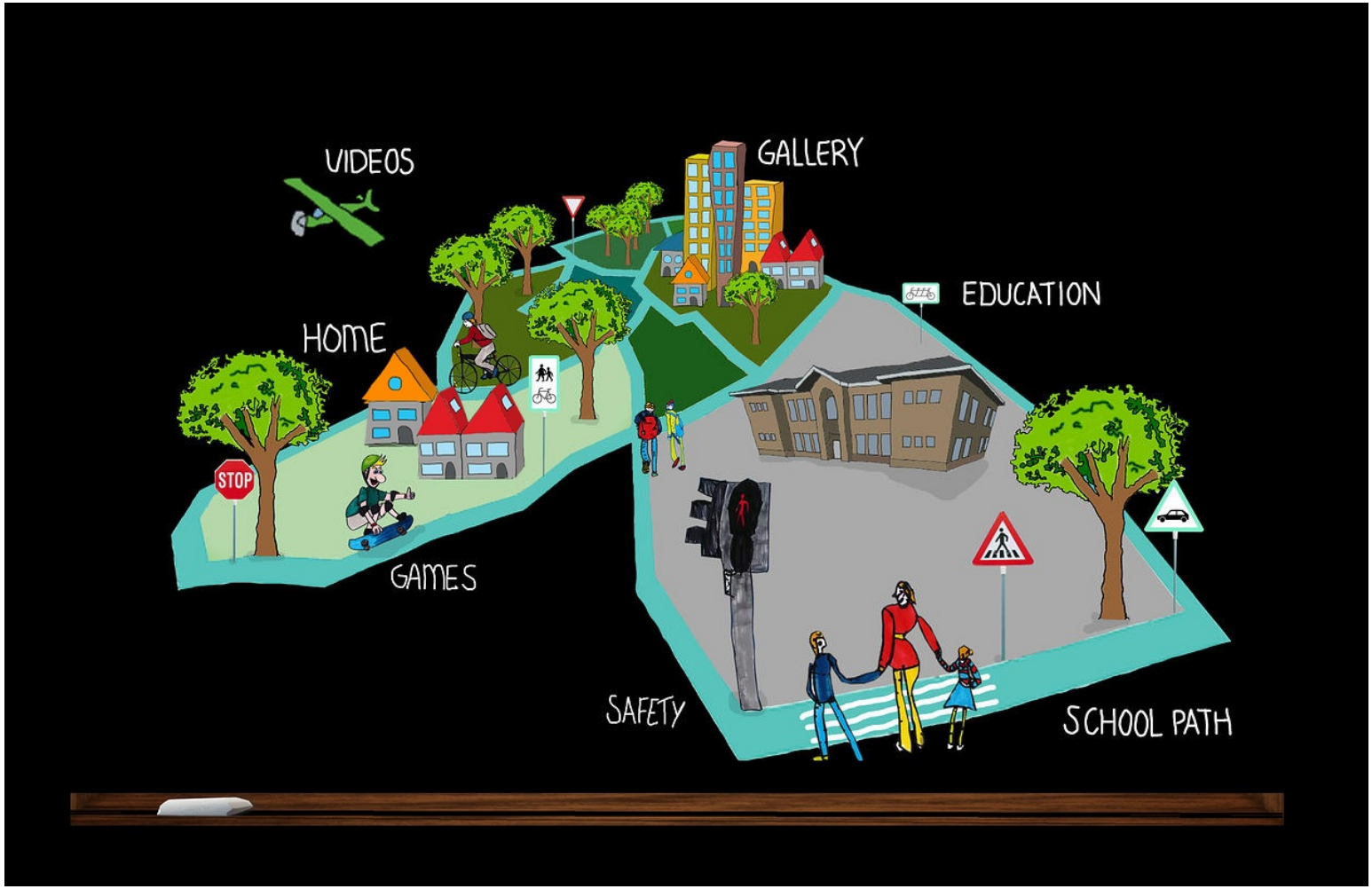
- Videos
- Games
- Printable elements
- Education material
- Links to other websites

The kids page is important as one of our goals is to provide traffic education and get kids excited about the School Path.

We have planned that the children's page is interactive. We examined other websites including traffic education websites for inspiration. One of our inspirations was the Traffic Club website in the UK that has games, songs and videos for children and a parents page. The School Path website would have videos, games and printable elements for children. In addition there would be fun educational material about street signs, traffic safety, how to maintain your bicycle, why it is important to use a bicycle helmet and reflectors. A lot of this material already exists online, so the purpose would be to collect the best ones into one place where children can easily find them.

VISUAL IMAGE

The kids page has a blackboard background with the buttons written in chalk. The map is of the actual Kivistö School Path with elements drawn by children.



GAMES

The website would have several games for children to play. Children learn through play and interaction.

We examined several traffic related websites that have games and education for children. Most of these games are aimed for small, preschool aged, children. Therefore we have come up with some game and test concepts for the website that are aimed for different aged children. The game concepts we have designed are complementary to the ones that are already available. We have examined different types of gaming websites and games for inspiration. Lego and Pikku Kakkonen have good graphics and easy games that children enjoy to play.

There are also links to other traffic games on other webpages.

GAMES ON OTHER WEBSITES

There are a number of traffic related websites, games and programs for children.

Maltti ja Valtti is a traffic education program on Pikku Kakkonen. The Pikku Kakkonen website offers Maltti ja Valtti games and films. It is aimed at small children. (http://yle.fi/pikkukakkonen/#!/maltti-ja-valtti)

Turvapupu.net is a Liikenneturva website for kids. There is information, pictures and videos, games and drawing gallery.

Vili vyötiäinen is another Liikenneturva website for kids with games and tests. http://www.liikenneturva.fi/buddy/fi/default.html

Liikenneturvallisuuspeli board game can be downloaded for free from the Liikenneturva turvapuoti website. The questions are aimed for over 10 year olds. http://www.liikenneturva.fi/www/fi/turvapuoti/liikenneturvallisuuspeli.php

GAME CONCEPTS

TRAFFIC ENVIRONMENT GAME

This game is targeted for 7-10 year olds. The aim of the game is to create a safe traffic environment. In the game there are given objects like cars and roads. The player creates safe cyclist and pedestrian walkways, adds lights, crosswalks, underpasses, traffic lights and parking places. The environment can be made more attractive by adding benches, trash and recycling cans and rest stops. Players need to create a safe neighborhood and solve the neighborhoods traffic and safety problems. Once this is done, they pass on to the next neighborhood. In following levels, policemen, traffic directors and other street patrol can be added. The neighborhoods can also be connected to one another.

The inspiration for this game has come from games such as SimCity, Roller Coaster Tycoon and Minecraft.

CYCLIST DRIVING GAME

The cyclist driving game is inspired by driving theory tests and the hazard perception test. The game has two age groups. The beginners game is for 5-9 year olds and the advanced for 10-15 year olds. The child can test his cycling and perception skills without putting himself in danger. The game has about 10 levels each. In the game, the player can choose his bike and adjust his handlebars and seat. The player cycles in different situations, the screen shows the view the cyclist has while biking. The player needs to click on the screen when he sees possible hazards. The game would also include a test with multiple choice questions. After completing a level, the player receives a diploma. The game encourages safe cycling in a fun way.

SALLY GOES TO SCHOOL

This game is aimed at small children (approx. 4-8 year olds). The objective of the game is to get Sally to school safely. The game goes along school routes and stops ant certain points. When Sally stops, a choice will come up and the player needs to choose the right option. The game will teach young children traffic safety judgments.

TRAFFIC SIGN QUIZ

On the website there will be pictures of all the most common and important road signs for children to learn. A quiz tests children's traffic sign reading skills. There is a beginners and an advance quiz with multiple levels. When a level is passed, the child receives a certificate.

VIDEOS

This page would include traffic safety video material for children. For example Liikenneturva have some educational films. Youtube also has videos on traffic awareness. Jämsä city made a video of their area, that teaches children traffic awareness in an environment that they know (Koulukierros 2002, 2.10.2013). We would suggest that this would also be done for the Kivistö School Path and any other future school paths.

EDUCATION

The education page has information about road signs and traffic rules. This page would have links to useful pages mostly on the Liikenneturva website. The intention is not to create new material, but to use already available material.

GALLERY

The website would have a gallery for children's traffic related artwork.

SCHOOL PATH

There is a link to the School Path page.

SAFETY

The safety page has information about using reflectors and bicycle helmets. During our research we noticed that a lot of children don't use cycling helmets. The page would also have information about bikes and scooters and how to check that they are in a good condition to use. There would be a bike maintenance check list for kids. The page would have educational material on the subject of safety, but also fun craft ideas for children to do. There would be instructions on how to make your own reflectors and how to customize your bike, scooter, bike helmet, backpack and clothes. (Appendix 3)

There is a page designed particularly for parents. It has useful information collected from other websites and from our research. We have examined the Liikenneturva website and Poljin ry webpage. The idea of the website is to collect everything on to one place.

The page includes:

- Information about Children and Traffic
- Advice on how to keep you child safe
- Printable check lists
- LAD project
- Links to other websites and research

PARENTS

HOME LAD RESEARCH LINKS ADVICE

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ADVICE FOR PARENTS

The Parents page would include advice on how to make your child's school route safe. Here are a couple of examples of this information.

TEACH THE SCHOOL ROUTE

Parents should teacher their children a safe route to school well before the child starts to use it. The safest route may not be the fastest route. The child should use the walk ways and the pedestrian crossings, underpasses and bridges along their routes even if this makes their school route longer. Parents should ask their children about how they would act in different situations to find out in which areas the child still need support. A child starting school may not yet be able to distinguish between right and left. Crossing the road is the most dangerous situation. If there is no pedestrian crossing a child has to cross the road at a place where there is good visibility on both sides. It is important that drivers are able to see the child. Children need to be taught to be cautious also on pedestrian crossings as children trust other road users too much. Especially when travelling in a group, children may think that others are also caring for his safety. Parents should consider whether a child ready to cycle to school. Are a child's cycling skills good enough and is the route safe enough.

Advice to drivers in school zones

Children deserve special attention when it comes to road safety. They are the most vulnerable group on public roads. Usually they are inexperienced and they feel a little insecure. Children can make unexpected movements or fall. Children often don't pay enough attention and don't look out for the cars, there for they may run out in front of a car suddenly or they may come behind the cars. Because the concentration by young children is undeveloped, they can't do several things at once. Therefore, extra caution is required when a driver is approaching children. When approaching a school zone or play area, it should be kept in mind that children play there regularly. It's important that these a zones are driven with a slow speed.

When passing a school area: **SEARCH** the school zone environment; **IDENTIFY** any possible hazards or predetermined hazards such as children walking too close to sidewalk; **PREDICT** the worst course of action the children might take such as abruptly crossing the street or crossing it between moving vehicles; **DECIDE** what you will do such as maintaining a safe following distance, slowing down a couple of kilometers even though you are driving within the speed limit, and paying full attention to the school zone environment; and finally **EXECUTE** your decisions.

CHECK LISTS

There are a number of useful checklists for parents and schools to use to ensure children's safety. (Appendix 2)

LAD AND RESEARCH

On the parents page there would be a links to the School Path projects done on the LAD project. There would be information on the project.

LINKS

The purpose of the parents page to enable parents to find all the information they need quickly and easily.

SCHOOLS

The page includes:

- Traffic education materials
- Ideas for traffic education
- Links to other websites

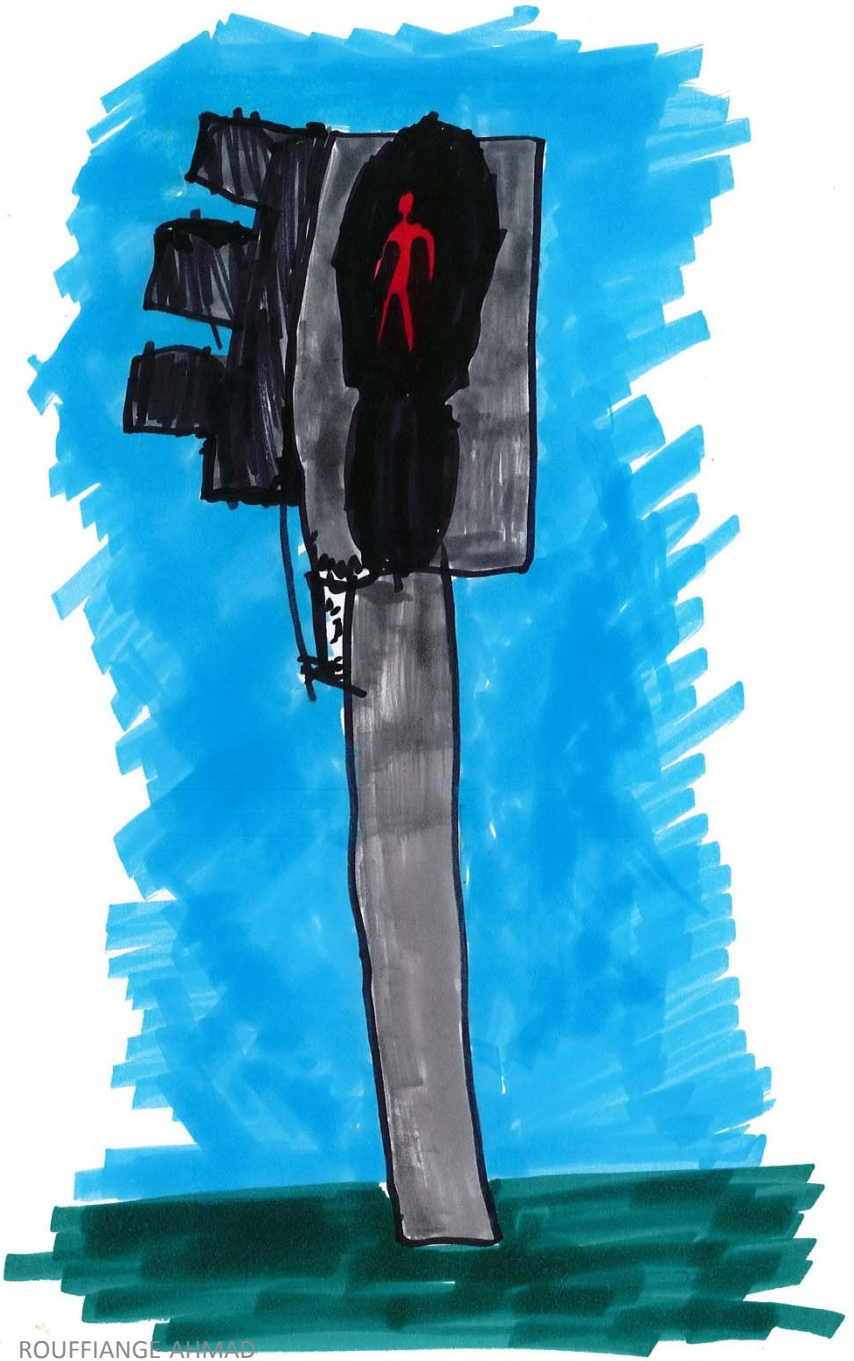
The School page includes material for schools to use for Traffic Education (Appendix 1).

In our project we plan how traffic awareness education can be incorporated into the School Path website and pamphlet, so that they can be used as education material both at schools and at home.

TRAFFIC AWARENESS

Children need traffic awareness education as creating a safe environment is not enough. Children's traffic education needs to be increased. The school curriculum includes traffic awareness basics. However, it is up to the school how they implement it into their studies. Traffic awareness can be taught in environmental studies and physical health studies. Some schools organize Traffic Awareness Days or events. The content differs from school to school. In some cases it is the parent council that organizes the event.

The website would have links and material that could be used in traffic awareness education and themed days. We suggest that a video is made of the Marja-Vantaa area from a traffic safety point of view so that children would learn using a familiar environment. Schools could use the School Path maps and information to inform children on how to use it.



EVENT CONCEPTS

When planning an event you should take into consideration

- the students age,
- what kind the traffic environment is,
- the students' experiences,
- what their mobility needs are
- The student's individual skills

Liikenneturva has a vast website with lots of material on traffic education. For lower comprehensive aged children there are traffic education material and action ideas with subjects concerning visibility in the dark, what do the traffic signs mean, how to move safely in the traffic, cycling, how to maintain your bike, and so on. They have material for all age groups.

In addition to the Liikenneturva traffic safety event suggestions we have planned some events based on traffic safety events in other countries.

BICYCLE EXAM

In the Netherlands every child learns at school the traffic rules. Children in the sixth grade have a long bike ride in the area surrounding the school. First everyone has a theory lesson, in which the children learn the meaning of the signs, how intersections work, when to extend your hand, how to correctly use pedestrian crossings and roundabouts. After the theory lesson, everyone cycles. The "police" test the bike's safety (working lights, working brakes, are the tires hard enough etc.). Every child wears an orange or yellow vest with a number on it. All children cycle the same route. There are signs on the sides of the roads to help the children with the route. The children practice to deal with different types of situation and have to respond to them correctly. On almost every street corner there is a volunteer or parent, who notes the child's number and how the child behaves in the traffic. When the children arrive at school, there is a "diploma" ceremony.

MERCEDES-BENZ ROAD SENSE

The Mercedes-Benz Driving Academy Road Sense has set up an interactive traffic program . The program is scientifically based and based on recommendations of the European Commission. Road Sense allows young people to critically reflect on the theme of road safety. This happens in group discussions, exercises of risk in the so-called safety laboratory and practical exercises. That last part is appealing because the students ride in a car itself on a closed area with a professional instructor from the Mercedes-Benz Driving Academy.

Young people often remain devoid of traffic education, as there is a gaping hole between the traffic education in lower elementary school and the start of the driving courses at 17 - 18 years. This education is for students around 14 - 16 years.

The Road Sense course last the whole day and consists of three parts:

- Discussions

  What role do emotions play in traffic? What is the effect of the group on the choices of the driver? Or those of the passenger? Groups discuss their experiences. Students gain insights that they can use immediately in daily traffic.

- Practice exercises

  Professional and specially trained driving instructors do practice exercises with the students on a closed parking location. How is the driver distracted by passengers? How can luggage be securely anchored?

- Safety Laboratory

  Safety systems are an important tool, but the driver and passenger(s) remain responsible for road safety. How can you assess risk, reduce it and prevent it?

IV

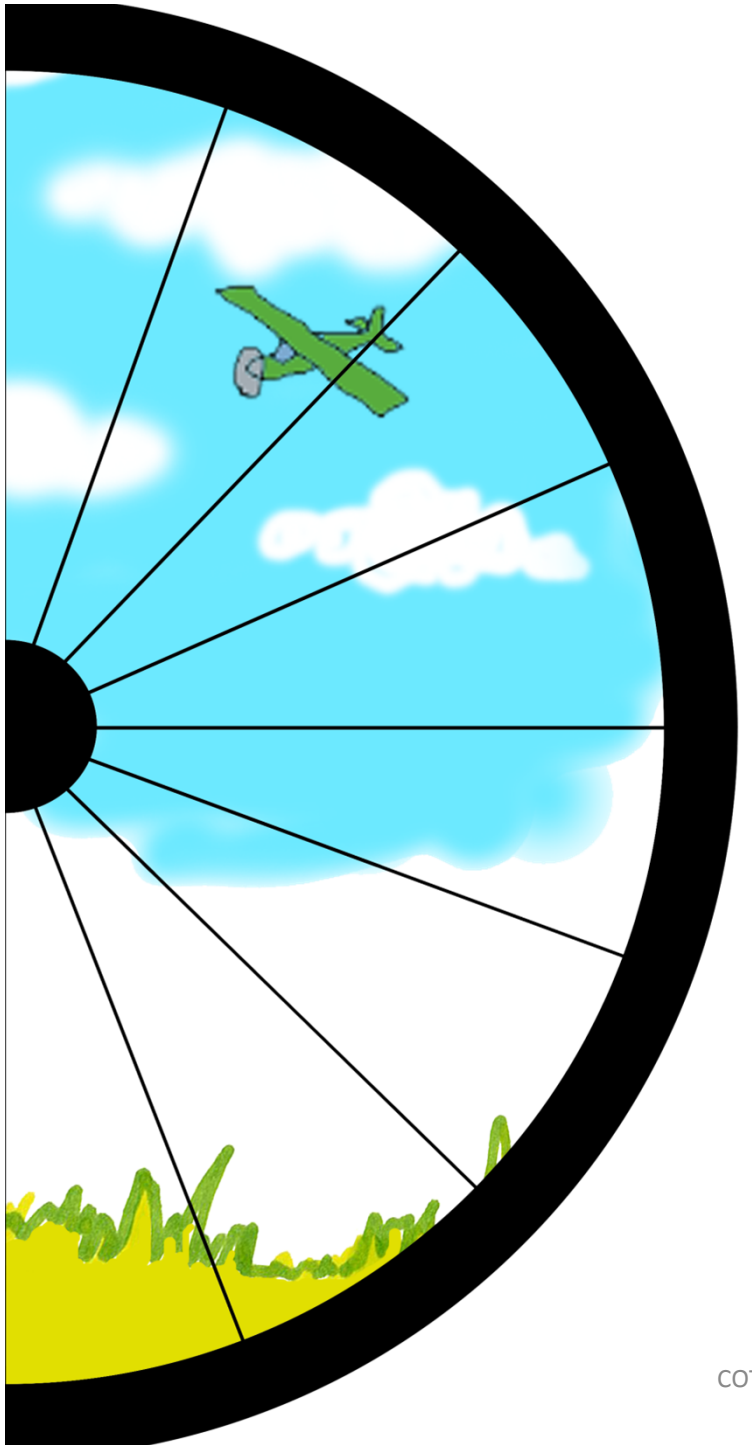
PAMPHLET AND POSTER

Pamphlet

Pop-up Pamphlet

QR-code

Poster

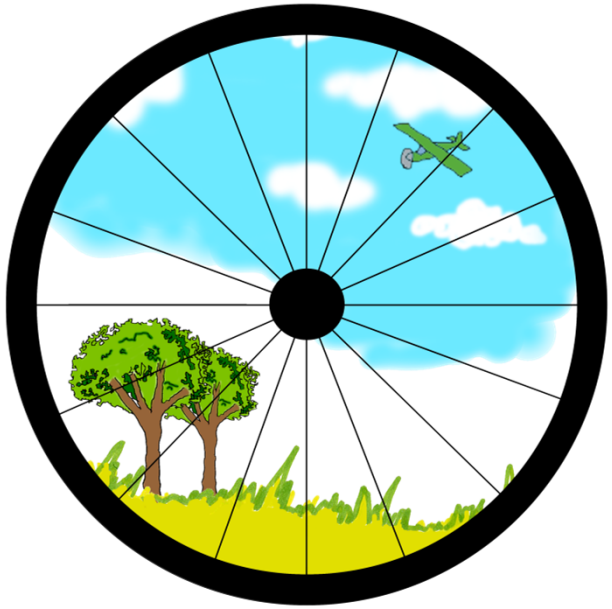


PAMPHLET

We decided to design a pamphlet to promote the School Path website. We decided that a pamphlet is an easy way to share information and inform people about the website. The pamphlet has basic information concerning children's traffic safety in addition to informing the public about the School Path. It would include a map of the School Path, some light information of it. In addition to the website address there is a QR-code on the pamphlet. We have targeted the pamphlet to school children. Therefore the pamphlet needs to attract lower comprehensive school aged children. The pamphlet is to be given out at school and events. Schools can put out pamphlets on to tables for children to examine during lunch breaks.

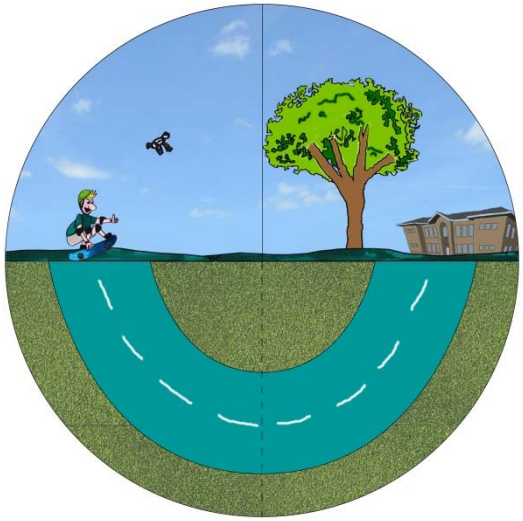
IDEA

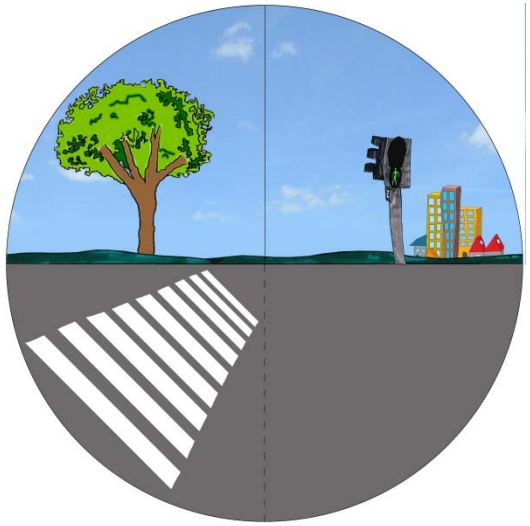
We got the idea for the pamphet from pop-up books and cards. We wanted to design a pamphlet that is memorable and fun. The idea is that the pamphlet can be opened up so that it can stand on it's own.

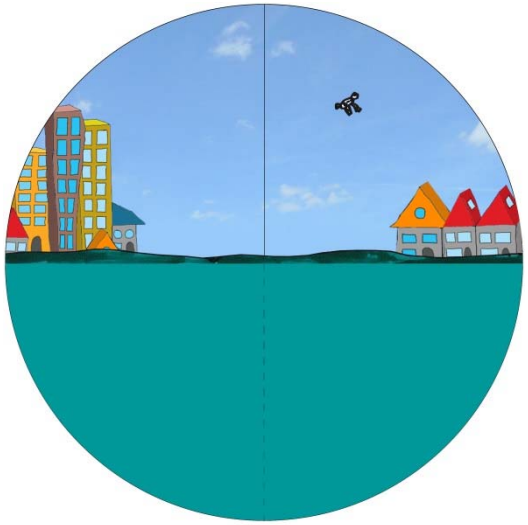


POP-UP PAMPHLET

The pamphlet is made up of five circles that are folded and glued together to form a cylindrical accordion than opens up.







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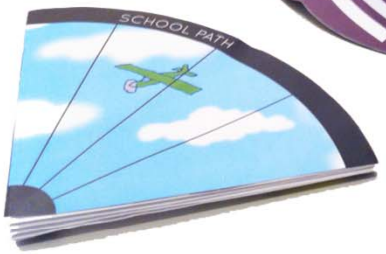

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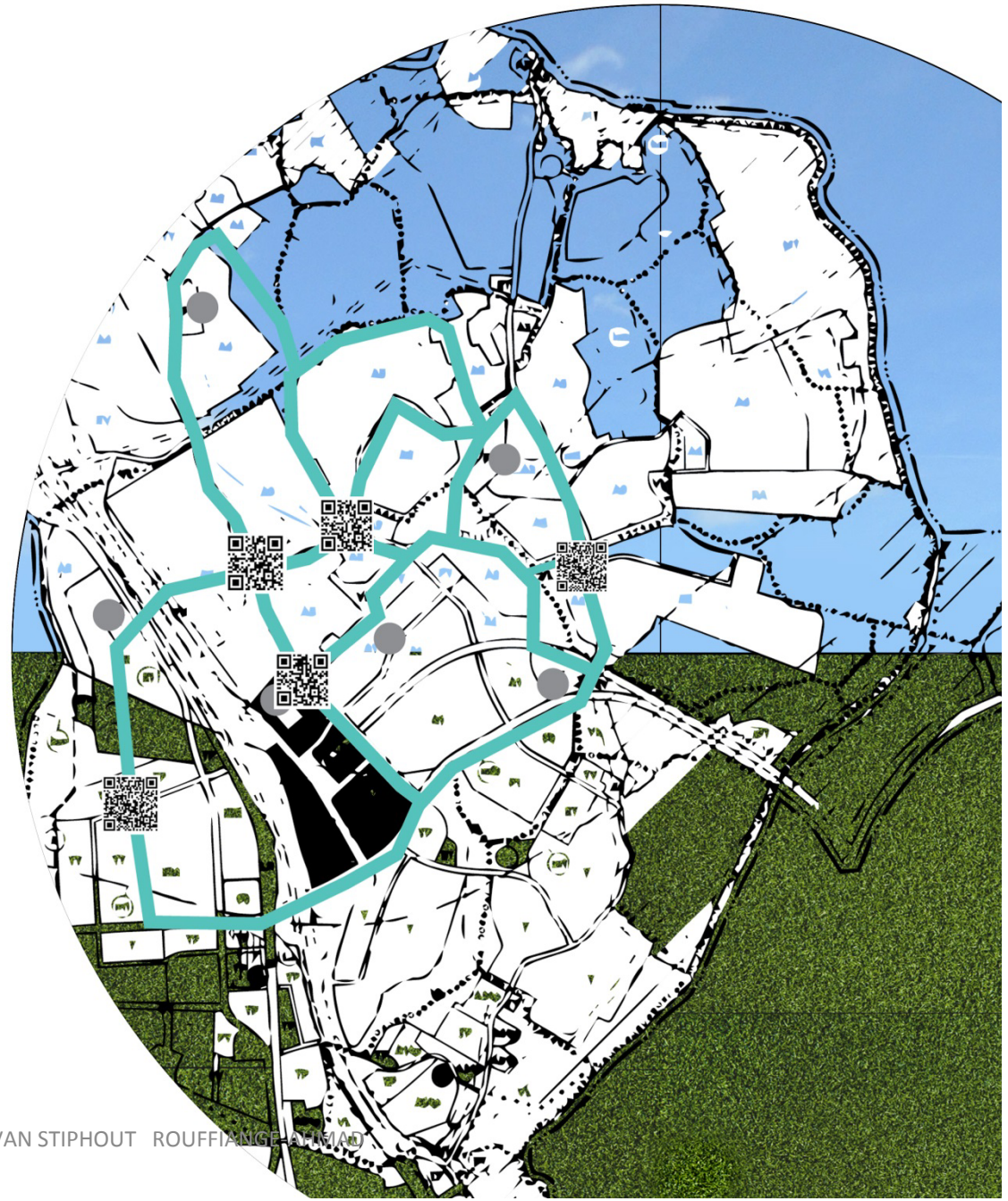
QR-CODE

QR-codes are a fun way of engaging young people. The QR-code is photographed with a smart phone and it opens up a webpage on the phone.

We are using QR-codes on the pamphlet. One of the codes links to the website. On the pamphlet there is a map of the School Path with QR-codes. By scanning the codes, it enables you to get further information on particular areas with photos.

The idea is to get children interested in the pamphlet by having it interactive in this way. By making the pamphlet more engaging, it increases the likelihood that the pamphlet will be examined and the website will be visited, thus children will know of the School Path and where to get information concerning it.



HOME SNAPSHOTS KIVISTÖ LINKS KIDS

SNAPSHOT 2

This is the school path route. The children are able to safely cross the road at this intersection by following the turquoise path and school path signs that are outlined in the same color.

By scanning the QR-codes, you are taken to the snapshot pictures on the website. The snapshot is of a particular area on the map and there is information on those particular places.

POSTER

In addition to a pamphlet, posters are an efficient way to attract attention.

The poster would be on display at schools, youth centers, sport centers, libraries and different types of happenings. We propose that it would be a size A0 or A1. In some cases A2 size maybe needed.

The poster is aimed at children and displays the School Path map with QR-codes, a QR-code for the website, and information about the School Path.

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The School Path connects homes and schools. It is a safe and fun way to come to school in the mornings and go home in the evenings.

The text on the poster would encourage children to go on the webpage, try out the QR-codes and to be curious about the School Path.

WEBPAGE

Scan the QR-code and visit the School Path webpage! There are lots of cool pages for you, your parents and your teacher to see.

The School Path informs you about the School Path near you.

Find games, videos and craft ideas on the kids page. Learnabout traffic signs and how to take care of your bike.

Tell your teacher about the page for schools. Plan a traffic education day at your school. Get some ideas from this page.

Are your parents worried about your safety. Tell them about this page.

Visit the website by scaning the QR-code.

SCAN THE QR-CODES

Check out the School Path! Do you know where the walking and cycling school bus stops are? Ask your parent to drop you off at a drop off zone. Find out the safest place to cross the road.

By scanning the QR-codes with your smart code you can see photos from the area. Read about these areas. Talk about them with your friends and parents.

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V

SOURCES AND APPENDIX

Appendix

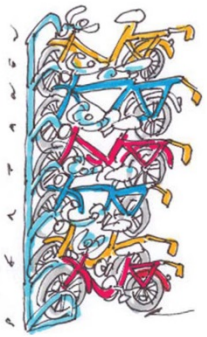
Sources

APPENDIX 1: CHECK LIST FOR TEACHERS

TARKISTUSLISTA KOULUN LIIKENNETURVALLISUUSTOIMIA VARTEN

OPETTAJILLE

KOULUN LIIKENNETURVALLISUUDEN TARKISTUSLISTA	asia on kunnossa	asia ei ole kunnossa	asia ei liity omaan ympäristöömme, muita kommentteja
1. Koulun piha-alueella:			
vanhemmille on järjestetty paikoitusalue lasten tuomista ja hakemista varten			
kouluaikana autoilijat eivät aja koulun pihaan			
oppilaiden välituntialue on eristetty autoilta			
opettajille on järjestetty erillinen paikoitusalue			
polkupyörille on riittävästi telineitä			
koulukuljetusautot ja retkibussit eivät aja oppilaiden välituntialueelle			
huoltoautot eivät aja pihalla välituntien aikana			
oppilailla on autoista erillinen sisäänkäynti pihaan			



2. Koulun lähiympäristössä:			
oppilaat voivat käyttää kevyen liikenteen väylää			
koulukyytiläiset voidaan tuoda ja hakea siten, että he eivät joudu ylittämään katua			
vanhemmat voivat jättää lapsensa siten, että lapset eivät joudu ylittämään katua			
kouluun pääsee lähimmän kadun alitse/ylitse			
koulun lähikaduilla on 30 tai 40 km/t nopeusrajoitus			
kouluun johtavalla kadulla on töyssyjä			
kouluun johtavan kadun suojatie on oikeassa paikassa			
kouluun johtavalla kadulla on korotettu suojatie			
lähikadun liikennevaloissa on jalankulkijoille oma vaihe			
kouluun johtavalla kadulla ei sallita läpiajoliikennettä			
kouluun johtavalla kadulla ei sallita raskasta läpiajoliikennettä			
koulun ympäristössä on tarpeelliset liikennemerkit			

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KOULUN LIIKENNETURVALLISUUDEN TARKISTUSLISTA **3. Oppilaiden toiminta:**	asia on kunnossa	asia ei ole kunnossa	asia ei liity omaan ympäristöömme, muita kommentteja
oppilaat käyttävät koulumatkoillaan turvallisia reittejä			
oppilaat käyttävät pyöräilykypärää			
oppilaat käyttävät heijastimia			
oppilaat käyttävät koulukuljetuksessa turvavyötä			
oppilaat käyttävät vanhempien kyydissä turvavyötä			
oppilaat käyttävät suojatietä			
oppilaat käyttävät ali/ylikulkua			
oppilaat noudattavat liikennevaloja			
bussin edestä tai takaa ei kuljeta kadun yli			
oppilaat eivät leiki ajoradalla			

4. Autoilijoiden toiminta:			
autoilijat noudattavat kieltoa koulun pihaan ajamisesta			
autoilijat eivät peruuta oppilaiden joukossa			
koululaisautonkuljettajat huolehtivat lasten turvavöiden käytöstä			
oppilaita kuljettavat autoilijat käyttävät turvavyötä			
autoilijat eivät aja ylinopeutta koulun lähikadulla			
autoilijat noudattavat koulun lähistöllä liikennevaloja			
kääntyvät autoilijat väistävät liikennevaloissa koululaisia			
autoilijat antavat tietä suojatietä ylittäville oppilaille			

5. Paikallisia ehdotuksia:

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APPENDIX 2: CHECK LIST FOR PARENTS

KOULUMATKAN VAARANPAIKKAKARTOITUS

VANHEMMILLE

Tällä lomakkeella selvitetään lapsesi koulumatkan mahdollisia vaarallisia paikkoja kuten katuja, risteyksiä ja tienylityksiä. Tarkoituksena on kiinnittää huomiota lasten liikenneturvallisuuteen ja saada parannuksia koulumatkojen ongelmakohtiin. Lomakkeet palautetaan kouluun. Toivomme lisäksi, että käyt yhdessä lapsesi kanssa läpi turvallista kulkemista ongelmapaikoissa, sillä mahdollisten parannusten aikaansaaminen saattaa viedä aikaa. Kääntöpuolella on lisävihjeitä lapsesi turvallisuuden parantamiseksi koulumatkoilla.

Kunta_____

Koulu_____ Luokka_____

1. Mikä on lapsesi koulureitin vaarallisin paikka? Nimeä kyseinen paikka (esimerkiksi Jokikadun ja Ratakadun risteys).

_____

2. Paikka on vaarallinen, kun lapseni kulkee 1 jalan 2 pyörällä
3 henkilöautossa 4 bussilla 5 koulukuljetuksessa

3. Miksi paikka on lapsellesi vaarallinen tai pelottava?

_____

_____

4. Mitä mielestäsi voitaisiin tehdä, jotta liikenneturvallisuus tässä vaarallisessa paikassa paranisi?

_____

_____

5. Tähän voit tarvittaessa piirtää kartan vaarallisesta paikasta. Jos haluat kiinnittää huomiota myös johonkin muuhun koulumatkaa vaarantavaan asiaan tai paikkaan, voit käyttää tilaa siihen.

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NÄIN VOIT LISÄTÄ LAPSESI TURVALLISUUTTA KOULUMATKOILLA

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- Valitse turvallisin reitti. Siinä on mahdollisimman vähän tienylityksiä. Valitse mahdollisista tienylityspaikoista sellainen, joka on lapsellesi helpoin ja turvallisin. Ohjaa häntä käyttämään myös kevyen liikenteen väyliä aina kun se on mahdollista.

- Kulje koulumatka ja uudet reitit yhdessä lapsesi kanssa ja näytä hänelle turvallinen kulku niillä.

- Korosta turvallista tienylitystä. Valitse ylitykseen sellainen paikka, josta on hyvä näkyvyys. Neuvo lasta pysähtymään, katsomaan ja kuuntelemaan. Näin hän ehtii rauhassa tarkistaa, onko tie vapaa.

- Harkitse, milloin lapsesi on turvallisinta kulkea kouluun jalan, pyörällä tai muulla tavoin. Koulunsa aloittavan on usein varsinkin vilkkaassa liikenteessä turvallisempaa kulkea jalan kuin pyörällä. Automatkoihin verrattuna itse tehdyillä koulumatkoilla oma liikenneympäristö hahmottuu lapselle ja samalla hän saa liikuntaa. Jos koulumatka on yli 5 km tai muodostuu oppilaan iän tai muiden olosuhteiden vuoksi oppilaalle liian vaikeaksi, rasittavaksi tai vaaralliseksi, on oppilaalla oikeus maksuttomaan kuljetukseen tai oppilaan kuljettamista tai saattamista varten myönnettävään riittävään avustukseen (Perusopetuslain 32 §).

- Arvioi lapsesi koulumatkan turvallisuutta monien eri tekijöiden kannalta. Mitä suurempi ajonopeus koulutiellä sallitaan, sitä suuremmat vaatimukset tulee asettaa myös tien suunnassa kulkemisen ja tienylitysten turvallisuudelle. Esimerkiksi erilliset kevyen liikenteen väylät ja alikulkutunnelit ovat tarpeellisia jo alhaisen nopeusrajoituksen alueilla, mutta niiden tarve kasvaa vielä entisestään nopeusrajoituksen kasvaessa. Muita koulumatkojen turvallisuuteen vaikuttavia tekijöitä ovat mm. liikennemäärät, valaistus- ja näkyvyysolosuhteet, tien ja pientareen leveys, raskaan liikenteen osuus sekä tien mäkisyys ja kaarteisuus.

- Jos kuljetat lapsesi autolla kouluun, pysähdy koulun kohdalla niin, ettei siitä aiheudu kenellekään lapselle vaaraa ja ettei lapsesi joudu ylittämään tietä. Kouluun kiirehtiessään lapset eivät aina huomaa lähestyviä ajoneuvoja.

- Huolehdi siitä, että lapsesi käyttää turvalaitteita kuten pyöräilykypärää, heijastinta ja turvavyötä. Käytä niitä itsekin.

- Kerro lapsellesi, että hänen on aina itse varmistettava liikenteessä oma turvallisuutensa. Lapset luottavat yleensä liikaa muihin tienkäyttäjiin, sekä autoilijoihin että kavereihinsa. Erityisesti tienylitystilanteissa on oltava tarkkana, sillä tilanteet vaihtuvat nopeasti.

www.liikenneturva.fi

APPENDIX 3: CHECK LIST FOR STUDENTS

KOULUMATKAN VAARANPAIKKAKARTOITUS

OPPILAILLE

Tällä lomakkeella selvitetään sinun koulumatkasi mahdollisia vaarallisia paikkoja kuten katuja, risteyksiä ja tienylityksiä. Voit käyttää tarvittaessa oman alueesi karttaa apuna. Jos haluat kirjoittaa tai piirtää useista vaarallisista paikoista, pyydä opettajalta uusia lomakkeita. Jos kuljet koulumatkat koulukuljetuksessa, voit vastata kysymyksiin siitä huolimatta. Palauta lomakkeet opettajalle.

Kirjoita vastauksesi kysymyksiin ja ympyröi oikea vaihtoehto.

Kunta_____

Koulu _____

Luokka_____

1. Mikä on koulureittisi vaarallisin paikka? Nimeä kyseinen paikka (esimerkiksi Jokikadun ja Ratakadun risteys).

_____

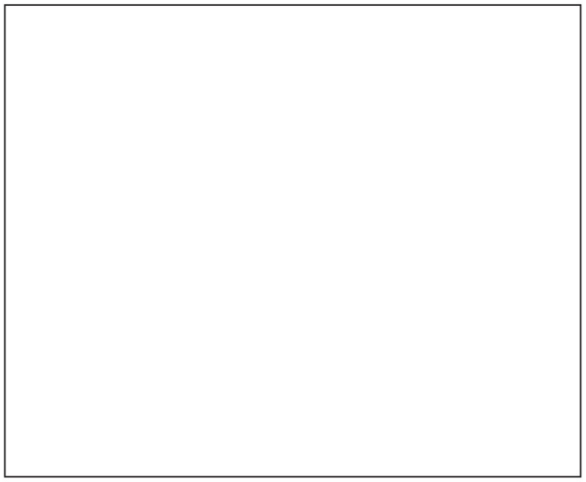
2. Paikka on vaarallinen, kun kuljen

1 jalan 2 pyörällä 3 mopolla

4 henkilöautossa 5 bussilla

6 koulukuljetuksessa

3. Piirrä tähän kuva vaarallisesta paikasta.



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4. Miksi paikka on mielestäsi vaarallinen?

_____

_____

_____

_____

_____

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5. Mitä mielestäsi voitaisiin tehdä, jotta liikenneturvallisuus tässä paikassa paranisi?

_____

_____

_____

_____

6. Laadi itsellesi turvalliset toimintaohjeet piirtämääsi paikkaan. Mieti, mitä liikennesääntöjä sinun tulee siinä noudattaa ja mitä muuta sinun kannattaa ottaa huomioon oman turvallisuutesi takia.

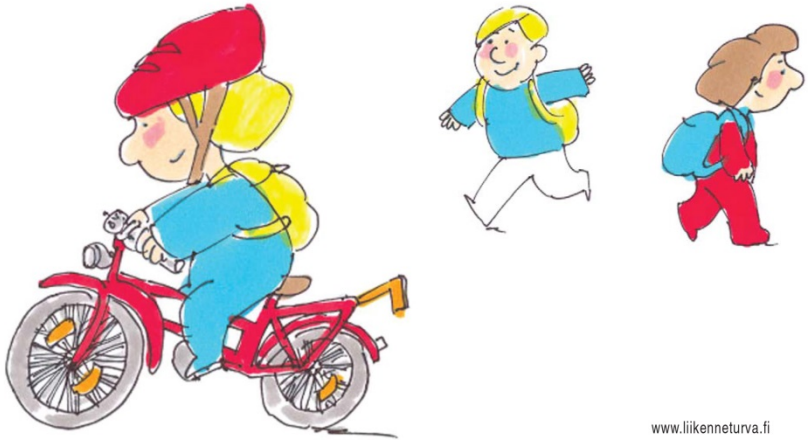
_____

_____

_____

_____

_____



www.liikenneturva.fi

SOURCES

GRAPHICS & PICTURES

Monica Cota, Linda van Stiphout,
Camilla Rouffiange-Ahmad, Maximilien Rouffiange

Website / Games:
turvapupu.net, yle.fi

Website / Game Concepts:
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WORLD
DESIGN
CAPITAL
HELSINKI
2012


Helsinki
Metropolia
University of Applied Sciences


Uudenmaan liitto
Nylands förbund


European Union
European Regional Development Fund


Leverage from
the EU
2007–2013


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