

STARS ECCENTRIC activity guide



Abstract

This document puts together a series of methods and activities conducted as part of the STARS-ECCENTRIC project in Madrid during the years 2013 – 2020. It aims to be a useful tool to help the school community design activities when they want to implement sustainable mobility projects in schools and high schools.

This guide explains the method used and gives an idea of the resources needed to organize each activity.

The STARS-ECCENTRIC methodology started as the European Project IEE-STARS between 2013 and 2016, it aims to create *peer to peer* campaigns, designed and produced by the students themselves and aimed at the school community. The method places emphasis on monitoring activities since, depending on the quality and quantity of the activities, they will receive a score reaching three accreditation levels: gold, silver or bronze. The active participation of students and teachers, together with the recognition and assessment of the processes, is the key to success of this methodology.

Currently, the STARS-ECCENTRIC project thanks to the DGT and CENEAM has been extended to many Spanish municipalities, so we have decided to make a toolkit in order to suggest ideas and to promote the replica of these experiences in other cities. In fact, it is an open guide offered not only to cities subscribed to this project, but to any city or school wanting to develop sustainable mobility projects. As we know, these kinds of programs are health, autonomy and active life programs in childhood and teenage years. Any initiative can take on these ideas as own processes, even though these are methodologies other than STARS-ECCENTRIC.



We are convinced that active travel modalities (on foot and by bike) have an enormous pedagogical value for students, since active mobility, with its burden of personal experiences, the language of signaling systems, the coexistence of different speeds, the need to put oneself in the other's shoes and to respect it, the requirement of anticipation and planning of appropriate routes, etc. contains all the necessary elements to become a "citizenship school", a school that raises awareness about its rights and duties and teaches how to manage the risks and the possibilities that the shared city presents.

We thank all those who participated in these activities and we hope it will help achieve the benefits of active and autonomous mobility of schoolchildren: cleaner air, more fluid traffic, more humane and friendly cities, improved school performance, increased coexistence skills, reinforcement of young people's commitment to public space, promotion of healthy lifestyles.

We are also grateful for the collaboration of all those national and European allies with whom we share objectives: those who support the increase of cycling culture in cities and support measures that foster sustainability and the fight against climate change. We thank the collaboration of those who share the same educational methodological principles, such as participation, networking, the quest for allies and the emphasis on creativity and communication. Our most sincere gratitude to all of them.





How to use this guide



A summary of all the activities undertaken as part of STARS-ECCENTRIC project can be found in this guide. These activities have been conducted in the participating schools with the main goal of promoting active trips and sustainable mobility. This guide is addressed to all of those who want to implement school projects on sustainable mobility.

The activities below show the objectives to be achieved in each one, what the activity consists of, which groups are targeted a short description of the activity Finally, at the end of every activity sheet, you will find three different emoticons with an assessment from 1 to 3, referring to the cost of economic resources, the time required by each activity and the difficulty level.

Economic resources



Time



Difficulty level



STARS-ECCENTRIC vocabulary:

- **STARS.** Sustainable Transport Accreditation and Recognition for Schools.
- **Active mobility.** By bike, on foot, on scooter, skate, etc.
- **Sustainable mobility.** Active mobility + Public transport (metro, bus, tram, etc.).
- **Modal shift.** Change in the percentage from motorized trips to active trips. STARS-ECCENTRIC goal is to increase active trips (at least sustainable) and decrease motorized trips.
- **Peer to peer.** Methodology based on the creativity and participation of the students. It aims at the “involvement among equals” or “contagion among equals”; it usually consists of students creating campaigns targeted at their classmates.



- **Mobility ambassador group.** Students specially involved in sustainable mobility, either because of their motivation for environmental issues or their motivation for communication aspects. The duties of the ambassador group or environmental committee are:
 - To make a diagnosis and an action plan for school; the objective is to reduce motorized trips and to increase independent, safe and sustainable active trips (on foot or by bike).
 - To make an annual campaign on sustainable mobility, developing products targeted at the school community (interviews on the radio, news, articles, research works in the neighborhood, videos, posters, contests, bike rallies, events, sustainable breakfast, conferences, exhibitions, letters to the district council, etc.).
 - In secondary education, to help on conducting surveys.
- **Champions.** Teachers involved in the STARS-ECCENTRIC Project in each school. Their duties are:
 - To coordinate the mobility ambassador team or the school environmental committee.
 - To do a follow-up of the action plan.
 - To collaborate with the advisor on the mobility surveys.
 - To provide evidences of the activities carried out by the school.
 - To accompany in the implementation of the activities (bike bus, bike rallies, events, campaign products, cycling training, etc.).
- **Advisors.** Environmental teachers or municipal technicians or DGT technicians, they coordinate the Project in each school. The advisors are in contact with schools through visits, e-mails and telephones, and their duties are:
 - To advise on the design and the implementation of the plan of action in each school.
 - To support in the preparation of diagnosis or assessment reports.
 - To support in conducting surveys on mobility habits.
 - To conduct an audit.
 - To train ambassadors and committees in order to have successful meetings, allocating the duties among students (information collection, news or minutes writing, etc.).
 - To encourage meetings with neighborhood or cycling associations, etc.
 - To participate in the organization of bike rallies, bike buses and walking buses.
 - To advise on the organization of activities about public space and active mobility events involving the educational community.
 - To support young mobility ambassadors and champions when implementing the mobility by bike campaign activities.



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Education and training activities



Environmental committee and group of mobility ambassadors

Target group: Primary and secondary education schools (groups of 10 to 20 people made up of students, some relatives and teachers).

Main topic: Group that designs the action plan and the activities that will be carried out to promote active mobility in schools.

Goal: To promote the participation of an active group and provide it with the necessary tools to carry out the diagnosis, organization and evaluation and all the steps to implement the mobility project. This group designs the annual campaign to promote active mobility in order to spread it among their classmates, relatives and teachers.

Short description:

The participation of the whole school educational community in mobility decision making process promotes a greater commitment to the actions carried out. In order to ensure this participation, the schools participating in the STARS-ECCENTRIC project have a team called environmental committee or mobility ambassador group.

Their functions are as follows:

- To propose and promote actions.
- To approve or disapprove the action.
- To share tasks, responsibilities and establish deadlines.
- To take the minutes after every meeting.
- To gather all the written and visual documentation on the project evolution.
- To disseminate the agreements and the results of the actions undertaken by the committee.



Activity development:

- The participation must be voluntary.
- It is advisable that the ambassador group is formed by people from the same grade and they already know each other, so the consolidated groups are more productive.
- It is advisable that the ambassador group be composed of people who have shown a previous interest in bikes and sustainable mobility, as well as, great communicative skills towards their classmates. An ambassador group usually consists of 8 students.
- However, there are many possible ways to do it and it is preferable to prioritize group performance and look for channels that can ensure maximum participation.
- In secondary education schools, the students should be picked from the second year, so their participation in the project can be longer. In primary education schools, the students should be selected from the fifth grade.
- It is important that the group meets outside school hours so as not to cause distortion among classmates or miss classes. If there is no other possibility than meeting during class hours, it is important that each meeting is at a different time, so they do not miss many hours from one subject only.

MORE INFORMATION:

<http://www.educarmadridsostenible.es/contenido/%C2%A-1nuestro-comit%C3%A9-stars-ya-est%C3%A1-en-marcha>

<http://www.educarmadridsostenible.es/contenido/dise%C3%B1ando-estrategias-con-los-embajadores-del-isabel-la-cat%C3%B3lica>

<http://www.educarmadridsostenible.es/sites/default/files/C%C3%B3mit%C3%A9%20Ambiental.pdf>

Economic resources



Time



Difficulty level



Cycling Family Workshop on weekends

Target group: Families with children aged from 8 to 15.

Main topic: Cycling.

Goal:

- To reinforce cycling skills in the city.
- To attract families to the use of the bike so that they can participate in bike buses.
- To increase leisure cycling activities carried out by families.

Short description: Cycling Family Workshop on weekends is a training workshop for families carried out during the weekend and led by environmental educators. It lasts two hours and, according to the participant level, it is carried out in streets or parks.

Activity development:

- Conditions: Each family member brings its own bike.
- There will be different difficulty levels on the routes depending on the urban cycling skills of each family.

TALLER FAMILIAR
CIRCULANDO EN BICI POR LA CIUDAD



FECHAS:	ENERO	FEBRERO
	25 26	8 9 15 16
HORARIO:	11 a 13:45 h	
LUGAR:	C.I.E.A. EL HUERTO DEL RETIRO	




Economic resources



Time



Difficulty level



Pauwels' test and bicycle skill games

Target group: Primary and Secondary Education students.

Goal: To dominate the skills to ride a bike and gain the confidence to do so.

Short description: It is essential that we are certain that the students have the necessary skills and abilities to ride a bike before organizing bicycle gatherings or bike buses.

The success of this activity lies in completing the tasks designed in this workshop and in carrying out Pauwels' test which shows that the participants have the skills to ride a bike outside the school. In Madrid, this activity is conducted by the Local Cycling Police.

Activity development:

Contribution of this activity to the development of basic competences:

- Skill to learn and interact with the physical world.
- Personal initiative and autonomy.
- Social and civic competences.
- Entrepreneurial spirit.

Step by step (methodology, timeline, materials, spaces...):

- **PLANNING AND ORGANIZATION (15 minutes):**
Some examples: We can only ride a bike on the streets if we have learned to keep the balance when a car passes by. Moreover, we need to learn how to ride with one hand in order to sign change of direction with the other hand.

The series of exercises designed for this workshop allow us to work the necessary aptitudes and skills to ride the bike on the streets. The intense training offered to the students includes cycling exercises on a circuit formed by a 80 cm wide traffic lanes (exercises 1 to 4) or a 1.50 m wide lane if we are riding in rows of two (exercise 5).

Traffic lanes can be marked with bottles, cans, colored cones or chalk.

- **ACTIVITY DEVELOPMENT:**

Exercise 1: Keep the same trajectory. Cycling in a straight line on the 80 cm wide traffic lane in both directions. The lane will be progressively narrowed to 50 cm.



Exercise 2: Brake. On hearing a whistle, all participants need to brake their bikes and stop without getting out of the lane.

Exercise 3: Extend the arm. The same as exercise 1, but extending the arm towards the inside of the circuit.

Exercise 4: Look back without moving away from the lane. We need to learn this skill to let car drivers know what we are going to do. The teacher stands at the beginning of the lane holding a blackboard with a number written on it. Then, the teacher calls one of the participants who has to look back and shout the number he/she has seen.

Exercise 5: Cycling with consideration for other. On a 1.50 m lane, participants have to cycle in parallel and crossing each other (students cycle in both directions).

• SUMMARY AND GROUP FEEDBACK

We can evaluate the participants' skills through this test designed by professor Pauwels (Leuven University, Belgium).

We only need to have a 20 m x 20 m playground and to establish a marked circuit. Each participant will have to complete it and he or she will be timed. A 10-12 year-old student should be able to cycle it in 85 seconds including penalties. Each mistake sums one extra second to the final time (putting a foot on the ground, tumbling a cone, changing lane, not extending the arm completely, and not being able to see the number when looking back).

This is not a race, but a skill test determining if the participants are able to assimilate all the information needed to ride a bike correctly on the streets in a reasonable time.

Evaluation of Pauwels' test:

- Less than 45 seconds: Excellent.
- Between 46 to 74 seconds: Good.
- More than 75 seconds: Poor.

Economic resources



Time



Difficulty level

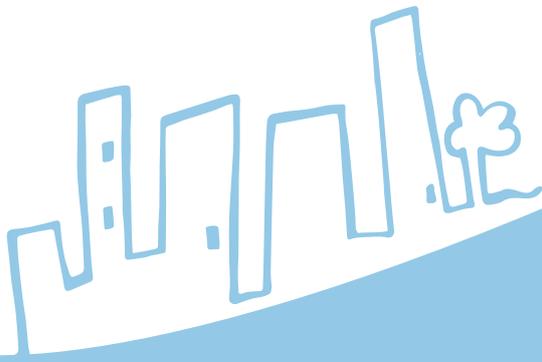


MORE INFORMATION:

[Pauwels' test: Circuit designed to test students' abilities on a bicycle](#)

<http://www.educarmadridsostenible.es/actividad/test-de-pauwels-y-juegos-de-habilidad-en-bicicleta>





Communication Workshop for ambassadors

Target group: Secondary School students that are sustainable mobility ambassadors.

Main topic: The city of Madrid organizes communication workshops once a year, gathering about 100 pupils from 10-12 schools for 4-5 hours in a “city lab” to develop their communication skills and how to work together, in order to be able to design and promote their own campaigns on sustainable mobility.

Short description: Professionals from different communication fields: video, marketing, journalism, blogs, cultural management and design, etc. work with students in small groups (15 max.). It is a practical learning that will be translated into students learning how to make a video by making one or how to design a logo by designing their own. At the end of the morning, they can take home a practical knowledge of what they have done and learnt in just a few hours. This way, they feel they can do similar projects on their own. Through this experience, they get to know better their role in the STARS-ECCENTRIC project, what they are supposed to do and how they can do it.

Working side by side with students from other schools is a way for students from different neighborhoods to get to know each other. We try to distribute students from each school in different groups (on a different thematic basis), so that they can later share their different experiences and knowledge with their classmates.

How to develop communication workshops:

- Make it attractive. Few weeks in advance, it is important to advertise the workshop among students letting them know the different options they have (interviews, video, graphic design, theatre, radio, blog, graffiti, etc.), so they can choose which they want to do.



- Find the right place. You need to hold the workshop in a space where students can work in small groups (12-15). Each subgroup should be equipped with all the necessary materials (crayons, computers, tablets, radio set, etc.). Also there should be a place where they can gather to share the results. It is better to reach the place by bike or walking.
- Find the right professionals. They have to be experienced but also they have to have the pedagogical skills to teach and work with students. Usually young professionals seem to be closer to teenagers than senior professionals. We need to have a budget to give them a small salary, even though they usually do it vocationally.
- Find the right moment. Secondary schools are very busy, that is the reason why we have to organize it in advance. The end of November seems to be a good time for this kind of activities.
- Enjoy the workshop. It is a good moment for everyone. We all have a great time sharing good ideas, skills and lots of creativity. Teenagers love meeting new friends and they enjoy a lot sharing time with ambassadors from other schools. That makes them feel they are part of a city and European project, not just part of a school activity.

MORE INFORMATION:

<https://www.educarmadridsostenible.es/articulo/taller-de-t%C3%A9cnicas-de-comunicaci%C3%B3n-stars-eccentric-2018-0>

<https://www.youtube.com/watch?v=bwZv1vEhsvg&feature=youtu.be>

<https://www.youtube.com/watch?v=GoZINObV1Cw&feature=youtu.be>

https://www.youtube.com/watch?v=N_U37M98q0Y&feature=youtu.be

Economic resources



Time



Difficulty level



Photography workshop

Target group: Students from Primary and Secondary schools (aged 10 to 16) that are members of the Environmental Committee or the ambassador team.

Main topic: Photography, mobility and urban space.

Goal:

- To increase students' awareness about the importance of observing the urban space with a critical eye.
- To enable students to create new images or use those created in the workshop for the awareness-raising campaigns targeted at the rest of the educational community.
- To create materials which will facilitate school participation in STARS-ECCENTRIC project activities, such as the photography contest scheduled for the second quarter.

Short description:

This workshop aims to provide students with resources for the development of communication campaigns in their schools, designed by students and members of the environmental Committees, with the support of their teachers. In this case, students will create photos and/or photo collages to be used in their exhibitions about sustainable and active mobility in schools to encourage the educational community to come to school on foot or by bike.

Activity development:

- **Group size:** 8-12 students.
- **Duration:** 2 hours.
- **Materials:** Paper, thick felt pens or pencils, torches, tablets, an analog camera and a digital camera.
- **Procedure:** The workshop will be held in a single session. First, there will be a time for participants to introduce themselves and talk about their relationship with photography and the bike. Afterwards, students will learn how the camera works and how to use it. The definition of PHOTOGRAPHY as "drawing with light" will be explained. The students will do an activity in the dark to see that they can only take a picture if there is light; otherwise, it is not possible.

The participants will be told that, apart from light, they need ideas and emotions to be transmitted and captured in a picture. They will be asked to draw or

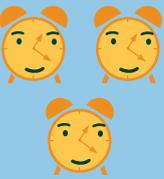




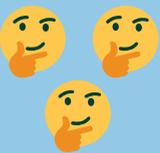
Economic resources



Time



Difficulty level



describe a landscape or a scene where they have liked or would like to ride a bike, or also where they have felt afraid of riding a bike.

Then, they will work in pairs taking pictures of each other and trying to evoke the emotion they felt in their drawings.

The workshop is intended to be a laboratory of ideas for the students to work in depth, experiment and take more pictures further on.

MORE INFORMATION:

<http://www.educarmadridsostenible.es/contenido/taller-fotograf%C3%ADa>

<http://www.educarmadridsostenible.es/contenido/taller-fotogr%C3%A1fico>



Musical composition workshop

Target group: Secondary education students.

Goal: To give the students the necessary skills to use music in their active mobility campaigns.

Short description: It consists of a workshop where the participating students will compose, together, a song that will be used as an advertisement and promotion of active transport and right environmental behaviors.

Activity development:

- **Session 1:**

The first session will work as an introduction to the musical topic and as preparation of the material for the song. To begin with, the participants will carry out musical exercises of rhythm and improvisation with different instruments, everything coordinated by the workshop facilitator. Once they have warmed up, they will have a brief debate on sustainable mobility (advantages of cycling mobility, woman and the bike, problems due to the lack of bike lanes in the city, etc.). The lyrics of the song that will be composed will be taken from these discussions. After taking notes of the most important points of the topic, the facilitator will carry out exercises to complete stanzas, creations by groups, etc., to create the primary material of the song.

The workshop facilitator will improvise a melody for all this material and will practice it with the participants for the rest of the session. Between the first and the second session, the facilitator will finish composing the song in order to practice the whole song in the second session.

- **Session 2:**

Exercises will be performed to warm up the participants' body and voice and to prepare them to use the instruments. Once the instruments have been given to the participants, they will begin to practice the song stanza by stanza.

Later on, the song will be recorded and disseminated on the different media and social networks.

Requirements:

- **Duration:** 1,5 – 2 hours each workshop.
- **Human and material resources:**
 - Music teacher or facilitator hired for it.
 - Computers with speakers.



- Musical instruments of all kinds (guitar, piano and percussion are compulsory).
- Recording instruments (video recorder and voice recorder).

Important aspects which need to be known:

- The workshop is designed for a group of 7-8 people doing the same song, but there may be more people and different work groups, resulting in more than one song.
- The objective of the workshop is to practice the song so that the students can sing it and spread it among their classmates, as well as to assimilate the explicit knowledge of the song about mobility and environmental education.
- This workshop also promotes knowledge and practice in the use of music as a means of mass communication.

Example:

*Cuando salgo con mi bici me divierto un montón
mientras cuido el medio ambiente y bajo el colesterol
en mi bici todo es diversión y late a un millón mi corazón*

*Aunque me despiste y me caiga
Aunque yo cansado me sienta
Aunque me tropiece con alguien
Lo importante es seguir adelante*

*Siento la velocidad, esto es fenomenal
soy más libre y es normal, en mi bici soy genial*

*Cuando salgo con mi bici noto el aire al respirar
es más sano y saludable y me da ganas de más
siento la adrenalina sin fin, y el cielo brilla gracias a mi*

*Aunque me despiste y me caiga
Aunque yo cansado me sienta
Aunque me tropiece con alguien
Lo importante es seguir adelante*

*Siento la velocidad, esto es fenomenal
soy más libre y es normal, en mi bici soy genial*

Economic resources



Time



Difficulty level



MORE INFORMATION:

<http://www.educarmadridsostenible.es/articulo/nuevo-taller-de-composici%C3%B3n-musical>



Mobility and Urbanism workshop

Target group: Secondary education students.

Main topic: The workshop aims to teach concepts such as urbanism and mobility by explaining how to design a cycling network in the city and how to implement a cycling lane to go from their school to other places of interest. The students will have information on the steepness of the streets, traffic intensity and street capacity to be able to evaluate the real problems of the city, focusing not only on cycling, but on pedestrian and public transport.

Activity development:

The workshop will be held in two stages:

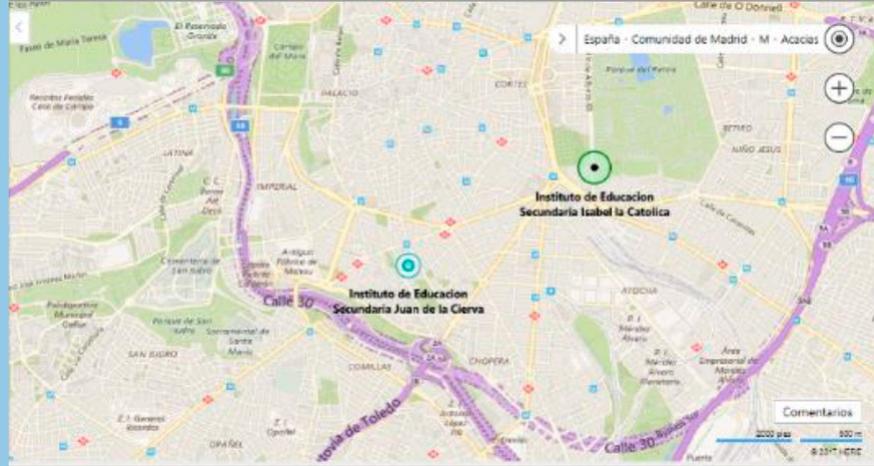
- STAGE 1: PRESENTATION
 - Workshop goals.
 - What do we understand by human, urban and sustainable mobility?
 - Mobility evolution in Madrid.
 - Cycling mobility: design of a cycling network and development of an infrastructure for cycling.
 - Advice on how to move around by bike.
- STAGE 2: WORKSHOP
 - The students must design a cycling network on a map of their district showing all the important places where you can go by bike (commercial, leisure, cultural, sports, work, health, education, parks, transport links, tube, train and bus stations, EMT – Madrid’s Municipal Transport Company – lines).



- Implementation of a cycling route from their school to specific points.

Example: Students from Isabel La Católica School designed a cycling network from Usera to Retiro.

Cycling Itinerary connecting Isabel la Católica school with Madrid Río: Alfonso XII street – Cuesta Moyano – Emperador Carlos V Roundabout – Paseo de Delicias



MORE INFORMATION:

https://eustarsmadrid.blogspot.com.es/2017/04/taller-trimestral-de-secundaria_25.html

<http://www.educarmadridsostenible.es/articulo/taller-urbanismo-stars-eccentric-de-secundaria-2019>

<http://www.educarmadridsostenible.es/articulo/%C2%A1ya-llega-el-taller-de-movilidad-y-urbanismo-para-embajadores-de-centros-stars>

<http://www.educarmadridsostenible.es/articulo/taller-urbanismo-y-stars-eccentric-de-secundaria>

<http://www.educarmadridsostenible.es/contenido/taller-de-movilidad-y-urbanismo-2018>

Economic resources



Time



Difficulty level



Mobility Diagnosis and Safety Plan

Target group: Primary and Secondary Schools (9-19 year-old pupils, families and teachers).

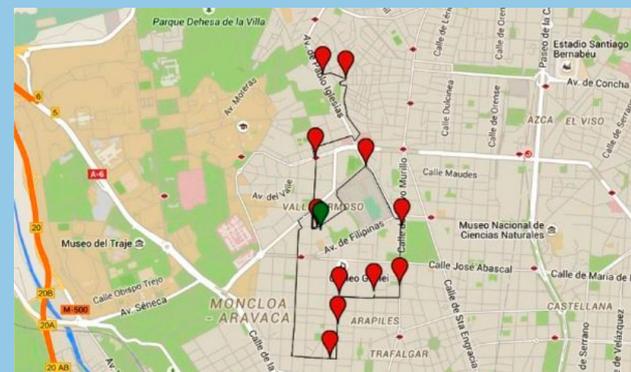
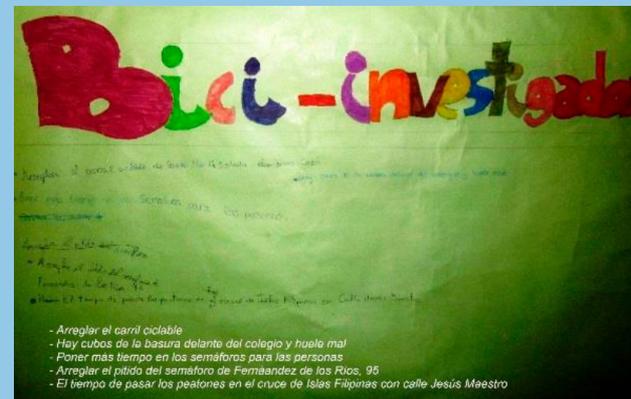
Main topic: Pedestrian and cycling mobility analysis in the school surroundings.

Short description: Diagnosis work of the council technical staff in collaboration with teachers, students and families. It consists of an assessment work of the surroundings and a mapping study. There are proposals such as reducing traffic speed limits to 30 km/h, incorporating specific signaling, provision of bicycle parking spaces, temporary street closures during schools entry and exit, or kiss and go signalized points, etc.

Maps, photos and reports will be prepared.

Activity development:

- What are diagnoses?:
 1. An opportunity for reflection on school surroundings.
 2. A joint effort between members of the school community and municipal technicians.
 3. A proposal to improve accessibility and safety of school surroundings.
 4. An opportunity to create a bike culture.
- Who can participate?:
 1. The members of the school community: teachers, students, non-teaching staff and families, but mainly students belonging to the environmental committee or the ambassador group.
 2. Municipal officers, especially from urban planning and mobility areas.
- Proposals from schools:
 1. Provisions of bicycle parking spaces.
 2. Measures to reduce traffic.
 3. Speed limitation: residential streets, areas 30km/h.
 4. Specific signals: kiss and go.
 5. Temporary street closures during school entry and exit.
 6. Identifying priorities.



- **Frequent questions:** Are there traffic jams in the class entrance? Do cars park in double rows? Do cars park at zebra crossings? Is one-way traffic or both? How many lanes are there? Do you hear horns or screams? How high are the sidewalks at the school door? Do cars run very fast? (Use Gun Speed Hunter); Do cars respect people who are going to cross zebra crossings or traffic lights? Do cars respect people who ride a bicycle on the road? Does a wheelchair fit on the sidewalk? Can a person go with a baby stroller or a shopping cart? Are there any sign interrupting the way? Are there curbs lowered in the zebra crossings? Do cars and motorbikes get on sidewalks? Do cars perform dangerous maneuvers, such as reversing, turning directions?

Book: <http://www.educarmadridsostenible.es/kit-materiales/kit-cazavelocidades-i>

Associated activity: <http://www.educarmadridsostenible.es/sites/default/files/Ficha%20cazaweb.pdf>

- **Process and Timetable:**
 1. Preliminary work. Reflection by the school community. Analysis of background, conditions and criteria with previous intervention of the municipal technicians. Development of cartography.
 2. Technicians' visits to the school and diagnostic tours of the surroundings.
 3. Evaluation and synthesis of proposals. Selection of actions to perform.
 4. Planning and implementation.
- Through this collaborative and telematic tool, each school center is intended to add the following information from its surroundings. https://drive.google.com/open?id=19Te-0FW89-EV6h8s6_DMM9UwKR9DkxVkc&usp=sharing
Each center will add information of their neighborhood: Cycle paths, STARS-ECCENTRIC Centers, cycling allies (association headquarters, mechanics, bicycles, etc.), black spots, cycling shortcuts, neighborhood initiatives, etc.

Economic resources



Time



Difficulty level



MORE INFORMATION:

<http://www.educarmadridsostenible.es/contenido/investigamos-nuestro-entorno-escolar>



Map your environment

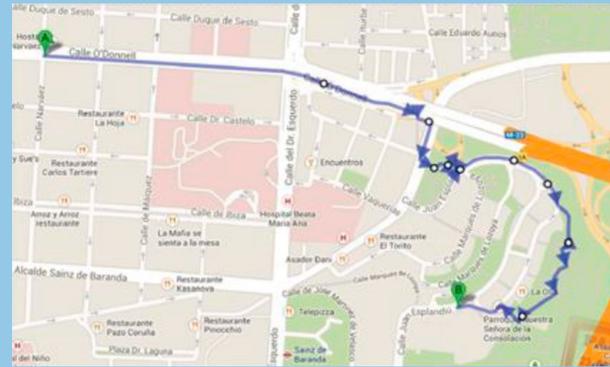
Target group: Secondary education schools, teachers and families.

Short description:

Create a map illustrating the use of the surface around the school: green areas, areas for cars, pedestrians, cultural areas, social services, etc.

Activity development:

1. Raise awareness about the distribution of public spaces mainly favoring cars.
2. Analyze the location of pedestrians and cycling areas.
3. Propose transformations of specific points with realistic improvement proposals.
4. Present the results at the district meeting.



Difficulty level



Speed hunters

Target group: Primary and secondary education students.

Main topic:

- Sustainable mobility (on foot, by bike or public transport).
- Acknowledgment and appreciation of friendly cities (30km/h).
- Cyclist path concept and other road standards.
- Municipal mobility ordinance.
- Public space and friendly city concept.
- Actions and attitudes that will contribute to the decrease of motorized vehicles.

Short description: This activity aims to raise awareness and discover the real speed of motorized vehicles in the city through the use of speed hunters. Complementarily, it is an activity to work on Excel: statistics, averages and other graphs, etc. belonging to math.

Goal:

- To calm the traffic in the city, to make it friendlier and to help the different means of transport to respect each other.
- Data collection to inform citizens on: vehicle speed in the city, % of vehicles that do not respect the limits, kind of vehicles that least respect the limits (in Madrid these are the motorbikes), kinds of roads where speed limits are less respected, etc.
- To develop a data base with the speed measurements in Madrid's school surroundings.
- To learn how to manage statistical data and graphic data (to make well-founded judgments and to follow chains of arguments in the realization of calculations, the analysis of graphs, mathematical representations and the manipulation of algebraic expressions, incorporating digital means when appropriate).
- To reflect collectively on the concept of sustainable and motorized mobility.



Activity development:

- Step 1:
 - Content review: road recognition, vehicle speed, road safety.
 - Presentation and explanation of the speed hunter gun.
 - Situation and recognition of reference points: slopes, traffic lights.
 - Short description of the routes that will be analyzed by the different groups and identification of the positive and negative aspects on these topics: road safety, citizen safety, environment, cleanliness and coexistence.
- Step 2: The group will be divided in subgroups of 4-5 students each and they will be allocated in different crossings in the school surroundings. Each group has a speed hunter gun and charts to put the data on.

Each person of the group will be responsible for the following functions: one person in charge of pressing the speedometer, another person in charge of taking photographs (*optional), another person in charge of collecting data in the Excel table.
- Step 3: Explanation of how to use the speed hunter: the person in charge of taking the measurements with the speed hunter gun must stand on the right side of the lane to note down the speed. The gun takes measurements up to 457m away. These measurements will be made by pointing to the trunk of the car. A single shot is enough to obtain the speed. It is important to take the measurements in KPH.



Project to charge electronic devices with a bicycle and its relationship with the energy crisis

(Activity carried out by José Pérez Castrejón from IES San Isidoro de Sevilla)

Target group: Students from last years of secondary education or high school.

Short description: Project on the use of the bike to get energy to charge a smartphone. A smartphone battery stores energy in the form of chemical compounds. Once in operation (discharged), electrons are released as a result of the chemical reaction. The way to indicate how much capacity a battery has is by the number of milliamps per hour (mAh). As a practical example, for a 3,000 mAh battery and a voltage of 3.7 V we have a stored energy of 11.1 Wh ($3,000 \text{ mAh} \times 3.7 \text{ V} = 11,100 \text{ mWh} = 11.1 \text{ Wh} = 40 \text{ kJ}$). We would have to pedal theoretically for 10 minutes, but too much voltage is provided with the dynamo (which is technically an alternator) to charge the smartphone. That voltage excess would damage the battery of the phone and, therefore, must be reduced with an electronic device (in our case, the voltage regulator LM 7805), which reduces the voltage to 5V and removes the energy excess through heating. Therefore, the actual charging time is the same as with our usual charger (as approximate values, 60 minutes for charging it to 70% and 90 minutes for charging it to 96%). But, to charge it in the bicycle, the advantage is that we could pedal slowly if we only want to charge the smartphone.

The purchase price to assemble an electronic circuit used between the dynamo (alternator) and the female USB where we plug the smartphone is around 3€.

Activity development:

- Explanation of muscle energy through pedaling

The mechanical force of humans comes from the energetic contribution of food, which gives movement to muscles. The unit of measurement is the Joule, although traditionally calories are also used. Human diets contain between 1,000 kcal/day and 4,000 kcal/day. The amount of consumed energy varies depending on the activity we develop. An adult person weighing 70 kg, requires a vital minimum of around 1,650 kcal in food. The average human energy power is around 150W in a machine like a bike, with the adequate food. However, when using energy for several hours, it is normal the power does not exceed 70W.

So, for one hour of cycling (Energy = Power x time), this would mean:

- Energy pedaling for one hour = $70\text{W} \times 1\text{h} = 70\text{Wh} = 250 \text{ kJ}$
- Energy pedaling for one day (8 hours) = 2000 kJ

- Energy equivalences using the power of the bicycle

- In one year (250 working days), one person = 500 MJ of energy = 14 liters of petrol (amount spent in one week by one person driving a car).
- 60 liters of gasoline (one tank) = 48 men pedaling for 1 month = 4 people working for 1 year = 1 man working for 48 months or 4 years = 48 men working for 1 month.
- A car would go down the highway at about 100 km/h with the energy provided by 1,000 men.
- 4 people pedaling for 2 hours = energy needed to watch a DVD movie on a flat screen of about 50 inches.



- For a flight from London to New York, more energy per passenger is consumed in the form of fossil fuel than the energy that one passenger could generate in his/her entire life.
- In order to heat water for an infusion by means of electricity (250 ml of water to heat from 20°C to 100°C), $80 \text{ cal} \times 250 \text{ grams of water} = 20,000 \text{ cal} = 84 \text{ kJ}$ are necessary. And if we heat it in one minute, we would need 20 people pedaling during one minute.
- We spend about 4,000 kJ of energy on petrol to go to the supermarket to buy a 500 kJ snack and come back (about 2 km). The energy spent on the car petrol is the equivalent of a person pedaling for 16 hours, about 200 km would have been covered by bike during that time. The 500 kJ snack would give us energy to pedal for 2 hours (about 25 km). The energy spent on the bicycle on the 2 km journey would have been 40 kJ, 100 times less.



- Conclusions

Some of the examples have been taken from the bibliography of Richard Buckminster “Bucky” Fuller (1895-1983) who was an American designer, architect, visionary and inventor. Energy slave is a term he created and is equivalent to the amount of energy that human labor would provide and that man-made machines do save us in the modern, fossil-fueled industrial economy.



Fossil fuels are a gift from the Mesozoic. We live at a speed that is impossible to overcome with animal or human energy. It is increasingly difficult to obtain oil and there will come a time when more energy will be invested in making a well than in what will be obtained from it. In the first wells, the ratio between what was invested and what was obtained was 1:100, now we are at 1:10. When we get to 1:1, exploiting these oil reserves will not offset. Renewable energies cannot immediately replace fossil fuels (gas, coal, oil) at the speed at which they are currently being used, so there seems to be no other way than to decrease the use of these energies, otherwise the “slaves”, that appeared in the previous examples and move our world, will have to be us when the fossil fuel reserves are exhausted.

MORE INFORMATION:

<https://www.educa2.madrid.org/web/educamadrid/principal/files/3dc9ad73-4b2f-4092-9364-36d483492e09/Proyecto%20bicicleta%20cargador%20USB.pdf?t=1525688508246>

Economic resources



Time



Difficulty level



Journalists on wheels

Target group: Primary and Secondary schools (9-13 year-old pupils, their families and teachers).

Main topic: Cycling and its health benefits.

Short description: This is a journalism workshop in which children interview health technicians (physicians and psychologists) about the benefits and risks of cycling to school. The result of the interviews will be recorded by children and it will be watched later on by families and technicians during a round table where families' fears can be addressed.

We have seen this workshop as a visible and concrete tool to attract families that would, otherwise, hardly ever go to school.

Furthermore, the health technicians' point of view had a great impact on the families' decisions on whether to do something or not, so including the physical and psychological benefits of cycling will encourage parents to allow children to go to school by bike.

Finally, journalism workshop has been proposed in line with the STARS-ECCENTRIC methodology, which trains children in communication techniques.

Photos, videos and reports about all these ideas will be prepared.

Activity development:

The workshop consists of three sessions:

- The first is a class meeting with the teacher to make a list of 20 questions that kids want to ask the doctors, police officers and psychologists on the benefits or risks of using the bike.
- The second is the session with the health professionals, psychologists and safety experts. Some students address their questions to them while others record them on tablets and take pictures and notes to disseminate some news.



- The third is a round table with the families and health technicians in which the output made by the students is displayed (videos, pictures, news, etc.). Later on, technicians and children answer to the families' questions. Some children also record this part and draw up a final video in which families', students' and technicians' questions and answers are inserted.

Examples on health questions:

- Is it true that cycling helps yours bones and your health?
- Is it true that cycling one hour a day helps getting over heart illnesses?
- Is it good to exercise a lot by bike? How many hours a week would you recommend?
- If you have asthma, can you go by bike?
- What diseases does cycling prevent?
- How do you exercise the most, through cycling or through running?
- What can benefit you the most, going to school on foot or by bike?
- If you get dizzy because of the heat you feel during cycling, what can you do?
- Do you become slimmer if you ride your bike?
- Did you see sick people in Madrid due to the air pollution?
- Why do we feel so good after cycling?
- What happens if you ride during your menstrual period?
- What happens if you ride during your pregnancy?



Examples on psychosocial questions:

- What are the psychological benefits of cycling?
- Could we come alone to school or together with our friends instead of our parents?
- How can we win the trust of our parents so that we can come to school alone? And by bike?
- If we come to school by bike, what do you advise us so as not to cause accidents?
- Why don't our families give us permission to go home or to school by bike?
- If we ride a bike, is it easier to get a girlfriend?



- If we bring an expensive carbon bike, would our peers be jealous?
- Should we feel bad for riding an ugly old bike?

Examples on safety rules questions:

- Is there a speed limit for bikes on urban and interurban roads?
- Why is the helmet only compulsory for children under 16?
- How much is the fine if you talk on the phone while cycling?
- Would it be wise to take measures in order to decrease car presence near schools?
- In which streets can you create bike lanes to come to school?
- Could you convince my father and mother so that I can come to school alone?
- Why aren't there more zebra crossings?
- How can we get bicycle parking within the school?

MORE INFORMATION:

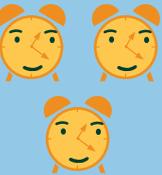
<http://eustarsmadrid.blogspot.com/2014/05/reporteros-sobre-ruedas.html>

<http://eustarsmadrid.blogspot.com/2015/10/que-preguntan-sobre-la-salud-los.html>

Economic resources



Time



Difficulty level



Bicycle rack building workshop

Target group: Teachers and parents.

Main topic: Construction of a bicycle rack with recycled material.

Short description: Teachers and parents interested in installing a bike parking in the school playground. The workshop is conducted in a central part of the city.

Goal: To get schools to build their own bike parking. It is intended to give “tools” to the members of the educational community in order to build a bicycle rack with recycled material, and then replicate it in the schools with their students.

Activity development:

- Duration: 1 session of 2 hours.
- Materials: Car tires, drills, saws, cutters, keys, screws, etc.
- Group size: Up to 15 people.



- Procedure:

Theoretical session

- The material, the tools and its characteristics are presented, brief explanation of the proposed designs.
- There is a talk on the relevance of the recycling materials and the different possibilities and uses they have in their life cycle.
- A questions and doubts time is established.

Practical session

- The group is divided into pairs around the tires. Each group will be accompanied by a specialist who will guide them to do the work and the use of the tool.
- Final assembly of all elements.
- Final picture.
- A satisfaction survey is filled out and signed in the attendance section.
- A leaflet/guide is given with the necessary instructions for the replica of the bicycle racks in the schools.

MORE INFORMATION:

<http://www.educarmadridsostenible.es/articulo/los-neum%C3%A1ticos-que-se-unieron-para-sujetar-bicis>

Economic resources



Time



Difficulty level



Workshop to teach students how to ride a bike by other students

Target group: Students who cannot ride a bike.

Main topic: Learning how to ride a bike.

Goal: To train the students on basic skills to ride a bike.

Short description: This workshop is promoted by the committee or the ambassador group. The members will act as student body representatives to show the need for training workshops where you can learn to ride a bike from scratch.

Activity development: The “teachers” will be students from the same age that are eager to help and with enough skills to ride a bike and teach some others to do it.

Needs: playground, cones, bikes.

Necessary time: 1 hour/week.

Once they are able to manage the bike, these workshops can aim to improve their skills by creating circuits to improve the students’ biking skills. The difficulty level of the circuits can be increased week by week.

It is important that these workshops are managed by students, despite being monitored by teachers, it is the key to success.



Economic resources



Time



Difficulty level



MORE INFORMATION:

<http://www.educarmadridsostenible.es/contenido/taller-aprende-montar-en-bici>

https://www.youtube.com/watch?v=2pDw_vjEUAQ

<https://twitter.com/ceipasturias/status/1093221506757394432?s=20>

<http://www.educarmadridsostenible.es/contenido/taller-aprendiendo-montar-en-bici>

“Letter to the District Authorities” Workshop

Target group: Primary and secondary education schools (students aged 6 to 19 and teachers).

Main topic: School environment improvement. Promoting children’s and teenagers’ participation and raising their voice up to the administration.

Goal:

1. To provide students with a critical look at the public space.
2. To pass along to the authorities the claims that students have about improving mobility around the school.
3. To get young people involved in municipal policies.
4. To transmit the participative process to young people: area diagnosis, finding the needs of the different groups, looking for allies, improvement proposals, proposals written embodiment, meeting request with politicians and district technicians to pass along the proposals, looking for communication means that will disseminate the proposals, follow-up of the claims.

Short description:

This activity is intended for committees or groups of STARS-ECCENTRIC ambassadors that will address the district alderman (or any other relevant authority such as Environmental councilman, the mayor, etc.) through a formal letter in order to propose active and sustainable mobility-related improvements in the school surroundings.

Activity development:

This activity is divided in 4 sessions:

1. (On the streets) we go for a stroll checking the urban space around the school: sidewalks, bike lanes, cars speed, cleanliness, safety, traffic lights, zebra crossing, urban furniture, etc.
2. (In the classroom) In order to ease writing the letter, we will divide the class in four groups, each one answers the following sentences:



- What things do we do (or have we done related to mobility) in our school?
 - How is our neighborhood?
 - How do we go from home to our school?
 - How do we want our neighborhood to be in order to go by bike, on foot or to spend more time on the street with friends?
 - We put the answers from the four groups together to make the final letter that will be sent to authorities.
3. We get a meeting with the technical and political relevant authorities. The Environmental Education Department will mediate to get the meeting.
 4. (In the City Council) Reading of the letter in an official ceremony. Every school from the same district is invited to the ceremony. It is recommended that the event has a festive nature and to go there by bike. The ceremony can be held as well in a public space in the open air so that everybody in the city can know the students' claims. Each school will call two representatives that will read the letter to the authority, who will later answer it specifying whether these claims are feasible or not, both technically and from a budget point of view. The political commitment to the proposal is desired.

Media will be invited to the event so they can disseminate the news. Public representatives, neighborhood associations, cycling and pedestrian associations, student's families associations, etc. will also be invited.

MORE INFORMATION:

<http://eustarsmadrid.blogspot.com/2016/02/querido-concejal.html>

<http://eustarsmadrid.blogspot.com/2016/04/los-escolares-piden-carril-bici.html>

<http://eustarsmadrid.blogspot.com/2018/06/bicicleta-da-stars-por-vallecas.html>

<http://www.educarmadridsostenible.es/contenido/una-carta-para-la-alcaldesa-de-nuestro-barrio>

Economic resources



Time



Difficulty level



Activity and event organization



Shared cycling itinerary

Target group: Primary and secondary schools (9-19 year-old pupils, families and teachers).

Main topic: Promoting urban cycling.

Short description: It is a cycling tour that will be joined by several schools (up to 30 schools) with the aim of gathering a big amount of riders in the city. The purpose of the cycling tour might be launching a STARS-ECCENTRIC campaign or a different event (celebrating European Mobility Week, Three Wise Men parade, joining cultural events, joining cycling associations' claims, etc.).

The group rides in the city among motorized vehicles. In order to make the route safer, measures on traffic calming may be taken by the City Council. In addition, police on bikes might escort the group and cut the traffic when needed.

Goal:

- To involve the school community and several Madrid City Council departments (safety, mobility, public events, communication media, urban furniture, etc.).
- To create critical mass in order to raise social awareness about urban cycling and the advantages of the bike: speed, fun, etc.



- To encourage parents and pupils to organize bike routes to school (bike bus).
- To optimize the results of the modal shift by fulfilling the environmental objectives of saving emissions and calmer and more fluid traffic in cities. There is a correlation between the schools with the best results and those most involved in shared cycling itineraries.
- To encourage the autonomy and responsibility of children, since being part of a bike bus or when cycling requires preparation, acceptance of rules, checking the state of the bicycle, agreeing on schedules and routes, etc.
- To strengthen the creation of networks between schools and neighborhood actors (other schools, associations and neighbors who support cycling or bikes), developing social networking that help to develop the neighborhood and create social capital in the city.
- To achieve health-related objectives by promoting physical exercise and preventing diseases related to sedentary lifestyle.
- To increase children's citizen participation. It can be matched with "Letters to the Councilor", letting the authority know the black spots in the area.
- To communicate the project (a picture or a video of children riding bikes is worth more than a thousand words). These events are included in radio interviews, posters and newspaper news.
- To improve the relationship with institutions and companies sponsoring the events (such as the Dutch Embassy and Reale insurance company or Mapfre Foundation, in Madrid). These relations are very important for cycling and mobility support and promotion.



- To create campaigns and develop children's creativity with posters, news about bicycles, advertising material, etc.

Activity development:

- Conditions required for schools:
 - Allocating a couple of adults to guide and to be responsible for each 50 participating pupils of each school.
 - Disseminating the event among the school community.
- Conditions required for the City Council:
 - Taking the necessary to make the route safe (traffic calming measures) and involving different City Council departments.
 - Setting up bike repair workshops, in case they are needed during the route.
 - Providing a car to pick up bikes that cannot be fixed during the route.

MORE INFORMATION:

Three Wise Men Parade: <https://www.youtube.com/watch?v=h3ck8GRDgSw>

<https://www.youtube.com/watch?v=pE6HfQPZXQo>

<https://www.youtube.com/watch?v=LhwQgGWqIIU&feature=youtu.be>

Itinerary with Dutch ambassador: <http://www.educarmadridsostenible.es/articulo/bicicletada-stars-con-holanda>

<https://www.youtube.com/watch?v=0zTryROiMWs>

Itinerary in EMW: <https://www.youtube.com/watch?v=HFMMWbmF0pyg&t=10s>

<https://www.youtube.com/watch?v=4-87aTx1rfE&feature=youtu.be>

<https://www.youtube.com/watch?v=UFaf6HdQSpw&feature=youtu.be&list=PLxnk-qwCj3huS3QTkYDJuquGh6PcdZbjVo>

<https://www.youtube.com/watch?v=vE87crnwHsc&feature=youtu.be>

Itinerary on Environmental day: <https://www.youtube.com/watch?v=kmdlWUuigP8&-feature=youtu.be>

Economic resources



Time



Difficulty level



Bike bus

Target group: 6-11 year-old students.

Main topic: Urban cycling.

Short description: Bike bus is a “bus to go to school by bike” usually organized once a week in every school. It is led by a number of teachers and parents involved with cycling.

Activity development:

- Check students’ cycling skills: are they ready to ride their bikes among other motor vehicles in urban areas?
- Check the students’ addresses and put them on the map. Prepare a round route starting at school, having stops near each child’s house and finishing in the school. Print out the route with timetables and stops, and hand it over to students.
- Check parents’ availability to do the cycling route (at least 2 adults for every 6 children) through a message, then send a message to the students and establish a round route with several stops near the students’ houses. The complete route with stops and timetables is sent through the email and given to the students on hard copy.
- Check the weather forecast several days in advance. If it is going to rain, maybe the activity should be cancelled.



- The day of the bike bus: ride safely and enjoy a healthy ride to school. The routes change each week to give all the students the possibility to sleep a little bit more. The roles also vary each week (the adult leading and closing the route, the student leading, etc.) The students go in groups of two with clear safety rules.



Economic resources



Time



Difficulty level



MORE INFORMATION:

<https://www.youtube.com/watch?v=oKPxGmGtnhE>

<http://www.educarmadridsostenible.es/recurso/%C2%BFqu%C3%A9-es-un-bicib%C3%BAs>

<http://www.educarmadridsostenible.es/contenido/el-bicib%C3%BAs-del-jes%C3%BAs-maestro-todo-un-%C3%A9xito>



Active and sustainable mobility card

Target group: 6-12 year-old students.

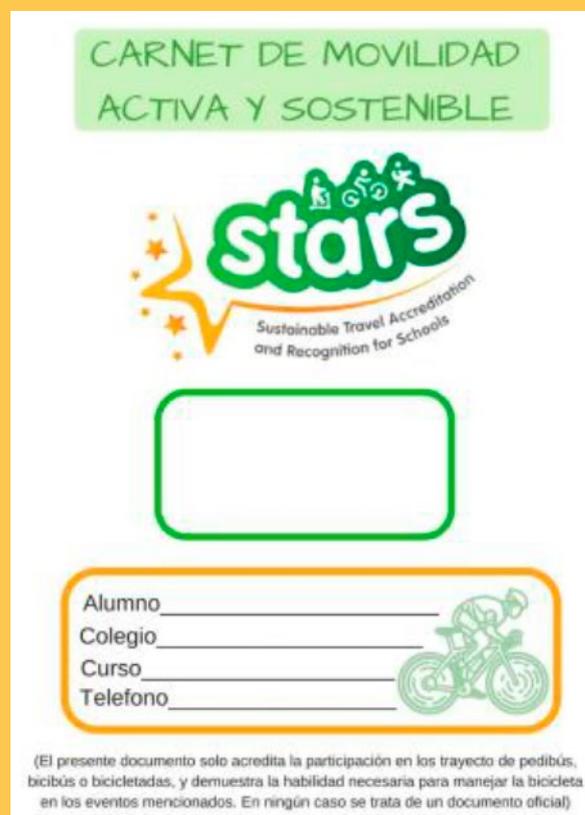
Main topic: Pedestrian and cycling modes.

Short description:

Students who usually go to school actively (on foot or by bike) are given a card on which a box is stamped every day they actively go to school. Usually, a small prize is established every quarter to those who have been active more days, such as bells, helmets, reflective lights, etc.) or STARS-ECCENTRIC t-shirts.

Activity development:

- **Cover:** it includes the project and school logo. We try to promote active and sustainable mobility on school routes. Students must take an urban cycling training course that will allow them to participate in bike buses, cycling trips or bike rides organized by the school. (This document only certifies the skills necessary to ride the bike on bike-bus routes or bicycle gatherings. On no account this is an official document).



- Back cover

Advantages of active trips (on foot, by bike, scooter, etc.) to school or High School:

- They improve my school performance.
- They develop my spatial intelligence.
- They teach me to know the city in a better way.
- They help me stay in shape physically.
- They improve my health.
- They stylize my figure.
- They are more fun.
- Generate endorphins and take away my bad mood.
- I feel like I'm capable of.
- They give me a sense of freedom.
- They develop my commitment to sustainability and public space.
- I learn to take care of myself.
- I learn to detect what doesn't work well on the streets I'm going through.
- It is cheaper than car or public transport.
- Many active journeys are faster than car or public transport.
- They reduce chemical and acoustic pollution.
- They make motorized traffic more fluid.
- They take care of the planet.
- They make my city nicer.

- Inside

- School stamps for each day pupils arrive at school in an active way.

Economic resources



Time



Difficulty level



Ventajas de los viajes activos (a pie, en bici, patinete, etc) al colegio o instituto:

- Mejora mi rendimiento escolar
- Desarrollan mi inteligencia espacial
- Me enseñan a conocer mejor la ciudad
- Me pone en buena forma física
- Mejoran mi salud
- Son más divertidos
- Me generan endorfinas y me quitan el mal humor
- Siento que soy capaz
- Me dan sensación de libertad
- Desarrollan mi compromiso con la sostenibilidad y el espacio público
- Aprendo a cuidarme
- Aprendo a detectar lo que no funciona bien de las calles por las que voy
- Es más barato que el coche o el TP
- Muchos de los viajes activos son más rápidos que en coche o en TP
- Reducen la contaminación química y acústica
- Hacen más fluido el tráfico motorizado
- Cuidan el planeta
- Hacen más amable mi ciudad

DÍAS QUE HE LLEGADO AL COLEGIO DE FORMA ACTIVA Y SOSTENIBLE



Kiss and go

Target group: Primary education schools (students aged 6 to 13, teachers and families).

Main topic: Good practices related to individual car mobility. Children's autonomy. Recovering school environments.

Goal: To implement measures to achieve safer and healthier school environments.

Short description:

Kiss and Go is a traffic calming measure applied to school entry points and entry time in order to achieve safer and healthier environments.

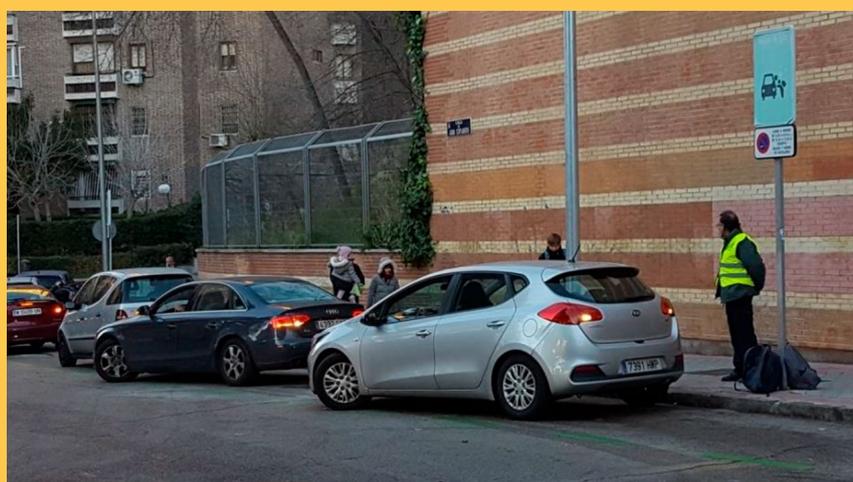
This measure consists of providing parking areas at certain times, where families can stop for a moment, kiss goodbye (kiss) their children and drive away (go) immediately, without parking the car. These areas need to be close to the schools so students can go walking safely and there are no jams close to the school entrance.

This is not only unclogs the school entrance creating a safer and friendlier environment with less noise and emissions, but also children's personal autonomy is encouraged, which is essential for their physical development and the maturity of basic psychological competences, such as social skills, problem solving, spatial orientation, self-confidence, etc.

Kiss and Go is a pioneering initiative that Madrid City Council launched in 2016 for Montserrat and Ciudad de Roma schools (Retiro district), and later on, in 2019, for Real Colegio Santa Isabel-La Asunción (Central District).

Activity development:

- Choose the schools where the measure can be implemented (high rate of students arriving by private car, traffic jams at the entrance, urban planning able of setting up kiss and go areas [depending on the streets width], safety conditions in the area, etc.).
- Ask the mobility and signaling technicians about the suitability for implementing the measure and the most appropriate places to locate the signals.



- Propose the measure to the AMPA and to the teaching staff.
- Organize a group of volunteers to come along with the youngest children from the Kiss and Go areas to the school door (secondary education students, teachers, relatives, district workers, etc.).
- Assess the measure, its main indicator will be the number of students that benefit from this tool, as well as the number of cars that do not park anymore in front of the school entrance.



MORE INFORMATION:

Madrid City Council Video: <https://www.youtube.com/watch?v=yA8PPMbZCJU>

RTVE video, minute 15: <http://www.rtve.es/alacarta/videos/informativo-de-madrid/informativo-madrid-01-02-19/4962760/>

https://www.youtube.com/watch?time_continue=32&v=40CEUiwzD4o

TeleMadrid video: <https://www.youtube.com/watch?v=zVMSc7KQii0>

Montserrat school video: https://www.youtube.com/watch?v=1KpMr_f0JvM

On Biciclistasmontserrat blog: http://www.biciclistasmontserrat.es/Noticias/Entradas/2016/2/15_Arranca_Kiss_%26_Go.html

<http://www.educarmadridsostenible.es/contenido/nuevo-kiss-go-en-el-santa-isabel>

<http://eustarsmadrid.blogspot.com/2019/01/20-minutos-sin-trafico-para-entrar.html>

“To school with no cars” campaign: <https://spark.adobe.com/page/lwmvREsInH5Yu/>

Safe and healthy school environments web: <http://www.entornoscolares.es/>

Economic resources



Time



Difficulty level



Parking day

Target group: All the stakeholders, technicians, teachers, families and students involved in the project.

Main topic: To be aware of the urban space occupied by motor vehicles and how it could be used for other goals and not mere parking, but as bike lane, pedestrians stop area, green area, etc.

Goal: To bring students and citizens walking on the street closer together in order to show the space occupied by private cars in the city.

Short description: During the sustainable mobility week, the city council allows some parking spaces are occupied to install gardens, activities or performances (games, reading rooms, exhibitions, gyms, musical concert, etc.). Thus, citizens can see other potential uses of the parking spots, such as parks, libraries, cultural or sports centers, etc.

Activity development:

- “No parking allowed” signs will be placed 48 hours in advance. If a car is still parked that morning, you can call the Municipal Police directly.
- The city council will provide plants to define the space of the parking that will be used, as well as explanatory posters of what “Parking day” is.
- The school organizes pedagogical activities in which students inform the public about what they are doing and the importance of recovering the public space, now for cars, for people.



- Complementary activities such as “Speed Hunters” or “Zone Diagnosis” can be implemented that day.
- It is essential the post-event communication, so some students will take pictures, others will write news and reports and some others will conduct a journalistic research to know what citizens think of the topic.



MORE INFORMATION:

<https://www.youtube.com/watch?v=Rocb1E3FBIs>

<https://www.youtube.com/watch?v=2zJUbhAVFCM&feature=youtu.be>

<https://www.youtube.com/watch?v=3p4UuVfQDaQ&feature=youtu.be>

<http://www.educarmadridsostenible.es/articulo/parking-day-2018>

<http://www.educarmadridsostenible.es/articulo/parking-day-2019>

<https://twitter.com/i/status/1173874685093797888>

Economic resources



Time



Difficulty level



Awareness-raising activities



STARS-ECCENTRIC short story, video and t-shirt design contest

Target group: Primary and secondary education students.

Main topic: Using children and teenagers' creativity and communication skills to create campaign products promoting active mobility, by bike and on foot.

Goal: The contest has a pedagogical goal following the methodology of the European educational project STARS-ECCENTRIC, based on the implementation of advertising campaigns conducted by and for children and teenagers, in order to achieve its main goal: to reduce motorized trips to school and shifting from motorized trips to active trips by bike or on foot.

Short description: This contest, organized by the program "Educate Today for a More Sustainable Madrid" awards several modalities (photographic composition for printing t-shirt, video, short story, etc.) and two levels (students of primary and secondary education).

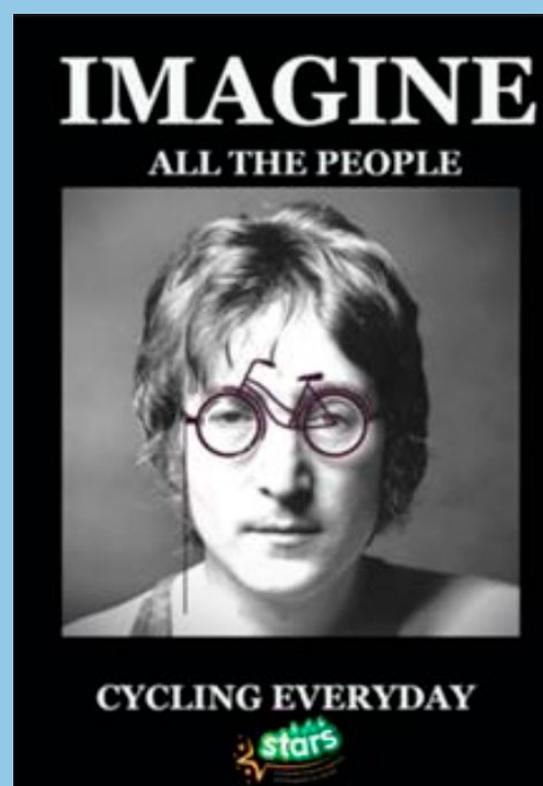
The short stories, designs and videos must be of a pedagogical nature and disseminate the values of sustainable mobility. The designs must include the project logo and reflect the characteristics, circumstances and values dedicated to promoting sustainable and active mobility among young people, especially the use of the bicycle.

Activity development

1. Prizes: The most valued graphic design or photographic composition will be awarded with the printing of its design on the front of the STARS-ECCENTRIC t-shirts, which will be distributed among the students and teachers of the schools who are involved in the project, as well as the digital printing of its publication on Madrid City Council's blogs and websites, "Educate today for a more sustainable Madrid", STARS-ECCENTRIC, in addition to the fact that all the designs can be disseminated through blogs, websites and social networks of schools.

The most highly rated stories and video clips will be awarded with their publication and dissemination through blogs and websites.

The stories, designs and videos submitted to the contest by the participating schools will be applied a Creative Commons-Recognition — ShareAlike license, which implies that anyone else is free to copy, distribute and publicly communicate the work and make derivative works with the only



requirement of acknowledging the authorship of the original work (and derivative works, if any) and share the resulting work under this same license.

2. Requirements, mode of participation and format of the papers to be submitted

Each school may present a maximum of three short stories, three t-shirt designs and three video clips. The school reserves the right, in its sole discretion, to determine the selection method of the students' work, sending the jury of the "Educate today for a more sustainable Madrid" program those it deems appropriate. In order to guarantee the anonymity of each school to the jury, the "Champion" teacher of each school will give a five-digit number to their designs, putting it before the title of the work. Only the teacher will know the association between the identity of the participant and the assigned number.

The work will be submitted from an email that does not identify its origin, therefore not from the emails usually used to communicate with the advisors or technicians of the program. The works will always include the project logo.

Graphic design or photocomposition format: The size of the JPEG file may not exceed 5 MB nor be less than 1.5 MB. The images included in the designs or photocompositions submitted to the contest must be free of copyright. The images may be used as long as the participants have the right to use and diffuse them.

Video clip format: Videos will have a maximum duration of 2 minutes, and it is recommended that they do not exceed one and a half minutes of broadcasting. The size of the mp4 file may not exceed 50 MB and must be of sufficient quality to be correctly broadcasted and watched through the usual channels and social distribution networks. The images and audios, sound effects and music included in the videos submitted to the contest must be free of copyright. Images and audios may be used as long as the participants have the right to use and disseminate them.

Short story format: Stories must be unpublished and original, handwritten and have a maximum length of 4 pages and they must be numbered. Works will be presented in DIN A4 format, written on one side only and in digital format.

3. Evaluation Criteria and Jury

The jury will take into account the following criteria when awarding points:

- **Functional criteria.** The adaptation of the story, video and design to the objectives established by the STARS-ECCENTRIC project: promotion of active and sustainable mobility, especially the use of the bike.
- **Propagandistic criteria.** The adaptation of the story, video and the adaptation of the design to the current graphic languages, in order to promote more demand for cycling mobility and, therefore, more dissemination of the project itself and its aims.
- **Aesthetical criteria.** Appeal of the design or the literary quality of the story.

The jury is formed by City Council technicians of communication and mobility.



4. Voting procedure

Each member of the jury will distribute in whole units a maximum of 3 points for each modality –3 points for story, 3 points for design and 3 points for video–, awarding them to one, two or three of the works presented in each modality. In the event of a tie, a new vote will be taken among the members of the jury, this time each member must give the three points of the modality to the same participant.

4. Resolution and notification deadline

The jury's decision will be communicated to the same mail from which the winning entry was sent and the results will be made public and will be disseminated during the following week.

MORE INFORMATION:

Blog STARS-ECCENTRIC: <http://eustarsmadrid.blogspot.com.es/>

Web Educate today for a more sustainable Madrid: <http://www.educarmadridsostenible.es/articulo/buenas-pr%C3%A1cticas-en-el-autob%C3%BAs>

Blog ECCENTRIC Madrid: <https://www.madrid.es/ECCENTRIC>

Links to school videos:

Juan de la Cierva: <http://eustarsmadrid.blogspot.com.es/2014/05/encuentra-tu-motivacion-para-ir-en-bici.html>

Montserrat: [Ole!! Ole !! Ole!! en bici voy al cóle](#)

Santa Bárbara: <http://eustarsmadrid.blogspot.com.es/2015/06/campanas-de-promocion-de-la-movilidad.html>

Santamarca: <http://eustarsmadrid.blogspot.com/2018/05/ganadores-del-concurso-stars-de.html>

San Isidoro de Sevilla: <http://www.educarmadridsostenible.es/articulo/resultados-de-los-concursos-stars-eccentric-2019>

Villa de Vallecas: <https://www.youtube.com/playlist?list=PLQMFBBEsDRs6RL-H9nfTs8NaIOic6G6HKI>

Economic resources



Time



Difficulty level



“Madrid moves me” Exhibition

Target group: Primary and Secondary Schools (9-19 year-old pupils, families and teachers).

Main topic: Urban cycling.

Goal: To reflect on the problems related to urban cycling mobility. We invite parents involved with the STARS-ECCENTRIC project to visit the exhibition when it opens in each school.

Short description: “Madrid moves me” is an exhibition by the artist Lola García Garrido. It consists of 20 photomontages of 70x90 cm with images on mobility (by public transport, walking and cycling) and with scenarios, buildings or emblematic sculptures of the city of Madrid to favor the identification of the audience with the city shown.

The pictures are exhibited in an itinerary way in the STARS-ECCENTRIC secondary schools in every school year since 2007. It has also been exhibited at CIEA Huerto de Retiro and CIEA Dehesa de la Villa, as well as on the “parking day” every European Mobility Week.

Activity development:

The exhibition will be on display for 15 days in each school.

They have activities designed to complement the exhibition and encourage reflection:

1. Divide the pupils into 4 subgroups of no more than 8 people. Each group will choose 1 poster to debate about it during 3 minutes:
 - Subgroup a): advantages of using the bike in the city.
 - Subgroup b): personal benefits of using the bike.





- Subgroup c): problems in the use of the bike.
 - Subgroup d): solutions to improve circulation by bike.
2. Discussion group (no more than 10 people) about the myths / realities associated with the use of the bike.
 3. A research subgroup has previously prepared an issue which it presents to the group, e.g., the relationship between fossil fuels and climate change or between urban planning and mobility shift.

MORE INFORMATION:

<http://www.educarmadridsostenible.es/contenido/madrid-me-mueve>

<http://www.educarmadridsostenible.es/contenido/la-exposici%C3%B3n-madrid-me-mueve-visita-el-ies-antonio-dom%C3%ADnguez-ortiz>

<http://www.educarmadridsostenible.es/contenido/taller-sobre-la-exposici%C3%B3n-madrid-me-mueve-0>

<http://www.educarmadridsostenible.es/contenido/exposici%C3%B3n-madrid-me-mueve-0>

<http://www.educarmadridsostenible.es/contenido/la-exposici%C3%B3n-madrid-me-mueve-visita-el-ies-antonio-dom%C3%ADnguez-ortiz>

Economic resources



Time



Difficulty level



“Best by bike” Exhibition

Target group: Primary and Secondary Education Schools (9-19 year-old pupils, families and teachers).

Main topic: Urban cycling.

Goal: To reflect on the advantages and barriers of urban cycling or public space.

Short description: The “exhibition that you can cycle” is an initiative shared by the association “Friday” with the collaboration of 26 artists who share a common goal: to promote the use of bicycles as a regular means of transport, thus building cleaner, friendlier and more sustainable cities. Nowadays, this is showed under the “Best by Bike” slogan, an exhibition being held at schools and high schools in our city under the STARS-ECCENTRIC Project (Sustainable Travel Recognition and Accreditation for Schools). The exhibition includes 23 posters and also three stationary bikes and wooden models that show 3 bike itineraries in Madrid. Pedaling generates energy and lighting. The model is built according to the miles travelled.

We invite students’ parents from all schools committed to the STARS-ECCENTRIC project to visit the exhibition when it opens in each school. It will be available around two weeks in each school.

Activity development:

Complementary activities of the “Best by Bike” Exhibition

1. Divide the pupils into 4 subgroups of no more than 8 people. Each group will choose 1 poster to debate about it during 3 minutes:
 - Subgroup a): advantages of using the bike in the city.
 - Subgroup b): personal benefits of using the bike.
 - Subgroup c): problems in the use of the bike.
 - Subgroup d): solutions to improve circulation by bike.

Afterwards, each group appoints a speaker who will present the reason for choosing that poster during 2 minutes.

2. Each person chooses and presents a poster, names it, gives the reason for participating in the activity (or program) and explains his/her choice. (This can be done in groups of no more than 15 people).
3. 8 groups of no more than 5 people are formed. They stand near the poster they have to discuss. Later, the spokesman of each group explains in two minutes the conclusions reached by the group. The posters which can generate more debate and are, therefore, convenient for this activity, are number 3, 4, 9, 11, 17 and 26.



4. Discussion group (no more than 10 people) about the myths / realities associated with the use of the bike.
5. Discussion group (no more than 10 people) about the problems / advantages of using the bike.
6. A research subgroup has previously prepared an issue that is addressed to the group, e.g., the relationship between fossil fuels and climate change or between urban planning and mobility shift.
7. The group is divided into as many subgroups as posters are exposed and, in 2 minutes, each subgroup has to put a title on its poster. Then, everyone approaches each poster and the spokesperson explains why each poster has that particular name.



Topic suggested according to the posters: Compact City and Mobility; Bicycles fight climate change; Public space recovery of and bicycles; Dispelling Myths about Bicycles (old-fashioned, age, fitness, picture, gender, attire, insecurity, weather conditions, etc.); Bicycle Advantages (Time, economic, environmental, health, aesthetic, social, etc.); Bicycle Problems; Solutions to bicycle problems.

Economic resources



Time



Difficulty level



MORE INFORMATION:

<http://www.educarmadridsostenible.es/contenido/best-bike-en-el-madro%C3%B1o>

<http://www.educarmadridsostenible.es/contenido/exposici%C3%B3n-best-bike>



Exhibition of works presented in the contest

Target group: Primary and Secondary Education Schools (9-19 year-old pupils, families and teachers).

Main topic: Active mobility (pedestrian and cycling modes).

Goal: To disseminate the campaign graphic products. To show the commitment that students have towards sustainable mobility. To provide students with a creative way of social participation. To build a social net in the neighborhood. To reinforce teenagers' social value. To empower students.



Short description: The exhibition includes the best works presented in contests in the past years as products of sustainable mobility campaigns. The exhibition travels through all the schools participating in the project in Madrid to let all students, families and teachers know about the work they have done.

The fact that students can see their own works exposed improves their motivation to continue working on campaigns, to continue researching on the design and photography and to stay involved with sustainable mobility and urban space.



Economic resources



Time



Difficulty level



“Little Red Riding Hood walks alone” Exhibition

Target group: 6-16 year-old pupils.

Main topic: Pedestrian mode.

Short description: This exhibition consists of 12 panels of 61 x 131 x 2.5 cm, with the story of Little Red Riding Hood turned into the topic of mobility. Drawings are childish but the content is quite advanced, so activities can be carried out both for primary and secondary.

“The Little Red Riding Hood” exhibition reflects on the difficulties children face in their relationship with the urban environment, especially focusing on urban mobility and cultural-educational aspects.

Activity development: The exhibition focuses on the importance of the road to school as a space to develop children’s autonomy, to reinforce children’s and teenagers’ social relationships and to increase cities safety and kindness (providing a video on the subject as a complementary resource).

“Little Red Riding Hood” exhibition is around two weeks in each school that asks for it. Each classroom, depending on the primary and secondary levels, can conduct different activities with the posters of the exhibition (describing the ideal surroundings, describing the problems of the school surroundings, convert CO2 emissions saved by kilometers travelled on foot or by bike, etc.

This exhibition (see the posters in the link below) proposes an attractive and multidimensional approach to a complex issue that presents multiple perspectives and can be an especially interesting resource for those administrations and organizations that are developing improvement programs on urban education with children’s participation or that focus their work on mobility.



Complementary activity: within this exhibition, we have also carried out activities such as the one on the blog “How is the ideal street for students?”: <http://eustarsmadrid.blogspot.com/2016/03/co-mo-es-la-calle-ideal-para-caminantes.html>

STREET TO STROLL		
	PLEASANT	UNPLEASANT
CARS		
TREES		
SIDEWALKS		
NOISES		
CHEMICAL POLLUTION		
ZEBRA CROSSINGS		
TRAFFIC LIGHTS		
HOUSES		
STORES		
PEOPLE		
FURNITURE (Street lights, benches, kiosks, etc.)		
SIGNS		
NEON LIGHTS		



Economic resources



Time



Difficulty level



MORE INFORMATION:

<http://www.mapama.gob.es/es/ceneam/exposiciones-del-ceneam/exposiciones-itinerantes/caperucita/default.aspx>



Introducing the project to students' families' associations

Target group: Primary Education Schools (families from Primary Education School).

Main topic: STARS-ECCENTRIC.

Short description:

We have thought about this tool to attract families and to involve them in the program.

Furthermore, we prepare a Power-Point presentation to clarify the objectives, methodology and activities to be carried out over the course within the STARS-ECCENTRIC program.

This activity is an opportunity to review the importance of children's autonomy and their developmental features in terms of perception, thought and motor control.

Moreover, we advise family members on how to introduce children into active mobility.

Economic resources



Time



Difficulty level



Presentación de proyecto STARS

Miércoles, 13 de noviembre
a las 16:00 horas
en el comedor del colegio

Colegios e institutos por la movilidad sostenible

El proyecto STARS es un proyecto europeo y municipal de promoción de la movilidad sostenible en bicicleta al colegio.
Incluye a otros 20 centros de primaria e institutos de la ciudad de Madrid, el C.P. Ignacio Zuloaga va a participar en el curso escolar 2013-2014 en una iniciativa que, desde 2013 a 2016, agrupa a 9 ciudades, entre ellas Bruselas, Milán, Budapest o Eindhoven, y que a largo de estos 3 cursos escolares unirá en un mismo proyecto a 270 colegios e institutos europeos, 35 de ellos madrileños.

Climate change and Mobility Lecture

Target group: Educational community: students, teachers and families interested in the subject, especially those active in the development of the STARS-ECCENTRIC project (environmental committees and ambassador groups).

Main topic: Climate change and its connection with unsustainable mobility.

Goal: To get to know the effects of climate change, the main causes and problems. To raise awareness of the importance of acquiring habits that contribute to mitigate climate change, especially through actions related to sustainable mobility (food consumption, tourism habits, etc.).

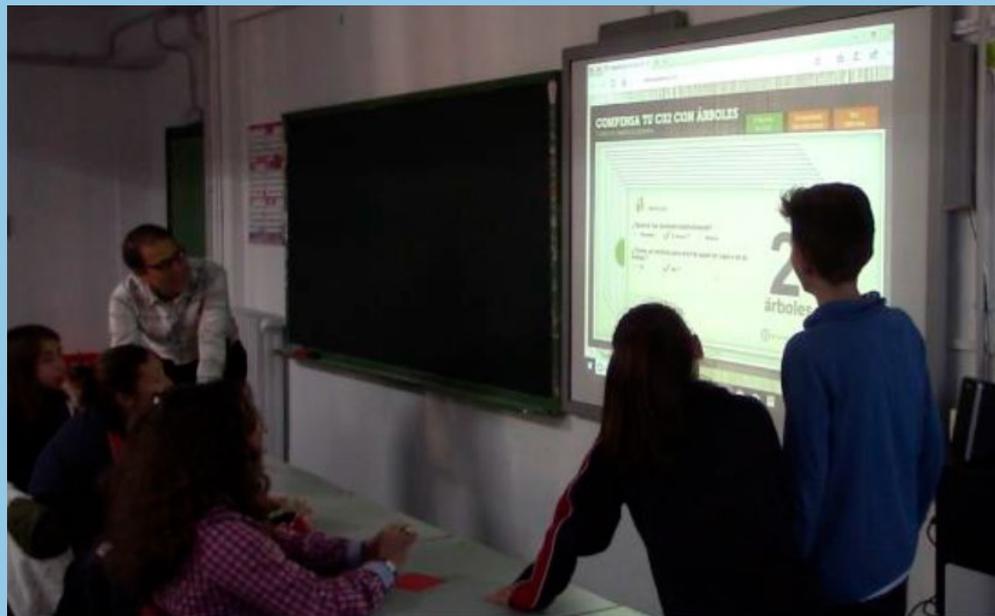
Short description: The lecture will consist of the presentation of the main topic and a time will be reserved for questions and some dynamics to engage the audience.

Activity development:

- Duration: 1 hour.
- Materials: projector, speakers, Internet access, blackboard, microphone (depending on the audience).
- Group size: up to 200 people.
- Procedure: The lecture will be accompanied by a PowerPoint presentation where the following contents will be transmitted in a participatory manner:
 - Concept of climate change. Importance of transport. Pollutant emissions by type of vehicle and their effect on climate change. Grams of CO₂ equivalent/km.
 - Differences between compact and diffuse urbanism. Diversity of uses and functions, energy and water resources of both models, endogamous/exogamous spaces, increase in infrastructure building price in the dispersed city, exponential need for transport, lack of services that leads to increased motorized travels, loss of air quality, loss of teenagers' and old people's autonomy, loss of meeting spaces and development of citizenship, loss of biodiversity, etc.



- Public space for motor vehicles. Public transport versus private transport depending on the urbanism and the consequences of the current mobility model: high external energy dependence, high greenhouse gas emissions (continuously growing, more than any other sector), air pollution, noise pollution, loss of city centers and public spaces, alienation, social exclusion, slums, road insecurity, loss of quality of life, etc.
- Active transport versus motorized transport depending on the use of the public space and urbanism.



Economic resources



Time



Difficulty level



MORE INFORMATION:

<http://www.educarmadridsostenible.es/contenido/conferencia-cambio-clim%C3%A1tico>

<http://www.educarmadridsostenible.es/contenido/conferencia-en-el-centro>



Gender and bike workshop

Target group: Secondary education students (high school level). Aspects to be considered:

- The selected students cannot be repeating pupils, as their age should be between 16 and 17 years old.
- The selected students cannot be from the same class. A sample group from each classroom must be chosen.

Main topic: Gender stereotypes, sustainable mobility, equality.

Goal: To raise awareness of teenagers' mind maps regarding masculinity and femininity. To reflect on mobility and gender stereotypes.

Short description:

This workshop will be divided into two sessions. The first one, with girls and boys separated in different rooms, addresses a discussion on the concepts of masculinity and femininity for each group and what attributes we allocate to each one. This session aims at gathering information about teenagers' thought processes and mind maps and at using this data as the basis for future interventions.

The second session, in which boys and girls are together working in pairs, focuses on carrying out a little intervention. Each couple will have to solve a problematic situation (by a role playing conversation) in front of the group, the situation will be related to a gender problem described in the previous session: being invited for a drink, giving your phone to your partner to check it, do some house chores, agree to change your clothes because your partner considers them unsuitable, etc.

Activity development:

- Group size: 16 students divided in two groups of 8 girls and another group of 8 boys from the first year of High School.
- Duration: Two sessions of 75 – 80 minutes.
- Materials:
 - Session 1: computer and video on gender (<https://www.youtube.com/watch?v=BjOfTHMXyok>), pencil and paper, thick felt pens, post-it notes, flip chart paper, 7-question questionnaire.
 - Session 2: photographs (20), inflated balloons (8), cards (8) with "stereotype-related problem" from session 1 (8), thick felt pens, post-it notes, materials produced in the previous session, flip chart paper, tape and video (<https://www.youtube.com/watch?v=h8Hj3xXjUAY>).



- Description of the sessions:

First session:

- Each group works separately during the whole session, but they do the same activities. The session starts showing a video about segregated education through gender-based toys. <https://www.youtube.com/watch?v=Bj0fTHMXyok>
- After watching the video, they discuss and share their ideas and opinions about it.
- Afterwards, a debate on masculinity and femininity is proposed in order to define the most characteristic attributes of these categories.
- They write each attribute on post-it notes and stick it on the flip chart paper. The paper is divided into two large areas, one for masculinity, WHAT DOES IT MEAN TO BE MASCULINE? and another one for femininity, WHAT DOES IT MEAN TO BE FEMININE? and each one of them is divided into two to note the characteristics they consider natural and learned.
- The session ends by completing a seven-question questionnaire. Some of them are open questions, others have a 1-10 scale.

Second session:

- Presentation: each participant chooses a photograph (all of them are photos related to urban cycling). Then, they introduce themselves and explain why they have chosen that picture.
- Students are given feedback about all the work carried out by groups in the first session, since pupils don't know what the other group said. A joint analysis of the results of both groups is carried out.
- The participants form mixed gender pairs and each pair takes a balloon containing one of the stereotype-related problems discussed in the previous session. For the next 15 minutes, each couple has to come up with at least two specific solutions to that problem.
- Each couple discusses their solutions for a few minutes and writes them in post-it notes, they stick them on the flip chart paper.
- Each couple plays (role playing) at least one of the solutions in 3 or 4 minutes.
- Short summary and final conclusions of these sessions are exposed by the facilitators.
- To close the workshop, the whole group watches a video: <https://www.youtube.com/watch?v=h8Hj3xXjUAY>

Economic resources



Time



Difficulty level



MORE INFORMATION:

<http://www.educarmadridsostenible.es/actividad/taller-de-g%C3%A9nero-y-bici>

Communication, dissemination and networking activities



Madrid's families and teachers' workshops

Target group: City Council technicians, schools and families.

Main topic: Finding reasons to explain why the City Council, schools and families must work in the same direction to achieve the same goal. Addressing announcements and manifestos to the authorities in order to improve the public space that surrounds the schools.

Goal: To create a network of people interested in improving the school surroundings to reflect on it and to take the proposals to the authorities and the media about topics such as the urban space that surrounds schools and sustainable mobility from home to school.

Short description:

The group will tackle the role that families may play in the STARS-ECCENTRIC project and will propose ways of collaboration among the city council, teachers and families to increase children's autonomy.

It is of greatest interest to reflect on the fear and social alarm of insecurity and to see how the project can contribute to building trust.

It is also essential to reflect on the negative effects of the current civic responsibility system and to propose shared civic responsibility formulas in the risk-taking processes.

Activity development:

The group will be divided into 5 subgroups, each subgroup will elaborate proposals, ideas and solutions to these issues:

1. Families' role in municipal mobility projects: what can they do, where, when and how.
2. Students' autonomy. How to establish a common strategy to take down the barriers that prevent children from achieving greater autonomy on their way to school.



3. Fear. How to counteract the current climate of social alarm regarding children: proposals in all directions to overcome fear generated by communication media.
4. Trust. Ideas and proposals that can contribute to generating safety in several directions: in the children's own abilities; in the neighborhood relationships; in the family-teacher relations; and in the society in general.
5. Legal framework. With a context limited by Civil Liability and Accident Insurance, how can shared responsibility agreements be created and addressed?

Recommendations:

1. Bring together the group on a Saturday morning or afternoon depending on their preference.
2. Duration: 2 hours and a half.
3. Group size: no more than 30 – 35 people.
4. Show the group the general proposals taken from each subgroup, for example:

Legal protection of children's autonomy:

- To show the needs and request a normative development that links children's autonomy with safety.
- To submit a letter addressed to the Children's Ombudsman, the Department of Education and the corresponding councils, signed by the school board –after a faculty meeting–, the Environmental Area of the Madrid City Council and the tutors.
- This demand must focus on the fact that the authorization of the families is enough for a minor to enter or leave an educational center without being accompanied by an adult.

Regulation of movement of children on bicycle:

- To clarify the regulation on bicycle traffic on sidewalks.
- To participate in the creation of rules for bicycle traffic in cities, providing the point of view of educational centers.

Coexistence and safety:

- To carry out an awareness-raising campaign for an adequate coexistence between bikers, drivers and pedestrians.

Economic resources



Time



Difficulty level



Teachers' workshop: Biking to school is cool

Target group: Primary and Secondary Education School teachers ("Champions" in STARS-ECCENTRIC terminology).

Main topic: Workshop (including 3 workshops/school year) where the Champion teachers involved in the STARS-ECCENTRIC project, some relatives, cycling associations, health and mobility technicians and municipal cycling police share their knowledge on the project objectives and tools.

Goal:

1. To create a coordination and interlocution group between the Madrid City Council, the STARS ECCENTRIC program technical team and the participating educational centers.
2. To exchange experiences, resources, methodology or proposals among STARS ECCENTRIC educational centers.
3. To coordinate joint activities between the educational centers participating in the program.
4. To monitor the project, analyze the difficulties and conflicts that appear along the way and look for alternatives and joint solutions.

Short description:

A variant of the STARS-ECCENTRIC initial methodology where the unique local workshop has been replaced by a continuous working group in every city with well-organized quarterly workshops.

During these workshops, every school Champion shares its experiences, approaches and projects with the rest of schools involved. The transmission effect has been very positive, as all of them address similar problems and there are different experience levels between the groups. The important thing is to create a network of cycling teachers. The factors that affect the successful implementation of the program (familiar engagement, support of manager's school, rest of school teachers' participation, neighborhood engagement, etc.) are analyzed, as well as the barriers (lack of implication around the scholastic community and neighborhood).



Also, we can see the resources and activities provided by the City Council (cycling training courses for students and teachers, exhibitions, diagnostics, workshops with health departments, family forum, conferences with family associations, cycling weekend workshops, big itineraries, events, result of surveys, etc.) and the resources provided by the school (exhibitions, competitions, campaigns, small itineraries, curriculum integration, STARS-ECCENTRIC bulletin boards, murals, surveys, etc.)

Activity development:

Send previous meeting minutes and make an agenda for the next meeting.

Create a climate of participation in order to allow others a turn for sharing educational experiences: speaking turns, dynamics to alternate spokesperson, etc.

Promote dynamics by subgroups, optimizing the analysis of the problems and the solutions proposed.

Review the methodological part with a presentation. The methodology, the tools and the activities are in constant modification or adaptation depending on the intrinsic characteristics of the schools or neighborhoods, or the strengths of the relatives and teacher involved.

Prepare a calendar and a list of activities for the next meeting.

MORE INFORMATION:

<http://www.educarmadridsostenible.es/articulo/%C3%BAItimo-gt-de-profesorado-stars>

<http://www.educarmadridsostenible.es/articulo/segundo-taller-stars-eccentric-primaria>

<http://www.educarmadridsostenible.es/articulo/taller-de-profesores-stars-eccentric>

<http://www.educarmadridsostenible.es/articulo/bienvenida-oficial-al-curso-2019-20-taller-profesorado-stars-eccentric>

<http://www.educarmadridsostenible.es/articulo/pr%C3%B3ximo-gt-de-profesorado-stars-eccentric>

Economic resources



STARS-ECCENTRIC Blog

Target group: All the stakeholders, technicians, associations, teachers, families and students involved in the project.

Main topic: News and activities carried out by schools.

Goal: To disseminate the STARS-ECCENTRIC project, the participating schools and teachers, its methodology, its tools, its allies and its inclusion in the Madrid's society future.

Short description:

STARS-ECCENTRIC Blog works as a showcase, a network node and a resource for training in the municipality. It is a loudspeaker of what is happening in schools and in the municipality in relation with the project, a mosaic of good practices, and an experience exchange place. The blog also aims at being a training tool in order to continue disseminating information about the STARS-ECCENTRIC methodology. The work of the blog is complemented with a Twitter account so that news related to active and sustainable mobility can be disseminated to schools, locally, regionally, nationally and internationally.



Activity development:

1. Feasibility, conditions and resources for implementation. We need a person knowing the project in depth (at least 2 days a week for 40 schools), in order to do a follow-up of the project, create a blog, create contents, upload it to the account and active the Twitter account. The promotion in schools is very important to encourage students and teachers to share news and develop materials (photos, videos, drawings, etc.). There will be a set of articles, photos, etc. designed by the entire STARS-ECCENTRIC team.
2. Aspects of interest to be known:
 - Benefit from the resources and the people that are already involved, as well as the person in charge of municipal communication or the use of a specific tab on the municipal website.
 - Motivation by the advisor for schools to share their activities and materials by creating news constantly.
 - Assessment of the importance of the communication of the work done by schools.
 - News will be more than the description of a fact, they may also be a summary of how this activity has been developed and the impact it has had, and thus is replicated in other schools.

Economic resources



Time



Difficulty level



MORE INFORMATION:

<http://eustarsmadrid.blogspot.com/>



Campaign to promote sustainable mobility

Target group: Primary and secondary education schools (students between 6 and 19 years old, families and teachers).

Main topic: Sustainable, autonomous and active mobility dissemination and promotion.

Goal: To implement a dissemination campaign on active mobility (on foot or by bike) in each school every school year.

Short description: This activity has been designed in order to disseminate and promote sustainable, autonomous and active mobility values to our target group through communication posts on hard copies, such as articles, interviews, research studies from the students in the neighborhood, posters, videos, short stories, events at school or in the neighborhood, letters to the authorities, manifests, etc. always referred preferably to active mobility, good practices in public transport or even in particular cars (shared car, kiss & go, speed reduction, etc.).

The campaign is also present in the STARS-ECCENTRIC corner inside each school, in the school magazine or any local printed or digital paper, websites, school blogs, other social media, STARS and ECCENTRIC webs or Educate today for a more sustainable Madrid, etc.

The purpose is that students themselves generate their ideas, create the campaign products and conceptualize the message that they want to transmit in the campaigns through participating work groups (mobility ambassador group and environmental committees) where the whole educational community is involved.



It is desirable that the students themselves be responsible for and manage the campaign through peer to peer methodology (communication among equals). In order to do so, this can be done together with communication workshops (video, posters, interviews, theatre plays, graffiti, etc.).

Activity development:

1. Choose the student group that wants to participate in the campaign material creation (posters, video, theater play, etc.).
2. Choose the group of students that wants to participate in the event organization (open doors days, bike rallies, sustainable mobility week, etc.).



3. Choose the group of students that wants to participate in the dissemination plan: through social media, making newspaper articles, campaigns and events pictures, etc.

Usually, the selection is made among those most involved in environmental issues, those who love cycling, those who are most motivated by creative or artistic tasks, those better at communicating, etc. Therefore, it is not needed that the students' selection is made among those with better grades, but those with better communication skills.

MORE INFORMATION:

Campaign We smoke with the smoke: <http://www.educarmadridsostenible.es/articulo/echamos-humo>

Campaign to improve pedestrian mobility (with elders): <http://www.educarmadridsostenible.es/articulo/me-gusta-mi-barrio>

Campaign Going to school by bike and fearless: <http://eustarsmadrid.blogspot.com/2018/11/los-escolares-ensenan-stars-en-un-video.html>

Campaign Going to school without cars: <https://spark.adobe.com/page/lwmvREslnH5Yu/>

Campaign Reintegration is possible: <https://www.youtube.com/watch?v=lr2DpxMqGpo>

Campaign Respect 30: https://www.youtube.com/watch?v=xil_LZjb8GM

Campaign Knowing your neighborhood BEC: <http://www.educarmadridsostenible.es/contenido/y-t%C3%BA-%C2%BF-conoces-tu-bec>

Campaign Yes, I do pick up <https://www.youtube.com/watch?v=gCtNPsz9MDY&feature=youtu.be>

Economic resources



Time



Difficulty level



Intergenerational communication activities about good practices on mobility

Target group: Vulnerable groups with gender perspective (elders and primary and secondary education students).

Main topic: Mobility good practices on the bus and as a pedestrian.

Goal:

- To achieve specific improvements in road safety and public space quality in areas often visited by vulnerable groups.
- To take a more critical look at the public space and to increase the capacity to raise their opinions and proposal to the authorities. There will be a comic analysis on mobility problems by bus and as a pedestrian.
- To promote intergenerational relationships on mobility issues so that elders can feel more respected on the bus and to improve the pedestrian mobility safety.
- Integration and empowerment of vulnerable groups.
- Increased independence of mobility for the elderly and children.

Short description:

A change in the daily mobility behavior of teenagers and old people is proposed, having a positive impact on the whole neighborhood within safe and sustainable mobility.

All of this is created through a participative process from lower to higher levels in the different audiovisual communication products, the script and performances will be done by elders together with teenagers in work groups that will result in video clips on good practices on the bus and awareness-raising chirigotas on the urban space.

Activity development:

1. Look for a group of old people and a group of students that may be interested in doing the videos on mobility and urban space.
2. Go for a stroll with a critical mind with elders and teenagers, both on foot and by bike, taking notes on the following topics: road conditions, tree barrels, green areas conditions, cleanliness, benches, zebra crossing, duration of traffic lights, speed of cars, bus frequency, waiting time, bus speed and breaking



adequacy, yielding your seat to older people, pregnant women or people with mobility problems, users' behavior on the public transport, etc.

3. Elderly people and students write comic scripts about the general problems and devise scenes in which the problem and possible solutions are shown.
4. Record videos with the students and the elders as the main characters.



MORE INFORMATION:

<https://www.madrid.es/portales/munimadrid/es/Inicio/Medio-ambiente/CIVITAS-ECCENTRIC/Las-11-medidas/Estrategias-de-gestion-de-la-movilidad-para-grupos-vulnerables-con-perspectiva-de-genero-medida-2-8-/?vg-nextfmt=default&vgnextoid=a018b0cb9959f510VgnVCM-2000001f4a900aRCRD&vgnnextchannel=a92192f14e69f510VgnVCM1000001d4a900aRCRD>

<http://www.educarmadridsostenible.es/articulo/me-gusta-mi-barrio>

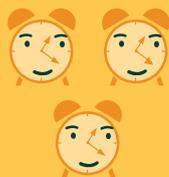
https://www.madrid.es/UnidadesDescentralizadas/Sostenibilidad/EspelInf/Eccentric/04Difusion/04cBoletin/201905_Newsletter_Eccentric_Madrid_V3.pdf

<http://www.educarmadridsostenible.es/articulo/buenas-pr%C3%A1cticas-en-el-autob%C3%BA>

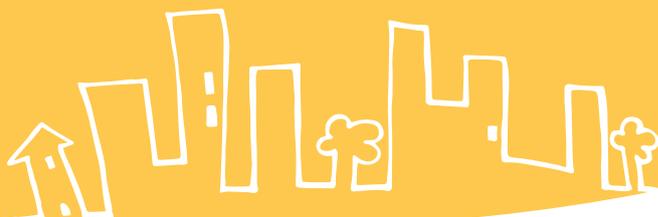
Economic resources



Time



Difficulty level



Broadcasting on the Radio

Target group: Primary and secondary education schools (students from 6 to 19 years old, families and teachers).

Main topic: STARS-ECCENTRIC project dissemination and promotion in the neighborhood and the city.

Goal:

- To report the progress of the STARS-ECCENTRIC Project to the city.
- To communicate the factors that ease the development of the project (relatives' and teachers' involvement, cycling police training, students' team that will disseminate the project, companies that donate bikes, etc.) and the elements that works as barriers for the project (lack of cycling infrastructure, excessive car speed, relatives' fears, etc.).
- To develop students' linguistic and oral expression skills.

Short description:

We find ourselves in the world of communication, the influence of the media on our learning and perception of the society is very important in every life stage. The early 21st century meant the development of internet, resulting in an open platform that allows new ways of socializing the information. This evolution also affects schools and provides us with new pedagogical tools: radio broadcasting is now within our reach.

The participation in radio programs tries to complement the project dissemination campaigns, giving a unique opportunity to students to improve their linguistic and journalist abilities, developing their creativity through oral expression. Students will prepare their questions and answers, feeling like a journalist for a day and exploring mobility topic that can be of general interest for the population.



Activity development:

- Contact local radios at municipal, district and neighborhood level. It is even possible to carry out the activity in school radios or cycling and pedestrian association radios.
- Prepare scripts for radio interviews with students.
- Practice.
- Live broadcast.
- Write an article on the topic with pictures and disseminate it on social media with the link to the radio interview.

CES VALDECÁS
Y PROYECTO STARS EN LA RADIO

Jueves 25 de Mayo a las 18h en

radio valle as
107.5 FM

stars

RVK

¿Conoces qué es el Proyecto STARS y todas las actividades que se han realizado en nuestro centro?

¡¡Escucha a nuestros seis embajadores en la radio y te enterarás de todo!!



Economic resources



Time



Difficulty level



MORE INFORMATION:

<http://www.educarmadridsostenible.es/contenido/t%C3%BA-ambiente-y-valdec%C3%A1s-en-radio-vallekas>

<https://www.youtube.com/watch?v=wlfHLdyi9Ks>

<https://www.youtube.com/watch?v=vA5nVlsDIAQ>



Statements by students at the National Environment Conference

Target group: Primary and secondary education schools (students from 10 to 19 years old, families and teachers).

Main topic: Mobility school project dissemination and promotion.

Goal:

- To throw visibility and place value on children and teenagers' collaboration in order to achieve sustainable mobility goals.
- To make visible the lack of sustainable habits of those attending the congress (in theory, the population most motivated and involved in environmental change and the fight against climate change).
- To empower young mobility ambassadors from the STARS-ECCENTRIC project.

Short description:

Both in 2016 and 2018 there has been an active presence of students at the National Environmental Congress (CONOMA). Secondary education students have participated in workshops and activities, and have been protagonists by doing presentations on their active and sustainable mobility projects. Primary education students have shared successful experiences and actions with the audience, they even prepared a small performance on the concerns that they have about autonomy and the way to school.

In the last edition of CONOMA, more than 140 children participated actively in the congress by talking about sustainable mobility and participating in sessions and workshops where they exchanged ideas with environmental experts. They conducted radio interviews to several scientific and political celebrities in the congress, they participated in the work group "Mobility and the Elders", and they also worked as ECO-INVESTIGATORS carrying out a sustainable habit survey among several congressmen and visitors, they showed the results with a critical and witty speech at the closure of the event.



Activity development:

- Talk to the forum's organizations where we want to participate.
- Present a menu of possible activities to be done by the children (radio interviews to politicians or scientists, audience surveys, theatre plays, lectures, exhibitions, workshops, etc.).
- Organize logistics: students' transport to the place where the congress will be held (by train, by bus, on foot or by bike, etc.), sustainable lunch, and the attire should have preferably a claiming sustainable message, activities disseminations, their presence on media such as TV and newspapers, etc.
- Ensure the presence of the children and that their voices will be heard at the opening and closure of the forum.
- Ensure handing over the diploma with the congress stamp to all the participating students to enrich their future cv.



MORE INFORMATION:

<http://www.educarmadridsostenible.es/articulo/%C2%A1estuvimos-en-el-conama>

<http://eustarsmadrid.blogspot.com/2017/02/ninos-y-conama-ganamos-todos.html>

<http://www.educarmadridsostenible.es/contenido/preparando-el-conama>

<http://www.educarmadridsostenible.es/articulo/rumbo-2030-0>

www.educarmadridsostenible.es/articulo/participacion-conama

Economic resources



Time



Difficulty level



Participation of STARS ECCENTRIC teachers in Forums, Congresses

Target group: STARS-ECCENTRIC primary and secondary education teachers.

Main topic: Sustainable mobility dissemination and promotion. Experiences and ideas exchange from schools and mobility programs at a national level.

Goal:

- To support the dissemination and implementation of the methodology of the European STARS-ECCENTRIC project.
- To create a change in students and teachers' mobility patterns towards active, sustainable and autonomous trips.
- To promote networking and to encourage the exchange of knowledge about theoretical frameworks of sustainability, practical work models, methodologies, experiences, educational policies, mobility policies, municipal technical initiatives on mobility, sustainable mobility programs, pedagogical tools, assessment systems, etc.
- To research and disseminate new techniques and pedagogical tools in order to achieve a better involvement from the schools, teachers and relatives in these active mobility programs.



Short description:

The working group of the Spanish STARS-ECCENTRIC network was created in 2016 after a collaboration protocol was signed by the DGT, Madrid Town Hall and CENEAM, within the line of action on "Mobility and Childhood".

The STARS-ECCENTRIC seminary is held annually (in May), where representatives from every municipality involved in the development of the STARS-ECCENTRIC program participate. Teachers from schools in many cities have participated in these calls to share their knowledge, good practices and successful



experiences. Two clear examples are the interventions of the teachers from Madrid: IDEO School, Ignacio Zuloaga School, IES San Isidoro de Sevilla, IES Isabel la Católica. They showed the keys to start and organize successfully the bike bus and the walking bus, having the participation of the whole school community, especially the families. In addition, actions that contribute to showing the need to develop safer school environments, as well as adequate infrastructures for children's and teenagers' cycling mobility, thus participating in the improvement of urban mobility.

MORE INFORMATION:

<https://www.miteco.gob.es/es/ceneam/grupos-de-trabajo-y-seminarios/stars/stars.aspx>

<http://www.educarmadridsostenible.es/articulo/iv-seminario-de-la-red-espa%C3%B1ola-de-ciudades-stars>

<http://www.educarmadridsostenible.es/articulo/iii-seminario-de-la-red-espa%C3%B1ola-de-ciudades-stars>

<http://www.educarmadridsostenible.es/articulo/ii-seminario-de-la-red-espa%C3%B1ola-de-ciudades-stars>

<http://eustarsmadrid.blogspot.com/2016/12/los-champions-de-stars-madrid-cuentan.html>

<http://www.educarmadridsostenible.es/articulo/infancia-y-ciudad>

<http://zaragozaciudad.net/movilidadstars/2019/052001-intercambio-de-experiencias-stars-en-el-seminario-de-profesorado.php>

Economic resources



Time



Difficulty level



Monitoring and Accreditation Activities



STARS-ECCENTRIC audit

Target group: Primary and secondary education schools.

Main topic: Monitoring and evaluation of actions and their impact in favor of sustainable mobility.

Goal:

- To collect evidence of the actions carried out by schools in the project and monitor them.
- To assess the progress of schools regarding sustainable mobility.
- To determine the modal shift and define the most successful actions.

Short description:

The assessment stage is essential for STARS-ECCENTRIC project. As it could not have been otherwise, its methodology comes from the Anglo-Saxon world. This stage is used to analyze the positive and negative aspects of the development plan designed by schools in order to improve school mobility. By carrying out surveys and monitoring the activities, it is possible to identify the modal shift (from motorized trips on public transport to active individual trips by bike or on foot), the enabling elements, the barriers, the actions that must be repeated, those that did not obtained the expected results, the flaws that have been seen, etc.

The audit is carried out not only to know how the program is doing in each school, but also to ensure the accreditation level achieved based on the achievement of points that are awarded with widely criteria and indicators.

Online questionnaire in order to get the STARS-ECCENTRIC Spain program accreditation

Centro	Población	Puntos	Medallas
Maria Inmaculada	Cuencas	Auditoria	☆☆☆☆
CEP José Garmez Iturriz	Alcala la Real (Madrid)	Auditoria	☆☆☆☆
CEP San José de Calasanz	Ormaiztegui (Albacete)	Auditoria	☆☆☆☆
Colegio San Alberto Magno	Madrid	Auditoria	☆☆☆☆
Escuela Profesional Ingegnia Familia	Alcala la Real (Madrid)	Auditoria	☆☆☆☆
CEP Rubio Blanco	Madrid	Auditoria	☆☆☆☆
CEP Jimenez de Cisneros	Albacete	Auditoria	☆☆☆☆
CEP Diego Pignora	Albacete	Auditoria	☆☆☆☆
Colegio Puertillo Doria Pareda San Francisco	Cuenca	Auditoria	☆☆☆☆
Colegio Mariscal (Primeria)	Madrid	Auditoria	☆☆☆☆

Accreditation ranking of schools STARS-ECCENTRIC

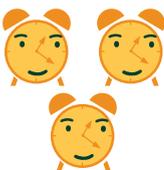
Activity development:

1. This audit will be carried out online through a questionnaire that can be found on www.starsespaña.com
2. The technical team (advisors + champion teachers) checks the questionnaires and allocates the scores so the school gets its accreditation.
3. One of the conditions to get this audit done is carrying out the mobility habits surveys among students and staff (both at the beginning and at the end of the school year) to pinpoint the modal shift, from motorized trips to active trips.
4. Each activity undertaken at the school gives a different score.
5. Evidences must be attached to the questionnaire (pictures, links, files, videos, etc.) of the actions undertaken.
6. There are three accreditation levels:
 - BRONZE accreditation: If you exceed 40 points in the STARS-ECCENTRIC audit.
 - SILVER accreditation: If you exceed 100 points. In addition, schools must increase the number of active trips by more than 3 percentage points among students (modal shift) or assure that 80% of the student's trips to school are sustainable (active and/or on public transport).
 - GOLD accreditation: over 150 points. In addition, a modal shift of more than 5 percentage points has to be achieved or 90% of the students' trips to school must be sustainable. Also among employees a modal shift of 3 percentage points is necessary or 90% of staff trips must be sustainable.
7. You can keep track of the scores of the participating schools on the web www.starsespaña.com where you can also get more information and resources.

Economic resources



Time



Difficulty level



MORE INFORMATION:

<http://www.xn--starsespaa-19a.com/>

<http://www.xn--starsespaa-19a.com/#foto>



Accreditation Event

Target group: Primary and secondary education schools.

Main topic: The accreditation is the recognition that DGT and Madrid Town Hall give the schools for their work on sustainable mobility as part of the STARS-ECCENTRIC project. A plaque is given with the different level and the goals achieved (gold, silver or bronze).

Goal: To give credit and provide visibility to the work done by the most active STARS-ECCENTRIC schools.

Short description: The accreditation event is one of the most important activities of the project for schools participating in STARS-ECCENTRIC project. It is held during the European Mobility Week (the third week of September) and previously, a bike rally is done in order to gather all the schools.

After the bike route, the accreditations are handed over by different municipal officials depending on the level reached by the score achieved. The points are awarded based on modal shift, quality and quantity of the activities carried out, amount of campaigns designed, participation in neighborhood and city activities, curricular integration level of activities, teachers' body participation, families' participation, and material improvements achieved with regard to safety in the school environment, etc.

Activity development:

- Conduct an audit (advisor + champion).
- Find out the level achieved by each school.
- Order the plaques and diplomas with the star achieved.
- Organize the event and make authorities get involved in handing over the award, from DGT to City Council (Town Hall authorities, District Board, Environment, Communication, Health, Police, Mobility, Urbanism, EMT, etc.) as well as project natural allies (cycling associations, pedestrian association, AMPAS, teachers and school headmasters, radio and media representatives, etc.).



- School representatives (usually a teacher or a student) go up on stage to pick up the accreditation.
- The plaque handing over will follow this order: bronze, silver and gold.
- Finally, a students' representative and a teachers' representative (usually the one with the highest score and the golden accreditation) give a short speech, highlighting the advantages of sustainable mobility or the solutions that must be adopted to increase active mobility in the city,
- The supreme authority present is in charge of the event closure (mayor, mobility councilman, etc.)



- Students will go to the event by bike from their schools, there will be a meeting point in the city center to pedal for a few kilometers together to get to the place where the event will take place. Usually, around 1,000 people come by bike to the event.
- It is a festive event, students will see that their effort to improve the city mobility during the school year.



MORE INFORMATION:

<https://diario.madrid.es/blog/2019/09/23/en-bici-al-cole-28-colegios-del-proyecto-stars-participan-en-la-bicicletada/>

https://www.youtube.com/watch?time_continue=81&v=HF-MWbmF0pyg&feature=emb_logo

<http://www.educarmadridsostenible.es/articulo/acto-de-acreditaci%C3%B3n-stars>

<http://www.educarmadridsostenible.es/articulo/%-C2%A1por-donde-no-pasan-coches-pasan-muchas-otras-cosas>

<http://www.educarmadridsostenible.es/contenido/oro-stars-al-colegio-montserrat>

Economic resources



Time



Difficulty level





MADRID