

The city belongs to people, not to cars



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ENVI-MOBILE: Integration of mobile learning into environmental education fostering local communities' development

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Activity No. 1

Part of the lesson: EVOCATION

The aim of the activity: Through brainstorming, students summarize their existing knowledge about transport.

STEP 1.

Brief description of the activity:

Students work in pairs, sitting behind the desks. They write on the paper all the associations that come to their mind in relation to the subject of transport. Writing time is two to three minutes.

Instruction (what you need to tell the students):

What comes to your mind if someone said a word TRANSPORT? Eventually: Why is transport important? Why do we use it and need it? Work together in pairs while sitting behind the desks. Write your ideas on the paper. Write whatever comes to your mind, there is no wrong answer.

STEP 2.

Brief description of the activity:

Students share their associations related to the topic of transport, while the teacher is writing the ideas on a board.

Instruction (what you need to tell the students):

Tell us what ideas came to your mind that you've got written down related to the topic of transport.

Tools for the activity (everything you need to take to the classroom): Board, paper, pen

Estimated time (max. 40 min.): 20 minutes

Activity No. 2

The aim of the activity: Using the Game through which pupils get the skills of conscious decision-making, acquire responsibility for their actions, foster cooperation and also get knowledge about the impact of transport on the environment and people's lives.

STEP 1.

Brief description of the activity:

Students will work in the groups of 5. The teacher will provide them with a script of the game (The Government Document in Annex 1) and also cards, letters and prognosis, which are in Annex 2 - 4 and which the teacher will put on his/her own desk or at different place in the classroom accessible for anybody. Through this game, students can learn conscious decisions making, responsibility for their actions and cooperation and also they learn the facts about impact of transport on the environment and people's lives.

Instruction (what you need to tell the students):

Divide the students into the groups of 5.

Imagine there is a beautiful land called Hopeland. It's actually a bigger city-state. Undulating landscape is dominated by the magnificent capital city, surrounded by several villages, fields, meadows and forests. You live in this land, and now you've even been elected a member of the local government. You should take care of the country and its inhabitants and make important decisions about country's development. Now there are few tasks in front of you that you have to deal with as the members of the government. In your group of five government members, carefully consider all the pros and cons of each task, and then vote for one option. Each of you must participate in voting. Now I will provide you with the important Government Document you will work with and also a package of role cards. Everybody will draw his or her role to follow for the whole game. At first, start with drawing the roles, then go on by following the instructions in the Document. It's all in your hands now.

Tools for the activity (everything you need to take to the classroom): Annex 1 - 4

Estimated time (max. 40 min.): 20 minutes

Part of the lesson: APPRECIATION

Activity No. 3

Part of the lesson: REFLECTION

The aim of the activity: In the discussion, students summarize the knowledge they acquired through the role play in the previous activity.

STEP 1.

Brief description of the activity:

Discussion of the whole class is a reflection of how students felt when playing the game, what they learned, what they would have done differently if they had the information they have now etc. Start it with sharing the results. Then the teacher can go on with free discussion or get inspired by suggested questions.

Instruction (what you need to tell the students):

- 1) Who got the prognosis no. 1? Read it loud, please. (choose a volunteer)
- 2) Who got the prognosis no. 2? Read it loud, please. (choose a volunteer)
- 3) Who got the prognosis no. 3? Read it loud, please. (choose a volunteer)
- 4) Why you decided the way you did? What do you think the results means?

If you played the game again, would you do something differently? Do you think the information from the letters corresponds with reality? What do you personally think about traffic? Do you consider something about it as problematic? What can we do in our real life to improve the situation? What can you do personally? Why every little step might be important for improving the situation?

Tools for the activity (everything you need to take to the classroom): -

Estimated time (max. 40 min.): 10 minutes

Annex 1 - HOPELAND (THE GOVERNMENT DOCUMENT)

CHAPTER 1: THE INTRODUCTION TO YOUR POSITION

Welcome to your new position! You have been elected to the government of the city-state called Hopeland, which means you have to get to your government office every day since now. Your previous job was very close to your house; therefore you used to walk there. To a new office in the government, however, the journey is 4 and a half kilometers long. Now, decide with your colleagues which mean of transport you want to use for travelling to work on daily basis.

a) Buying a long-term ticket for public transport. By public transport, each route takes 12 minutes and you have to change one time, but it's relatively cheap and you don't have to spend money and time for buying or maintaining a car or a bicycle.

If you choose this option, send the messenger for LETTER 1.

b) Buy a car and start driving. For buying the car you have to spend all your savings. Paying the gasoline, maintenance and parking will cost a lot, too. But there are hopeful expectations that you can get to work comfortably and the journey will not take more than 10 minutes.

If you choose this option, send the messenger for LETTER 2.

c) Wipe the cobwebs and clean the dust from your bike and ride it to get to your office. Your journey takes about 20 minutes and you have to struggle with laziness, but given that you sit behind the table all the day in the office, riding the bike will improve your mood and health. And it will be free of charge.

If you choose this option, send the messenger for LETTER 3.

CHAPTER 2: THE FIRST YEAR IN OPERATION, THE FIRST BIG DECISION

Indeed, traffic jams means big trouble for the whole Hopeland. Quite often, there is no chance for cars, buses and trucks to move on the roads and people have difficulties to get to the places they need to. Your task is to solve the traffic jams problem. You have the following options:

a) to close completely the city center, limit the traffic in general in the city, build pedestrian zones, support the development of cycling routes and make the public transport more effective

If you choose this option, send the messenger for LETTER 4.

b) to widen the existing roads with new extra traffic lanes

If you choose this option, send the messenger for LETTER 5.

c) to establish a system park&ride, building big parking places on the edges of the city for the people arriving from the surrounding area; they would leave their cars in the parking lots and use their parking ticket as a ticket for public transport getting to the city centre.

If you choose this option, send the messenger for LETTER 6.

CHAPTER 3: ANOTHER YEAR IN OPERATION, ANOTHER BIG DECISION

The company which was the main supplier of vegetables and vegetable products for Hopeland, has decided to change the scope of its activities. It is now up to you to find a new supplier for Hopeland. You have the following options:

a) to start importing these goods from a country on 1,800 kilometers distance; you can purchase those goods very cheaply and you can easily gather everything from one supplier

If you choose this option, send the messenger for LETTER 7.

b) to support growing of vegetables in Hopeland; it means financial investments at the beginning and the cost of vegetable will be at least half price higher than those offered by foreign suppliers

If you choose this option, send the messenger for LETTER 8.

GRANDE FINALE

It's about the time to send your reporters out to do their fieldwork. Before they come back with required information, ask your secretary to take on his/her counting role. The Table 1 below determines the number of points associated with each possible choice. Let your secretary count the final number of points for your group and then provide the result to the messenger. Wait until the reporters come back and discuss all information they bring. Try to compare it with information in your own letters. Then follow the instructions by Table 2.

Table 1

	Option a	Option b	Option c
Chapter 1	10 points	5 points	0 points
Chapter 2	0 points	10 points	5 points
Chapter 3	10 points	0 points	-

Table 2

The moment when you find out the prognosis of further destiny of Hopeland is coming. Because every decision matters, none of your government's decision will remain without consequence, they denounced the country a certain direction for the future. Are you rushing straight into disaster, or is there a wonderful harmonious future waiting for you? Ask a messenger to pick the prognosis based on the number of points stated in the table below. Then get together to read your prognosis and jointly think over it's contents.

0–5 points	PROGNOSIS 1
10–20 points	PROGNOSIS 2
25–30 points	PROGNOSIS 3

Annex 2

This is a set of cards with roles for the strategy game Transport for ENVI MOBILE program. Before the lesson, print as many of these sets as many 5-member groups you expect in the class. Then cut the papers into pieces as cards and provide one set to each group.

SPEAKER

You have a very important task – you'll be a voice for the whole group. You're going to read aloud from The Government Document, read letters and final prognosis.

MESSENGER

When you're asked by The Government Document, pick up a letter or the final prognosis for the group.

REPORTER

When you're asked by The Government Document, go for an exploration to the other groups. Your mission is to find there the letters with different numbers than your group received. Gather all important information written in those letters. Then convey the information to the own entire group. In your group you got one more colleague working as reporter. Altogether there are 8 letters in the game. With your colleague, think of the best strategy how to effectively divide the work.

REPORTER

When you're asked by The Government Document, go for an exploration to the other groups. Your mission is to find there the letters with different numbers than your group received. Gather all important information written in those letters. Then convey the information to the own entire group. In your group you got one more colleague working as reporter. Altogether there are 8 letters in the game. With your colleague, think of the best strategy how to effectively divide the work.

SECRETARY

Watch the game carefully and write down the results of every voting of your group, as well as numbers of received letters. When you're asked by The Government Document, find how many points belong to individual solutions, which you have collectively chosen. Then, count the earned points and write down the result.

Annex 3

This is a set of letters for the strategy game Transport for ENVI MOBILE program. Before the lesson, print as many of these sets as many 5-member groups you expect in the class. Then cut the papers into letters and divide them into 8 different sets so that letters with identical number are placed together in 1 set. Then find a place where to put the letters so students in role of messengers can come there and easily pick them up.

LETTER 1

You chose a relatively cheap mode of transport, and yet you managed not to occupy the urban area by car. **One bus on the road needs about three times more space than a car, but also can carry about 20 times more passengers. That's why frequent use of cars causes frequent traffic jams, as there are many cars on the roads.**

Now proceed to the CHAPTER 2 in The Government Document.

LETTER 2

Travelling to work doesn't require any physical effort from you, however, **you contribute to air pollution by exhaust gases. Lots of inhabitants of Hopeland yet have health trouble due to pollution, namely the exhaust gases contribute to the formation of cancers or respiratory diseases.** It also came out that while driving to work, the journey won't take the originally planned 8 minutes, but you spend a lot of time in traffic jams.

Now proceed to the CHAPTER 2 in The Government Document.

LETTER 3

Ride to work by bike was a great choice! You've not only just improved your fitness, saved money and you do not linger in traffic jams, but you also have inspired other city residents to buy and use bike instead of buying a car. So all of you managed to reduce the noise and pollution in the city, which is a great benefit for the residents. **In Europe, however, long-term impact of traffic noise causes 3% of all deaths from the heart strokes, which is definitely a big amount!**

Now proceed to the CHAPTER 2 in The Government Document.

LETTER 4

Oh no! After the introduction of all arrangements the traffic jams have even multiplied! But then you just waited for a few weeks, the traffic jams suddenly disappeared so you had a reason to be satisfied. **Closing the city centre for cars and general reduction of traffic had a positive effect as in Copenhagen, Denmark or Kajaani, Finland, where they decided for similar solution. People have become accustomed to the fact they can't drive as much as before, they started to walk more and to use a bike and public transport. Streets with little traffic became alive** and became a friendly place to live in and lots of new stalls, small shops, cafés and playing children appeared there.

Now proceed to the CHAPTER 3 in The Government Document.

LETTER 5

What happened elsewhere in Europe, now happened in Hopeland as well. Your arrangements were very expensive, but it had exactly the opposite effect than what you'd hoped for: **numbers of cars on the roads have increased, even by 15 %! Increasing the capacity of roads has motivated people just for using the capacity.**

Now proceed to the CHAPTER 3 in The Government Document.

LETTER 6

It turned out that **the system of park&ride didn't make the overall traffic smaller. Some of the cars which are now usually parked there during the day just opened the roads to other cars, which previously didn't ride that way.** The situation with traffic jams and high traffic remained similar to that before the introduction of the solution.

Now proceed to the CHAPTER 3 in The Government Document.

LETTER 7

You have acquired cheap goods for Hopeland, but a high price must be paid elsewhere. Your situation is not much different from the situation **prevailing in most of Europe, where 75 % of goods is transported from producers to consumers in trucks and for long distances. In Hopeland, the vegetable is imported by trucks as well. And trucks, which are harmful to the environment, dominate among other modes of transport of goods. Also the trucks are responsible for one third of carbon dioxide, a greenhouse gas that contributes to global warming.**

Now proceed to GRAND FINALE in The Government Document.

LETTER 8

Although vegetables and vegetable products are little bit more expensive than before in Hopeland, people have better orientation in quality and the origin of the food. **Thanks to your decision Hopeland became more self-sufficient country. This decision also means support to your local economy. In addition, vegetables are sold in the place of origin, so there is no need to transport them for long distances and the environment is not exposed to harmful exhaust emissions which import of goods usually produces!**

Now proceed to GRAND FINALE in The Government Document.

Annex 4

This is a set of prognosis for the strategy game Transport for ENVI MOBILE program. While preparing prognoses, follow the same steps as within the preparation of the letters in the appendix 03.

PROGNOSIS 1

In a few years, your economy, as well as the lives of all of you, probably gets into big trouble. You might be threatened by a devastating war, because the world runs out of oil reserves, too. How is it possible? You live in a civilization where it is common for people to travel long distances to work and to buy goods from afar. The functioning of industry, agriculture and trade cannot work without oil. Due to overgrown traffic lots of people suffer from illnesses, the environment is negatively affected by acid rain and pollution. The economy is totally dependent on transport and consequently on oil and other nonrenewable natural resources. Peak of the oil supplies, the moment when oil production reaches its peak and then it will only decrease, is inevitably coming. Also the day when there is no more oil on the Earth is coming closer and closer.

PROGNOSIS 2

You live in a civilization which is largely dependent on traffic and thus on oil and other natural resources. If you continue without changing approach, a disaster will probably hit you sooner or later. Hopelands' environment already faces harmful emissions from transport, for example, increased production of carbon dioxide causes the greenhouse effect, the increased concentration of nitrogen oxides causes acid rain, carbon monoxide chokes humans and animals, there are also carcinogenic hydrocarbons and dust in the atmosphere. Relatively dense road infrastructure means a huge barrier in the landscape, so wild animals can't move in the terrain as they would need and thus the transport reduces biodiversity. If you come to the moment of peak of the oil supplies, your economy, and hence the living standards of all of you can get into serious threat. Neither technological innovations such as cars on solar or other alternative fuels might not save you because the massive automobile transport is still very dependent on non-renewable natural resources, which will run out one day. However, if you change your lifestyle and reduce overall dependence on transport, your civilization and the nature around you has a chance to survive!

PROGNOSIS 3

Your government deserves applause! By your innovative arrangements you have helped to rapidly reducing the dependence on transport and to developing a local market. People in Hopeland started to search for more services on local level, as well as for employment and business in their resident area. An ecological agriculture was developed, too, so people can eat healthy food, and nature does not suffer from emissions or other negative impacts of car traffic. There is no doubt that Hopeland can handle even the situation when the world's oil reserves begin to shorten dramatically.

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