

Peer-to-peer education for youths on smart use of Information and Communication Technologies



D4.1 Collection of 10 didactical concepts for the application of the vehicle approach for educational settings

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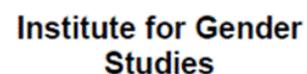
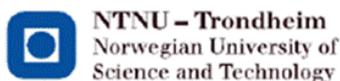
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CB9	AURA energi	AE	DK



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1. Introduction

This deliverable provides a collection of 10 vehicle training concepts that will feed into the national peer training activities which are described in deliverable D4.2.

This collection will start with an introduction to the pedagogical background of the so called vehicle theory that was developed for educational purposes by IFZ and how it will be applied specifically for vehicle-based smart-technology learning for useITsmartly (section 2).

Section 3 will give an overview on all vehicle training concepts that will allow the reader to scan quickly through all ideas.

Section 4 is the actual collection of the ten proposed vehicle training concepts which are presented in a standardised template to ensure comprehensibility and comparability.

The last chapter (section 5) summarises the different approaches of the useITsmartly members to integrate the vehicle training into the national peer-training activities.

2. What is vehicle based training

The original vehicle theory was developed by Anita Thaler and Isabel Zorn (Thaler & Zorn 2010), with the aim to engage kids without a STEM (Science, Technology, Engineering and Mathematics) background into technology related learning fields by using music as a vehicle to connecting STEM subjects instead of directly focusing on technological or engineering themes. The vehicle based training was then further developed to be applied for different vehicle-topics and in various learning settings and for different target groups (Thaler & Hofstätter 2012, 2014; Hofstätter & Thaler 2013; Berger et al. 2014; Hofstätter & Berger 2014). This means for useITsmartly that the topics of energy efficiency and reducing energy consumption and CO₂ emissions will only be indirectly thematised by connecting them to interest fields of youths. As these vehicle topics are based on youth interests – and not all young people share common interests – there can be used two different approaches. First the training starts without a predefined vehicle topic or only a general field like “TV or film”, which can be supposed as connectable to most young people. And the participating young people can then decide which specific topic they want to work on (e.g. creating a music video or remixing the popular TV series “The Simpsons”, like in the project transFAIRmation, see Hofstätter & Berger 2014). The second approach uses a more particular field of interest and relies also on specific competencies of the involved youths by choosing a special group of young people who are known for their interest in the vehicle topic (for instance “music”, because it is the focus of their school, like in the project Engineer Your Sound!, Thaler & Zorn, 2009).

No matter which of the two approaches will be chosen, both ways lead to the same participatory didactical setting, in which the young people decide on their ideas, how they implement and later present them.

By using this angle the classic STEM education approach is re-democratised since vehicle based smart-technology learning does not exclusively focus on those who are already interested or educated in STEM fields. Young adults have been found to feel indifferent to (or even uninterested in) STEM-subjects and STEM-related professions (Thaler & Zorn 2010) even though we are living in a “technology-based knowledge society” (Bammé et al. 1988) in which especially teenagers use information and communication technologies very naturally. The results from the latest Eurobarometer (2013) show that people have an understanding of

STEM that does not match with what they should have experienced in compulsory education. In Austria, for instance, 78 % of the respondents claimed that they have never received education in science or technology; only 11 % stated that they had science or technology classes in school (European Commission 2013). However, subjects such as biology, chemistry, physics and IT are requirements in the curricula of compulsory education. These results suggest that STEM-subjects leave little impression on young people.

Therefore, to enable youths to uninhibitedly deal with STEM-related issues and processes that are in the focus of useITsmartly (energy efficiency and the saving of energy and greenhouse gas emissions), it is essential to increase their interest and their identification with these topics. If young people are to become independent and contributing players in research and innovation processes as well as societal changes and actively engage and participate in dealing with energy efficiency and saving potentials to protect the climate, they have to learn about using technology but also about societal, economic and ecological impacts of technology (Thaler 2010). Thus, topics as green IT or the social sustainability of the construction of electronic devices (computers, tablets, smart phones etc.) will also be part of some vehicle training concepts.

The vehicle theory-based training approach is based on the assumption that a basic scientific literacy and technological competence is important for all citizens. Technological competency combines more than merely mastering technical applications: It is part of a set of key competencies enabling citizens to lead a self-determined and good life in a society co-constituted by technology and at the same time to be critical of this co-construction and co-shaping of society and technology (Degele 2002). Therefore useITsmartly uses an approach where we can also reach people who are not very interested in STEM topics themselves or who need a training method which connects the themes of useITsmartly to their everyday lives, previous knowledge, skills, and interests.

One of the core principals is the participatory design of all vehicle learning concepts. The fulcrum point of each vehicle is that youths are already experts in their fields of interests (fashion, sports, games, music, etc.) and related everyday problems. The idea behind using vehicles is that topics as energy efficiency or the carbon foot print of IT-devices can be taught also to rather STEM-distant youths by using their already existing knowledge and skills.

In the example of the Austrian Engineer Your Sound! (EYS) project teenagers' interest in

music was taken as a starting point in order to raise their interest in science and technology. EYS was conceptualised as a participatory science project, involving students as experts and part of the research team. To really build on their expertise the project was carried out in a music-focused high school where all students can be regarded as music experts, having several years of experience of playing at least one instrument and already studying at the University of Music and Dramatic Arts in Graz and additionally playing music in orchestras and/or in bands in their spare time. The EYS team was completed by a technology coach, by the students' music and physics teachers and by a pedagogical coach with gender expertise. EYS was embedded in formal school courses which allowed pupils to work regularly on their projects in school. Additionally the teenagers worked on their projects in their leisure time (which only works when the vehicle topic really relates to a youth interest field). Indeed EYS could show that music can serve as a suitable theme to raise students' interest in and their knowledge about technology. The quality of their ideas and their produced music-technological artefacts, their high engagement in the process and their views on technology after the project indicated that using a youth interest as a vehicle for STEM learning is a promising approach (Thaler & Zorn 2010).

2.1 Vehicle-based smart technology learning

The vehicle approach for useITsmartly is a combination of a specific youth interest (vehicle) and smart technology use. Together these two components form a concept for vehicle-based smart-technology learning (see figure 1). For example: "Solar-Fashion" is the first vehicle training concept of this collection (see 4.1). It comprises of the youth interest "fashion" (yellow box) and the smart technology usage of photovoltaics (blue box). Together these two boxes form the smart-technology learning concept of "Creating solar fashion" (green box) which is also oriented to fix the ever present problem of low batteries during outdoor activities.

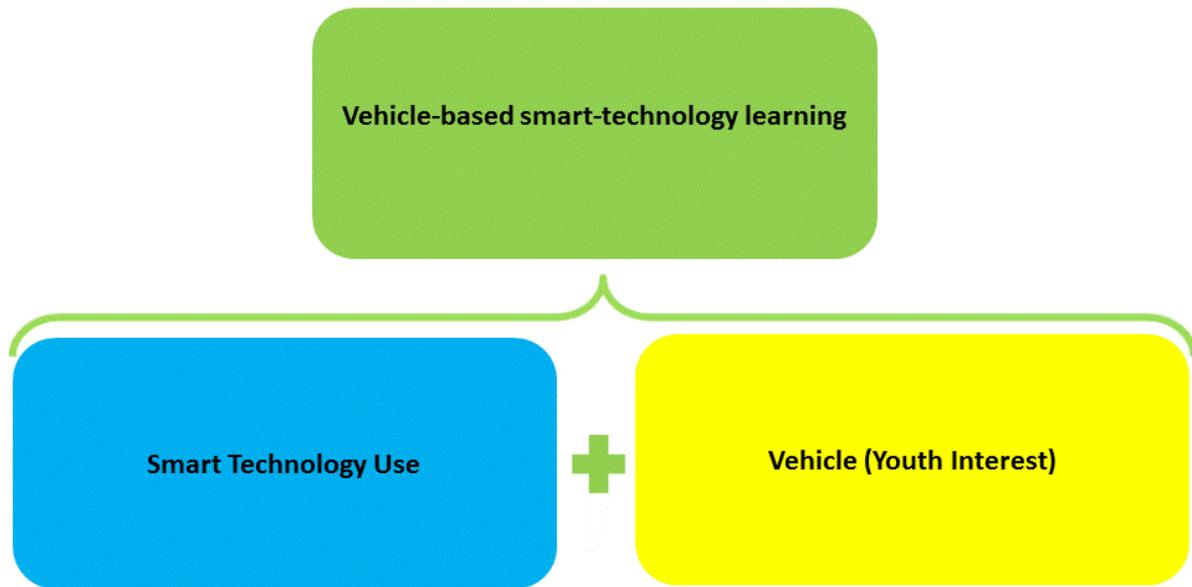


Fig.1: Vehicle concept of useITsmartly

The vehicle-based school workshops will ideally be integrated in STEM subjects or relatable projects in schools or in other educational settings. They will in general comprise of three phases:

- (1) **Conception Phase:** Each participating country will pre-develop two vehicle training concepts. In this first phase the vehicles will be introduced to the youths who will be selected according to the preselected general vehicle-topic (e.g. students from a sport high school for the vehicle topic sport). The adolescents will then ideally decide within smaller working groups with which specific vehicle training they would like to proceed. Then they will engage in a creative process (i.e. creativity and design workshops).
- (2) **Realisation Phase:** In a second step the creative ideas developed in the context of the vehicle topic will be realised during school classes or workshops, but also informally during their leisure time. If the consortium partners cannot cover the vehicle topic and the vehicle related expertise, additional partners will be included to help with the realisation of the pupils' ideas and act as coaches (e.g. for fashion design). All involved adults should act as coaches to the pupils and support them in what is actually feasible, in the choice of materials, and assist them in the realisation of their ideas. However, they do not act as teachers showing a step by step approach but rather as coaches who

only give small hints and help rather subtly. The pupils should feel encouraged to find their own solutions. Coaches and other consortium members have to take into account gender inclusive and reflective didactics in these workshops.

- (3) **Presentation Phase:** The outcomes of the vehicle learning and the developing process will be presented in a public activity organised in close cooperation with the respective youths. This can be a show at the partaking school or an exhibition, for instance. The participation of the pupils in the form of freely choosing an idea to follow, in its design and realisation, and in organising the presentation event, raises their commitment compared to non-participatory ‘school projects’. Since useITsmartly has a work package dedicated to communication”, this participatory, transdisciplinary approach also helps in engaging the pupils to promote their ideas and the public event via social media like Facebook, Instagram or Twitter.

2.2 Literature

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3. Overview

This section will give a short overview on all vehicles that are included in this collection. The reader should get a quick impression about the nature of each vehicle.

Name	Short info
AT1_Solar Fashion	By creating solar-fashion (for charging mobile devices outdoors) the students (and also potential peers) will thereby learn about energy efficiency, saving energy and reducing the climate impact of IT on a secondary level.
AT2_E-Waste-Art	Creating E-Waste-Art and thereby understanding and reconstructing IT hardware in an artistic way.
DE1_Photo Art	Knowledge on energy saving while photographing or printing or posting pictures online but also the process of choosing a theme for the image could relate to environment, technology, e-waste etc.
DE2_EcoDesign	Learning on consumption and sustainable production. Insights in ecological, sustainable product design with a special reference to ICT-related products.
DK1_ Create and share a video about “saving with ICT”	By making short videos about how to save energy with ICT, the participants will learn about the link between ICT and energy consumption and how to save energy with ICT.
DK2_ Visualization of power consumption	<p>The primary intention with this vehicle can be divided into the three following objectives:</p> <ol style="list-style-type: none"> 1) To get an insight into own behavior patterns 2) To show the connection between energy, environment and economy 3) To make power consumption present by measuring on own devices
NED1_ Green ESA	By planning and actually launching a green and sustainable ESA space mission at the Space Expo centre in Noordwijk, the students

Space Mission	will learn about using ICT in a sustainable way. Issues of energy efficiency, energy savings, climate impact of ICT, but also e-waste will be intermingled with the main task of re-enacting the ESA space mission.
NED2_ Smartphone video challenge	By having students design and video-report on a challenge that involves IT-related energy saving, curtailment, or efficiency improvement aspects, they report their own learning process on the topic as well as providing an interesting video report for others to look at.
NOR1_ Computer games on green IT	By designing computer games about a chosen topic within the area of green IT, the students will learn about different issues (energy use of ICTs, energy saving, e-waste problematic etc.) related to green IT.
NOR2_ Theatre play	By writing and practicing a theatre play on a chosen topic within smart and sustainable ICT use, students will learn about central issues of the useITsmartly project such as energy intensive ICT practices, electronic waste problems, how to save energy etc.

The vehicles will be explained in detail and in alphabetic order by participating country in the following section. Each vehicle will be presented in the same format which is structured as a template. The template was developed to guarantee comparability among all vehicle based training concepts for this deliverable and also to serve as a kind of guide for all partners in developing their vehicle ideas.

4. Collection of Vehicles

4.1 AT1_Solar Fashion

General info	Country: Austria Name of vehicle training: Solar-Fashion
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Vehicle-based smart-technology training: By creating solar-fashion (for charging mobile devices outdoors) the students (and also potential peers) will thereby learn about the core issues of useITsmartly (energy efficiency, saving energy and reducing the climate impact of IT) on a secondary level.	
Vehicle topic (Youth interest): Creating fashion, do-it-yourself (DIY), self-expression, urban/modern lifestyle	Smart technology use: Energy efficiency and solar technology. Learning about photovoltaics (PV), batteries, textiles etc.

Description of vehicle learning goal	<p>This vehicle training concept will be centred on how to solve the ever present problem of recharging mobile phone batteries during music festivals or outdoor activities. This question targets a problem for youths (and for all other users of hand held mobile devices as well) that occurs in everyday life.</p> <p>At the end of the project the participants should have learned about the basic principles of PV-technology, aspects of fashion design and how to set up this kind of creative process in general. They will learn about the energy consumption and environmental issues of ICT and develop skills in working with materials and textiles and also learn about the economic feasibility and usability of their ideas.</p> <p>Ideally some creative ideas/solutions will become prototypes and will</p>
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	be usable for collaborations with local companies or other organisations.
Target group	<p>This vehicle training should be relatable to everybody from 16 to 20 years of age with a basic interest in creating fashion or DIY. No specific skills or knowledge is needed beforehand. Thus, youths with no interest in technology or IT can participate and contribute to the development of solar-fashion ideas. However, if there are participants that already have skills in DIY-fashion or electronic tinkering the workshop setting will integrate them as experts with their respective skillsets. So the students will learn among their own peer group.</p> <p>To ensure the overall diversity approach of useITsmarly we will aim to have a gender balanced group of participants.</p>
Materials and other resources	<ul style="list-style-type: none"> • Materials for sketching (pens, paper, flipcharts etc.) • Video-beamer or TV-Set to present inputs and work-in-progress ideas • Textiles and further materials to create clothes and accessories • PV-devices to work with • Sufficient rooms that allow a creative workshop setting
Internal and external experts and their needed competences	<p>Experts that do not represent general gender stereotypes in the fields of fashion design or technology. E.g.: if we invite a fashion designer, we will look for a man and for a woman if we need a PV-expert.</p> <ul style="list-style-type: none"> • Supporting teacher(s) <ul style="list-style-type: none"> ○ Ideally the involved teacher(s) can give a feedback on the vehicle training concept and co-develop it for the specific needs of the involved students ○ The teachers(s) could discuss relevant topics (how do photovoltaics or batteries work) during classes. • Coach on fashion design <ul style="list-style-type: none"> ○ Local design studio or school • Coach on the photovoltaic technologies <ul style="list-style-type: none"> ○ Technology expert or a teacher • Ulrike Auer (UBZ) as female technology coach

<p>Work plan for integration into national peer-training</p>	<p>The Solar-Fashion-training will be integrated into the Austrian IT-peer-training (organised by UBZ). The peer-training will be held in the middle of February 2015. One to four participants of the solar-fashion workshops will take part and also become IT-peers.</p> <p>Preliminary time plan:</p> <ul style="list-style-type: none"> • 3 workshops (2-3 hours) at one school Nov.14-Feb.15 • Presentation of the vehicle training during the 1st peer training (Feb. 15) • Presentation of vehicle outcome March/April 15 <ul style="list-style-type: none"> ○ This event will also be used to hand out the certificates for 1st peers that participated in the training ○ and ideally also as the kick-off-event for the 2nd round of peer-training in Austria. The vehicle will thereby be presented and disseminated.
<p>Potential stakeholders of interest that could be informed (general dissemination) or involved</p>	<ul style="list-style-type: none"> • Energy agencies • Local fashion or textile companies • Eco-social oriented companies • Stakeholders that are eventually relevant to disseminate our efforts: <ul style="list-style-type: none"> ○ Styrian government: climate protection office ○ Landesenergieverein Steiermark (public energy agency) ○ Local administration (political and provincial school administration). Depends on the school with which we will collaborate.
<p>Potential (business) partners for cooperation</p>	<p>In Graz and Styria there are several companies and non-profit organisations that could fit into this vehicle training. Potential partners are also firms that produce eco-centred or socially fair oriented fashion:</p> <ul style="list-style-type: none"> • SunnyBag is a small enterprise that makes solar fashion on a professional level (http://www.sunnybag.at/). We will try to win them as partners for the creative process; it would be great to involve them as creative coaches of this vehicle. • Schools: <ul style="list-style-type: none"> ○ Modeschule Graz (professional fashion school) Potential school partner ○ BG/BRG Gleisdorf (school with STEM focus) Gleisdorf names itself “solar-town” (http://www.gleisdorf.at/energie_118.htm)

	<ul style="list-style-type: none"> • Tagwerk Non-profit creative youth centre by Austria’s biggest social welfare NGO Caritas http://www.tagwerk.at/tagwerk/?page_id=47 • Heidenspass Creative non-profit youth project http://www.graz-cityofdesign.at/de/places/detail/87/heidenspass • Crossing Fashion – Graz City of Design http://www.graz-cityofdesign.at/de/output/detail/156/crossing-fashion Potential fashion show partner • Kwirl Design Sustainable design shop. Potential retail partner. http://www.kwirl.at/node/11 http://www.graz-cityofdesign.at/de/places/detail/85/kwirl • Sattler Tex Firm that produces smart textiles. Potential partner for coaching our students on materials. http://www.sattler-global.com/global-site/de/index.jsp •
<p>Type of closing event to present the outcome</p>	<ul style="list-style-type: none"> • Fashion show at school or in the context of some public art/music/youth culture event: <ul style="list-style-type: none"> ○ Move - festival for ethics, music, culture and arts Annual political music event in the central park of Graz http://www.move-festival.org/ ○ Lendwirbel (www.lendwirbel.at) An annual alternative street culture event in Graz • Online presentation of developed ideas • Prototype presentation

4.2 AT2_E-Waste-Art

General info	Country: Austria Name of vehicle training: E-Waste-Art
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Vehicle-based smart-technology training: Creating E-Waste-Art and thereby understanding and reconstructing IT hardware in an artistic way.	
Vehicle topic (Youth interest): Creativity, self-expression, to develop/make something; awareness rising	Smart technology use: Dismantling, re-arranging and understanding IT hardware and its materials and components

Description of vehicle learning goal	<p>Through the creative process of dismantling and reconstructing IT hardware the participants will learn about all the stages of the production of IT products and hardware. They will disassemble IT-equipment; learn about materials, components and environmental impacts (energy consumption along the whole life cycle) of them. Then, by making objects out of IT-waste a transformation will occur that will focus on self-expression and reflect the problem of e-waste: making something beautiful/reflective/challenging out of something problematic that is potentially hurting the environment.</p> <p>There are various kinds of art that can be created ranging from medium sized installations for exhibitions in the school cafeteria to maybe small earrings or other kinds of jewellery. Thereby this vehicle also relates to some aspects of the current popular DIY-movement (which is strongly represented in social media).</p>
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Target group	<p>Everybody with a creative motivation (DIY interest) in our respective age group (16-20 years).</p> <p>To ensure the overall diversity approach of useITsmarlytly we will aim to have a gender balanced group of participants.</p>
Materials and other resources	<ul style="list-style-type: none"> • Adequate workshop location • Video-beamer or TV-Set to present inputs and work-in-progress ideas • IT waste to work with • Materials and tools for crafting
Internal and external experts and their needed competences	<ul style="list-style-type: none"> • Supporting teacher(s) <ul style="list-style-type: none"> ○ Ideally the involved teacher(s) can give a feedback on the vehicle training concept and co-develop it for the specific needs of the involved students ○ The teachers(s) could discuss relevant topics (how is IT produced) during classes. • Rüdiger Wetzel, CEO of Compuritas, as an IT coach; information on the whole life cycle of IT products (raw materials-production-use-disposal). PR of e-waste-art through IT-business channels. He has a lot of experience in presenting at and working with schools. He also participated in WP3 of useITsmarlytly. • Art coach, somebody that could give creative input and ideas or help to develop ideas and ways to present installations or e-waste-jewellery • Ulrike Auer (UBZ) as female technology coach
Work plan for integration into national peer-training	<p>The E-Waste-Art-training will be integrated into the Austrian IT-peer-training (organised by UBZ). The peer-training will be held in the middle of February 2015. One to four participants of the solar-fashion workshops will take part and also become IT-peers.</p> <p>Preliminary time plan:</p> <ul style="list-style-type: none"> • 3 workshops (2-3 hours) at one school Nov.14-Feb.15 • Presentation of the vehicle training during the 1st peer training (Feb. 15) • Presentation of vehicle outcome March/April 15 <ul style="list-style-type: none"> ○ This event will also be used to hand out the certificates for 1st peers that participated in the training ○ and ideally also as the kick-off-event for the 2nd round of

	peer-training in Austria. The vehicle will thereby be presented and disseminated.
Potential stakeholders of interest that could be informed (general dissemination) or involved	<p>Some of the stakeholder below could support us by advertising and disseminating our workshops and events.</p> <ul style="list-style-type: none"> • Make IT fair Network European project/initiative http://makeitfair.org/de https://www.facebook.com/groups/5633878567/ • Clean-IT Austrian NGO campaign http://www.clean-it.at/ https://www.facebook.com/pages/Clean-IT/286642411361923 • LOGO Youth service centre in Graz https://www.logo.at/
Potential (business) partners for cooperation	<p>Of interest are NGOs or firms with an interest in socio-ecological issues that could also support the training with PR and dissemination.</p> <ul style="list-style-type: none"> • Compuritas (compuritas.at) Firm that focuses on socially and environmentally fair IT. • Südwind (www.südwind.at) NGO that works with schools and other partners. They have a cooperation with the local library of the City of Graz where a joint event to promote the e-waste-art could be possible. • Electronics Watch (http://electronicswatch.org/de/) https://twitter.com/electrowatch A recent founded watch-dog organisation that could feature our workshop's outcome. • Students of the Master "Exhibition Design" (situated in Graz) could coach and help with the organisation of the closing event of this vehicle. http://www.fh-joanne-um.at/aw/home/Studienangebot_Uebersicht/department_medien_design/~czh/aud/?lan=en
Type of closing event to present the	Exhibition at a school or other venue that attracts youths. There are several youth centred urban events in Graz that could be a forum to present the

outcome	e-waste-art. <ul style="list-style-type: none">• Youth festivals in Graz/Styria:<ul style="list-style-type: none">○ Move - festival for ethics, music, culture and arts Annual political music event in the central park of Graz http://www.move-festival.org/○ Lendwirbel (www.lendwirbel.at) An annual alternative street culture event in Graz• Online presentation of developed ideas via NGOs mentioned above
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4.3 DE1_Photo Art

General info	Country: Germany Name of vehicle training: Photo-Art
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Vehicle-based smart-technology training: Knowledge on energy saving while photographing or printing or posting pictures online but also the theme of the image chosen could relate to environment, technology, e-waste etc.	
Vehicle topic (Youth interest): Photography	Smart technology use: Using cameras or smartphones “smartly”

Description of vehicle learning goal	Creativity, self-expression; Awareness rising
Target group	Youth (16-19 years) interested in photography and art
Materials and other resources	Own digital cameras and even their existing build-in smartphone cameras, so there is no need to buy a new one, anything necessary for a printed Exhibition.
Internal and external experts and their needed competences	Photographer, People with the ability to teach good photography.
Work plan for integration into national peer-training	<p>The future IT-Peers should learn to work with modern camera technology and image processing software and become aware of other technology surrounding us.</p> <p>They will take photos of old/new electronic devices of the street visible devices (like radio masts, traffic lights, oversized advertising) or</p>

	<p>the intense consumption of it-devices (like smartphones or computer screens). Topic could be (missing?) interaction between humans and electronics. Pictures can be posed and/or documenting.</p> <p>At the end of the workshop, everyone should have taken and edited 1-3 pictures concerning our consumption and use of visible and almost invisible technology in our surroundings. The photos could be used as support for the IT peer training / the IT peers.</p>
Potential stakeholders of interest that could be informed (general dissemination) or involved	WWF Youth Club / Green Youth Clubs, Local Press, Summer University for Girls,
Potential (business) partners for cooperation	<p>Any local photo-gallery or museum of modern art could support this vehicle with expertise in photography as art. It's also possible to work together with a photo shop for the more technical aspects.</p> <p>In Germany, we will try to get a cooperation with a youth-art-club at the Kunstmuseum Solingen.</p>
Type of closing event to present the outcome	Exhibition at one of the potential partners, maybe within another event like a youth culture festival. It's also possible to publish the artworks online in a high quality online-exhibition.

4.4 DE2_EcoDesign - nachhaltige Produkte (sustainable production)

General info	Country: Germany Name of vehicle training: Eco Design – sustainable products
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Vehicle-based smart-technology training: Knowledge on consumption, sustainable production	
Vehicle topic (Youth interest): Design, Marketing	Smart technology use: CAD Programmes for sketching

Description of vehicle learning goal	Creativity, self-expression, awareness raising, responsible production/consumption
Target group	Youth (16-20 years) interested in design, marketing, technology, IT, environment
Materials and other resources	Virtual marketing campaign, CAD or similar programme, anything needed for exhibition
Internal and external experts and their needed competences	Junior university teacher who teaches a similar class
Work plan for integration into national peer-training	Insight to ecological, sustainable product design with a special reference to ICT-related products. Attempt to discuss questions such as: Are we buying tomorrow's trash today? Do we permanently have to buy new things? What about our responsibility for the environment? By means of examples the adolescents will explore how products could last longer, how they could be re-(and up-)cycled or produced

	<p>in an environmentally friendly way. The designers' task is to take on responsibility and design products which are environmentally friendly and sustainable.</p> <p>Ideas how products could be more environmentally friendly will be collected and the youths will design their own products, which will be presented as a sketch or models.</p> <p>Within the peer-training the designed products could be examples for eco-friendly production.</p>
Potential stakeholders of interest that could be informed (general dissemination) or involved	Economics department at the university, Summer University for girls, Local press, Youth Clubs
Potential (business) partners for cooperation	Junior University Wuppertal, Schools
Type of closing event to present the outcome	(Fake) Marketing campaign for a product, product-design exhibition at school, business plan presentation

4.5 DK1_Create and share a video about “saving with ICT”

General info	Country: Denmark Name of vehicle training: Create and share a video about “saving with ICT”
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Vehicle-based smart-technology training:	
<p>By making a short video about how to save energy with ICT, the students (and also potential peers) will learn about the link between ICT and energy consumption and how to save energy with ICT. The vehicle might be particularly relevant for comprehensive schools.</p>	
Vehicle topic (Youth interest):	Smart technology use:
Creativity, do-it-yourself (DIY), self-expression – could perhaps also be combined with a competition (making the best video)	Working with ICT (cameras, video editing, uploading video to websites like YouTube or Vimeo) in order to create video and share knowledge about ICT and energy with peers

Description of vehicle learning goal	<p>The main idea of this vehicle is to utilise the interest of young people in doing creative work and sharing own video content with peers via social media.</p> <p>In small groups, the IT-peers should develop a script, shoot and edit a short video (1-5 minutes). The aim of the video is to inform about the link between young people’s own use of ICT and energy consumption and/or inform about how to save energy used for ICT. The form and style of the video are up to the IT-peers to decide – also whether it should be e.g. a drama (with a fictional storyline), a documentary, a “commercial” etc. When the videos are finished, they are uploaded and shared via social media such as facebook, YouTube, Vimeo etc.</p> <p>Through the work with preparing the video script and creating a “sto-</p>
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	<p>ry line”, the IT-peers will need to collect information about ICT and energy and in this way learn about the link between these. They will also need to reflect on how to convey these insights to others, which will help them to learn how to communicate complicated messages about ICT, energy and environment to others. Finally, the outcome of the exercise (the video) will be a useful product for communication and for their (or other IT-peers’) peer-to-peer education.</p> <p><i>In one of the Danish creativity workshops (the “Gøglerskolen”/”Produktionsskolen”), the participants made similar videos as suggested here. An example of these videos can be found here (the title of video is “Hva’ så? ... med at spare på energien”, in English: “What’s Up? ... about saving the energy”) : http://youtu.be/JMPzoDFLk4M</i></p>
Target group	<p>Everybody with creative interests in our respective age group (16-20 years). However, if carried out as part of the teaching curriculum, it might be most relevant for comprehensive school classes (i.e. young people aged 16-17 years). No specific skills or knowledge are needed on beforehand – except that the students should be able to do video recording (e.g. with their mobile phones) and edit this on a computer. There might be some challenges with the latter (knowledge and skills on video editing), but if there are participants who have experience with video editing tools (which is likely for larger groups), these could be assigned the role of “experts” in relation to this.</p>
Materials and other resources	<ul style="list-style-type: none"> • Video camera or smart phones for video recording • Computers for video editing • Internet access (for uploading video to social media and – perhaps – for video editing by use of online video editing tools) • Sufficient rooms that allow the students to work with and prepare their videos.
Internal and external experts and their needed competence	<ul style="list-style-type: none"> • The participants need an introduction to energy (and environmental) issues related to ICT devices and their use. This could e.g. happen through an exercise. There should be a person able to facilitate this. This could be a member of the useITsmartly team, the school or perhaps another external ex-

<p>tences</p>	<p>pert (e.g. energy consultants).</p> <ul style="list-style-type: none"> • Supervision of the participants doing their work (e.g. about video editing, discussing script ideas etc.) – from the useITsmartly team or the school. This could also be external experts, e.g. teachers or students from local schools working with visual arts and design (if available).
<p>Work plan for integration into national peer-training</p>	<p>It is not yet decided exactly how to carry out this vehicle in Denmark. But here is a suggestion for the general work plan (needs to be adjusted to the specific context):</p> <ul style="list-style-type: none"> • Introduce the IT-peers for the vehicle idea and general introduction to the link between energy/environment and ICT. • IT-peers form groups and decide on overall ideas about form and content of their video. • IT-peers develop their ideas further (prepare a “script” for the video) – and in relation to this collect further information about ICT and energy needed for doing the video script. • IT-peers shoot, edit and upload (share) their videos. • The vehicle could finish with a closing event and/or competition for “the best movie” (see later). This could perhaps also be a “kick-off event” for following rounds of IT-peer training.
<p>Potential stakeholders of interest that could be informed (general dissemination) or involved</p>	<ul style="list-style-type: none"> • Local TV stations (might be interested in showing the videos) • Stakeholders that are eventually relevant to disseminate the results: <ul style="list-style-type: none"> ○ Other schools ○ Other groups of young people working with energy, energy saving or the environment (fx “Ung Energi” or “Klimaambassadørerne”) ○ NGOs with an interest in environmental issues (PR and dissemination) ○ Local energy consultants who could use the videos as part of their dissemination
<p>Potential (business) partners for cooperation</p>	<ul style="list-style-type: none"> • Local energy suppliers: Could use videos as part of information about energy saving – might also be interested in sponsoring a gift for the competition (?).
<p>Type of closing event to present the outcome</p>	<p>An “opening night” (première) can be arranged where the IT-peers presents there “saving with ICT” videos. This could also be combined with other events – e.g. at the school or public events.</p> <p>As part of the “opening night” (or as a separate activity), there could</p>

	be arranged a competition for “the best video”. E.g., this could be organised as an online competition.
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4.6 DK2_Visualization of power consumption

General info	Country: Denmark Name of vehicle training: Visualization of power consumption
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Vehicle-based smart-technology training: The primary intention with this vehicle can be divided into the three following objectives: <ol style="list-style-type: none"> 4) To get an insight into own behavior patterns 5) To show the connection between energy, environment and economy 6) To make power consumption present by measuring on own devices 	
Vehicle topic (Youth interest): A fun way to compete with friends and other youths in who are the best at saving energy or using the least possible energy.	Smart technology use: Energy savings and comprehension for own power consumption and energy economy.

Description of vehicle learning goal	<p>For many teenagers the use of electricity is an abstract and even invisible thing. In most cases, teenagers do not even shed a glance at the electricity bill, which their parents are paying month after month.</p> <p>By measuring their own consumption, electricity gets visible in a way that shows one's current power consumption, CO2 emissions of the individual device, and the cost of using a specific device.</p> <p>With the use of an electricity meter, teenagers will get insight into:</p> <ul style="list-style-type: none"> ○ Which of their own devices that are the biggest power guzzlers ○ Their individual behavior patterns and how to improve them ○ Sharing their own power consumption and possibly compete with friends about who are able to use the least electricity ○ Gaining practical experience measuring electricity consumption
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	<p>In brief, teenagers will gain knowledge of their own electricity consumption, by which they come to know the biggest power guzzlers. Electricity becomes present by measuring the power consumption of their own or their family's IT equipment. By measuring on teenagers own electricity consumption, it opens up opportunities to compare themselves with other peers.</p> <p>The comparison between peers can be a way of engaging them in this exercise, as young people are often concerned about comparing their own behavior with others. The comparison might even be designed as a kind of competition.</p>
Target group	All teenagers who are interested in engaging with their own power consumption and comparing with friends and peers.
Materials and other resources	An easy-to-use energy measurement, which the IT-peers can bring home and set up to for a short period of time.
Internal and external experts and their needed competences	<p>External experts could be energy consultants.</p> <p>Internal experts could be school teachers e.g., who've received a short lesson on how to operate the energy measurement, and how to properly use it.</p>
Work plan for integration into national peer-training	<ul style="list-style-type: none"> ○ Step one is to educate the IT-Peers on how to properly use the chosen energy measurement. ○ Step two is to choose whether the measuring should be on standby consumption or actual running devices. ○ Step three is for the IT-Peers to set up the energy measurement in their own homes. ○ Step four is to bring back the measurements, upload and work with the data and make suggestions on how to save energy <p>Depending on the actual work plan, there's also a possibility for setting up goals, before even starting the exercise. Those goals could sound something like this:</p> <ul style="list-style-type: none"> ○ Save 10 % of one's usual consumption ○ Remove all standby consumption

<p>Potential stakeholders of interest that could be informed (general dissemination) or involved</p>	<p>NGOs with an interest in lowering the amount of time teenagers spent with different IT-devices. Environmental NGO's.</p>
<p>Potential (business) partners for cooperation</p>	<p>There's properly a potential for a whole lot of business partners in a vehicle like this, so far we've teamed up with:</p> <ul style="list-style-type: none"> ○ AffaldVarme Aarhus (E-waste and energy improvements) ○ SL-Electric (Supplier of measuring equipment)
<p>Type of closing event to present the outcome</p>	<p>Arranging different types of school competitions that involve visualization of students' personal power consumption. As an example, the school class could set up a pyramid containing the "best" and the "worst" types of IT-devices.</p>

4.7 NED1_Green ESA Space Mission

General info	Country: the Netherlands Name of vehicle training: Green ESA Space Mission
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Vehicle-based smart-technology training:

By planning and actually launching a green and sustainable ESA space mission at the Space Expo centre in Noordwijk, the students will learn about using ICT in a sustainable way. Issues of energy efficiency, energy savings, climate impact of ICT, but also e-waste will be intermingled with the main task of re-enacting the ESA space mission.

Vehicle topic (Youth interest):

Aerospace, management, technique, (becoming an) astronaut, science

Smart technology use:

Energy efficiency, learning about battery use, PV's, energy management, e-waste, renewables such as solar technology and bio-fuels

Description of vehicle learning goal

This vehicle training concept will be centred on how to plan and execute an actual simulation of an ESA space mission in a sustainable way. Although planning and executing the ESA space mission is a simulation, and not something youth probably will be doing after they start working, this vehicle learns them how to take notice of the sustainable aspects of the operational and management processes of topics where these processes are a vital part of the success.

At the end of the project the participants should have learned about energy efficiency, the basic principles of PV-technology and other renewables, the energy consumption and environmental impact of ICT in general, but also of planning and executing such a mission. They will learn how to combine aspects of general planning and management with taking a sustainable perspective.

Target group	<p>This vehicle training is interesting for everybody interested in technology, science, aerospace, but also management. Parallel to management games where participants have to manage an airline, managing an ESA mission can be a vehicle to practice management aspects such as marketing, finance, logistics with a focus on sustainability.</p>
Materials and other resources	<p>At the start of the project, all students write an application. On the basis of these applications it is determined which function the pupil will get. It involves the following functions: Press & Media, Mission Support, Ground Control, Web Design, Mission Organiser and Astronaut. During the 24-hour mission all students have a task. Without the support of their classmates simulating the space mission is impossible.</p> <p>Six students are the astronauts and will stay for 24 hours in a space capsule. They are supported by other pupils from the class, located in two Ground Control Stations and who are performing different functions. Management of the mission is under supervision four students selected for that purpose. They are the "mission organizers" and are coached by the involved teachers.</p> <p>The astronauts execute a program consisting of doing various experiments, varied with tasks such as communications, but also attention for their physical wellbeing such as resting and eating. These experiments are closely linked to the various subjects that are taught at school and aerospace. The astronauts are thoroughly prepared by the teachers on the mission.</p> <p>The supporting students support the astronauts and perform tasks regarding logistics, research, communication and care. For students, simulating the ESA mission is a unique opportunity to develop their intellectual and emotional skills. During the simulation they get maximum responsibility.</p>
Internal and external	<ul style="list-style-type: none"> • Supporting teacher(s)

<p>nal experts and their needed competences</p>	<ul style="list-style-type: none"> ○ Ideally the involved teacher(s) can give a feedback on the vehicle training concept and co-develop it for the specific needs of the involved students ○ The teachers(s) could discuss relevant topics (how to design photovoltaics used in space or how to expand the lifetime of batteries that store sustainable energy) during classes.
<p>Work plan for integration into national peer-training</p>	<p>The Dutch IT Peer training becomes part of the ESA Space Mission. The IT Peer training is organized by DuneWorks and Smart Homes. Five to ten participants of the ESA space mission will become IT-peers. The IT-peers will train both youth within their own school by means of presentations, but also via visits to other schools. Furthermore, they will use social media to communicate with their peers. This way we hope to reach 500 peers.</p> <p>Preliminary time plan:</p> <ul style="list-style-type: none"> • Start of planning the ESA mission – January 2015 • The IT peer-training will become part of the curriculum that is focussing on the planning and execution of the ESA mission • Presentation of vehicle outcome June 2015 <ul style="list-style-type: none"> ○ This event will also be used to hand out the certificates for 1st peers that participated in the training. ○ Ideally at the end of the space mission will be a kick-off for the 2nd round of peer-training in the Netherlands. In September 2015 new students will apply for a next ESA space mission.
<p>Potential stakeholders of interest that could be informed (general dissemination) or involved</p>	<ul style="list-style-type: none"> • Policymakers interested in smart energy technologies • Policymakers responsible for making youth more interested in technology • Companies that have smart energy technologies as their core business • Companies that want to enter the smart energy technology business • Companies with a background in aerospace technology • Schools interested in technology and science • Schools interested in making technology and science part of their curriculum
<p>Potential (business) partners for coop-</p>	<p>ESA Estec – Noordwijk http://www.esa.int/About_Us/ESTEC Space Expo – Noordwijk http://www.spaceexpo.nl/ Delft Aerospace Rocket Engineering – Delft</p>

eration	http://dare.tudelft.nl/ Senior Aerospace Bosman B.V. – Barendrecht http://www.sabosman.com/ Fokker (CDR) B.V. - Papendrecht http://www.fokker.com/
Type of closing event to present the outcome	Simulation weekend at the Expo Space Centre in Noordwijk.

4.8 NED2_Smartphone video challenge

General info	Country: the Netherlands Name of vehicle training: Smartphone video challenge
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Vehicle-based smart-technology training: By having students design and video-report on a challenge that involves some type of IT-related energy saving, curtailment, or efficiency improvement aspects, they report their own learning process on the topic as well as providing an interesting video report for others to look at. The videos are for all pupils of participating schools to look at.	
Vehicle topic (Youth interest): Video reporting (easy, allows for creativity), sharing videos, partaking in a challenge/competition.	Smart technology use: Use IT towards decreased use of IT in a challenge setting. Three challenge ideas (related to IT): - a mobile free day at schools for instance - E-waste collection battle. - reduce school-IT-based energy consumption.

Description of vehicle learning goal	<p>This vehicle training concept is addressing how seemingly difficult changes can actually be addressed by taking a collective and fun approach (namely a challenge). Using the mobile phone less often (or at least becoming aware how difficult/easy it can be to do without for one day), investigating opportunities for schools to cut down on IT-related electricity consumption, or collecting E-waste for proper further recycling, all serve to at least enhance awareness and preferably also change behaviours.</p> <p>At the end of this project the participants have learned more about the</p>
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	<p>social needs and norms around smartphones (as this is what the smart phone video will address); or about IT-related electricity schools and options to reduce consumption and enhance efficiency; or about our current culture of obsolescence and its ecological and social impacts of the current ways of handling E-waste and options to improve that.</p> <p>In addition, a creative process of smartphone video-reporting allows the students to make their own story, using interviews etc. This story addresses both the fun and challenge parts as well as the IT & energy related parts. Moreover, the exchange as part of the challenge between schools will give it an additional dimension.</p> <p>Ideally, the set-up and elaboration of these challenges will serve as a template for replication at more schools.</p>
<p>Target group</p>	<p>This vehicle training welcomes pupils from high schools that are in a similar age group and school type – so that the competition is between equals.</p> <p>The multiplier effect targets all youth at both schools and beyond.</p> <p>The student do not have to have any specific skills or knowledge or a huge interest in technology, IT.</p> <p>However, we do aim at including some students from a communication and multimedia design school that can help out if possible. They will be awarded a role as supporting experts so that young people are educated by other youth.</p> <p>The aim is to have a gender balanced group of participants.</p>
<p>Materials and other resources</p>	<ul style="list-style-type: none"> • Laptops to edit the videos – with necessary software • Video-beamer or TV-Set to present the videos • E-waste collection challenge: full organisation • Measurement tools for monitoring school IT-related energy reduction • Rooms at school to work on the video-editing, the preparation of the challenge etc.
<p>Internal and exter-</p>	<ul style="list-style-type: none"> • Supporting teacher(s) at the schools to

<p>nal experts and their needed competences</p>	<ul style="list-style-type: none"> ○ Support the further development and implementation of the vehicle training concept ○ The teachers(s) could discuss relevant topics during classes or provide the UiS team some time to discuss these at school. • Coach to support the organisation of the challenge (UiS team). • Coach on the energy measurements (Greeniant – not yet confirmed) • E-waste race initiator (concept by Timmy de Vos) • Additional technology coach
<p>Work plan for integration into national peer-training</p>	<p>The challenge video reporting is part of the IT-peer training in the Netherlands. The peer-training is held between Jan – sept 2015. We expect a number of 6 – 10 participants to become IT-peers (their multiplier impact is through the dissemination of the videos and exchange between schools and perhaps also by visiting other schools to make them enthusiastic about such a challenge as well).</p> <p>Preliminary time plan:</p> <ul style="list-style-type: none"> • 2- 3 workshops (2-3 hours) at one school Nov.14-Feb.15 • Presentation of the vehicle training during the 1st peer training (Feb. 15) • Presentation of vehicle (video and outcome of the challenge) March/April 15 <ul style="list-style-type: none"> ○ This event will also be used to hand out the certificates for 1st peers that participated in the training ○ And ideally also as the kick-off-event for the 2nd round of peer-training in the Netherlands.
<p>Potential stakeholders of interest that could be informed (general dissemination) or involved</p>	<ul style="list-style-type: none"> • Energy agencies • Various school- and student organisations • Other (non/not yet participating) schools who are interested in doing this in the future
<p>Potential (business) partners for cooperation</p>	<ul style="list-style-type: none"> • Greeniant: smart app developer (tbc) • E-waste Race: company that initiates E-waste races at elementary schools but that is interesting to do similar things at high schools • Environmental organisations like JMA (youth branch of FOE) and Greenpeace

	<ul style="list-style-type: none"> • Green Offices (where we also have other types of IT Peer Training) • Local media • Depending on the type of challenge, we will approach e.g. energy DSOs and waste companies
<p>Type of closing event to present the outcome</p>	<ul style="list-style-type: none"> • Videos are presented at closing event where both the winners are announces and all the involved peers receiver their Smart IT Coach Certificate (if possible this event is combined with an existing art/music/youth culture event). • Online presentation of developed ideas

4.9 NOR1_Computer games on green IT

General info	Country: Norway Name of vehicle training: Computer games on green IT
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Vehicle-based smart-technology training: By designing computer games about a chosen topic within the area of green IT, the students will learn about different issues (energy use of ICTs, energy saving, e-waste problematic etc.) related to green IT.	
Vehicle topic (Youth interest): Computer game design	Smart technology use: ICT and energy use, e-waste, energy saving etc.

Description of vehicle learning goal	<p>This vehicle starts off from the interest among some young people in computer game design. Young people will be given the opportunity and support to design their own computer games either alone or in small groups.</p> <p>The topic of the game has to be chosen within the area of green IT. However, within that area students are free to design their games. They could be about e-waste, energy use of certain ICT practices etc. Through the process of designing the computer games the students learn about different aspects of green IT and smart and sustainably IT use.</p> <p>The students will not only design a computer game but also have to think about how to disseminate the game and engage other youths in green IT issues through their game. So they will also learn about communication, dissemination, and presentation techniques.</p> <p>The designed computer games will then be used further by teachers, schools, NGOs, etc. to inform and engage young people in the sus-</p>
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	tainable use of ICTs.
Target group	<p>The target group is young people between 16 and 20, who participate in the peer-trainings and are interested in developing a computer game on a chosen topic within green IT as their IT-Peer student project.</p> <p>The software is quite straightforward so the young people do not need any knowledge or skills in game development beforehand.</p>
Materials and other resources	<ul style="list-style-type: none"> • Computers • RPG Maker VX-Ace (http://www.rpgmakerweb.com/products/programs/rpg-maker-vx-ace) • Room that allows for both individual and group work
Internal and external experts and their needed competences	<ul style="list-style-type: none"> • Norwegian useITsmartly team <ul style="list-style-type: none"> - As organizers of the peer-training - As Support and motivation of students • Expert on game design <ul style="list-style-type: none"> - Kristine Øygardslia (game designer and PhD Candidate with research focus on how children and youth learn through game design) • Supporting teacher(s) <ul style="list-style-type: none"> - Who ideally have already introduced some of the green IT topics in their classes - Who help to organize room, computers etc. - Who can use the games the youths designed later to teach issues related to green IT
Work plan for integration into national peer-training	<p>The development of the computer games on green IT will be integrated in the Norwegian IT-peer trainings organized by NTNU. It will be presented as one option for a student project, i.e. after the general part of the training students can chose to develop a computer game and distribute it to other peers as their own IT-peer project.</p> <p>Preliminary time plan:</p> <ul style="list-style-type: none"> • Dec. 2014: Getting the game development software ready in cooperation with our partner Kristine Øygardslia • Probably Feb. 2015: First peer-training where the development of the computer games will be integrated as student projects

	<ul style="list-style-type: none"> • Spring/Summer 2015: Second peer-training where the developed computer games can be used as part of the training and again students will have the opportunity to develop new games as their student project.
<p>Potential stakeholders of interest that could be informed (general dissemination) or involved</p>	<ul style="list-style-type: none"> • Environmental NGOs • Green IT companies • Energy agencies • Schools • Local governments • Municipalities • Gaming communities
<p>Potential (business) partners for cooperation</p>	<ul style="list-style-type: none"> • Green IT companies • Game design companies
<p>Type of closing event to present the outcome</p>	<ul style="list-style-type: none"> • Presentation of the different computer games for other young people, e.g. school classes, by the developers themselves (incl. the opportunity for other young people to play the games) • Distribution of the developed computer games via social media and other channels to reach interested youths, teachers, schools etc. • Presentation and use of the computer games in the second peer training

4.10 NOR2_Theatre play

General info	Country: Norway Name of vehicle training: Theatre play
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Vehicle-based smart-technology training:

By writing and practicing a theatre play on a chosen topic within smart and sustainable ICT use, students will learn about central issues of the useITsmartly project such as energy intensive ICT practices, electronic waste problems, how to save energy etc.

Vehicle topic (Youth interest):	Smart technology use:
Writing, practicing and performing theatre plays	Green IT, e-waste, energy use of ICTs, energy saving etc.

Description of vehicle learning goal	<p>This vehicle starts off from the interest among young people in theatre/drama/acting/shows/writing. Young people will be given the opportunity to develop/write their own theatre play.</p> <p>The topic of the play has to be chosen within the area of green IT. However, within that area students are free to include whatever they find interesting. The plays could be about e-waste, energy use of certain ICT practices, solutions for smarter ICT use etc. Through the process of developing the play the students learn about different aspects of green IT and smart and sustainable IT use.</p> <p>In addition, the students will learn about drama/theatre, both about how to write/set up a play and about performing and acting. Furthermore, students will be involved in planning and advertising for the show and hence, also learn about communication and event organisation and management.</p> <p>The theatre plays written by the students can then be used by teach-</p>
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	ers, schools, NGOs, etc. to inform and engage young people in the sustainable use of ICTs.
Target group	<p>The target group is young people between 16 and 20, who participate in the peer-trainings and are interested in developing and performing a theatre play on a chosen topic within green IT as their IT-Peer student project.</p> <p>Students do not need experience in drama/theatre beforehand in order to participate here, but if some students have some skills and knowledge, they can be used as experts in the project development.</p>
Materials and other resources	<ul style="list-style-type: none"> • Rooms for writing the play and practicing the performance (enough space!!!)
Internal and external experts and their needed competences	<ul style="list-style-type: none"> • Norwegian useITsmartly team <ul style="list-style-type: none"> ○ As organizers of the peer-training ○ As support and motivation of students • Experts on theatre <ul style="list-style-type: none"> ○ E.g. from NTNU (Drama Studies/Theatre Studies) ○ E.g. from other theatre organizations in Trondheim • Supporting teachers <ul style="list-style-type: none"> ○ Who ideally have already introduced some of the green IT topics in their classes ○ Who help to organize room, computers etc. ○ Maybe drama/theatre teachers
Work plan for integration into national peer-training	<p>The development of the theatre play on green IT will be integrated in the Norwegian IT-peer trainings organized by NTNU. It will be presented as one option for a student project, i.e. after the general part of the training students can choose to develop a theatre play and the performances of the play to other young people will count as IT-peer project.</p> <p>Preliminary time plan:</p> <ul style="list-style-type: none"> • Dec. 2014: Contacting theatre/drama experts and develop a concept for play development together with them. • Probably Feb. 2015: First peer-training where the development of the theatre plays will be integrated as student projects • Spring/Summer 2015: Second peer-training where the plays

	will be performed in front of the new IT-peers as part of the training and where students again will have the opportunity to write new plays as their IT-peer student project.
Potential stakeholders of interest that could be informed (general dissemination) or involved	<ul style="list-style-type: none"> • Environmental NGOs • Green IT companies • Energy agencies • Schools • Local governments • Municipalities • Theatre/Drama
Potential (business) partners for cooperation	
Type of closing event to present the outcome	<ul style="list-style-type: none"> • Performance of the theatre play in front of other youths (school classes, whole schools, youth centres etc.) • Filming the play and distributing it on social media • Distributing the written text to schools etc.

5. Integration of vehicles into the national peer-training activities

It has to be noted that this last section should be seen as an outlook on how the vehicle trainings will be integrated in the national IT-peer-training-activities. In all partner countries the actual setup of the vehicle trainings is still in progress while this deliverable is prepared.

Each country team of useITsmartly faces different circumstances in setting up the various vehicle training activities. The challenges in organising and conducting vehicle trainings are different for each case and learning scenario. The first hurdle all partners have to face is to find committed national partners that are willing to provide contact to a group of motivated youths and other necessary resources (time and suitable locations to work with youths). The experiences of all youth related activities (focus groups, creativity workshops etc.) that were conducted in useITsmartly so far show that, if a reliable partner institution (school, youth organisation, university) is found, the actual activities run rather smoothly. To gather a significant number of interested adolescents outside of an institutional setting was not a successful approach for most useITsmartly partners.

The Austrian approach is to develop one vehicle outside of the IT-peer-training, but connect those two activities by inviting participants of the vehicle trainings to the compact peer training that will be conducted in February 2015.

For the vehicle trainings in Germany several options are possible so far, but the ideal variant would be to conduct the vehicle trainings in a summer university setting.

The Danish vehicle trainings will be part of the peer trainings and will be organised with several school partners.

The vehicles in the Netherlands and Norway will be realised as specific school projects that will be part of the overall peer trainings. Contacts with schools have already been established in Norway.