LTT schedule in Turku

4th – 7th September 2023
Turku, Finland

LTT 2 in Turku, Finland

The FULLSTEAM training session for 4 days (+1 optional Helsinki day) for teachers

The main goals:
-to learn more about steam pedagogy and get practical skills how to use it.
-to familiarize with the Finnish school education.

There will be:
Hands-on activities - discussions – workshops!

Location: Olemisen office,
Vanha Suurtori 3, 20500 Turku, Finland

Trainers:

Kirsi Äyräs – lecturer, Finnish STEAM pedagogy and Finnish school system: she is Olemisen´s project manager at FullSteam project and will be your host during the LTT days. Call her any time, all questions: +358 40 8227851

Siim Maaten – workshop leader, theater-based teaching and learning: he is a teacher, actor, and professional theater director.

Veli Elyak, lecturer, STEAM activities – international point of view: he is Olemisen´s innovation manager and has a strong background as a teacher.

Monday 4th of September:

9:00 am - 9:30 am: Registration and Welcome

9:30 am - 10:00 am: Introduction to STEAM Pedagogy and its Importance in Finnish Education

10:00 am - 11:00 am: Understanding the Finnish Education System: Principles and Practices.

-Getting started with the theater-based workshop. (The workshop will continue every day as we continue to do our research about STEAM practices together)

11:00 am - 11:15 am: Coffee Break

11:15 am - 12:30 pm: Integrating Science and Technology in the Classroom

12:30 pm - 1:30 pm: Lunch Break

1:30 pm - 3:00 pm: Workshop: Activities in Mathematics and Engineering. Bring your ideas!

3:00 pm - 3:15 pm: Break

3:15 pm - 4:30 pm: Group Discussions and Reflections on STEAM Integration

Tuesday 5th of september:

9:00 am - 10:00 am: Promoting Creativity and Innovation in STEAM Education

10:00 am - 11:00 am: Effective Use of Digital Tools in the Classroom – sharing ideas

11:00 am - 11:15 am: Coffee Break

11:15 am - 12:30 pm: Exploring Arts Integration in STEAM Education – the workshop continues.

12:30 pm - 1:30 pm: Lunch Break

1:30 pm - 3:00 pm: Workshop: Hands-on Activities in Arts and Design

3:00 pm - 3:15 pm: Break

3:15 pm - 4:30 pm: Collaboration and Project-Based Learning in STEAM Education

Wednesday 6th of september:

Museum as a learning environment, museum visit to Maritime museum Forum Marinum

Forum Marinum (forum-marinum.fi)

10:00 am - 11:00 am: Environmental Education and Sustainability in the Finnish Curriculum

11:00 am - 12:30 pm: Workshop at the Maritime museum: Outdoor Learning and Field Trips in STEAM Education

12:30 pm - 1:30 pm: Lunch Break

1:30 pm - 3:00 pm: Workshop at the Maritime museum: Hands-on Activities in Science and Environmental Education

3:00 pm – back to the office!

3:15 pm – 5:00 pm:

-Assessment and Evaluation in STEAM Education – the teachers

-TPM for the project managers: how are we doing and what are the next steps?

Thursday 7th of september:

9:00 am - 10:00 am: Language and Literacy Integration in STEAM Education. Theater workshop continues.

10:00 am - 11:00 am: Physical Education and Health Promotion in the Finnish School Curriculum

11:00 am - 11:15 am: Coffee Break

11:15 am - 12:30 pm: Workshop: Hands-on Activities in Language and Physical Education

12:30 pm - 1:30 pm: Lunch Break

1:30 pm - 3:00 pm: Reflection and Sharing of Best Practices. How´s our lesson plan booklet doing? More ideas? How to develop it?

3:00 pm - 3:15 pm: Break

3:15 pm - 4:30 pm: Closing Remarks, feedback and Certificates Distribution.

Friday 8th september:

Helsinki day (optional) – get to know the capital city of Finland!

Note: This schedule is a general guideline and may be subject to adjustments based on the specific needs and preferences of the teachers attending the training. We are also expecting an invitation to visit Taivassalo school – the date will be agreed in August.

OLEMISEN BALANSSIA RY

Full STEAM

Co-funded by the
Erasmus+ Programme
of the European Union

notes

See you in Turku, Finland!

FullSTEAM

2021-1-PT01-KA220-SCH-000030430

Training course II support material

Result id 3

2023

FullSTEAM

Co-funded by the Erasmus+ Programme of the European Union

STEAM PEDAGOGY - HOW WE DO IT

|Vanha Suurtori 3, 20500 Turku

Full STEAM:
an approach to science teaching
in non formal settings
Project Acronym:
FullSTEAM

Olemisen Balanssia ry
Turku, Finland
Kirsi Äyräs

Co-funded by the
Erasmus+ Programme
of the European Union

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Steam pedagogy, also known as STEM or STEAM education, is an approach to learning that focuses on four important disciplines: Science, Technology, Engineering, Arts, and Mathematics. It encourages students to develop critical thinking, problem-solving skills, and creativity through hands-on and interdisciplinary activities.

In simple terms, Steam pedagogy involves teaching these different subjects together, rather than as separate and isolated topics. It emphasizes the connection between them and how they relate to real-world situations. Here's a breakdown of what each letter in **STEAM** represents:

- Science: Students explore scientific concepts and engage in experiments to understand the natural world around them. They learn about topics such as biology, chemistry, and physics.

- Technology: Students use various tools, devices, and computer programs to solve problems and create projects. They learn about coding, robotics, digital media, and other technological skills.

- Engineering: Students apply their knowledge of science and technology to design and build structures, machines, and systems. They learn about engineering principles, problem-solving methods, and the design process.

- Arts: Students express their creativity and explore different forms of artistic expression, such as visual arts, music, theater, and dance. They learn to think creatively, communicate ideas visually, and appreciate the role of art in society.

- Mathematics: Students develop their mathematical skills and understanding, which are essential for solving problems in science, technology, engineering, and art. They learn concepts like algebra, geometry, statistics, and logical reasoning.

Through Steam pedagogy, students are encouraged to think critically, collaborate with others, and apply their knowledge in practical ways. By integrating these subjects, they can see the connections between different disciplines and gain a broader understanding of how they work together in the real world.

Interdisciplinary approaches to learning

STEAM pedagogies, which stand for Science, Technology, Engineering, Arts, and Mathematics, are interdisciplinary approaches to learning that integrate these subjects into a cohesive framework. They offer various **benefits for different types of learners**, catering to their individual strengths and interests. Here are some examples:

1. Visual Learners: Visual learners thrive in environments that provide visual stimuli to enhance their understanding. In a STEAM classroom, visual learners benefit from visual representations of concepts and ideas. For instance, when learning about the solar system, they might benefit from creating a visual model using art and craft materials or using digital tools to design a virtual representation of the planets.

2. Kinesthetic Learners: Kinesthetic learners learn best through hands-on experiences and physical interactions. In a STEAM setting, they can engage in activities that involve building, constructing, and experimenting. For example, they may learn about physics concepts by building a simple machine or participate in a robotics workshop to understand programming through hands-on experimentation.

3. Logical/Mathematical Learners: These learners excel in logical reasoning, problem-solving, and mathematical thinking. STEAM pedagogies provide them with opportunities to apply their analytical skills to real-world challenges. For instance, they might analyze data sets to identify patterns, use mathematical formulas to solve engineering problems, or create algorithms to program a computer game.

4. Linguistic Learners: Linguistic learners thrive on verbal and written communication. In a STEAM classroom, they can benefit from activities that involve explaining concepts, writing reports, or creating presentations. For example, they might research a scientific topic, write a detailed report, and then present their findings to the class using multimedia tools.

5. Musical/Rhythmic Learners: These learners have a strong sense of rhythm and musicality. In a STEAM context, they can explore the connections between science, technology, and music. They might create soundscapes to represent scientific concepts, compose songs or raps to remember mathematical formulas, or explore the physics of sound through musical instrument construction.

6. Interpersonal Learners: Interpersonal learners thrive in social settings and enjoy collaborative work. In a STEAM environment, they can engage in group projects, team-based problem-solving, and peer-to-peer learning. For instance, they might work together to design and construct a sustainable architecture model, collaborate on a coding project, or participate in a science fair where they interact with other students and professionals.

7. Intrapersonal Learners: Intrapersonal learners are self-reflective and independent. In a STEAM classroom, they can benefit from opportunities for self-directed learning and personal exploration. For example, they might be given the freedom to choose a research topic of their interest, design and conduct experiments independently, or work on long-term projects that align with their individual goals and passions.

It's important to note that learners often exhibit a combination of these learning styles, and the examples provided are not exhaustive. STEAM pedagogies encourage an inclusive and multifaceted approach to education, allowing learners to explore and develop their strengths while fostering a holistic understanding of the interconnectedness of different disciplines.

Finland - how and why?

The Finnish education system is often regarded as one of the most successful in the world. While it is challenging to pinpoint a single factor responsible for its success, there are several key elements that contribute to the effectiveness of Finnish schools. Here are some detailed pedagogical examples:

1. Focus on Equality: The Finnish education system emphasizes equal opportunities for all students. There is no streaming or tracking based on academic ability, and students with different abilities are educated together. This fosters a sense of equality and promotes a positive learning environment.

2. Play-Based Early Education: Finnish schools emphasize play-based learning in the early years. Instead of formal instruction, children engage in activities that promote social skills, problem-solving, and creativity. Play is considered a crucial part of a child's development and learning process.

3. Relaxed Approach to Homework and Testing: Finnish schools have minimal homework and fewer standardized tests compared to many other countries. The focus is on holistic learning rather than rote memorization. This approach helps reduce stress and allows students to develop a genuine love for learning.

4. Emphasis on Teacher Quality: Finnish teachers are highly qualified and respected professionals. They undergo rigorous training and are required to hold a master's degree in education. The high standards for teacher education ensure that the educators possess the necessary skills and knowledge to support students effectively.

5. Collaborative Learning: Finnish classrooms promote collaborative learning, where students work together in groups to solve problems, discuss ideas, and learn from each other. This approach encourages active participation, critical thinking, and communication skills.

6. Individualized Support: Finnish schools provide individualized support to students who require additional assistance. Special education services are integrated into mainstream classrooms, and support is tailored to meet the specific needs of each student. This personalized approach ensures that no student is left behind.

7. Emphasis on Well-being: The well-being of students is a top priority in Finnish schools. Regular breaks, outdoor activities, and a balance between academic and non-academic pursuits are emphasized. Schools also have student welfare teams that address any challenges students may face and provide necessary support.

8. Teacher Autonomy: Finnish teachers have a significant amount of autonomy in designing their curriculum and teaching methods. They are trusted as professionals and are given the freedom to adapt their teaching to meet the needs of their students. This autonomy promotes creativity and innovation in the classroom.

9. Continuous Professional Development: Finnish teachers engage in continuous professional development throughout their careers. They participate in regular training programs and collaborate with other educators to enhance their teaching skills. This commitment to ongoing learning ensures that teachers stay updated with the latest pedagogical approaches.

These pedagogical examples collectively contribute to the success of the Finnish education system. By focusing on equality, play-based learning, teacher quality, individualized support, and student well-being, Finnish schools provide a nurturing environment that fosters academic achievement, critical thinking, and lifelong learning.

The Finnish school system is highly regarded worldwide for its effectiveness and innovation. It focuses on providing equal opportunities for all students, fostering holistic development, and promoting individualized learning. One approach that **Finnish schools have embraced is STEAM pedagogy,** which stands for Science, Technology, Engineering, Arts, and Mathematics.

In Finnish schools, STEAM pedagogy aims to integrate these subjects seamlessly into the curriculum, allowing students to explore and apply knowledge across disciplines. Here are a few examples of how Finnish schools incorporate STEAM pedagogy:

1. Project-based Learning: Finnish schools often emphasize project-based learning, where students work on real-world problems or challenges that require them to apply knowledge from various disciplines. For example, a project could involve designing and building a sustainable model house, which requires students to consider scientific principles, mathematical calculations, engineering concepts, and artistic design.

2. Collaborative Learning: Finnish schools encourage collaboration and teamwork among students. In STEAM-related activities, students often work in groups to solve problems or complete projects. For instance, students might collaborate to develop a mobile application that addresses a social issue, combining their skills in technology, design, and problem-solving.

3. Hands-on Experiments: Finnish schools prioritize hands-on learning experiences. In STEAM subjects, students engage in practical experiments and investigations to deepen their understanding. For instance, in a physics lesson, students might conduct experiments to explore concepts like magnetism or electricity, enhancing their scientific inquiry skills.

4. Multidisciplinary Approach: Finnish schools promote the integration of different subjects to create a more comprehensive learning experience. STEAM pedagogy encourages teachers to connect concepts from science, technology, engineering, arts, and mathematics to demonstrate their interconnections. For example, students studying geometry might explore the relationship between mathematics and art by creating geometric patterns and designs.

5. Digital Tools and Technology: Finnish schools leverage technology to enhance STEAM education. Students use digital tools and software to engage in simulations, programming, and data analysis. For instance, students might use programming languages to create interactive art projects or analyze scientific data using specialized software.

6. Outdoor Education: Finnish schools value the importance of nature and outdoor activities in education. They often incorporate outdoor learning experiences into STEAM subjects. For instance, students might visit a local forest to study ecosystems or conduct field observations for a biology project.

The Finnish school system's approach to STEAM pedagogy fosters creativity, critical thinking, collaboration, and problem-solving skills in students. By integrating different disciplines, students gain a deeper understanding of concepts and develop a broader perspective on their application in the real world.

****Hands on - real world -problem solving and much more***

Steam pedagogy is an approach to learning that combines different disciplines such as science, technology, engineering, arts, and mathematics. It encourages students to explore these subjects in an integrated way, fostering creativity, critical thinking, problem-solving skills, and collaboration.

In simple terms, Steam pedagogy focuses on hands-on learning experiences and real-world applications. It encourages students to think like scientists, engineers, and artists by engaging them in projects and activities that involve problem-solving and creative thinking.

For example, instead of just learning about the laws of physics from a textbook, students might be given a task to design and build a working model of a roller coaster. This project would require them to apply scientific concepts like gravity, friction, and energy, while also considering engineering principles for stability and artistic elements for visual appeal.

Steam pedagogy emphasizes the importance of practical application and the integration of different subjects. It recognizes that these fields are interconnected in the real world, and by combining them, students can gain a deeper understanding of how they work together. It also prepares students for future careers in fields like engineering, technology, and design, where interdisciplinary knowledge and skills are highly valued.

Overall, Steam pedagogy encourages students to explore, experiment, and discover through a blend of science, technology, engineering, arts, and mathematics, fostering their curiosity, creativity, and problem-solving abilities.

Exploring the Synergy between STEAM Education and Visual Art

STEAM education encourages creativity, critical thinking, and problem-solving skills among students. While the relationship between STEM subjects and STEAM education is widely recognized, the integration of visual art into this framework provides a unique opportunity for students to engage in artistic expression and develop a holistic understanding of the world around them. Let´s explore the dynamic relationship between STEAM education and visual art, highlighting the benefits it offers and providing examples of lesson plans that foster creativity and innovation!

Enhancing Problem-Solving Skills through Artistic Exploration:

Visual art serves as a powerful medium for nurturing problem-solving skills within the STEAM framework. Students can learn to approach challenges from multiple perspectives, adapt to changing circumstances, and think critically to find innovative solutions. For example, a lesson plan could involve designing and constructing a sculpture using recyclable materials. Students would explore engineering principles such as balance, stability, and structural integrity, while also considering artistic elements like form, texture, and color. This activity encourages students to experiment, troubleshoot, and refine their designs, fostering a blend of artistic creativity and scientific inquiry.

Promoting Scientific Inquiry through Artistic Inquiry:

Visual art can also serve as a catalyst for scientific inquiry within the STEAM education framework. By engaging in artistic processes, students can develop a deeper understanding of scientific concepts and phenomena. For instance, a lesson plan might involve creating a series of paintings inspired by natural landscapes. As students study various landscapes, they can explore the geological formations, weather patterns, and ecological systems depicted. This artistic exploration encourages scientific observation, data gathering, and the analysis of cause-and-effect relationships, enabling students to integrate scientific knowledge into their artistic expressions.

Fostering Technological Literacy through Digital Art:

Incorporating digital art into STEAM education provides an avenue for students to enhance their technological literacy. Digital art encompasses various forms, such as graphic design, digital painting, and animation, which require the use of digital tools and software. Lesson plans that introduce digital art could involve designing a multimedia presentation on a scientific concept, where students use digital tools to create engaging visuals, infographics, and animations. Through this process, students develop proficiency in digital platforms while exploring the connections between art, technology, and scientific communication.

Cultivating Mathematical Thinking through Artistic Design:

Visual art can also be employed to cultivate mathematical thinking among students. The elements of symmetry, proportion, patterns, and geometry are fundamental aspects of both mathematics and visual art. For instance, a lesson plan could involve creating tessellations, where students explore the repetition of geometric shapes to form intricate patterns. By engaging in this activity, students can understand mathematical concepts such as transformations, congruence, and symmetry, while simultaneously creating visually appealing artworks.

Conclusion:

Integrating visual art into the STEAM education framework enhances students' creativity, critical thinking, and problem-solving skills. By combining artistic exploration with scientific inquiry, technological literacy, and mathematical thinking, students develop a well-rounded understanding of the interconnectedness of these fields. The examples of lesson plans provided demonstrate how visual art can be seamlessly integrated into STEAM education, enabling students to approach learning in a holistic and interdisciplinary manner. As educators continue to embrace the potential of STEAM education, the inclusion of visual art offers a valuable avenue for students to express themselves artistically while expanding their knowledge and skills in science, technology, engineering, and mathematics.

Steam Pedagogy and Theatre:

Enhancing Learning

Through Dramatic Expression

In recent years, there has been a growing recognition of the value of incorporating creative and engaging teaching methods into education. One such approach is the integration of theatre and acting techniques within the framework of Steam (Science, Technology, Engineering, Arts, and Mathematics) pedagogy. This essay explores the potential of theatre as a powerful teaching tool and presents practical lesson plan examples that showcase its application in various educational settings.

1. The Power of Theatre in Education:

Theatre offers a unique platform for students to explore and express themselves creatively. By immersing students in dramatic scenarios, they are encouraged to step into the shoes of different characters, develop empathy, and gain a deeper understanding of complex concepts. Theatre-based pedagogy fosters collaboration, critical thinking, and communication skills, nurturing well-rounded individuals who are prepared for the challenges of the 21st century.

2. Lesson Plan Examples:

a) Science: The Human Body

Objective: To enhance students' understanding of the human body systems.

Lesson Plan:

- Divide the class into small groups and assign each group a different body system (e.g., respiratory, circulatory).

- Instruct each group to research and create a short skit that illustrates how their assigned system functions.

- Encourage students to use props, costumes, and dialogue to bring their skits to life.

- After each performance, facilitate a class discussion to analyze the accuracy of the information presented and clarify any misconceptions.

b) Technology: Digital Citizenship

Objective: To promote responsible and ethical use of technology.

Lesson Plan:

- Introduce the concept of digital citizenship through a short play or monologue that highlights various scenarios involving online interactions.

- After the performance, engage students in a guided discussion, encouraging them to identify positive and negative behaviors portrayed in the skit.

- Divide the class into groups and assign each group a specific aspect of digital citizenship (e.g., cyberbullying, online privacy).

- Instruct students to create short scenes that showcase responsible behavior and address the challenges associated with their assigned topic.

- Encourage students to incorporate technology tools, such as multimedia presentations, to enhance their performances.

c) Mathematics: Geometry

Objective: To deepen students' understanding of geometric concepts.

Lesson Plan:

- Introduce the concept of geometry through a short play that features characters navigating a maze or solving geometric puzzles.

- After the performance, provide students with geometric manipulatives and challenges related to the play.

- Divide the class into groups and assign each group a geometric concept (e.g., angles, symmetry).

- Instruct students to create skits that incorporate their assigned concept into a real-world scenario, such as designing a building or organizing a dance routine.

- Encourage students to use spatial awareness, shapes, and movements to convey their understanding of the geometric principles.

3. Benefits of Theatre-based Pedagogy:

- Promotes active learning: Theatre engages students in hands-on, experiential learning, making concepts more memorable and meaningful.

- Develops communication skills: Theatre encourages students to articulate ideas, collaborate with peers, and present information confidently.

- Enhances creativity: By assuming different roles and perspectives, students unleash their imagination and explore innovative solutions to problems.

- Fosters empathy and emotional intelligence: Theatre allows students to empathize with characters and develop a deeper understanding of human emotions and experiences.

Conclusion:

Theatre-based pedagogy offers a dynamic and engaging approach to education that seamlessly integrates the arts into the Steam framework. By incorporating dramatic expression into lesson plans, educators can foster creativity, critical thinking, and collaboration among students. Through the examples provided, it is evident that theatre has the power to transform the learning experience, making it more interactive, memorable, and enjoyable for students.

—-->>>> to promote critical thinking, problem-solving, creativity, and innovation among students

—----->>>> Integrating the arts into STEM subjects enhances students' ability to think outside the box

—--->>>> and encourages them to approach problems from multiple perspectives!

Here's a general framework for using STEAM pedagogy with students, along with some example lesson plans:

1. Identify a Real-World Problem: Start by selecting a real-world problem or challenge that aligns with the curriculum or interests of your students. This could be a social issue, a scientific question, or a technological challenge.

Example: Environmental Sustainability

Lesson Plan: Designing Sustainable Packaging

Description: Students explore the concept of sustainability and its importance in reducing waste. They learn about different types of packaging materials and their environmental impact. The students then work in groups to design and prototype sustainable packaging solutions for a chosen product, considering factors such as recyclability, biodegradability, and reduced carbon footprint.

2. Integrate STEM and Arts Elements: Once you have identified the problem, incorporate STEM and arts elements into the lesson plan to engage students in hands-on, creative activities that promote interdisciplinary learning.

Example: Energy Conservation

Lesson Plan: Creating Sustainable Homes

Description: Students learn about energy conservation and efficient design principles. They explore the use of renewable energy sources and energy-efficient technologies. In groups, students design and build model sustainable homes using recycled materials, incorporating solar panels, rainwater harvesting systems, and energy-efficient appliances. They also create artistic representations of their homes using drawing, painting, or digital media.

3. Project-Based Learning: Implement project-based learning strategies to encourage students to actively engage in the learning process. Provide opportunities for students to collaborate, research, experiment, and solve problems independently or in groups.

Example: Robotics and Art

Lesson Plan: Artistic Robot Design

Description: Students investigate the relationship between robotics and art. They learn about basic robotics principles, programming, and design aesthetics. In teams, students design and build robots that can create artistic works, such as painting or sculpture. They program the robots to respond to stimuli, create patterns, or express emotions through their artwork. The students document their design process and showcase their robots' artistic creations in an exhibition.

4. Reflection and Integration: Allow time for students to reflect on their learning experiences and make connections across the different disciplines. Encourage them to discuss and present their projects to their peers, teachers, or the broader community.

Example: Human Body and Performance Arts

Lesson Plan: Anatomy Dance Performance

Description: Students explore the human body systems, focusing on their interconnections and functions. They learn about different dance styles and choreography techniques. In groups, students create dance performances that showcase the functions of specific body systems, such as the circulatory system or the skeletal system. The performances integrate scientific knowledge with creative movements and expressive elements. Students reflect on the connections between the body, movement, and art, and present their dance performances to an audience.

Remember that these are just examples, and you can adapt and modify them based on the grade level, subject area, and resources available. The key is to provide students with opportunities to engage in hands-on, interdisciplinary activities that foster critical thinking, collaboration, and creativity while exploring real-world problems or challenges.

Here's a breakdown of what each letter in STEAM represents:

- **Science:** Students explore scientific concepts and engage in experiments to understand the natural world around them. They learn about topics such as biology, chemistry, and physics.
- **Technology:** Students use various tools, devices, and computer programs to solve problems and create projects. They learn about coding, robotics, digital media, and other technological skills.
- **Engineering:** Students apply their knowledge of science and technology to design and build structures, machines, and systems. They learn about engineering principles, problem-solving methods, and the design process.
- **Arts:** Students express their creativity and explore different forms of artistic expression, such as visual arts, music, theater, and dance. They learn to think creatively, communicate ideas visually, and appreciate the role of art in society.
- Mathematics: Students develop their mathematical skills and understanding, which are essential for solving problems in science, technology, engineering, and art. They learn concepts like algebra, geometry, statistics, and logical reasoning.

Through Steam pedagogy, students are encouraged to think critically, collaborate with others, and apply their knowledge in practical ways. By integrating these subjects, they can see the connections between different disciplines and gain a broader understanding of how they work together in the real world.

Thank you for taking part to the FullSTEAM training course II

Turku, Finland 2023

Let´s explore the world together!

This project has been funded with the support of the European Commission. This publication reflects the views only of the author and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Co-funded by the Erasmus+ Programme of the European Union

Your Notes:

FULLSTEAM
training session in
Turku
4th – 7th September 2023
Turku, Finland

Drama Workshop
with participatory design*

by Simba Maaten

Drama is marginal to many, and thus moves most parties into an ambiguous area where they must negotiate meaning and collaboratively construct their understandings.

Drama provides one way to tell stories and learn – for example in the form of theatre. One of the important tensions with regard to drama in this context is the question of whether the drama is considered a finished piece, or a changeable work-in-progress.

The working method in current workshops will be chosen based on the needs of the training

Method 1 Forum Theatre

In Forum Theatre a group of non-professional actors performs a skit in front of an audience of interested parties. The outcome of the skit is consistent with current events and trends – often to the dissatisfaction of the audience. The audience is then invited to become authors and directors of the drama, changing it until they approve of the outcome.

Agreements, conflicts, and new ideas can emerge as their multiple voices and perspectives are articulated through this rich communication medium

Method 2 Frozen Image

In the staging of a tableau a group of non-professional actors positions its members as if they had been stopped in the middle of a play. Each member can tell what s/he is doing, thinking, planning, and hoping.

Possible benefits

- Building bridges between the worlds professionals and users
- Enhancing communication through the use of embodied (i.e., acted-out) experience and through contextualized narratives
- Engaging small and large audiences through direct or actor-mediated participation in shaping the drama
- Increasing professionals empathy for users and their work
- Simulating use of not-yet-developed tools and technologies to explore new possibilities
- Fuller understanding by focus group members, leading to a more informed discussion

*Based on Participatory Design: The Third Space in HCI by Michael J. Muller and Allison Druin

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FullSteam

Training session in september 2023

turku (fi)

About the city
TURKU

Travel to Turku
FLIGHTS AND CONNECTION

Staying in Turku
ACCOMODATIONS

About the city

Founded almost 800 years ago, Turku is the country's oldest city and former capital. It boasts a long cultural history and prominence as a gateway to the Western world.

This lively city is said to have the soul of a metropolis in the body of a small town.

Turku, with its surrounding municipalities, is an energetic Centre of growth in the Baltic Sea area. The versatile livelihood structure, top-class selection of education, culture, and services, as well as the beautiful archipelago, form a magnetic combination in Turku.

There are around 184 000 residents in Turku. The entire region has over 310 000 residents. A great portion of Turku residents are students. The city has two universities and four higher education institutions with over 35 000 students altogether.

In addition to residents, students, and companies, Turku attracts tourists. Turku is one of the most popular travel and congress destinations in Finland. Here is a link to visit Turku pages:

Some additional information about Turku:

- http://www.visitturku.fi/en
- https://issuu.com/visitturku/docs/englanti

Most welcome to Finland and Turku!

Arrival in Finland

AIRPORTS

Turku has its own airport, but flights to Turku (TKU) are quite rare and more expensive than flights to Helsinki-Vantaa airport (HEL). We suggest you arrive at HEL. Turku is approximatively 2h away from Helsinki

TRAVEL TO TURKU

Flights

From the airport to Turku

Reach Turku from the airport

TRAIN

With train, you will get to Turku almost every hour and it costs around 10€ if you buy it early from VR, www.vr.fi/en. You need to change the train to the Pasila station.

NB!!!! Due to track work the Turku main station is not accessible. You will have to select "Kupittaa (Turku)" when booking your train ticket.

BUS

From Turku airport: there is a bus connection directly to the city center.

From HEL, buses go from Helsinki-Vantaa airport every two hours and cost around 28€ when bought in advance from Matkahuolto www.matkahuolto.fi/

*Sunday evening buses and trains are almost sold out if you are not an early bird, but tickets are for only that time if you don't buy a flexible ticket.

CAR OR TAXI

Car renting cost about 50€/day + petrol for the period and a parking fee of 3€/hour in the city center.

Taxi from Helsinki airport to Turku, cost approximately 274€ for one person and 336€ for four persons together as 84€ per person.

ACCOMODATION

Hotels

Bed and breakfasts

Air bnb

In Turku there are tens of different Hotels ar
and Breakfast places. You can search for h
from www.booking.com, www.trivago.com
can be a good alternative.

HOTEL RECOMMENDATIONS:

-Hotel Scandic Atrium

-Hotel Scandic Julia

-Scandic Hamburger Börs

-Original Sokos Hotel Wiklund

-Park hotel Turku

-Hotel Radisson Blu Marina Palace

-Hotel Centro

-Hotel Helmi

Other options:

-Hesehotelli & Omenahotelli are reasonable but without any hotel services

-Hostel S/S Bore is an old cruise ship from can also be an interesting option.

Our meeting venue will be in the very city center and withing walking distance of all the hotels so don't book one in the suburbs

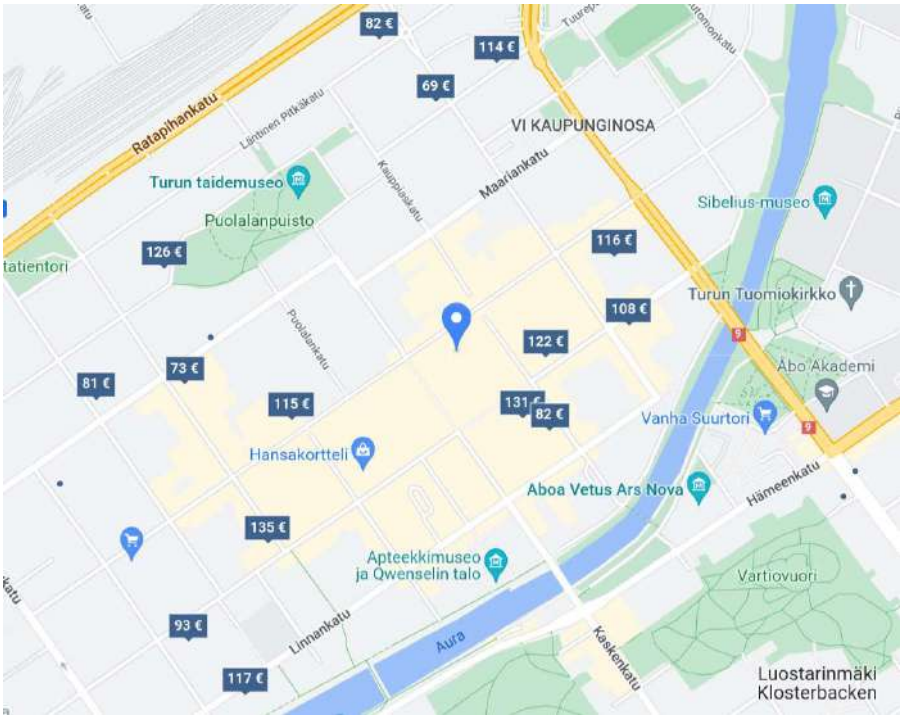


Figure 1 - Panorama of the hotel prices

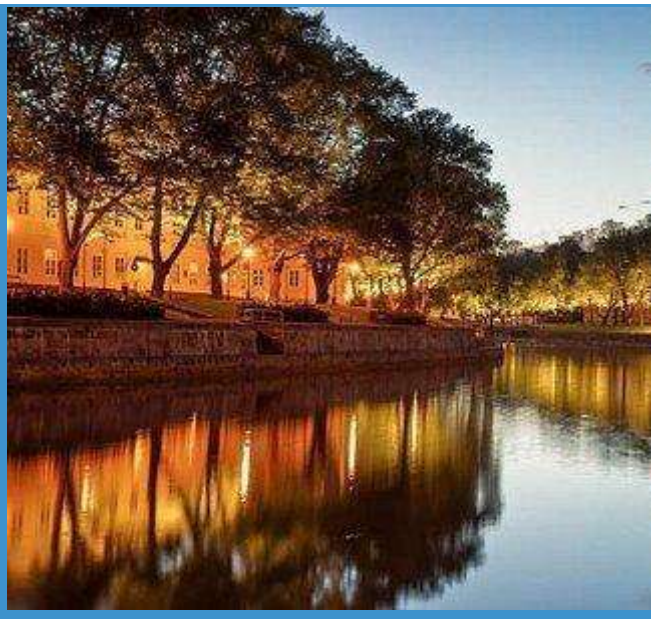
MEETING VENUE

OLEMISEN OFFICE

ADRESS: VANHA SUURTORI 3, 20500 TURKU

Our meeting venue is located in the city center so if you want to book your accommodation early, please book a place in the center of Turku.

CONTACTS



HOSTING ORGANIZATION

Olemisen Balanssia ry

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Turku training days
4th – 7th September 2023

Turku Evaluation FullSteam LTT

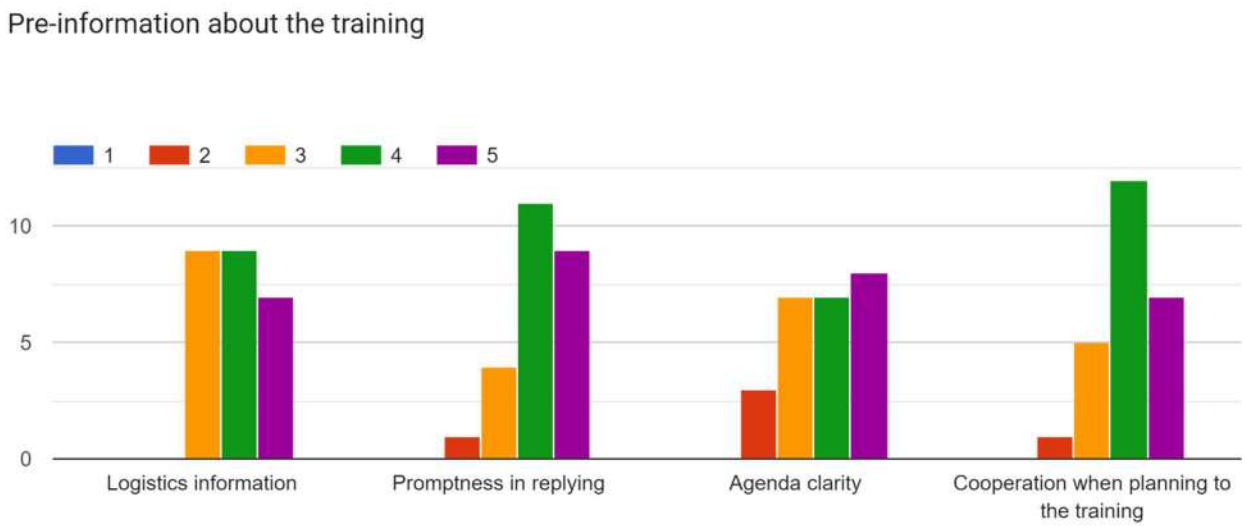
Olemisen Balanssia ry, Finland

Evaluation form:
FullSTEAM LTT Turku, Finland

We collected feedback right after the LTT in Finland. Google Forms questionaire was circulated, and the teachers were asked to fill in how they feel about the activities.

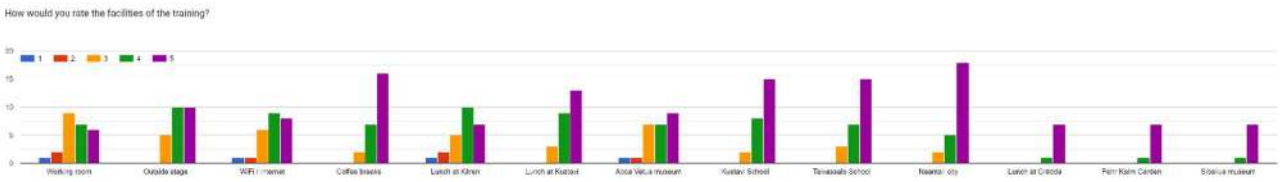
Questions and answers:

”We hope you have enjoyed your stay with us in Turku and that it has been fruitful for you personally - and for the whole project we are sharing!
We have a few questions that are important to check how we achieved LTT's goals, but also to improve future training activities.”



Do you have suggestions about the pre-information about the training? 10 answers

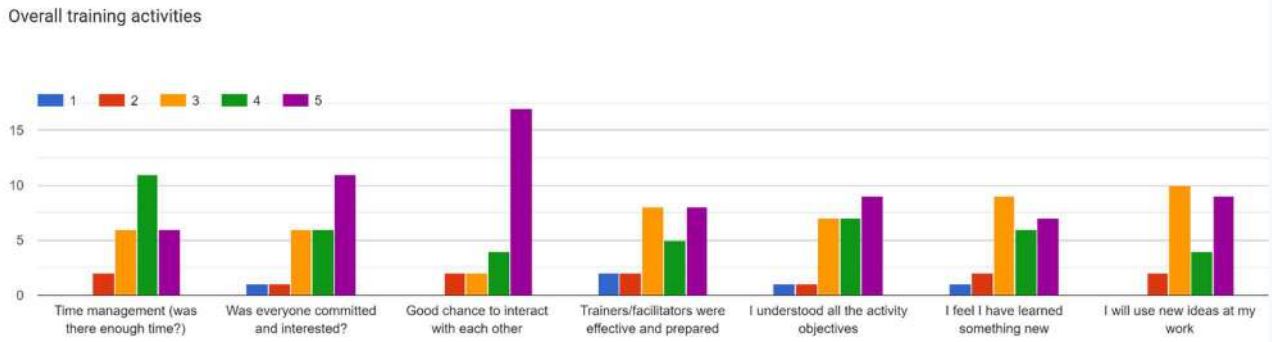
-No
-good
-Pre-information earlier
-everything ok
-Have more specific tasks and trainings instead of general approaches.
-I would like to have detail information about we gona do.
-Would be very useful to give examples in teaching methods
-Please suggest computers when needed
-thank you everything was clear



Remarks on the facilities? 11 answers

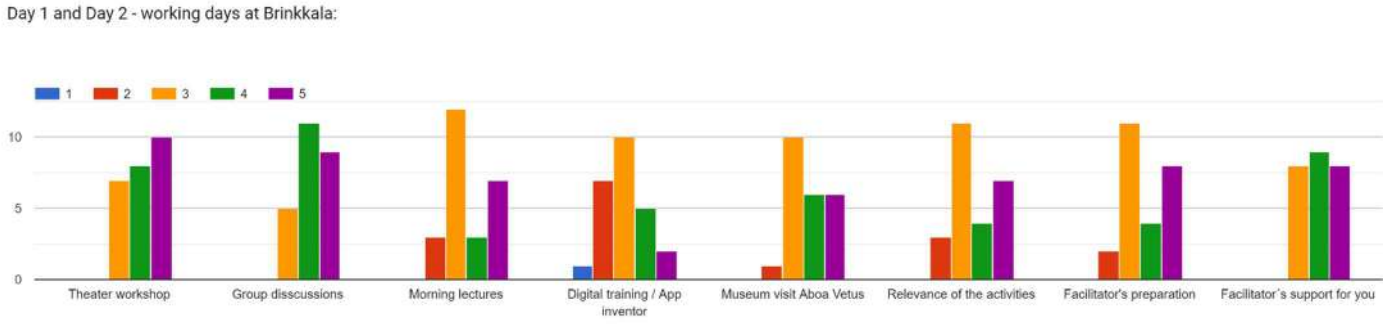
-Lovely places, I am thankfull to see Turku and small places in archipelago.
-The outside stage was great! lovely place
-A bigger space would be good.
-Nothing to Stay.
-No

-all arrangements were very good.
-Should have tablets or there should have been information for us to bring them
-I think it will be interesting visit the university.
-Working room was a bit too small
-museums were great, good choices
-It would be nice to have more space to work and have prior information to take the PC.



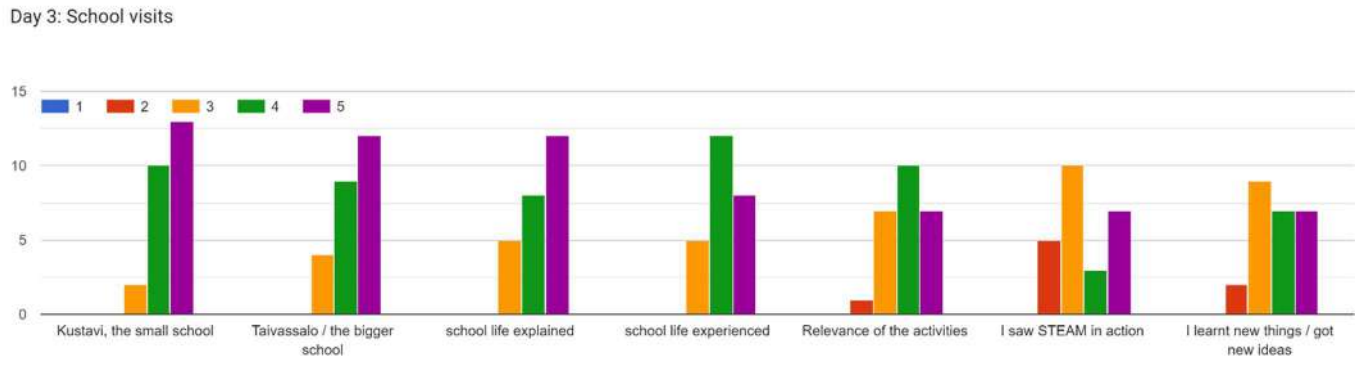
More comments about the activities? Feel free to state whatever you have in mind

-active days, well spent
-More pratical ativities in and outdoors
-Siim was super good facilitator, I got lots of ideas how to use theater with my group
-Activities should be more intense, more complete, more dense and with more usable and complete information.
-No
-Shoud have been more hands-on on the science and technology.
-I think appinventor whas interesting but I don't have a computer. Work on it it will be very useful but we need to now in time.
-lots of inspiration and ideas, thank you
- practical activities in new and different ways of teaching. Group dynamics with practical work.



Your comments or messages to the trainers? 9 answers

-I loved to work with you all
-Good work!
-Presentation should happen slowly and with several repetitions. Should have been done examples and presented real examples to the real use of the APP to allow comprehension...
-No
-good information about Finnish School
-Very caring and suportive. Plenty of honest information about finish way of living and the city of Turku
-Should have shared already implemented STEAM activities with us, to help us with new ideas/projects
-Siim has very good ideas and makes everybody feel good and calm and considering all points of view.
-App inventor training was too much about subject, which was a bit chaotic, because we didn' know that we had to take laptops to succesfully follow training.
-all trainers were very nice and supportive



Ideas to improve the training sessions:4 answers

-More pratical experience
-No
-Should share already implemented STEAM activities with us. Should have exterior STEM exploration activities and/or hands-on to implement with our students
-To see a music teacher in action or a craft teacher working with is students it will be interesting.

Please, write any other suggestion or final remarks you may have!4 answers

-Thank you
-Transportation and museums included in the training should have been free of charge.
-I liked it but I thought I would spend more time with pupils and teachers.
-Thanks! I felt very welcomed and enjoyed time being in Turku and Finland

THANKS VERY MUCH FOR YOUR SUPPORT & CONTRIBUTION!
You are such a great group, so much laughter, so many ideas!

Contact:

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