# **Empathy Creates the Magic**

**AUTHOR: Sibel SAYGIN** 

**TOPIC: Creative solutions for the problems** 

**GRADE: 6-7-8 Grades** 

**APPROACH: STEAM approach, Creative Drama** 

**DURATION: 4 Weeks** 

**Summary:** Short summary where you briefly mention the trend used for this learning scenario (project based learning, flipped classroom etc), the related subjects if it's a transdisciplinary approach etc

In this learning scenario, we will use the STEAM approach with creative drama . STEAM stands for science, technology, engineering, art and mathematics disciplines. In this scenario plan, students will learn to use many disciplines to solve the problems they face in their daily life. This approach is project- based so at the end of the scenario, students are supposed to produce their own product. Teachers may use flipped classroom technique in order to save time by giving warm up video watching at home as a home task and have a short discussion on the topic at the classroom as warm up.

Empathy creates the magic scenario plan incorporating the creative drama techniques. By incorporating creative drama techniques, students can experience the problem on an emotional level, gain a deeper understanding of its complexities, and develop innovative and empathetic solutions. It also provides a platform for collaboration, creativity, and self-expression, enriching the STEAM project experience.

### **Learning Objectives, Skills and competencies:**

What are the main objectives? What skills will the learner develop and demonstrate within the scenario? (e.g. 21st Century Skills).











The main objective of the "Empathy Creates the Magic" scenario plan is to find creative solutions to real life problems. The objective and skills within this scenario plan reflect the holistic approach of STEAM projects in fostering 21st-century skills, preparing students for future challenges, and equipping them with the necessary competencies to contribute to society. Moreover, using creative drama encourages students to think outside the box, explore multiple perspectives, and solve problems creatively. It nurtures their imagination, divergent thinking, and ability to analyze and interpret different situations.

### 21st Century Skills Developed:

- 1. Students will learn to analyze problems, think critically, and apply their knowledge to develop innovative solutions- Critical Thinking and Problem Solving
- 2. Working in multidisciplinary teams, students will collaborate effectively, communicate ideas, and leverage diverse perspectives to solve problems–Collaboration and Teamwork
- 3. Through STEAM projects, students will foster creative thinking, explore new ideas, and develop innovative solutions- Creativity and Innovation
- 4. Students will improve their communication skills by articulating their ideas, presenting findings, and engaging in effective written and verbal communication—Communication and Presentation.
- 5. STEAM projects will develop students' digital literacy as they use technology tools, software, and data analysis techniques to address real-life problems-Digital Literacy.
- 6. Students will adapt to changing situations, embrace new technologies, and navigate evolving problem-solving scenarios- Adaptability and Flexibility.
- 7. Students will explore the ethical considerations of their solutions and develop a sense of social responsibility towards creating positive impacts- Ethical and Social Responsibility.
- 8. Through research and data analysis, students will learn to collect, interpret, and apply data to inform decision-making and solution development- Research and Data Analysis.











#### Learners' role:

What sort of activities will the learner be involved in?

Mixed ability groups of students will join the scenario. Students with learning difficulties will undoubtedly benefit from this plan. Students will be actively involved in all stages of the plan.

-At the discussion part of the plan, students will present their work through dramatic performances, role-plays, or multimedia presentations, incorporating elements of creative drama to engage the audience emotionally. Through role-playing, students can develop a deeper understanding of the challenges, emotions, and perspectives of those involved, promoting empathy and a more comprehensive approach to problem-solving.

-At the presentation part, students will present their whole working process with a canva presentation.

For example; dyslexic students ,one of the best ways to deal with dyslexia is to use 'mind maps' to set out all the components of a task on a single sheet with different drawings, colors, and arrows between them. Dyslexic students have difficulty reading and writing words correctly. Reading is linear sequencing – determining how to pronounce a word and how to write it. A successful sequencing depends on timing – for sound, when the sound [d] of 'dog' occurs, then the [o], then the [g]. In writing 'dog', for example, it's important to watch when your eyes moves, e.g. seeing the letter 'd', then the letter 'o', etc.Because mind maps show the whole thing at once, there's no need for temporal sequencing. Dyslexics have often been said to have superior visuospatial skills, but that's hard to prove. It's because 'visuospatial' is too general and doesn't capture the true nature of dyslexia.

Dyslexics repeat and practice more than non-dyslexics. They are less capable of surface learning and need deep learning. This will take time and they may prefer to work at their own speed and repeat concepts and exercises. It may be helpful for them to have a summary of what they will learn at the beginning. They may then do exercises and then get another summary at the end. There is a fair amount of evidence that some dyslexics are not good at multiple choice exercises so self-assessments which have multiple choices are not suitable for them.

#### **Tools and Resources**

What resources, particularly technologies, will be required?











Mindmeister- for collaboration <a href="https://www.mindmeister.com/">https://www.mindmeister.com/</a>

Tinkercad - for producing part <a href="https://www.tinkercad.com/">https://www.tinkercad.com/</a>

Canva- for presentation part <a href="https://www.canva.com/">https://www.canva.com/</a>

Plickers - for assessment part <a href="https://www.plickers.com/">https://www.plickers.com/</a>

3D printer, internet connection, computer, smart board or projection

markers, cardboard, pen and pencils, scissors, tape, string, reusable materials such as plastic bottles, papers, cardboards, etc.

### **Learning space**

Where will the learning take place e.g. school classroom, local library, museum, outdoors, in an online space?

Learning place will be indoors

(classroom, Technology classroom and art/design classroom)

### **Far Beyond the Barriers Scenario Narrative**

Describe in max 10 sentences the main ideas of the scenario

This scenario plan is planned to create empathy for the real life problems and finding solutions by using STEAM education approach. Students will benefit from creative drama techniques while creating deeper understanding on focusing problems. For using this scenario, there should be links with following disciplines:

Language or drama class: To write scripts and learn more about drama

Technology and design class (Engineering and Art): To use tinkercad or any other web tool to design 3D models for the prototypes

Science class: To link with scientific facts on the problems

Math Class: To calculate the measurements of the prototype.











### Learning Activities

Warm-up activity  Teacher lets students watch the following video links and starts a discussion about the real life problems.  "Bridge" by Ting Chian Tey   Disney Favorite  Pigeons - Cute animation cartoon  Collaborative work  The teacher divides the class into groups of 4-5 students. Form a multidisciplinary team comprising individuals with expertise in various STEAM fields. Encourage diversity in terms of skills, backgrounds, and perspectives.  Ensure the team members possess a passion for problem-solving and a willingness to collaborate effectively.  Each group will need to think about the real life problems that they face . For this, give them enough time for brainstorming and encourage them to come up with their own ideas.	Learning Activities	
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Deptionally as a teacher you may provide them at least 3 general topic such as:  1. Environmental sustainability: waste management, renewable energy, water conservation, biodiversity, or pollution control  2. Health and wellness: promoting physical fitness, addressing healthcare disparities, or developing assistive technologies for individuals with disabilities.  3. Technology and Innovation: emerging technologies such as artificial intelligence, virtual reality, robotics, or Internet of Things (IoT)  students will use a mind mapping tool (https://www.mindmeister.com/) at that stage to create a solution to their idea after they decide on their idea.	Collaborative work	Form a multidisciplinary team comprising individuals with expertise in various STEAM fields. Encourage diversity in terms of skills, backgrounds, and perspectives.  Ensure the team members possess a passion for problem-solving and a willingness to collaborate effectively.  Each group will need to think about the real life problems that they face. For this, give them enough time for brainstorming and encourage them to come up with their own ideas. Optionally as a teacher you may provide them at least 3 general topic such as:  1.Environmental sustainability: waste management, renewable energy, water conservation, biodiversity, or pollution control  2.Health and wellness: promoting physical fitness, addressing healthcare disparities, or developing assistive technologies for individuals with disabilities.  3.Technology and Innovation: emerging technologies such as artificial intelligence, virtual reality, robotics, or Internet of Things (IoT)  students will use a mind mapping tool (https://www.mindmeister.com/) at that stage to create a











Then the teacher wants students to choose one of the following creative drama techniques to present their idea and solution to their friends,

1.Role-Playing:

-Ask students to take on different roles related to the real-life problem they have chosen. This could include individuals directly affected by the problem, stakeholders, or even inanimate objects.

### 2. Creative Storytelling:

- Ask students to create narratives or stories that depict the real-life problem and its potential solutions. They can develop characters, settings, and conflicts to illustrate the problem's impact and explore possible resolutions.

#### 3. Forum Theatre:

-Organize forum theater sessions where students present scenes related to the chosen problem and invite the audience to intervene and suggest alternative actions or solutions.

Inform them they are going to use chosen creative drama techniques to present their real life problem to their friends to ensure deeper understanding of the problem to give "empathy creates the magic" message.

### Investigation work

In this part, students will work in the groups and dive into the problems.

For research and gather Information:

Help students conduct thorough research to understand the problem, its root causes, and existing solutions (if any).

Encourage them to explore scientific literature, case studies, industry reports, and other relevant sources and analyze the collected data and identify gaps or opportunities where STEAM approaches can make a difference.











Practice work:	In this part, as a teacher ,initiate brainstorming sessions to generate creative ideas that leverage STEAM concepts to solve the identified problem. Encourage open discussions, free thinking, and the exploration of unconventional approaches.  Once students decide on the solution, guide each team for preparing their creative drama performance for how they create empathy for the problem and its solution.  (Duties and roles should be divided among the team members according to students' capacities.)
Producing work	In this part, students will work again in their groups on different tasks;  First they will scratch their design and then make its modeling on the computer. they will create their 3D modeling for their prototype which is needed for their problem's solution by using tinkercad or any other web tool that allows them to make 3D Modeling. Tinkercad web tool allows you to print the design from a 3D printer so it will be ready for the presentation stage.
	( If you do not have a 3D printer or internet connection or you are not able to introduce the tinkercad program this stage can be done by using reusable materials, papers, scissors, tape, sticks, coloring paper, etc.)  Second they will prepare their presentations by using Canva based on the chosen problem, research and the solution and prototype photos.
Discussion	Students will introduce their real life problems by their creative drama performance (students have already chosen which type of creative drama performance they use among these; Role-Playing, Creative Storytelling, Forum Theatre)  After each group performance, there will be a short discussion on each topic.











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Presentations	Each group will present their Canva presentation and introduce their prototype for the solution of these problems to their friend.
	Optionally ;
	After that each design can be exhibited in the school corridors.
	Canva presentations can be posted on school instagram / facebook accounts.
	Creative drama performances can be performed in the school conference hall to the other students .
Assessment and feedback	Formative assessment will be used during the 4 weeks. The teacher will give feedback during each stage.
	At the discussion and presentation part students will evaluate their friends.
	Self and Group assessment will be done.
	Final products; canva presentations, creative drama performances, produced prototypes will be assessed and feedback will be given as a final evaluation by using the evaluation sheet.









