DigiEduHack Solution
Rotterdam - Digital Education
Hackathon Rotterdam 2020
Challenge: Rotterdam - Digital
Education Hackathon Rotterdam 2020
Challenge 2020

Climate Clash

A serious game to create awareness on climate problems

Water challenges and public participation as climate issues and a serious game to provoke public participation when it comes to water challenges, while using VR-images provided by Arctic Explorer.

Team: Team Sem

Team members

Yusuf (17), Dawid (16), Sem (16), Fabian (15), Janne (17)

Members roles and background

1th grade students Segbroek College The Hague, the Netherlands

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Solution Details

Solution description

The team made a game which would increase climate change awareness amongst children between the age of 11-15. The end goal of this awareness creation is to stimulate their target group to undertake action against climate change. The biggest issue the game would focus around is water management. The VR-images Arctic Explorer shared with the team served as a source of inspiration to focus on water challenges. Being Dutch means that there is a constant fight against rising water levels, therefore this subject seemed fitting as well. As a result, the team created an educational game that focussed on (amongst others) water challenges. The game includes the VR-images provided by Arctic Explorer.

The game is called "Climate Clash" and consists of a simulation. The player starts in a small village near a mountain. Whilst playing, the village develops further and further to a city, but the player runs into several climate issues that need solving. The way the player responds to these issues, determines the development and future of the city. These climate issues occurring in the game are based on the same issues that cities experience in real life, such as urban heat islands and local floods due to poor drainage, but also as a consequence of the melting ice at the mountaintop near the village.

The team hopes to inspire their target group and help them learn about climate change while having fun playing the game. This way, the team creates awareness in a fun and educational way. Awareness of issues is the first step in achieving change.

Solution context

Youth is insufficiently aware of the impact of climate change and the water challenges that arise subsequently, particularly in the Rotterdam region. It has shown to be difficult to reach youth for issues like this and to engage them in active citizenship by means of regular education.

Solution target group

Grade 5 and 6 (final years of primary education in the Netherlands)

Solution impact

If this game can raise awareness and provoke youth to participate, it will be easier to deal with climate problems and their local consequences

Solution tweet text

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Solution innovativeness

Playing games is not something that is in the curricular of primary school and high school kids at this moment in the Netherlands. However, games are extremely popular amongst this age group. It is therefore a great opportunity for the educational system to integrate educational games in the school curricular.

Right now, school is focussed around learning while reading and making assignments. Lots of students find this hard and demotivational. Games could provide a more interesting manner of learning, while keeping the students motivated and engaged on the subject.

The team believes that their game will motivate students to engage with the subject, as it is based on a diversity of existing popular games and contains elements that keep players interested in the game. With its clear message and fun features, the Climate Clash game combines education with recreation and provides an interesting edge to the educational system.

Solution transferability

The idea of the game 'Climate Clash' can easily be transfered to other domains, even beyond climate issues. As within the game a city is build, it also fits education on town planning and urban design.

Solution sustainability

Before use in education the game needs to be further developed, tested, and evaluated.

Solution team work

Teamwork went smooth, because the team members are used to work with each other as they are classmates. The team enjoyed working for a 'real' client and learned the value of asking experts from outside school for advise (in this case a expert on game didactics, experts on climate change, and ofcourse the founders of Arctic Explorer).