GAMES PRODUCTION & DEVELOPMENT

Activity 1: *Greening your studio*

University students, B.A. and M.A. levels

Basic

45-60 minutes for a group of 15 people

Up to 20 participants

Ability to synthesize, understand and apply acquired knowledge

Whiteboard or digital whiteboard supplemented by data projector, pencils and paper

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CONTEXT

Like any industry at the moment, the video games industry must respond to the challenges posed by climate change and minimize its environmental impact in the short term. Part of these environmental impacts of the video game industry arise in the production phase of video games. Their scope is directly influenced by the decisions and strategies of video game studios. In order for video game studios to meet climate goals, it is crucial to contextualize studio activities that have an impact on the environment.

TASK

This task will provide you with an introductory overview of the tools and strategies currently available to video game studios to reduce their environmental impact. You will learn about the various options on how to reduce studios' environmental impact, you will try to critically apply them and defend your decisions in front of your peers.

SUMMARY

The aim of this activity is to demonstrate to students various ways how to reduce the carbon footprint of a video game studio. The activity will provide students with an overview of the basic lines of thinking about reducing the carbon footprint of game studios, provide a broader context for these lines of thinking, particularly with regard to their difficulty and impact, and allow students to practice this knowledge.

PREPARATION

You will need a whiteboard or digital whiteboard supplemented by a data projector, pencils and paper, and a room allowing group work.

LEARNING OUTCOMES

- Provide students with strategies on how to analyze and mitigate sources of carbon emissions.
- At the end of this activity, students should be aware that there are relatively quick solutions that can have an impact.
- Students will be able to actively discuss and distinguish the different contexts of differently sized and differently structured studios in relation to possible actions to reduce the carbon footprint.

Step 1 *Mapping of existing options (15 minutes)*

Imagine that you are running your own small independent game studio in this country, with up to 10 people. What actions can you take to make the studio more environmentally sustainable? Please provide as many examples as possible.

In this task, the instructor moderates the debate.

- List all the options that students mention on the whiteboard or display them using a data projector.
- If necessary, guide students to cover most of the 13 points below. For example, ask about travel: "How can we reduce the studio's impact in this area?" Or inquire about energy use: "Is there potential to reduce your carbon footprint there? How?"

List of examples:

- *Switch to green energy sources, either through your provider or by installing your own solar power system, for example.*
- *Design games that are playable on older hardware or develop less demanding games.*
- *Invest a share of your revenue into certified projects that reduce carbon emissions.*
- *If you must use cloud services, choose those which are energy-efficient or powered by renewable energy sources.*
- *Minimize flying and travel, or offset it when necessary.*
- *Purchase second-hand furniture or office equipment.*
- *Choose an office that is accessible by public transport.*
- *Implement recycling practices.*
- *Regularly measure and offset your studio's carbon footprint.*
- *Encourage working from home office.*
- *Distribute your games digitally only.*
- *Create games that raise awareness about environmental issues.*
- *Engage your community in pro-environmental activities via game mechanics, special events or in your forums*

Step 2 *Categorize the actions according to their impact (10 minutes)*

Form groups of two to three people. Review all the options we have listed so far. You are asked to do the following:

From the list of actions, categorize all those actions into three categories based on their impact on the carbon footprint of your studio. Use categories **Low impact, Medium impact,** and **High impact.** Sometimes, it might not be obvious, so please discuss within your group your decisions and the arguments for them. Always assume that you are running a smaller studio.

Step 3 *Categorize the actions according to the effort (10 minutes)*

Once you have finished with the categorization based on the impact of the actions, please label each of those actions also as either **'low-effort'** or **'high-effort'.** In other words, decide whether they require a lot of work to be implemented or if they can be accomplished with some or relatively little effort. By the end of this, each action on your paper should be marked to show whether you consider it a low-effort or high-effort action. Again, this might not be clear for all the options, so please discuss it within your group.

Step 4 *Compare your results and discuss (10 minutes)*

One person from your group takes your categorization of actions and joins another group. Then, that person presents their categorisation and compares it with the one from the other group. Discuss with each other reasonings for your choices, pay particular attention to the parts where your categorisations differ.

Step 5 *Debrief (10 minutes)*

Return to your original groups. Briefly share with each other what you have learnt from other groups. This should not take more than 3 minutes. After that, the person that has not left the original group within previous steps, will summarize to the whole class the main conclusions and suggestions that have emerged from the comparisons in the previous step.

In this step, the instructor should ask follow-up questions, if necessary, and thus partially correct the conclusions. Typically, if one of the outcomes would be the statement that there is no reason to green your studio, the instructor should challenge this opinion with appropriate questions.

Credits & Acknowledgements

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This educational material has been created within the framework of the project "Greening Games. Building Higher Education Resources for Sustainable Video Game Production, Design & Critical Game Studies" (2021-2024) that supports educators in addressing the interdisciplinary nature of green digital gaming. The project has been funded by the Federal Ministry of Education and Research in Germany within the framework of the Erasmus+ Programme of the European Union (KA220-HED – Cooperation Partnerships in Higher Education).

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More information may be found at: https://greeningames.eu.

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