

A gamified treasure hunt

Modules:	<i>Health & well-being & protecting the environment</i>
Topic:	<i>A gamified treasure hunt</i>
Title:	<i>Leveraging digital devices for an educational purpose</i>
Target group:	<i>Middle and high school students</i>
Starting Point:	<i>Nowadays, gamification has emerged as a leading method regarding the educational sector that facilitates interaction among the students and leads to a collaborative atmosphere. More specifically, gamification is becoming increasingly utilized in educational settings, as it contributes to the motivation of students, improves their learning performance, and enhances their overall competence.</i>
Aim:	<i>This game stimulates students' thinking and interest, while answering some educational questions.</i>
Implementation:	<i>This activity is designed to be implemented inside different classrooms.</i>
Estimated Duration:	<i>Game: 60 minutes Debriefing in class: 20 minutes</i>

More detailed content and instructions:

- This exercise is a game in which students scan with their mobile-phones QR-codes that are distributed in several spots in different classrooms across the whole school. Each QR-code “hides” a question that needs to be answered by the students, which concerns the impacts of digital devices and digitalization on users’ health, well-being, as well as the environment.
- Every correct answer represents a number that needs to be written down by the students leading to a code.
- If the student answers correctly, he/she is led to the next classroom until he/she arrives to the last one and applies the code that opens the last classroom’s locker.
- The first student that enters the last classroom will find an award, which will emphasize the importance of producing and utilizing digital devices in a sustainable way, e.g., a reusable cup made of electronic devices’ parts.
- The aim is to stimulate their interest, while at the same time provide information about the adverse impacts that stem from digitalisation.

To be taken into account:

- The content of the questions, as well as the correct answers must be discussed after the game, so that all students understand them in a thorough way and gain more perspective about this specific subject.
- It is worth noting that the questions should be adapted according to the teaching area of the educator.
- Given that the aforementioned exercise could get a bit hectic and chaotic, it is of high importance that the students are fully informed about the tasks that need to be implemented during the game.

Potential content of the question

- The following questions are suggestions created by the National Technical University of Athens team. They may need to be adapted depending on the students' age and year during which the game will be implemented. Furthermore, some of them might become outdated, since they were last updated in 2023. As a result, teachers should feel free to make the appropriate changes and upgrade the content of the questions.

Question	QR-code
<p>(1) Which of the 3 Rs causes the smallest environmental footprint according to the principles of the circular economy?</p> <ol style="list-style-type: none"> 1) Reduce 2) Reuse 3) Recycle 	
<p>(2) Which of the following is not an example of a "Dark Pattern"?</p> <ol style="list-style-type: none"> 1) Hidden costs 2) Hate speech 3) Masked advertising 	
<p>(3) Which of the following applies to FoMO (Fear of Missing Out)?</p> <ol style="list-style-type: none"> 1) FoMO does not increase screen time 2) FoMO increases active screen time 3) FoMO increases passive screen time 	
<p>(4) Which stage of a computer's lifecycle consumes the most energy?</p> <ol style="list-style-type: none"> 1) Maintenance 2) Function 3) Production 	

- For instance, based on the abovementioned answers, the code is: 1233