


Angry Birds serving the teaching of physics

Taking advantage of a popular game in order to investigate projectile motion (Angry Birds), Gravitational Pull (Angry Birds Space)



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Short description

- My initial aim is to demonstrate the link between the popular commercial game 'Angry Birds' and Physics, in order to convince students regarding the real value of scientific reasoning. The learning aim is to allow students to analyse the projectile motion in different cases so as to conceptualise the Physics of projectile motion. In order these aims to be achieved I am planning to allow students (group-work) to experiment using the games and later to help them to capture different frames of the motions. These video frames will have to be imported to a video analysis software (Tracker) so as to explore in-depth Physics concepts such as: velocity, gravity, range, 2-d motion. Teacher is responsible to support students while using the games and the video analysis software. At the end students should be ready to write a detailed report of their analysis so as to share their data and conclusions.

Student age group addressed

16-18 year-olds

Level in your country:

Upper secondary



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Curriculum area(s) addressed

Language (mother tongue)

Other Language

Mathematics (Parabola)

Science and/or technology

- A cross-curricular approach? Yes

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EU key competences addressed

- Communication in the mother tongue
- Communication in foreign languages
- Mathematical, science and technology competences
- Digital competence
- Learning to learn
- Social and civic competences
- Sense of initiative and entrepreneurship

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A special emphasis?

critical thinking

problem solving

initiative taking

decision making



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'Game' and your idea

The flash-based single player game Angry Birds is a game which requires logic and strategy.

The goal is to launch the bird using the catapult and knock down the picks.

The use of the game requires an understanding of physics concepts and it will be really challenging to use video analysis software in order to initiate further investigations by the students themselves.

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Thank you! 😊



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