

### BRIDGING ACADEMIC AND RESEARCH INTEGRITY IN A GAME ON FABRICATION

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#### Keywords

Academic integrity, research misconduct, games, gamification, fabrication

#### Abstract

The workshop is a part of Erasmus+ project *Bridging Integrity in Higher Education, Business and Society* (BRIDGE). The project aims to create a bridge between academic integrity, research integrity, integrity in business, and society in order to reach a broader understanding and transparency of integrity between these fields, as well as interrelated skills and qualifications needed to act in accordance with academic integrity values (<https://www.academicintegrity.eu/wp/bridge/>). Our target groups are master students, PhD students, and supervisors. To increase student motivation and engagement, we are developing open innovative educational resources addressing various ethical issues that can be transferred from the academic integrity field to the ethical aspects of the research, business, and citizen science fields. The educational resources will include gamified cases of real-life situations. Kapp (2012, p. 10) defines gamification as “using game-based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning, and solve problems”. According to Kapp (2012), game elements in traditional learning environments

are conducive not only to engagement but also to imagination and creative thinking, at the same time retaining a sense of control, possibility to explore or fail in a safe environment. Corresponding to different learning styles of the current young generation, gamification is an appealing way to transform the learning experience to keep students motivated and active (Furdu, Tomozei & Köse, 2017). Therefore, our gamified cases will accompany other (more traditional) educational suboutputs (i.e., checklists and guidelines) and it will be possible to adapt them in varied educational modules for academic integrity education in different disciplines or subject areas.

We have chosen multiple-choice storytelling computer-based games as the most suitable form of creating gamified cases for our aim. All our games will follow the same model which includes dialogues, illustrations, and branching storytelling. At the end of a game, each player reaches a concluding narrative customised for the story branch (s)he followed. A game is further accompanied by suggested educational material and resources.

The workshop will introduce one of the gamified cases, focused on fabrication, a major misconduct in research (along with falsification and plagiarism) (Tauginienė et al., 2018). The game is at its final development stage and we aim to pilot it with diverse potential users, either students, educators, or stakeholders. We will invite workshop participants to play the game and provide their first-impression feedback on any elements of the game.

The main story of the game was based on real-life situations thus the players (master and PhD students) should be able to easily relate to the actors, events and/or circumstances in the development of story branches. Our main actor, PhD student Alex, encounters a potential case of data fabrication. As Alex, a player has to make her/his first choice from three available alternatives. Each alternative then leads to a continuation of the story line and shifts the story in a different direction. The player is not only faced with a dilemma of choice because he has to choose how to proceed, but also with the consequences of her/his choice – the potential events that could happen as a result of making one or the other choice.

The game has three stages, after each the player is given a choice of three alternatives. Each stage tells a short story (continuation of the story) through illustrations and simple dialogues. There are several characters who are part of the story and can influence the player's choices. In addition to the player (PhD student), there is a supervisor, a friend and a company director. Following the developing story line, the player needs to decide how to behave in a particular situation. Each choice provides new experience

to the player. In total the game has 29 choices and 15 ending scenarios.

The game also builds a bridge between academic integrity (AI), research integrity (RI), and business ethics (BE) in order to promote understanding of AI, RI, and BE and to raise awareness of the potential risks of breaching integrity.

The development of the game took place in stages, initially searching for real life examples and information about fabrication cases in scientific literature, and creating a potential game story. The first version of the game was developed by a single consortium partner. Once the initial game scenario was developed, three rounds of discussions were organised with the partners to discuss the content and visualisation of the game. After each discussion round, the game was adjusted according to the comments and suggestions from the partners for improvement of the game. Once the final version of the game was agreed with the project partners, the game was reviewed by an editor and handed over to a partner who will transfer the game to a player-friendly computer-mediated format which will be presented during the workshop.

Workshop will be organised as follows:

1. A short introduction to the idea and the logic of the game.
2. Playing the game.
3. Participant feedback and concluding discussion.

With the consent of workshop participants, the authors of the workshop will take notes on the feedback and later use it to improve the game to best correspond to the needs of future players.

## References

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ENAI Report 3G [online]: revised version, October 2018.