

Effects of gamification - The two supervisors

1. Supervisor worldviews

- a. Supervisor A suggests: quantitative data, structured environment, experimentation, and statistics.
They are possibly a positivist. This is due to firstly their reliance on quantitative data, ie. the measuring of gamification effectiveness, with the metrics of student grades and engagement as metrics. Their method appears to be related to the scientific method of: Research, assume hypothesis, test hypothesis, then Accept or reject hypothesis. Additionally the object of “grades” is reductionistic, as a grade has been proven to be a poor indicator of skill/knowledge in a given field of study. Additionally a grade is subjective, and may vary depending on the teacher or examiner in charge of giving the grade, further reinforcing that the approach of using grades is reductionistic.
- b. Supervisor B: Qualitative, interviews, studying the context/setting.
Since the supervisor purposes interviews it suggests qualitative methods which could be either transformative or constructivist worldview, but since this research does not seem to be about making a change in the real world, and with the focus on the context, the supervisor’s worldview is possibly bound in constructivism because they rely on the human context of the research. The primary collection of data is through the understanding of how the teachers see the implementation of gamification, thus further underlining their constructivist worldview.

2. The best approach

- a. Supervisor A suggests: measuring grades and number of logins. These variables are objective, and it can be tested, for example, if grade has significant statistical dependence on the number of logins. The control group could be students who are subject to traditional teaching methods.
- b. This group is not entirely sure, but we suppose supervisor B intends to interview both educators who are using gamification, and their students. If these interviews are conducted, subjective but nuanced information can be gained. Both regarding which teacher skills it takes to get maximum benefits from gamification, as well as how students have subjectively experienced this form of education.
- c. Of the two approaches suggested (A & B), this group finds that neither of them is the better approach. This is since both kinds of information are needed: It needs to be known how the students perform, in terms of grades, and it also needs to be known if the new form is motivating, and if the grades are sub-par, knowing how to use the new gamification platform is important. Perhaps it has potentials, not yet known.

3. If it was up to us

We would approach it with a combination of quantitative and qualitative methods, due to the reasons mentioned in 2.c. More specifically:

- a. Worldview
 - i. We recommend a pragmatic worldview since it would incorporate both quantitative and qualitative data collection.
- b. Research approach/design
 - i. We suggest using mixed methods, since takeaways from both quantitative and qualitative research are needed.
- c. Methods
 - i. Both using close-ended questionnaires with questions that use the Likert scale which can then be used for statistical analysis to show some results later on in the project and open-ended interviews for more detailed knowledge from the teachers and students perhaps for data collection early on and late in the project
- d. Practices used
 - i. Quantitative
 - 1. Later in the project to get some statistical data from the students experience to analyze on
 - ii. Qualitative
 - 1. Can do interviews early on in the project to get the initial knowledge from teachers and students in the context. and then keep communicating with the teacher throughout the project and then do interviews with teacher and students later on in the project to get detailed feedback.