



Points, Badges and Beyond

A TWO-YEAR STUDY OF GAMIFICATION IN FURTHER EDUCATION IT

Slide 1: Title

Hello, my name is Tim and welcome to Points, Badges and Beyond. Today I want to propose a Two-Year Study of Gamification in Further Education.

Student engagement remains one of the strongest predictors of success and retention in Further Education, yet maintaining that engagement across long courses continues to be a challenge. Gamification, the use of points, badges and other game elements, shows clear motivational potential, but most evidence focuses on short-term outcomes.

This proposal outlines a longitudinal study exploring how gamification affects sustained engagement among students in Further Education programmes.



Points, Badges and Beyond

A Two-Year Study of Gamification in Further Education

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Research Proposal

Research Methods and Professional Practice

Slide 2: Why This Research Matters

Student engagement has become one of the main priorities in Further Education policy and practice. A 2023 report from Ofsted's, makes it clear that engagement is closely linked to both achievement and retention, students who stay involved tend to get better outcomes.

Gamification is often seen as a possible solution. Studies by Balalle (2024) and by Rafiq (2024) show that using game like elements can give learners a short-term boost in motivation and participation. The problem is that these effects often fade quite quickly and we still have limited evidence about whether gamification keeps students engaged in the long run.

Most of the existing research focuses on short projects or higher education modules. Very few studies have tracked students in Further Education, especially over a full two-year programme.

By following one cohort through both Years 12 and 13, this study would look at how engagement can be sustained through carefully designed gamified learning, addressing the gap in the research.

Why This Research Matters

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Student engagement is key to success and retention in Further Education (Ofsted, 2023).

Gamification can improve short-term motivation, but its long-term effects are unclear (Balalle, 2024; Rafiq et al., 2024).

Most studies focus on higher education or short modules, not full FE programmes (Alonso-Sánchez, López & González, 2025; Jack, Alexander & Jones, 2024).

This study will follow one FE cohort across two years to test whether gamified design supports sustained engagement.

Slide 3: Research Question, Aim and Objectives

The key question that guides this project is, how does gamification affect student engagement over a two-year period in Further Education?

This question moves beyond short-term classroom studies and looks at how engagement develops across a full Further Education programme.

The overall aim of the research is to evaluate the long-term impact of a structured gamified approach on engagement within a single Further Education cohort.

To do that, the project has four key objectives.

- First, it will track engagement across time, not just whether students take part, but how their behavioural, cognitive and emotional engagement changes as they progress through the course.
- Second, it will compare engagement between exam based and coursework based modules, since assessment type may shape how students respond to gamified activities. Students often report being more engaged in coursework as there is something to do other than memorise the material.
- Third, it will explore both student and tutor perceptions, identifying what aspects of gamification help or hinder motivation.
- And finally, it will examine whether engagement patterns link with academic achievement, treating performance as a secondary but informative measure.

Together, these objectives create a complete picture of how engagement evolves across two academic years.

Research Question, Aims and Objectives

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Research Question

How does gamification affect student engagement over two years in Further Education?

Aim

To evaluate the long-term impact of a structured gamified approach on engagement in an FE cohort.

Research Question, Aims and Objectives

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Objectives

- Track behavioural, cognitive and emotional engagement over time
- Compare engagement between exam and coursework modules within the same cohort
- Explore student and tutor perceptions of what supports or limits engagement
- Examine links between engagement patterns and achievement as a secondary measure

Slide 4: Key Literature, Part 1

Recent studies continue to show that gamification can be a powerful way to increase motivation and participation. For example, Rafiq, Iqbal and Afzal (2024) found that digital learning tools generally make students more active and more positive about their studies. Likewise, Alonso-Sánchez (2025) reported that structured gamified activities helped learners concentrate for longer and complete more work.

So, the short-term benefits are clear. The challenge is what happens next. Jack, Alexander and Jones (2024) tracked a statistics class and noticed that enthusiasm rose at first but then dropped once the novelty wore off. Bouchrika (2021) described a similar pattern of bursts of activity without much evidence of deeper learning.

Balalle's (2024) review pulls this together and points out that while gamification is now common across digital education, most of the research still focuses on short courses or higher education settings.

Key Literature

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Gamification can increase motivation, participation and enjoyment (Rafiq et al., 2024; Alonso-Sánchez et al., 2025).

Engagement often drops once novelty fades or when competition causes distraction (Jack et al., 2024; Bouchrika et al., 2021).

Gamification is widely used in digital learning environments (Balalle, 2024).

Slide 5: Key Literature, Part 2

When we look across the research, a few themes keep appearing. Gamification clearly has the potential to boost motivation, participation and enjoyment, but the effect does not always last. Once the novelty wears off or when competition becomes too strong, engagement can start to fall again.

Another consistent finding is that results depend on design. If the game elements connect well with learning goals, students tend to stay engaged. If they feel added on or superficial, the benefits disappear quickly.

What's missing from the literature is long-term evidence, especially in Further Education courses. We simply do not yet know whether gamification can sustain engagement beyond a single term or unit.

That's exactly what this project aims to test through a two-year longitudinal study, producing findings that will add to academic theory and offer practical guidance for tutors in the classroom.

Key Literature

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Most existing studies are short term and focused on higher education, with few longitudinal examples in FE (Balalle, 2024; Jack et al., 2024).

There is no sustained evidence on long-term engagement within Further Education IT programmes.

Slide 6: Methodology: Design and Participants

This study will follow a single cohort of Further Education students as they progress through Years 12 and 13. A longitudinal approach is ideal here because it allows engagement to be tracked and compared over time, showing how patterns develop rather than taking a single snapshot.

The course itself includes four modules, two assessed by exams and two by coursework. Gamification will be introduced only in the exam modules, where students often find the content more theoretical and harder to stay engaged with. Features such as points, badges, progress tracking and small team challenges will be used to make participation more active and rewarding.

The coursework modules will stay as they are. This creates a natural comparison within the same group, so we can see whether changes in engagement come from gamification rather than from other factors. Having one tutor deliver all the modules keeps teaching consistent, which is important for validity.

Overall, the design fits easily within normal college practice and still provides a clear contrast between gamified and non-gamified learning environments.

Design & Participants

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Two-year longitudinal case study in FE following one cohort across Year 12 and Year 13

Four modules: two exam based and two coursework based

Gamification applied only to exam modules to increase engagement with theoretical content and support retrieval and retention

Coursework modules remain standard for comparison with one tutor for consistency

Slide 7: Data Collection

To understand engagement properly, the study will collect both quantitative and qualitative data so that the findings show not just what happens, but also why.

On the quantitative side, I'll collect engagement surveys every half term. These will use Likert scales to measure behavioural, cognitive and emotional engagement, giving a consistent numerical picture across the two years. I'll also draw on platform analytics, things like logins, task completion and time spent on activities, to capture students' actual participation levels. Attendance and punctuality data from the college MIS will add another layer, showing behavioural engagement week by week. Achievement data from exams and coursework will be included as background information rather than as a main outcome, helping to place engagement trends in context.

On the qualitative side, I'll hold focus groups once per term to hear directly from students about how they experience gamified theory modules. In addition, short tutor reflections will be recorded after each module to capture observed changes in motivation and participation.

By bringing these sources together, combining measurable activity with lived experience, will allow for a complete view of engagement.

Data Collection

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Quantitative data

- Half-termly engagement surveys using Likert scales to measure behavioural, cognitive and emotional dimensions.
- Platform analytics: logins, task completion, activity time
- Attendance and punctuality from MIS records
- Achievement data for exam and coursework

Qualitative data

- Termly focus groups exploring student views on gamified theory modules
- Short tutor reflections recorded after each module

Slide 8: Data Analysis

On the quantitative side, I'll use a repeated measures approach, which means collecting data from the same students at several points across the two years. This is well suited to a single cohort design because it shows how engagement changes over time, whether it rises, drops or stays stable after the introduction of gamification. Engagement results from the gamified exam modules will be compared with those from the non-gamified coursework modules, using the same indicators for both, helping to identify clear trends rather than one off results.

For the qualitative side, I'll use thematic analysis on focus group discussions and tutor reflections. This involves coding and grouping statements into common themes such as motivation, novelty fade and competition. These themes will then be compared with the quantitative results to help explain why certain patterns appear.

By combining both types of analysis, the study will produce findings that are not only statistical but also interpretive.

Data Analysis

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Quantitative

- Repeated measures of engagement indicators across two academic years
- Compare engagement between gamified exam and non-gamified coursework modules
- Identify overall trends, increases or declines in participation

Qualitative

- Thematic analysis of focus group and tutor data
- Code and group statements into themes such as motivation, novelty fade, and competition
- Use themes to explain quantitative trends and provide context

Slide 9: Ethical Considerations and Risk Assessment

Because all the participants will be under eighteen, ethics and safeguarding are central to this project. Informed consent will be gained from both students and their parents or guardians before any data is collected. Participation will be entirely voluntary and students will be reminded that they can withdraw at any time without consequence.

All data will be handled in line with GDPR requirements. Names will be replaced with anonymous codes and all files will be stored securely on encrypted college systems.

The full proposal will go through the college's ethics and safeguarding approval process before the study begins.

There are also a few practical risks to consider things like unequal access to devices, do all students have access to computers at home and competition pressure, will poor result lead to less engagement.

To reduce these all students will have device access in college and competitive elements will be optional rather than mandatory.

Together, these measures ensure that the study remains fair, inclusive and ethically sound throughout the two years

Ethical Considerations and Risk Assessment

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Ethical Considerations

- Consent from students and parents/guardians
- Right to withdraw at any time
- GDPR compliant, anonymised data
- Safeguarding approval through college ethics process

Risks: novelty fade, device access, competition pressure, attrition

Mitigation: rotate features, ensure access, allow opt out, secure data storage

Slide 10: Timeline

The project is planned to run over two full academic years to allow for genuine long-term observation.

In Year 1, the focus will be on setting up the study. This includes gaining ethics approval, securing parental consent and collecting baseline measures across all modules before gamification begins. Gamification will then be introduced in the exam modules and engagement and perception data will be gathered throughout Year 12.

Year 2 will start with a new baseline to capture any changes since the first year. At this stage, the gamification features will be refined based on early findings. Engagement tracking and focus groups will continue through Year 13, followed by a mid-point review and final analysis.

The final stage will bring all this together, interpreting the data, writing up the results and sharing the findings through presentations and practitioner resources for tutors.

Overall, this timeline is practical for a two-year college programme and ensures steady, sustained observation of engagement over time.

Timeline

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Year 1

- Ethics approval and parental consent
- Baseline measures in both module types
- Introduce gamification in exam modules
- Collect Year 12 engagement and perception data

Year 2

- Re-baseline at start of Year 13
- Continue and adjust gamification features
- Collect Year 13 engagement and focus group data
- Mid-point and end-of-year analysis



Timeline

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Final stage

- Full data analysis, interpretation and reporting
- Disseminate findings and produce artefacts

Slide 11: Artefacts and Contribution

This project will produce two main artefacts that together form the core contribution of the study.

The first is a two-year longitudinal dataset that tracks how students engage with gamified exam modules over time. This dataset will provide rare, concrete evidence about sustained engagement in Further Education computing, something that's been missing from existing research.

The second artefact is a practical tutor framework that shows how gamification can be applied effectively in theory-based lessons. This framework will support professional practice, helping tutors design activities that encourage consistent participation. It could also be developed into staff training or CPD resources for wider use across the college.

Overall, the study contributes in two ways.

- Theoretically, it builds understanding of how gamification works over extended periods.
- Practically, it offers evidence-based strategies that FE tutors can use to make their teaching more engaging and sustainable

Artefacts

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Two-year longitudinal dataset on engagement in gamified exam modules

Practical framework for using gamification to support theory-based learning in FE

Contribution:

- Provides rare sustained evidence on long-term engagement in Further Education
- Findings will inform future FE teaching and staff development.

Slide 12: Critical Reflection and Conclusion

This proposal directly addresses a clear gap in current research. Most studies show that gamification can boost motivation in the short term, but very few demonstrate whether those effects last. By extending the investigation over two full academic years in a Further Education context, this study provides the kind of longitudinal evidence that the literature has been missing.

In short, Points, Badges and Beyond aims to show how gamification can sustain engagement over time in Further Education.

Gamification is not just about points, it is about creating lasting engagement and meaningful participation.

Thank you.

Thank You

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Gamification is not just about points, it's about sustained engagement.

References

- Alonso-Sánchez, J.M., López, M. and González, J. (2025) 'Gamification in higher education: a case study in educational sciences', *TechTrends*. Available at: <https://doi.org/10.1007/s11528-025-01056-2> (Accessed: 9 September 2025).
- Balalle, H. (2024) 'Exploring student engagement in technology-based education in relation to gamification, online/distance learning and other factors: a systematic literature review', *Social Sciences & Humanities Open*, 9, 100870. Available at: <https://doi.org/10.1016/j.ssaho.2024.100870> (Accessed: 9 September 2025).
- Bouchrika, I., Harrati, N., Wanick, V. and Wills, G. (2021) 'Exploring the impact of gamification on student engagement and involvement with e-learning systems', *Interactive Learning Environments*, 29(8), pp. 1244–1257. Available at: <https://doi.org/10.1080/10494820.2019.1623267> (Accessed: 9 September 2025).
- Jack, E., Alexander, C. and Jones, E.M. (2024) 'Exploring the impact of gamification on engagement in a statistics classroom', *Information and Inference: A Journal of the IMA*. Available at: <https://doi.org/10.1093/teamat/hrae009> (Accessed: 9 September 2025).
- Rafiq, M., Iqbal, S. and Afzal, M.T. (2024) 'The impact of digital tools and online learning platforms on higher education learning outcomes'. Available at: https://www.researchgate.net/publication/380734414_The_Impact_of_Digital_Tools_and_Online_Learning_Platforms_on_Higher_Education_Learning_Outcomes (Accessed: 28 September 2025).
- Ofsted (2023) *Further education and skills inspection handbook: for September 2023*. London: Ofsted. Available at: <https://dera.ioe.ac.uk/id/eprint/40007/> (Accessed: 28 September 2025).

References

- Alonso-Sánchez, J.M., López, M. and González, J. (2025) 'Gamification in higher education: a case study in educational sciences', *TechTrends*. Available at: <https://doi.org/10.1007/s11528-025-01056-2> (Accessed: 9 September 2025).
- Balalle, H. (2024) 'Exploring student engagement in technology-based education in relation to gamification, online/distance learning, and other factors: a systematic literature review', *Social Sciences & Humanities Open*, 9, 100870. Available at: <https://doi.org/10.1016/j.ssaho.2024.100870> (Accessed: 9 September 2025).
- Bouchrika, I., Harrati, N., Wanick, V. and Wills, G. (2021) 'Exploring the impact of gamification on student engagement and involvement with e-learning systems', *Interactive Learning Environments*, 29(8), pp. 1244–1257. Available at: <https://doi.org/10.1080/10494820.2019.1623267> (Accessed: 9 September 2025).
- Jack, E., Alexander, C. and Jones, E.M. (2024) 'Exploring the impact of gamification on engagement in a statistics classroom', *Information and Inference: A Journal of the IMA*. Available at: <https://doi.org/10.1093/teamat/hrae009> (Accessed: 9 September 2025).
- Rafiq, M., Iqbal, S. and Afzal, M.T. (2024) 'The impact of digital tools and online learning platforms on higher education learning outcomes'. Available at: https://www.researchgate.net/publication/380734414_The_Impact_of_Digital_Tools_and_Online_Learning_Platforms_on_Higher_Education_Learning_Outcomes (Accessed: 28 September 2025).
- Ofsted (2023) *Further education and skills inspection handbook: for September 2023*. London: Ofsted. Available at: <https://dera.ioe.ac.uk/id/eprint/40007/> (Accessed: 28 September 2025).