

MEdL MAJOR PROJECT PROPOSAL:

Increasing Student Engagement in Existing Online Learning Experiences
Through Incorporation of a Gamified Framework

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May 31, 2018

Critical Challenge Question

How can teachers increase student engagement by disrupting traditional educational paradigm by incorporating a gamification construct to enhance existing online learning experiences?

Why Gamify?

For educators, change is constant. Whether it's adapting a lesson to suit different learners, updating a unit or two year by year, or changing courses or grade levels of instruction, this profession is built on the expectation that nothing is static and that educational success is dependent on a huge number of variables. Add to this a recent curriculum overhaul in British Columbia, and you have the perfect storm of change and uncertainty.

One innovative strategy that is worth exploring is the use of gamification in education. I propose that by exploring and applying chosen elements of gamification it is possible to create an overarching gamified framework that educators can apply to their existing online courses in order to increase student engagement in Distributed Learning (DL) coursework while increasing student opportunities for personalization and choice.

In their work "Gamification in Education: What, How, Why Bother?" Lee and Hammer (2011) tell us that in order for educational innovations to be successful, you must first start by identifying a problem, and then "design systems that fix those specific problems, develop ways of evaluating whether those fixes work, and sustain those fixes over time" (p.3).

Identify a Need

DL teachers and students alike will tell you that working asynchronously online is not always the most engaging learning environment. There are feelings of isolation, perceived distance from the instructor, and fewer opportunities for collaborative learning (Bates, 2015).

Although there are a number of design innovations that can be employed to reduce transactional distance, increase feelings of connectedness, and build in opportunities for collaboration, one of the most compelling problems that needs solving in both the DL and bricks-and-mortar classroom is diminishing student engagement.

“Interaction is critical to creating a sense of presence and a sense of community for online learners, and to promoting transformational learning” (Anderson, 2008. p.32) This research shows us that students who are engaged and connected experience deeper learning; therefore, to start addressing the issue of student engagement, we should target this problem in our design.

Elements of Engagement

In addition to the introduction and conclusion, I will explore various elements of student engagement as they connect to game design, as presented in the research. Elements that increase student engagement and connect to pedagogical strategies and gamification elements include student autonomy, credit for time on task, learning as the goal (rather than product or reward), chunking learning into small, creditable units, clarity of expectation, and making progress and achievement visible. I will also explore the research around benefits of gamification, and challenges that can be expected. Naturally, I will need to explore what constitutes the traditional educational paradigm in order to present research suggesting that we need to disrupt these mental models in order to achieve greater student engagement.

Key Deliverables

Pedagogy Level Up! Website. I intend to create a gamified framework that teachers can use with their existing online learning materials to create richer learning environments for their students, piece by piece, rather than by reinventing the wheel all at once. Because my school

district has a membership to Microsoft Office 365, and because I am cognizant of the restraints of FIPPA around using products that house data outside of Canada, I will be creating this framework on our District Office 365 account.

Gamification Framework. The primary gamification elements that I will incorporate into my framework are experience points, badges, and choice (co-design principle). Pedagogical connections will include clear learning outcomes, transparent assessment, focus on mastery learning (no points without fully meeting expectations), and visualization of progress (badges & ongoing tally of points). I will also increase choice via a quest-chain and how long students spend on an outcome, how they demonstrate their learning, and which topics they choose to explore in order to meet the outcomes.

Resources for Teachers. I intend include videos and documents for students, a tutorial on using MS Office OneNote, a tutorial on Portfolio/Evidence, instructions for HOW learning can be demonstrated (creation of personal list of types of artifacts), and a detailed rationale and research section for teachers who may feel the need to justify the changes they are making in their practice in my “Pedagogy: Level Up!” website.

I will also explore ways to reframe and reorganize existing content, providing instructions and checklists for educators. For example, what are the main curricular outcomes/themes that need to be considered to select required assignments in the quest chain? How will I organize the quests? By topic? Theme? Learning outcome? What types of products can students use to demonstrate their learning? What degree of choice to do they have?

Conclusion

I believe this piecemeal model will promote greater gamification implementation rates by reducing upfront workload, especially in the DL world where teachers often have a demanding

scope of courses to instruct. The deliverable (website) with resources for teachers may be implemented in part or in whole, opening the doors to greater choice and option for students.

I fundamentally believe that in order for innovative pedagogies to become adopted and result in sustainable change for our learners, we need to disrupt the status quo, and we need to change our mindsets around what education looks like. I will explore and defend the rationale for using non-traditional pedagogies with our students, particularly to support the gamified framework developed herein.

The Microsoft Office 365 Framework proposed here is intended to add a “game layer” to existing online courses, allowing DL teachers to dip their toes into gamification without needing to deconstruct and reconstruct their existing courses. The addition of game elements to instructional design has the “potential to shape users’ behaviour in a desirable direction” (Dicheva, Dichev, Agre, & Angelova, 2015, p.75), helping address the issue of student engagement in online courses. Adding an “affinity space” (Gee, 2005), such as the Collaboration space in MS OneNote, where students can both work together and share their learning, can help add authenticity to the learning, as writing for an audience of peers can switch the focus away from the grades “situated within a social context with an increased focus on style, genre, and audience” (Kingsley & Grabner-Hagen, 2015, p.58).

When considering gamification, it is important to think about the design and problem that you are trying to address. We have to be careful to design experiences that are enjoyable and don’t suck the fun out of play, turning the learning into “chocolate covered broccoli”, as described by (Lee & Hammer, 2011, p.4). It is crucial to maintain authenticity, clear expectations, and strong teacher support to help your gamification initiative succeed. It is also necessary to have “strong teaching staff able to design effective assignments, grade students’

work relatively quickly, and interact with students closely” (Dicheva, Dichev, Agre, & Angelova, 2015, p.83).

Finally, the content, pedagogy, and relationships with students must be good in order for gamification to succeed (Chee & Wong, 2017), just as it would need to be in any classroom. The addition of game elements is not a magic solution to the issue of student engagement in online courses, but through thoughtful application of research and strong pedagogy, I propose that it is possible to create a gamified framework that can increase student engagement in Distributed Learning (DL) coursework while increasing student opportunities for personalization and choice.

References

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