

# ASCILITE 2024

## Navigating the Terrain:

*Emerging Frontiers in Learning Spaces, Pedagogies, and Technologies*

### TEL Pedagogies: Gamification – *Grammar Guru*: Strengths and Challenges

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The Centre for English Communication (CEC) developed and launched *Grammar Guru* (GG), a browser-based game application, as part of Singapore Management University's (SMU) TEL initiative in 2023. GG is used as part of CEC's blended learning resources, which complements our core curriculum module for undergraduates, Writing & Reasoning (WR). GG is an upgraded iteration of *Power Grammar 1.0*, a basic grammar game developed by students several years ago. GG is an effective TEL tool for teaching grammar as it uses gamification to make learning engaging and caters to the needs of learners with different language proficiency levels.

GG improves student engagement through gamification. Gamification is the application of game design, techniques and elements in non-game contexts and activities (Deterding et al., 2011, p. 1). Research shows gamification is highly effective in increasing student engagement, attention, motivation, creativity, digital literacy and performance level (Barua & Bharali, 2023; Fernandez-Antolin et al. 2021; Skritsovali, 2023). GG includes elements such as points, leaderboards, hints, and non-playable characters (NPC) to teach grammar in a professional, corporate context. By contextualizing grammatical and linguistic forms in sentences and paragraphs, GG helps students achieve greater competence and fluency in their English language abilities. The gamification elements make learning more interactive and enjoyable which improves students' knowledge retention and application. A primary quantitative study conducted by CEC established that "the positive correlation observed suggests that the higher level a student played, the higher the student's English language proficiency". CEC is currently conducting a qualitative study to gather students' feedback.

GG also addresses the requirements of learners with diverse language proficiency levels by varying the difficulty of questions. These questions include sentence and text correction, matching, re-arrangement, true/false, fill-in-the-blanks and multiple-choice questions. Players work their way through eight levels that comprises Junior and Senior Intern, Junior and Senior Management Trainee, Junior and Senior Middle Management and Junior and Senior Director. Perez (2020) and Langendah (2016) highlight how certain game elements such as storytelling, challenges, progression, and feedback can boost student drive and learning. The gamification elements in GG have a similar effect, motivating learners of different proficiency levels. GG's interface is designed to be simple and intuitive. Regardless of students' socioeconomic background or gaming aptitude, they would be able to navigate it effectively.

One challenge GG faces is striking a balance between entertainment and education. Limited game development funds result in limited game design features and less engaging gameplay for students, especially in comparison to commercial games with substantial budgets that offer high entertainment value through advanced graphics and intricate storylines. Furthermore, as CEC instructors are not game design experts, we have limited knowledge that restricts our capacity in designing and maintaining GG. Currently, CEC outsources game design and maintenance to a third parties. This results in instructors not being able to directly make changes to the game questions and content. Moreover, the process of retrieving relevant data for analysis is tedious and time consuming.

Despite these constraints, thoughtful and strategic approaches can create valuable TEL resources that improve student learning.

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### References

- Barua, A. M., & Bharali, S. S. (2023). Gamification and its challenges in e-learning: A case study of computer science learners in KKHSOU. *AAOU Journal*, 18(3), 233–245. <https://doi.org/10.1108/AAOUJ-01-2023-0001>.
- Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: Defining "gamification". In *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments* (pp. 9-15). ACM. <https://doi.org/10.1145/2181037.2181040>.
- Fernandez-Antolin, M.-M., del Río, J. M., & Gonzalez-Lezcano, R.-A. (2021). The use of gamification in higher technical education: Perception of university students on innovative teaching materials. *International Journal of Technology and Design Education*, 31(5), 1019–1038. <https://doi.org/10.1007/s10798-020-09583-0>.
- Langendah, P., Cook, M., & Herbert, C. (2016). *Gamification in Higher Education. Toward a Pedagogy to Engage and Motivate*. ResearchGate. [www.researchgate.net/publication/303843160\\_Gamification\\_in\\_higher\\_education\\_Toward\\_a\\_pedagogy\\_to\\_engage\\_and\\_motivate](http://www.researchgate.net/publication/303843160_Gamification_in_higher_education_Toward_a_pedagogy_to_engage_and_motivate).
- Perez, M., & Masegosa, A. (2020). Gamification as a Teaching Resource for English-Medium Instruction and Multilingual Education at University. In *IGI Global*. [www.igi-global.com/chapter/gamification-as-a-teaching-resource-for-english-medium-instruction-and-multilingual-education-at-university/238669](http://www.igi-global.com/chapter/gamification-as-a-teaching-resource-for-english-medium-instruction-and-multilingual-education-at-university/238669).
- Skritsovali, K. (2023). Learning through playing: Appreciating the role of gamification in business management education during and after the COVID-19 pandemic. *The Journal of Management Development*, 42(5), 388–398. <https://doi.org/10.1108/JMD-04-2023-0124>.

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