At-risk ESL students’ task-based learning in the 3D virtual environment

What this research was about and why it is important
Low-proficient English as a Second Language (ESL) learners at the college level usually face multiple barriers in language, culture and academic demands. They are also at risk of failing academic subjects due to limited oral and written English communication skills. This study was motivated by these urgent concerns raised in an English Support Program housed at an Australian university. Struggling ESL students in the Program often expressed their dissatisfaction with the conventional syllabus design that was unrelated to real-life task purposes and their learning interests. The traditional English support class activities were having limited effect in motivating and engaging students to improve their language skills. A synergy of task-based instruction and 3D virtual learning was thus initiated to transform conventional language instruction into 3D immersive learning. It also aimed to explore whether task-based practices in Second Life (SL), a 3D virtual environment, could foster learners’ communication skills, task engagement, motivation and avatar identities. Findings not only suggest best practices for curriculum design and program improvement, but also highlight both challenges and possibilities of conducting research and supporting at-risk language learners in a 3D sphere.

What the researchers did
- To further support under-achieving ESL students who were struggling with oral and written communication skills and lacking motivation, the ESL teacher worked with the researcher to develop a task-based course conducted in SL.
- Aligned with unique SL features (e.g., 3D immersion, simulation, multimodality, teleporting), tasks included role-playing in a 3D restaurant, teamwork in exiting a maze and building 3D objects, interviewing avatar friends, changing avatar outfits for a cultural clothing oral presentation and a fashion runway show.
- These tasks enabled students to use their created avatars to spontaneously undertake problem-solving and communicative tasks while collaborating with peers to negotiate meaning during task performance.
- Qualitative data were triangulated from students’ blog entries, reflective essay writing and a focus group interview, followed by a thematic analysis approach.

What the researchers found
- Despite unforeseen technical issues hindering virtual class management and causing communication breakdown, students overall perceived task-based design in SL to be conducive to their learning.
- SL features could facilitate authentic task execution, promote unrehearsed communication, and boost motivation; their increased motivation further sustained learner task engagement.
- Thanks to avatar anonymity, students were emboldened to use English for authentic and meaningful purposes without the sense of losing face, thus building confidence through avatar identities.
- The game factor in 3D virtual learning instilled fun in a mundane English class by transforming it into a virtual playground.

Things to consider
- SL affordances in tandem with task-based principles make a difference in learners’ communication skills, heightened motivation and invested engagement.
- This pedagogical synergy promotes simulated, immersive learning that fosters real-world task experience and spontaneous interaction.
- When task design is meaningful and engaging to the learners, they make more goal-oriented efforts that in turn lead to learner autonomy, increased motivation and sustained engagement.
- Avatar anonymity bolsters a sense of masked security that shields learners from the feeling of embarrassment when making mistakes. This aspect warrants the attention of language educators and researchers in order to explore its potential in empowering at-risk learners and enhancing their language acquisition.
- Caveats such as technical and instructional issues in SL should be noted so as to avoid the hindrance of virtual class management and student frustration, resulting in demotivation and disengagement.


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