

# Student Engagement: Developing Self-Generated Game-Assisted Activities for Teaching and Learning Language for Medical Purposes

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## Dear Editor,

Today, teaching Language for Medical Purposes (LMP) in higher education is a highly demanding conception of language pedagogy. LMP teaching and learning in real-life-like situations have plausible implications for using language in real-life healthcare settings. LMP skills can be considered a bridge between the instructional-learning context of medical higher education and therapeutic fields, enabling the students to keep their knowledge of tackling the emerging needs up to date (1). Parallel with the application of educational technology in medical higher education, the stakeholders' interest in synthesizing the games is now revolving around the application of Science, Technology, Engineering, Art, and Mathematics (STEAM) approach; in the light of this, LMP learning is not a vicarious experience (2). Games have long been recognized as a vehicle for both language learning and therapy; however, the

makeup of the new generations of games as educational-therapeutic LMP activities still resembles their prototypes. The novelty, driven in part by a host of educational technology and simulation tools, has made it easier than ever to introduce the games into LMP education.

Essentially, the new generation of games has expanded its focus on exploring different educational and therapeutic needs in medical higher education to provide all stakeholders with knowledge and skills. Games are categorized under tutorial language programs, and students can practice in simulated clinical settings using LMP in tandem with learning LMP content materials (3, 4). The new strategies for LMP education highlight the mutual relationship between textbooks and fieldwork, taking the needs into account. The capacity of students and patients to address their needs can be improved as a result of streamlining the game-assisted language

learning activities. It is believed that setting the stage for promoting medical students' knowledge and awareness of societies' hygienic and therapeutic needs helps them reach higher achievements through realistic thinking and careful needs analysis (5). On the other hand, although the simulated scenes of educational-therapeutic games are value-laden and open to interpretation, in the game-assisted language learning, students' and patients' active engagement is neglected in the design of commercial-off-the-shelf (COTS) products. COTS Augmented or Virtual Reality Game-assisted LMP education can exert little influence on medical education and treatment. The students' passivity in the process of developing and practicing game-assisted teaching and learning not only underrepresents the real-world situations but also undermines their cognitive language learning process (6, 7). Adopting a novel strategy to define an active role for students in teaching LMP skills and subskills and fostering real communication appear to be indispensable in this process. In addition, in the new generation-of game-assisted language learning modules, the widespread use of COTS has undermined the generalizability of the findings.

Along these lines, it is possible to reunify the LMP education and therapy by introducing the new method of active student engagement in LMP education through new generations of games. The students' self-generated activities present a situation in terms of how far it varies from the way material developers and language educators in medical higher education customarily apply the educational technology tools. The customary approach towards using new generation of game-assisted LMP activities needs to be complemented with a range of novel strategies that take into account students' active engagement in medical language education and therapy. Indeed, real game-assisted LMP modules support shared cognitive processes that can be conceptualized in the new generation of self-generated game-assisted activities; thus, implementation of self-generated games (vs. COTS) cannot be narrowed down to minor

format changes. Students and patients actively use the games in tackling their educational and therapeutic needs. The needs of patients can be addressed through an interplay between these needs and students' understanding of content materials. It is misleading to provide students with mere game-assisted LMP lessons, because their active participation is also deemed necessary. Concrete examples can be conceptualized for fostering a cross-contextual context wherein students can easily imagine the actual healthcare settings through active participation. The self-generated view of the new generation of game-assisted LMP learning enables students to broaden their perspectives on the usefulness of games in education and medical care. Students' active engagement in developing game-assisted activities stimulates their critical thinking and helps them find new solutions in their use of LMP materials. Under such circumstances, students try to capitalize on their LMP skills and knowledge to seize every possible opportunity for tackling educational-therapeutic needs. Diversity of the needs in the process of developing self-generated game-assisted LMP education can usher in a host of academic and therapeutic opportunities. COTS games are played individually while self-generated games are practiced collectively; thus, under interdisciplinary (vs. intradisciplinary) conditions, students should account for a greater diversity in both academic and healthcare fields. Similarly, patients are more comfortable in expressing their needs to the students. Along these lines, in the course of LMP learning, students can present their ideas and understand the patients' needs. To sum up, integrating new strategies into the process of defining an active role for students in the LMP classrooms to tackle educational, therapeutic, and hygienic needs seems indispensable. In this way, students learn LMP skills and use them for the purpose of meeting the therapeutic and hygienic needs.

### **Conflict of Interest**

The authors declare that they have no conflict of interest.

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