E-Learn 2019 - New Orleans, Louisiana, United States, November 4-7, 2019

Reflections on Promoting Engagement *and* Learning in Higher Education Multiplayer Online Role Play Simulation Games (MORPSGs)

Roni Linser, SimPlay.Net

Helen Hintjens, International Institute of Social Studies, The Hague, Netherlands

Abstract

While empirical research into role play simulation games is critical to our understanding of the way they are able to motivate and engage students in higher education, reflections by teachers, designers of MORPSGs and student/player voices are no less important, even if they are just anecdotal evidence. Not only because they may suggest gaps in current research, but because they can also aid to interpret empirical research results in order to design better educational MORPSGs. The present paper focuses on what we will term the inter-transparency of the person-student-player-role amalgam (PSPR) and suggests that giving learners room for uncertainty, chance, decision-making and reflection – in short 'fluidity' – enables participants in educational on-line role play simulation games to combine fun with on-line learning. It combines reflections from participants, relevant literature and empirical research in order to 'triangulate' the evidence on student motivation and engagement using MORPSGs for learning in higher education. The paper aims at exploring, how students make sense and construct their roles, and how 'free' they feel to extemporize –the degree of fluidity in the roles – that together seem to positively influence engagement and motivation. The authors have both worked on educational MORPSGs for more than two decades, and in this paper, we reflect on the experience with the aid of our students' reflections on their experience.

Introduction

"...knowledge comes to us through a network of prejudices, opinions, self-corrections, presuppositions and exaggerations, in short through the dense, firmly founded but by no means uniformly transparent medium of experience (Adorno 1974: 80).

While a formal definition of role plays as suggested by Linser (2019) may be useful, perhaps critical, in empirical research, a looser conceptualization suggested by Gredler (2013) may better suit the purposes of this paper that anchors itself in reflection. For Gredler a simulation is "open-ended, evolving situations with many interacting variables" whereas a game is "a competitive exercise in which the objective is to win" (Gredler 2013: 571).

MORPSGs may be, though not necessarily, both simulations and games simultaneously (Linser, 2019). It is the design for learning that enables such instructional tools to be engaging to students by aligning students' preferences with pedagogical objectives. As recently pointed out "...sound pedagogical design can make a simulation (or a game) suitable and effective across a wide age range [gender, educational level] ...and that different pedagogical decisions can have notable impact on students' learning (Veermans and Jaakkola 2019: 6).

While this may, or may not, be true in relation to games and simulations, in the case of MORPSGs in higher education the 'impact' on students requires attention to student demographics, the student as a player, and their preferences about the role they are playing. Linser (2019) found demographic variables like Gender, Language; previous experience with online games and educational role plays; preferences for anonymity; the relevance of the role to the player, their identification with their role; all had significant correlations to either Motivation, Engagement or both. These findings suggest that apart from pedagogical design, personal characteristics, player preferences and student preferred features for the role they are playing have an impact on student motivation and engagement with MORPSGs for learning.

These findings lead us to wonder about the relations between the demographic characteristics of persons, their preferences as students, their preferences as a player, and their preferences for certain characteristics of the role they may be playing. An individual person may have many social roles in life. Being a student is one such social role a person takes on for personal reasons. Being a player in an online role play in an educational setting is a role one accepts, or not, as part of being a student in an institution of learning. And finally, the role one chooses, or plays, is also a social role, albeit a virtual one. Thus, the role one plays is part of their role as a player, itself part of the role of being a student in a learning institution, amongst the various social roles one takes as an individual person.

This 'Russian doll' of roles thus creates a 'multidimensionality' of values, preferences, and consequently modes of interaction. For students using MORPSGs for experiential learning, and presumably gaining knowledge and understanding, this multi-layered experience of role taking, is not only not 'uniformly transparent' as Adorno put it. But given the collaborative enterprise of role playing and different layers of roles, we can paraphrase Adorno, that it is not uniformly inter-transparent and intra-transparent. Yet the familiarity and experience of assuming roles in everyday life and indeed taking roles within roles, allows a certain level of exchange on the porous boundary between the different roles one assumes.

This paper is a reflective exploration into the intra-transparency and exchange between these various levels, or as Gerdler (2013) referred to it as the "many interacting variables". Our reflection on these is based on working with online role play simulation games for many years (since the 1990s), as teachers, researchers and designers of MORPSGs, from a review of the research literature, and from what students have reported in their summary evaluations of their activities (a task included at the end of most role play simulation games we conducted).

Playing at real life

MORPSGs involves exploring a sort of interactive and collaborative thought experiment about some reality being modeled. The roles that populated these MORPSGs were in most cases drawn from the reality being modeled i.e. they were particular individuals rather than generic ones. As teachers and designers, we created these MORPSGs over the past 20 years, in the hope that the Reality being modelled by the role play medium filters through the porous layers of identity to become a transparent model for the students. As Gredler pointed out a simulation should "bridge the gap between the classroom and the real world by providing experiences with complex, evolving problems" which make such exercises "social microcosms" (Gredler 2013: 572). The overall goal, in such simulations, was "to take a bona fide role, address the issues, threats or problems arising in the simulation, and experience the effects of one's decisions" (Gedler 2013: 573).

Linser (2019) found that students who played particular roles rather than generic ones were significantly correlated with motivation (p<.001) and engagement (p<.001). Furthermore, students who evaluated the scenarios they played were relevant to their course material were significantly correlated to both motivation (p<.001) and engagement (p<.001) and students who evaluated the scenarios as being an adequate representation of the subject matter of their course were also significantly correlated to both motivation (p<.001) and engagement (p<.001) (see tables). Thus, given that the roles students played were real personas and presumably the courses dealt with realities that existed in the real world, we can at the very least suggest that both Gredler's insistence on bridging the gap between the classroom and the real world, as well as our 20 years of practice in creating MORPSGs that are anchored in reality and our use of real-world personas are justified and enhance student motivation and engagement.

As one player in a particularly dramatic role play simulation on Venezuela noted:

"It reflects reality...It was also useful because it gave us a good idea of the methods used in real life to achieve goals, no matter if the methods used are good or bad, as well as the indirect way of using power...The difference though with the real world is that the game out there is even harder." (2002 participant, Wales).

A different player noted:

"We had a real country; a real government and we were portraying real characters. We all made a conscious effort to play the characters as we imagined them in real life" (2002 participant, Wales).

Another student put like this:

"...such Simulations can be called new experiments for social change by using real life content and advanced technology practice. I found it beyond...the traditional teaching and learning procedures" (2014, participant, Holland).

The effect of anchoring MORPSGs in reality and using roles that are based in that reality seems to enhance student learning. For example, again, and again, players expressed their surprise that the 'authority role' they had chosen, whether a minister or other leader, did not seem to have as much power as they had expected.

"One of the thoughts that had never occurred to me before was that even the president can be very vulnerable, if 'the rules of the game are not fair'...political intrigues are relentless...the role play reminded me that Power is a dangerous weapon" (2002 participant, Wales).

Similar comments came from other players who took the role of a woman leader or a wealthy businessman. They too felt they did not have as much room for manoeuvre as they would have expected. In the 2014 in Holland, one participant was playing a very marginalized character who represented a minority indigenous people. The participant, in reflecting on her experience in her role summary (i.e. after she stopped player her simulation role and returned to her role as a student) expressed her concern that her role was marginalized in the simulation, just as in real life.

Just as carnival costumes and a borrowed identity can unleash dissent, so too some anarchy within a simulation shows it is working well (de Goede, 2005). Sometimes, in this simplified model of the world, one is glad when players break the rules, which include non-disabling of other players, for example. A normally rather quiet person explained:

"[The] simulation is great...You can just go and be crazy, wild and no one will question your motives", she then added "But in reality we are cautious as to how our actions will be read, which is somehow limiting" (2004 participant, Wales).

This caution is interesting, as participants felt allowed to 'go crazy', within limits, but rarely did so. A person who played a journalist role, had this to say on the matter:

...this simulation gave me a first-hand taste of how diplomacy happens. I stated this in our round table and will state it again, I feel our simulation was just too neutral compared to what was actually going on in the real world. I was expecting our classmates(actors) to disagree on more things rather than coming to a collective understanding. Speaking real world, it is impossible to have a collective agreement like we had in our simulation without someone getting offended or playing to pride (2015, participant, US).

Another quiet individual, admitting that she rarely spoke in class, explained how on-line she felt less inhibited and managed to engage deeply with her role, an opposition journalist from Rwanda. Here she explains how she experienced playing this role:

"I usually don't speak a lot in class. But through the simulation exercise I could openly and critically communicate with others and write freely to advance my agenda. It was fun. The simulation was based on real life situation. The scenario was real, the characters were real who actually exist in real life, the issues we dealt with were real, so it was a practical exercise that put together [what] we have learned so far. Through all that, I could see the diversity of opinions, the different stakeholders and the power relations of the actors involved, and complexity and possibility of realizing rights. It somehow felt like my first work experience (2014 participant, Holland)."

One student, playing a US politician, summed up his learning like this:

I think the simulation was helpful to my better understanding of groupthink...I better understand how convoluted an alliance can be. For example, the U.S. and Turkey are in alliance with the same goal of opposing Assad. However, The U.S. is also in an alliance with the Kurdish Peshmerga for they too want to destroy ISIS, but Turkey is in opposition to the Peshmerga [since they are Kurdish]...I believe that this simulation runs parallel to real world policy because we all tried getting the goals of our roles accomplished, but we soon found out how complicated it can be to actually achieve your goals, for perhaps the people you have to sway in order for these goals to be accomplished oppose your views (2015 participant, US).

Very similar to this was a comment from a participant who played an Ambassador, who struggled to find the right 'tone' for her diplomatic communications with others. As she put it:

...as an individual I could observe the many challenges faced by the Rwandan people, but as an actor I couldn't just go about solving the problems, I had to constantly negotiate my strategies with

other important actors who sometimes were busy, had different agendas and interests... I have realized that, for certain issues that are considered sensitive, actors need to be very cautious of how they frame these issues in a way that will not scare away actors or even invites them to frustrate their efforts (2014 participant, Holland).

Such insights into complex practicalities – and the dissonance – of alliance-building would be hard to achieve without acting from inside the role this person was playing. It is the person who has insight or confronts dissonance and they seem to occur through the filter of the student/player who directs the role and receives feedback from other roles.

Just as in life relations are fluid, so too in the simulation, a set of dynamic, unpredictable and highly fluid, but certainly not random, interaction with other actors. External realities enter the virtual world, as the participant above comments, running "parallel to real world policy".

Identity & Anonymity

As Turkle (1994) has argued, role-playing makes it possible for participants in such exercises to engage with questions of identity. Gredler emphasizes the importance of a realistic scenario, which she refers to as "fidelity"; she also emphasizes the importance of a defined role for each participant with clear goals and constraints (goals they may set themselves, constraints imposed by the game design) (Gredler 2013). The importance of having open-ended goals, is another consideration, since "solving a well-defined problem is not a simulation for the student. In other words, like the real world, a simulation is an ill-defined problem with several parameters and possible courses of action" (Gredler 2013: 572).

The INSEAD MORPSG came closest to this kind of very goal-oriented simulation, where some roles were pursuing a contract to build a nuclear power station, while others were competing for which of 3 Indian states would get the powerplant build on its territory, while NGOs were trying to achieve a green energy solution rather than a nuclear powerplant. One participant, expressed his strategy as follows:

"What mattered most were personal relationships, or more simply having talked with someone (even via email), thus creating a bond. A good example of this is our minister, who of course should have been fired right away, but having talked with him and then seen him in person made it much more difficult to fire him even though everyone was in complete agreement that he was a distraction to achieving our goal. (2015 participant, France).

Their own life philosophy may even come into how they play the role, as with the following poetic comments of one participant Again, the participant talks of the role he played in the third person emphasizes:

"I think he distrusts the elite of his country and is in no mood to give them a chance to have a say in the development of Venezuela. I think this is his Waterloo. No-one, I have been told by my professor, has the monopoly of loving" (2002 participant, Wales).

Such emotional identification with the role may or may not accompany role play; some players act out the part but without deeply identifying emotionally.

Some became completely entangled in their role's persona, including with off-line and out-of-simulation identification. One participant who played president, started to over-identify in some ways and explains: "I felt good when people were addressing me as dear president, in fact my ego was fed". He continued to explain:

I discovered that I had to use my position and a number of strategies as a president to make the nation move on to another level. In this I had to apply avoidance method, intimidation message to both national and international opposition no matter what, in order to make some of the actors feel threatened to act or to comment. I felt challenged when heads of ministries were not doing what they were supposed to do, including working against the government programs. In fact, I wanted to force most of the ministers to resign simply because they were not doing what I expected them to do, but since we were playing roles, I was concerned about who will replace them, I wish the moderator put some members aside for this purpose. I really felt like doing it (2014, participant, Holland).

This strong emotional attachment could also come about as a participant became more familiar with a role that involved working on issues of trauma, as this humanitarian worker role, explained:

...at first my role was not really getting attention, but we kept pushing and when we didn't get the person to respond by e mail, we approached them in person. Now looking back I think to improve my success in getting people to agree with me I would have maybe used more emotion and talked about the children suffering and dying from the beginning instead of [towards]...the end (2015 participant, US).

This kind of close and intense identification might be expected to be more likely for those participants who can choose their roles themselves, than for those whose roles are allocated by the teacher. These examples suggest why debriefing all roles is vital, especially for those who end up with this kind of strong emotional identification with the character.

Identification could also be reflected in considerable creativity, as for example when one individual, playing an activist, commented on her strategy:

"The power-play was to try to appeal to the emotional sense of the ministers for as long as possible. However, with the amount of politicking happening behind the scenes between heads of state, companies and the media with the government ministers it was difficult to get much airtime on that front" (2015 participant, France).

Another interesting situation is where the student appears highly motivated and engaged, in spite of actively disliking the character they are playing. For example, one participant in a 2016 MORPSG was appalled at her character's complicity with the government, and his lack of critical journalistic ethics. She did not identify with the role because of this, but later reflected:

It was not easy playing [my role] because I strongly disliked him. Having grown up believing in the free press for a functioning democracy, it was difficult to understand the merits of censorship. I played James as a self-appointed 'cheerleader' for the regime. If I had to play the role again, I would try to show him more sympathy and remember the immense pressures he is under. As a reporter, he probably has access to information that might make him fear or question the government. I would remind myself the fault is not with James but the powers above him: 'divisionism' is a crime punishable by prison, so if he published something critical, his job and potentially life would be risked (2016 participant, Holland).

As Linser (2004) has suggested, the more students are able to identify with the roles they play, the more effective the whole exercise will be, because of its grounding in what he terms: "...the recursive resonance between the identity of the role and identity of the student created by playing a role" (Linser 2019: 69).

To encourage creativity, anonymity, or partial anonymity is quite important, and this can result in quite deceptive behavior by some participants when playing their roles. One player with a media role explained

"Our approach was to misinform the press, spreading propaganda, and also questioning the Chavez supporters to try and weaken the president's position by pitting his supporters against one another" (2002 participant, Wales).

Crossing gender lines was an aspect that was positively encouraged in some of the simulations. Gender could be disguised by anonymity. Reflecting on this later, one female participant, who played a male farmers' representative, showed how this affected some of her choices to not bring up gender equality issues in the simulation:

There were instances where I consciously behaved differently than I would have as...woman. When the Minister for Agriculture for instance justified their targeting of a farmers' training to women only with the argument 'we specifically want to cover child nutrition', I personally would have replied 'And? Isn't that every parent's business, male or female?' [My role] is less likely to have replied that, so we left this debate aside. A further proof how your own identity shapes the rights framing and claiming strategies you engage in (2016 participant, Netherland).

Students who played their role anonymously or partially anonymously, had higher levels of engagement, showed higher levels of participation and higher levels of cognitive effort. Thus, the literature on online teaching, that suggests that anonymity contributes to student participation seems to also be applicable to MORPSGs (Linser 2019).

Concluding thoughts

There is much more that can be said and more anecdotal evidence that can be provided. In this paper we have dealt only with a fraction of the research that has been done, the theoretical models that may presented and the MORPSGs for learning in higher education that can be compared. Our aim in this paper was to present a clear but limited view on issues that promote engagement and learning using MORPSGs in higher education. Our focus was on the multidimensionality of roles in role-plays and just a few elements: letting students play, as the constructivist agenda recommends, with real world problems and anonymously through roles with which they can identify. The main takeaway from the paper is that promoting student engagement requires attentive design of the student-player-role "Russian doll" intra-transparency. This could be further developed into a theoretical model that relates the intra-transparency of our "Russian doll" model to the sociological understanding of roles and the fluidity of role play simulations mirroring the fluidity, dynamic and unpredictability of life. But this we can only leave to a later date.

References

Adorno, Theodor (1974) Minima Moralia: Reflections from Damaged Life, trans. E.F.N. Jephcott, Verso Books: London-New York.

Asplund, Therese, Tina-Simone Neset, Janina Käyhkö, Lotten Wiréhn and Sirkku Juhola (2019) "Benefits and challenges of serious gaming – the case of 'The Maladaptation Game'", *Open Agriculture* 4: 107-117.

De Goede, Marieke (2005) "Carnival of money: Politics of dissent in an era of globalizing finance", pp. 379-391 in L. Amoore (ed.) *The Global Resistance Reader*, Routledge: London-New York.

Gredler, Margaret E. (2013) "Games and Simulations and their Relationships to Learning", pp. 571-581 in David Jonassen and Marcy Driscoll (eds) Handbook of Research on Educational Communications and Technology, Association for Educational Communications and Technology, Taylor-Francis: London-New York.

Linser, Ron (2019) Multi-player Online Role-play Simulation Games for Learning in Higher Education: Student Motivation and Engagement, Thesis Masters in Education, Open University of Israel, Department of Education and Psychology.

Ip, Albert, Roni Linser and Mare Jasinski (2002) "The Zen of being an Effective 'Mod' in Online Role-Play Simulations" https://sharedoc.us/view-doc.html?utm_source=the-zen-of-being-an-effective-mod-in-online-role-play-simulations [accessed 6 September 2019].

Nederveen Pieterse, Jan (2002) "Globalization, kitsch and conflict: technologies of work, war and politics: *Review of International Political Economy*, 9(1): 1-36.

Rohrer, Julia M. (2018) "Thinking Clearly About Correlations and Causation: Graphical Causal Models for Observational Data", *Advances in Methods and Practices in Psychological Science*, Vol. 1(1): 27-42.

Van der Linden, Anne and Wouter van Joolingen (2019) "Supporting Conceptual Change in Physics with a Serious Game" pp. 15-26 in Yiyu Cai, Wouter van Yoolingen and Zachary Walker (eds) VR, *Simulations and Serious Games for Education*, Springer: Singapore, available at: http://dlib.scu.ac.ir/bitstream/Hannan/564793/1/9789811328435.pdf [accessed 5 September 2019].

E-Learn 2019 - New Orleans, Louisiana, United States, November 4-7, 2019

Veermans, Koen and Tomi Jaakkola (2019) "Pedagogy in Educational Simulations and Games", pp. 5-14 in Yiyu Cai, Wouter van Yoolingen and Zachary Walker (eds) *VR, Simulations and Serious Games for Education*, Springer: Singapore.