**From Screen to Table: A Case for Using Tabletop Role-Playing Games**

**and Related Forms for Education**

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**Introduction**

When I began my literature review, I knew that I wanted to learn something that would push forward my personal work and my reasons for coming to graduate school. Namely, I wanted to learn something about the relative efficacy of the use of tabletop role-playing games as a pedagogical tool and curriculum design methodology in comparison other types of curriculum and to more traditional methods. I knew that I held several unsubstantiated opinions based in my own experience and I was eager to find academic confirmation (or refutation) of my own intuitions on the subject. Spefically, I believed that:

1. Traditional skill-and-drill, assess-by-test educational methods were in some crucial ways failing a large percentage of our youth;
2. An educational methodology that takes into account the principles of games and game design is a better way to increase engagement, and is more in tune with our natural way of learning things in the world; and
3. Role-playing games hold a particular power to teach and engage.

I have my own stories and life experiences with role-playing games, and I know how my own interest in a multitude of subjects, from history to creative writing, geography, math and science, became solidified through my personal involvement with the ‘hobby’, and I know from asking around, that I am not alone in this personal narrative.

 And so I began my investigations, and in inspecting what I found from the peer-reviewed journals available to me, I discovered some scholarship that could be used to develop the beginnings of an exploration into my central thesis tabletop role-playing games are an exemplary pedagogical approach and curriculum design for engaged, student-centric, constructivist, situated learning. Quite a lot of material has been written in recent years regarding the use of simulations and video games in regards to their efficacy in education, and providing arguments describing the comparative shortcomings of traditional educational methodologies. While reviewing this literature, I found some reference to role-playing games, and also some investigations into hybridizations of real-life and digital games, such as ‘pervasive games’ and ‘augmented reality’ games, which all bear some relevance to my three assertions stated previously, as well as my thesis.

While I found very little (to date) in the form of peer-reviewed journal articles that directly addressed my central concern of the use of tabletop role-playing games in an educational context, there are plenty of ways that I can extend the scholarship I have found to address them as a special case, or even as solutions to the shortcomings found in the digital games covered in the articles I was able to collect. There are a number of books that have been published from which I will draw more materials as my studies progress, but for now, I will share with you what I have discovered and how it appears to be relevant to my thesis.

**The Desk and Blackboard – Limitations of Traditional Teaching and Learning**

While the concept of using simulations has been with academia for quite some time, it wasn’t until the late seventies or early eighties that educators took the idea of games in education seriously, and even then, the movement took a while to really find its footing. According to Brent D. Ruben, in his 1999 article *‘Simulations, Games, and Experience-Based Learning: The Quest for a New Paradigm for Teaching and Learning’*, even as recently as the late 1960’s, when the first number of the first volume of *Simulation & Games* (a journal dedicated to the subject of the use of simulations and games in educational contexts) was published, the very idea of ‘designing simulated environments for teaching and learning was novel.’ At that point in time, teaching was thought about in the much the same way that it is still considered today by many traditional practitioners, in terms of ‘information transfer’. The dominant teaching and learning paradigm was one of transference of information from a more knowledgeable ‘expert’ educator, through traditional methods and technologies, such as lectures and the assignment of reading materials from books and articles, to the less-knowledgeable, mostly passive learning ‘audience’ (Ruben, 1999, p.498).

This approach, however tried-and-true, and once universally accepted by the dominant paradigm, still showed (and shows, where it persists) some fundamental problems in its underlying thinking that I will explore in an attempt to tell the narrative of the introduction of games into the educational arena. Ruben suggests a collection of seven issues with the classical educational paradigm, though there are probably more and others. While a few of these seven issues are arguably outdated and no longer viewed seriously in the educational arena, all of the seven issues has its historic importance, as they led researchers and curriculum developers to contemplate their solutions. I will investigate each point, adding commentary or support for the position where I can, as each one of these problems in traditional educational methodology is solved by the inclusion of game playing as a pedagogical approach.

To begin, the traditional knowledge transmission framework implied that ‘teaching and learning are inseparably linked activities, and that teaching is a necessary condition for learning.’ This idea is clearly not true, as there are all sorts of examples of solitary and informal learning that happens in the world that does not require or involve an instructor as part of the educational model (Ruben, 1999, p.499). Some examples might be reading books, having casual conversations with strangers, watching videos, or even watching a wave crash on the beach.

Second, this traditional educational paradigm placed a premium on the idea of ‘knowing’ as the ultimate goal of education, however it is our ability to *use* knowledge appropriately to create behaviors that indicates personal, social or professional effectiveness (Ruben, 1999, p.499). James Paul Gee touches on this when he argues that while some still believe that learning is school is about learning ‘facts’ that can be repeated on a written test, decades of research have shown that students taught under such a methodology can pass tests, but have difficulty applying their knowledge to solve problems or even to understand the full conceptual landscape of the subject they are learning (Gee, 2005, p.34) Gee argues that learning is based on experience, and students do not learn facts or information well if they merely focus on the facts themselves. Rather, people learn and retain facts best when they use these facts as tools to solve problems. Teaching that focuses on facts can get paper-and-pencil tests passed, but such learning does not lead to problem solving. Teaching that focuses on problem solving and that uses facts as tools to solve problems leads both to fact retention and the development of critical-thinking skills. (Gee, 2013, p18) This is what Gee refers to as ‘situated learning’ in some of his other works, and speaks to the social and relational nature of learning and understanding.

Third, the traditional paradigm for teaching and learning is a model of transmission of knowledge from a knowledgeable educator to an individual student directly without mediation or collaboration; it is meant to be a direct relationship from teacher to learner, even in a classroom setting of many students. However, when learning occurs outside of the formal classroom setting, it is more often a social, collaborative and peer-based activity. What might be considered ‘cheating’ and actively discouraged inside the traditional classroom environment might be called ‘collaborative learning’ and lauded as model behavior in the workplace (Ruben, 1999, p.499).

Fourth, the model suggests the idea that the most desirable goal in teaching and learning is to learn exactly and only what the instructor intends to teach. This sort of closed-set thinking allows for no interchange from the student to the teacher, or even from the student to himself or herself, and leads fallaciously to think of creativity as error (Ruben, 1999, p.500).

Fifth, the structure of classes, classrooms, testing, etc. sends an implicit message that there exists a small number of informed sources who possess the knowledge that should be acquired by a large number of mostly passive learners. This model does not promote ‘active learning’ or ‘life learning’, or the acquisition of the critical skills necessary for evaluation and selection of information found outside of the classroom (Ruben, 1999, p.500).

Sixth, the traditional ‘knowledge-transfer model’ of education does not allow affordance for issues of emotional intelligence, content or learning, nor any theoretical or practical connections between the behavioral, cognitive, and affective domains (Ruben, 1999, p.500). The implications of this view are that only isolated ‘facts’, unconnected to any situational context are worthy of being taught or learned. James Paul Gee cites that recent work on learning suggests that people do not learn primarily from generalizations and abstractions of the type they are likely to find in rote transference of knowledge. People more readily learn from individual and shared experiences, in which they may find patterns with the help of talented instructors, and from which, with enough experience, they can eventually generalize to form larger generalizations or principles. If a learner has no experiences, no actions or images, connected to the material, transmitted orally or textually, the student cannot understand the work deeply. Learners need to collect experiences related to the textual material before the text can make sense. Only then may they use those materials to learn new things and improve the learning they perform through new experiences (Gee, 2013, p.18).

Tao Wang Yu, in his article *‘Learning in the Virtual World: the Pedagogical Potentials of Massively Multiplayer Online Role Playing Games’* cites a 1997 paper by Shepards that indicates teaching-to-the-test literature has repeatedly shown that practice with familiar formats reduces the likelihood that students will be able to use their knowledge when they encounter problems posed in even slightly different ways. This has vast negative implications around the effectiveness of the traditional classroom transmission-based learning methodology, and even raises fundamental questions as to the purpose of learning. Learning is effective only when learners can relate and contextualize what they already know to what knowledge they are going to acquire. (Yu, 2009, p32)

And finally, what is most salient to my own interest in the question, traditional teaching-and-learning environments are “predictable, static, unchallenging and ultimately boring” (p.500). While a small percentage of individuals find themselves entertained and engaged by the traditional style of learning, this is likely due to their personal buy-in to the identity of ‘scholar’ or ‘learner’ in the traditional setting. Many others, and rightly so, fail to find themselves bought-in to the identity provided to them, as it does not seem to serve any greater purpose beyond learning facts and regurgitating them back to the teacher in the form of test answers. Much can be said on the subject of learning and identity.

**Situated Learning and the Demands of the 21st Century**

James Paul Gee posits a fundamental question in the struggle to engage students in the enterprise and the identity of learning: ‘How do you get someone to learn something long, hard, and complex, and yet still enjoy it?’ (Gee, 2005, p.34). At the base of all of these attempts at learning, no deep learning will take place unless the learners make a commitment to extend their identity to include the values, work, and activities of the domain being studied (Gee, 2005, p.34). To commit to an identity is in part to assume the practices of that identity; i.e. to perform the activities and practices of those who embody and define that identity.

When we learn and commit to an identity, we create a context, or situation for what we learn, of which we can make sense, and to which we can attach meaning. Gee sites recent research which suggests that people know what words mean and learn new ones only when they can hook them to the sorts of experiences to which they refer; the sorts of actions, images and dialogues to which the words themselves relate. This gives those words *situated* meanings, not just verbal or textual (Gee, 2005, p36). In an earlier work, *“Reading as situated language: A sociocognitive perspective”,* Gee speaks about understanding language and language acquisition from the human context. He tells us that learning language (either oral or written) is connected to *embodied experience*, and *situated* action and interaction in the world. Gee argues that human language has only two primary functions through which it is best studied and analyzed: 1) to scaffold performance of action in the world, including social activities and interactions, and 2) to scaffold human affiliation in cultures and social groups and institutions through creating certain perspectives on experience and enticing others to take them (Gee, 2001, p714-715). Later on, Gee states that people fail to become successful school-based, academic, or work-related readers or writers because of failing to master the mapping of language to social activities (Gee, 2001, p718).

Gee takes a strong behavioral-sociocognitive point of view, but the gist is clear: language has no meaning outside of our experience of what the language means in the world. If we can’t connect our words and languages to our experience, they have no meaning. When we learn, we have to learn in relation to activities we perform, and those activities are attached to an identity with which we have opted to connect.

 This perspective of taking on learning in context to activities related to the field and identities attached to that learning is something that others have invoked. Experts in science education reform have called for the learning of science to be more like the practice of science, and as stated by Rosenbaum, Klopfer and Perry (2006) these experts (albeit softly) argue that ‘incorporating the tools, intellectual processes, motivations, and consequences of science practice can enhance science learning’ (p.31). More broadly, educational theorists have called for learning experiences to better reflect the complexity of 21st century work and citizenship, such as working with incomplete information, showing flexibility to changing conditions, dealing with complexity, and smoothly sharing and creating knowledge (Rosenbaum, Klopfer, Perry, 2006, p.31-32). Higher order, 21st century skills, such as critical thinking, viewing the world in multiple perspectives, collaboration, and social awareness are fundamental to the success of knowledge workers (Yu, 2009, p32) and can only be learned *while performing them.*

And yet, it seems that public schools are finding it difficult to create and teach curriculum that uses the forms of learning required in our era of modern information and communication technology. The 21st century employment reality requires knowledge workers that can think critically, adapt, and self-regulate; skills that existing schools are not adept at cultivating (Games, 2010).

So, how do we cultivate these 21st century skills successfully? How do we get our students to learn and perform within the context of the identity of the modern knowledge worker of the 21st century?

**Reality is Broken – How Games Can Bridge the Gap in Motivation and Learning**

Jane McGonical has enjoyed much publicity since the publishing of her book, “Reality is Broken”, and Sanaz Farhangi, in a 2012 article, reviews her book in context of promoting a gamer’s mindset for science educators. McGonical has an ambitious project to change the world through hacking ‘real life’ and utilizing game-like components, frameworks, mindsets and motivations (as well as creating new games) in order to ‘challenge players to tackle real-world problems, such as poverty, hunger and climate change, through planetary-scale collaboration’’, as well as increasing our resilience and well-being (Farhangi, 2012, p.1038).

McGonigal argues that games tap into the intrinsic motivation of players by providing them with satisfying work, the hope or experience of success, a network of social connections, and meaning or the chance to be a part of something bigger than themselves (Farhangi, 2012, p.1038). In a sense, game players ‘do’ the identity of gamers, and in participating, gain access to a meaningful relationship to the language, learning and activities of that identity.

In concert with Malcolm Gladwell’s idea in his book, *Outliers*, that getting good at something takes an estimated 10,000 hours or more, McGonical argues that this generation’s youth is going wind up being superstars in the skills they take up from games (Farhangi, 2012, p.1039). There appears to be no issue with motivation to learn, as Gee suggested previously.

One of the skills these youth can expect to master is collaboration. Often categorized as a 21st century skill, collaboration requires three separate types of concerted effort: 1) cooperating, or acting purposefully toward a common goal, 2) coordinating, or synchronizing efforts and sharing resources, and 3) co-creation, or producing a novel outcome together (Farhangi, 2012, p.1039). Collaboration is also at the root of playing a tabletop role-playing game, as a role-playing game is at its essence a collective improvisational storytelling session, albeit with an overlay of game mechanics and structured play.

Co-creation sets collaboration apart from other collective efforts, in that it is a fundamentally productive act. “Collaboration isn’t just about achieving a goal or joining forces; it’s about creating something together that it would be impossible to create alone” (Cited by Farhangi from McGonigal) (Farhangi, 2012, p.1039). Farhangi continues: “’Collaborative purposeful transformation of the world’ is considered to be the core of human nature and basis for learning; human nature is defined as ‘a process of overcoming and transcending its own limitations through collaborative, continuous practices aimed at purposefully changing the world’’’(Farhangi, 2012, p.1039).

Farhangi argues that educators can seek new ways of organizing the activities of teaching–learning science and the activity of doing science to make use of the potentials and skills taught through game play. Farhangi cites from McGonical: ‘‘Compared with games, reality is disorganized and divided. Games help us make a more concerted effort—and over time, they give us collaboration superpowers’’ (Farhangi, 2012, p.1042).

Farhangi argues further that if science educators take the perspective of a gamer in regards to the whole activity of teaching–learning science, they can transform the future of their practice to one that is ‘more responsive to the needs of complicated challenges of a networked society’ (Farhangi, 2012, 1043). I would argue this reasoning can be extended to the teaching of any subject, and necessitates our taking on of the gamer identity, and any other identities related to the subject domain of that which we wish to teach.

**Games as a Pedagogical Device**

In their paper, Rosario and Widmeyer explore the concept of a ‘constructivist gaming learning environment’, and in their argument cite Gee’s argument that ‘first-rate video games produce better learning conditions than many of today's schools.’ Gee’s book, *“What Video Games Have to Teach Us About Learning and Literacy”*, presents 36 learning principles that should be considered in using games to design a learning environment (Rosario & Widmeyer, 2009, p290), but exploring each and every one of these principles is beyond the scope of this paper. I will, however, briefly touch on some general ideas and concepts from that work and others by Gee on the subject, to lay the groundwork for a relation between video games and tabletop role-playing games as sound pedagogical devices. I propose all of these following points can in most cases be equally as applied to tabletop role-playing games as they can be applied to video games, and in some cases, even more so.

* According to Gee, ‘games are just well-designed experiences in problem solving’ (Gee, 2013, p18). He argues that games “focus on well-ordered problems, not just facts and information.”
* Games also provide players very useful tools with which to solve the problems they present, including such valuable asses as facts and information, as well as other players.
* Good, well-structured games by their nature have clear goals, but pedagogically they present opportunities to advance mastery by creating more difficult challenges that periodically encourage players to rethink their goals. Games ensure that at each new level, players face new problems that challenge their previously developed mastery.
* Games, by their ability present and re-present the same tests or tasks (or even merely by their nature of being games and not real life), lower the cost of failure so that players will be invited and encouraged to fully explore an environment, take risks they might not normally, look for alternative solutions than the first tried or most obvious, and allow players to try new styles of play and learning.
* Games place the player directly into contact with their virtual environment instead of expecting the player to engage with theoretical content before playing, and by doing so both put performance before competence and experiences and actions before words and texts.
* Games allow players to learn by doing; games present images and experiences to the player in order to give deep meaning to the words and texts they may read later in documentation, online communities, or even specific real-world domain knowledge, in service of improving their play and learning.
* Games have the ability to give continuous and voluminous feedback, and they can constantly assess a player’s progress, competence, and their entire game play history, in order to keep the player within the “Zone of Proximal Learning” postulated by Lev Vygotsky (Farhangi, 2012, p.1042) and ensure that players are well prepared for the next challenge.
* Games connect the activities of playing and learning to social interaction and mentoring. They leverage collaborative and competitive play between players, as well as player participation through and with interest-driven fan websites that allow players to extend and articulate their knowledge to themselves and one another. Games also allow players to produce new knowledge and designs devised through their interaction with the game.
* Games, especially role-playing games, use narrative to create engagement. They often incorporate stories that make it clear why the players perform specific actions or engage in particular activities, and the game explains what the player’s activity in the game *means*. Players create their own stories through the consequential choices they have made while playing the game.
* Games have the capacity to hold every player to the same *high* standards of performance, but simultaneously, games allow players to reach these standards in different ways and in different amounts of time. In terms of proficiency, it does not really matter where or when a player started their engagement with the game, it only matters where she finishes.
* Games allow for the transfer of skills and experiences from one game to another, or even from a game to activities in real life. One can assess how well players have learned what the game has presented by witnessing how well they do in similar, more difficult games or even in how they successfully handle problems in their real life.
* In order for gamers to be successful in a game, they must figure out the ‘rule system’ in the game, understand how it works, and then consider how that system can be used to accomplish their goals. In short, gamers have to think like designers to play games. With this design knowledge, gamers can go farther than mere play and may decide to modify the game through hooks provided by the game writers. These ‘mod’ hooks, along with using the design software with which the game was made, allow gamers to make new levels or versions of the game. (Gee, 2013, p.18-19).

This long list is by no means exhaustive of what James Gee has to say on the subject of the merits of video games as pedagogical and curricular devices, and each point can be expanded, explored and debated, but I think the point is made that games may offer a different and enticing view on how to engage learners in the identities related to the subjects that they learn, and provide a context of experience to which learned information may attach itself and create lasting and usable knowledge.

Beyond the adoption of the ‘gamer’ identity, video games (and by extension, tabletop role-playing games), do offer one other important feature related to identity – namely, the ability to take on and inhabit many different identities related to myriad roles and perspectives related to the narrative of the game and to the content being taught. Gee states “But now humans can, indeed, play hands they were not dealt and construct identity stories that are not really (just) their own. In this way, people can today have second, third, fourth, and multiple lives. It is digital interactive media, like video games, that allow for this possibility” (Gee, 2011, p355).

Gee postulates that the player of a video game is ‘an interesting hybrid creature’, in that the player is part real person in the real world and part virtual character in a virtual world, which the character the player “controls”(Gee, 2011, p.355). Players have an opportunity to take on a multiplicity of roles unavailable to them in real life, giving them insight and empathy into other lives and worlds. Gee points out the potential for players to learn something about their real selves and real lives, which they may choose to add to their own identity story, and the potential for players to learn something about who they would or could be in a different world -- a ‘second life’, which may inform their real identity stories in the real world, if their play is deep enough (Gee, 2011, p355). This is exactly equivalent in the world of the tabletop role-playing game (and live-action role-playing as well).

There are, of course, potential deep ethical dilemmas here; Gee posits that games that exploit ‘evil’ or immoral identities and behaviors could provide us with a plausible and justifiable origin story and context that could allow a player to integrate undesirable qualities and behaviors into their own lives (p.356). While there may be clear and positive pedagogical goals that are enabled by such role-play, care must be taken by game designers to clearly draw a line between any undesirable worlds and character behaviors and what our society does or should allow, and post-game debriefing may be an essential tool to implement this work.

**Education Reconceived as “Game”**

Ruben points out that the theoretical foundations for simulations, games and other forms of interactive, experienced-based learning can be found in the writings of Aristotle and the practices of Socrates, and they have been both reframed and popularized by Dewey, Bruner, Flavell, Goodman, Holt, Mead, Postman and Weingertner. (Ruben, 1999, p500). The case study, long used in law and business education, and role-playing techniques used in therapeutic situations provided one kind of model for the operationalization of these forms. Simulations, games, and other structured exercises offered others. Instructional simulations, games and group learning approaches have been integrated into many fields, including:

* Service learning, internships, externships, case study, and field study programs;
* Professional, leadership, and organizational development training and strategic planning in business;
* Education, health care, and government;
* Personal development, support groups, personal change, self-help programs;
* Continuous and lifelong learning programs for individuals and organizations;
* Case study methods; and
* Interest and instructional strategies for enhancing EQ competencies
(Ruben, 1999, p502).

One compelling argument for simulations and games as pedagogy is based on an understanding that all learning is a game, just some games are better than others. For example, a science such as biology is not merely a set of facts, as a traditional transmissive view of education might have you believe. In reality, biology, as well as any academic subject, is a “game” that certain types of people “play.” These people engage in characteristic sorts of activities, use characteristic tools and language, and hold certain values; that is, they play by a certain set of “rules.” They *do* biology. Of course, they learn, use, and retain lots and lots of facts — even produce them — but the facts come from and with the doing. Left out of the context of biology as activity, biological facts are trivia (Gee, 2005, p.34).

When you play a game, you must inhabit the identity that the game offers, and you have to discover the rules of the game and how they can be used to accomplish your goals. In a good game, “words and deeds are all placed in the context of an interactive relationship between the player and the world” (Gee, 2005, p.34). So must a person looking to learn about a specific field of study find a way to embody the central identities to that field, and discover the rules, the social norms and situated languages, and learn the understood truths about that field’s domain in terms of the roles and identities they embody.

If we agree with the assertion that even academic learning is in itself a game (sometimes designed with better results than others), we may now compare ‘apples to apples’, and discuss the merits of games as educational devices in relation to more traditional ‘games’ of education that perform less well than video games or RPGs in terms of engagement and situated learning.

One form of game, the “immersive participatory simulation” (Barab, Dede, 2007, p1), offers a rich device for contextualizing learning for education. These simulations have many features comparable to a role-playing game, in that they are designed to take the player deep into the identities that reside within the game, and allow the players to engage in activities meant to provide a context through which they can affix lasting meaning to knowledge. According to Barab and Dede, “’knowing’ is a contextual and participatory act, and that the context in which one learns any particular content shapes the resultant understanding of that content” (Barab, Dede, 2007, p1). The core idea is that rather than merely telling students about facts and issues, the knowledge and skills attached to the identity of the agent with the game are situated as an inquiry process, which can be assisted by engaging game mechanics and narrative, as well as technological and design devices.These learning experience games create strong engagement, and have an additional potential benefit of allowing learners with a weak belief in their own ability to complete tasks and reach goals, be it due to negative past experiences in a traditional learning environment, a lack of experience, or a general sense of self-doubt, have an opportunity to start over or “reboot” with a new ‘‘identity’’ not attached to their previous academic failures. This is something that is very hard to attain moving from one traditional academic setting to another of like format.

Because games require players to get inside of an identity and learn the rules of the game from within the context of the identity, they have an additional potential capability to teach design principles. Katie Salen, of the Institute of Play, developed an educational game called “Gamestar Mechanic” (<http://www.gamestarmechanic.com>) that not only uses game play as a learning device, but also game design, and which has been employed successfully in the Quest to Learn schools in Chicago and New York City, as well as other licensed organizations across the states. She asserts “Rather than imagining that education can be transformed by bringing games into the classroom, researchers should consider not only the effects of the thinking engendered by those who play, but also by those who design the play” (Salen, 2007, p.301). When one is playing a game, one is often engaged in critical analysis not only through reflecting on their actions within the game, and the efficacy of those actions within the game, but also through judging the mechanics and design of the game in relation to other games, be it in terms of realism, engagement, efficiency, etc. Salen gives credit to Schön (1983) for considering the ‘player’ as operating in the identity of researcher in the *practice* context. When players perform an action in a game, they are simultaneously considering what that action *means,* in terms of the current game state, and in terms of potential actions to be taken in future game states. (Salen, 2007, p.302)

As a result, game players are exploring theories through constant experimentation in the form of game play. Game designers also explore their theories through reflection on their actions as they employ a process of iterative rule modifications and changes to the behaviors of internal game components. Game designers apply a design loop that involves elements of play-testing, evaluation, and modification, which looks much like the process of play. According to Salen, “None of this is new. We know that play is iterative and that game design is a model rooted in reflection in action” (Salen, 2007, p302).

**Tabletop Role-Playing Games (RPGs) and Live Action Role-Playing Games (LARPs)**

Many of the benefits of a video game RPG are directly transferrable to a tabletop RPG. In fact, some of the cited limitations of video games can potentially be alleviated with tabletop RPGs and live-action role-playing games (LARPs), such as the relative ability for the scaffolding systems in video games to properly fade in accordance with an individual player’s zone of proximal learning (Chinedu Obikwelu, Janet Read and Gavin Sim, 2013).In tabletop RPGs or LARPs, the mechanics of the game are held within the context of physically present agents that play the role of ‘game masters’, who are the master educators that support the narrative of the game and coordinate the actions of the players in relation to the narrative, and who adjudicate actions within the context of the defined rule system of the game. Adjustments to the presentation of scaffolding that allow more novice players to engage with the game and to have that scaffolding properly remove itself and get out of the way of more experienced players would take a large amount of highly complicated computer code to accomplish in a digitally-based game. These activities become relatively trivial to a trained educator game master in the context of a tabletop or live-action role-playing game. Also, the ease of appropriation of role-playing games by educators and learners with relatively simple scenarios that require few rules and information allows implementation at a far faster and less-complicated pace than trying to adapt a piece of software (Mariais, Michau, Pernin, 2012, p25). The flexibility and the ease of updating of such games is also of note for the same reasons.

**The Future of Games In Education**
Critical challenges remain for scholars and practitioners interested the role that games can serve in the process of teaching and learning. Many of the limitations of the classic educational paradigm persist today, and there is still a great deal of work to be done to translate the insights of game play and game design into the common educational practice. In many respects, the fundamental challenges of teaching and learning persist: If one can fail to learn from a book or a classroom, one can just as effectively fail to learn from a game, if the appropriate design and pedagogy are not observed. Game technology holds a tremendous potential to transform educational practice, but it is not a substitute for properly designed and planned curriculum and good teaching paradigms. Also, as Gee states, “School alone, with or without games, cannot solve all the problems of our society. Children who do not have rich, well-mentored learning experiences out of school are at risk for school failure and failure in later life. We all, as educators, have to insist as strongly on social reform as we do on school reform.” (Gee, 2013, p20)

New forms of educational game hybrids are starting to be explored, such as “Pervasive games” (Pløhn, 2014, p.299). Pervasive gaming is “a new and emerging gaming genre where the physical and social aspects of the real world are integrated into the game and blends into the player’s everyday life” (p.299). Such innovative game experiences may help to support learning in a university course by providing a gameplay where the students expand the physical area of their learning beyond the lecture hall and the context of the lecture, into the students’ everyday lifes.

On the horizon are projects that are working to increase educators’ confidence with game-based solutions, and systems that promise to help create reusable databases of game experience components that can be easily collected, curated, selected and employed for any number of educational contexts based on a well-devised set of metadata and classification criterion. One such project by Mariais, Michau, and Pernin hopes to employ a ‘Description Grid’ that is meant to support the design of learning role-play games by improving the designers’ confidence in the validity of the game-based training solutions employed. (Mariais, Michau, Pernin, 2012, p24)

**Conclusion**

There is clearly much to be excited about in the realm of exploration and implementation of game-based learning solutions, and I have only scratched the surface on the scholarship available in this arena. My particular focus, however, on the use of tabletop role-playing games as a model for educational experience could use more qualitative and quantitative research into the efficacy of their methods. Greater scientific rigor and publishing of results would help push the paradigm forward in educational circles, and would lead to a greater number of well-designed and implemented educational role-playing games, which is my intended field of study and development. I plan myself to add to this body of knowledge as I continue to work on curriculum, and I am excited to employ whatever best practices I can find or create.

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