In relation to this division of formal and informal practices, gamers’ leisure practices in MMORPGs are in need of formation, whereas in informal practices this even spreads to other practices that the member gets involved in. Practices rely on intrinsic phenomena. Thirdly, according to these writers, formal practices miss out on identity different motivations for participation, where formal practices are built on extrinsic aspects while informal practices are glanced at (cf. Gee, 2003). In line with this reasoning, MMORPGs seductive power can be seen in relation to two learning metaphors, that of learning through participation and learning through acquisition (Sfard, 1998). Gamers involved in such communities need to manage generic social skills. These social skills can be connected to issues of language (for example a Scandinavian player is required to use English to communicate with other players online and when reading the textual features of the game) and to issues of discourses (cf. Steinkuehler, 2006). Gamers of MMORPGs use specific discourses, where abbreviations and terminologies have evolved over time (cf. Moore, Ducheneaut & Nickell, 2007; Steinkuehler, 2006). A common form of online game discourse is leet-speak; a language form that originate from practices of chatting. Another form of game discourse is tied to the practice of role-playing. Here the gamers speak as if they were fantasy characters. Role-playing discourse is a subculture only performed in certain communities in MMORPGs (Copier, 2007). Both leet-speak and MMORPG role-playing are practices where the gamer takes a certain social position and becomes someone on the online arena. Drawing on ethnographical accounts of gamers’ everyday gaming activities, the aim of the paper is to discuss gamers’ collaboration practices and skills in relation to MMORPGs as educational arenas.

Also, gamers are members in certain communities and adhere to both community specific epistemologies and to generic ones. These gaming stances are from certain educational approaches difficult to make-sense of, while gamers’ commitments in other perspectives become means for learning. Lastly, in relation to MMORPGs and education, a neglected issue concerns social pressure in gaming communities, resulting in various forms of participation.

Abstract: A common argument about computer games and learning is that the commitment gamers have might be transformed and used in educational practices. In order to unpack gamers’ commitment, the present study investigates collaboration in a Multiplayer Online Role-Playing Game (MMORPG). It investigates gamers’ practices in order to expose their everyday gaming activities and knowledge domains. Drawing on detailed descriptions of team gaming practices, the paper highlights that gamers’ of MMORPGs are hands-on experts in handling a game interface. Their expertise is about skilled stances tied to gaming structures. Also, gamers are members in certain communities and adhere to both community specific epistemologies and to generic ones. These gaming stances are from certain educational approaches difficult to make-sense of, while gamers’ commitments in other perspectives become means for learning. Lastly, in relation to MMORPGs and education, a neglected issue concerns social pressure in gaming communities, resulting in various forms of participation.

Introduction

Millions of gamers in many parts of the world spend their leisure time in Massively Multiplayer Online Role-Playing Games (MMORPGs). These games have been described as social worlds facilitating tightknit communities (Nardi & Harris, 2006; Steinkuehler & Williams, 2006). Gamers involved in such communities need to manage generic social skills. These social skills can be connected to issues of language (for example a Scandinavian player is required to use English to communicate with other players online and when reading the textual features of the game) and to issues of discourses (cf. Steinkuehler, 2006). Gamers of MMORPGs use specific discourses, where abbreviations and terminologies have evolved over time (cf. Moore, Ducheneaut & Nickell, 2007; Steinkuehler, 2006). A common form of online game discourse is leet-speak; a language form that originate from practices of chatting. Another form of game discourse is tied to the practice of role-playing. Here the gamers speak as if they were fantasy characters. Role-playing discourse is a subculture only performed in certain communities in MMORPGs (Copier, 2007). Both leet-speak and MMORPG role-playing are practices where the gamer takes a certain social position and becomes someone on the online arena. Drawing on ethnographical accounts of gamers’ everyday gaming activities, the aim of the paper is to discuss gamers’ collaboration practices and skills in relation to MMORPGs as educational arenas.

The fact that gamers exhibit commitment while engaging in activities related to gaming have made the field of education pose questions whether gaming and games have something to offer. Especially since educational systems are under pressure to develop educational reforms that will make students more interested in science (cf. Steinkuehler & Duncan, 2008). In relation to this background, the potential of computer games are glanced at (cf. Gee, 2003). In line with this reasoning, MMORPGs seductive power can be seen in relation to two learning metaphors, that of learning through participation and learning through acquisition (Sfard, 1998). Gamers participate in social game worlds where building an online identity is a major motivational mechanism (cf. Linderoth & Bennerstedt, 2007; Taylor, 2006). But MMORPGs are not only powerful identity brewhouses; they are also knowledge domains. For example, a gamer need to reason why an enemy encountered in the game is too difficult to handle. This can be due to the fact that it needs several gamers’ joint strength to accomplish, that the gamer’s virtual embodiment (i.e. avatar) have too low level (experience), or have insufficient equipment or that the player lacks skills in controlling his or her avatar. Seen in this light, the game structure forces the gamer to become knowledgeable of the underlying mechanics of how the game works and to manage various skills in order to proceed.

One dream that some educational researchers have is to make students as engaged in the context of schooling as gamers are of activities related to their online game worlds (cf. Barab, Thomas, Dodge, Carteaux, & Tüzen, 2005). Steinkuehler (2006) argues that MMORPGs are sandboxes for educational researchers where they can study “naturally occurring, self-sustaining, indigenous versions” (p. 50) of online learning communities. However, a recurrent theme is to separate learning communities to what is referred to as formal and informal practices. According to Hung, Lim, Chen and Koh (2008) there are three fundamental differences between them. Firstly, formal practices are subject to assessments of performances. Secondly, there are totally different motivations for participation, where formal practices are built on extrinsic aspects while informal practices rely on intrinsic phenomena. Thirdly, according to these writers, formal practices miss out on identity formation, whereas in informal practices this even spreads to other practices that the member gets involved in. In relation to this division of formal and informal practices, gamers’ leisure practices in MMORPGs are in need
of modification. Yee (2006) points out that gamers of MMORPGs spend an average of 22 hours a week online, and that this form of media consumption can be related to paid employment. Following this reasoning, the author raises the question if playing MMORPGs concerns what we in general terms consider to be play and fun, i.e. what people do in leisure activities and feelings of enjoyment. Instead another picture emerges where social pressure, i.e. need for solidarity, group pressure and status seeking, is one major mechanism that explain why gamers’ play for so many hours and why they become committed to engage in these game worlds (Linderoth & Bennerstedt, 2007). One example of this is shown below. Peter, a World of Warcraft (Blizzard Entertainment, 2004) gamer explains how group pressure made him spend more and more time online. The gamer had a major role in the community, the guild, he was involved in. Peter’s avatar had an important role, a so called main tank, in his guild’s organized team activities.

With the Warrior I was built so I could tank. As a result I felt forced to tank all the time. I was like the most important person in the guild. It was really tough. I was always needed. I had to be there every night. I was given first pick of all the good things so I felt I had to take part, like in gratitude, otherwise I would feel guilty. It felt like bad form not to be there.

(Linderoth & Bennerstedt, 2007, p. 46)

If we assume that gamers in MMORPGs are involved in a highly influential and effective learning environment, the question not only how they learn but also what they learn when engaged with these systems arises. Furthermore, in order to make hypothesis about how one practice could influence another, the informal to the formal and vice versa, we need to be aware of what constitutes these practices. Dewey (1985) points out that in order to criticize a specific educational order, we need to grasp what specific norms and values that exists, the so called social ideal.

Since education is a social process, and there are many kinds of societies, a criterion for educational criticism and construction implies a particular social ideal. (Dewey, 1985, p. 105)

The idea of social ideal as presented by Dewey is means as thought piece for imagination that link the ‘worlds’ of schooling and online gaming. In this paper, the notion of social ideal is working in line with what Garfinkel (1967) points out that people in their everyday conduct have commonsense knowledge of activities that for them, the members of such practice, are seen as commonsense activities. By taking the interest in gamers’ methods, how they accomplish practices relevant for them, we make visible gamers’ skills and competencies that they enact in their everyday, routine gaming practices.

On a general level, it is possible to talk about social ideals in MMORPGs by summing up indications from previous research, namely that the major time investment and participation stems from social pressure tied to tasks done in collaboration with others. Hence, the social gaming activities in MMORPGs shapes collaborative problem solving practices that Steinkuehler (2008) argues are to be understood as cross-functional teams. Following this reasoning, we go further and unpack gamers’ interaction in order to more closely examine what gamers are skilled and competent in when coordinating and assessing other gamers’ performances over time. On an interactional level, the gamers’ collaboration shows that their expertise can be understood as orchestrating an ensemble. The participants manage to coordinate each other through talk in chat and actions by means of their avatars. Drawing on the empirical accounts and previous research on social pressure present in MMORPGs, the paper indicates two overlooked phenomena in relation to learning and formal practices. Firstly, the expertise involved when mastering a game interface and the skills required when coordinating and assessing other gamers’ performances online. Secondly, the empirical examples make visible that gamers are attuned to different social ideals tied to different communities’ ways of talking (and, actually, walking by means of the virtual body). Finally, these findings are used as point of departure to discuss arguments concerning learning outcomes and processes by means of MMORPGs.

**Method**

This study uses an interaction analytic and ethnographic approach in order to investigate cultures within MMORPGs. The analytical point of departure is interaction analysis as presented by Jordan and Henderson (1995) as a way to explore gamers’ team-oriented practices. The study is grounded in screen-captured video data. From this material, questions concerning what players do and how they go about and make-sense in-game when collaborating and coordinating with others are raised. In this way, the study adheres to a tradition that scrutinizes participants’ sense-making by means of, among all, their talk, gestures, the surrounding and body-orientation (Goodwin, 1994; Goodwin 2000). However, instead of physical bodies in front of computers, the examined setting is the game landscape with its text-typed talk in chat windows and actions performed with the virtual body, the avatar (for more elaborated accounts, see Bennerstedt, 2008a; Bennerstedt, 2008b).
The gathering of empirical material is informed by ethnography (Hine, 2000; Moore, et al., 2007). By participant observation in various European servers of *World of Warcraft* we have reached a gamer perspective. The empirical material in this paper has been video-recorded by the second author. Out of several hundreds of hours of playing time only a fraction has been video-recorded and out of 90 hours video data from three MMORPGs, 20 hours are from *World of Warcraft*. The recorded material contains team related gaming practices and role-playing practices. In relation to ethics, the paper has two approaches. As we are interested in actions of collaboration online, we are not interested in the players’ personae outside the game context. In the first example, where players are strangers to each other and grouped together for a short period of time, we adhere to praxis of Moore et al. (2007). They mark out a research strand that is interested in investigating gamers’ talk-in-interaction in naturally occurring activities. The recorded members in the team are not aware of our in-game personae as researcher and “we were not aware of the real-world identities of the players, only their in-game pseudonyms and personae.” (Moore et al., 2007, p. 269). As the second example concern players that are familiar to each other, they are aware of us as researchers and, hence informed about the video-recording. All the names of the players’ avatars have been changed.

The screen-captured data have been transcribed from practices stemming from conversation analysis (Sacks, Schegloff & Jefferson, 1974). Also, it is inspired by sequential art (McCloud, 1994) as has been used by Ivarsson (2007) and Lindwall (2008). In order to situate the players talk in chat (these gamers do not use voice-chat) with actions in the game landscape, the paper relies on support of images taken from in-game situations. Some objects in the images have been highlighted by means of an image editor. Also, the typed talk in chat is cut out and put in speech balloons that sequentially outline gamers’ text-typed talk, to be read from the left to the right, coupled with images relevant for the participants’ subsequent actions in the game landscape.

**Findings**

**Team Roles in *World of Warcraft***

As setting to investigate gaming activities we selected the MMORPG *World of Warcraft*. This online game was released in 2004 and in late 2008 it had about 11 million, monthly paying subscribers. *World of Warcraft*’s fantasy world has a graphical interface where, for example, the chat window is situated in the bottom left (see Figure 1).

*World of Warcraft* involves a 3D-gameworld, where gamers interact with the game system and with other gamers in various ways. A gamer starts by choosing and customizing a character. In this creation process the gamer chooses the appearance, the name, but more important, the specific *class* (for example priest, mage and warrior) the avatar should have. The avatar starts from zero and by doing various types of activities and quests, for example, killing monsters (*mobs*) in the game or by gathering objects, the player gain *experience points* which makes the avatar evolve (i.e. gain higher levels and skills). Furthermore, as *World of Warcraft* is a multiplayer game there are various supports for interaction between players. Various chat channels exist and gamers can also use voice-chat to support player interaction. *World of Warcraft* has an interactive structure that
in many ways forces gamers to join groups and to play together, but at the same time there is plenty of ways to play solo. However, what have drawn most people into these game worlds are the social side of the game; either by playing alone but being able to socialize with other gamers through chat or by “seeing” others avatars (Ducheneaut, Yee, Nickell & Moore, 2006), or by actually being involved in team related gaming practices.

MMORPGs are built on differentiating players’ avatars in ways in which different functions are connected to what the player selected when she or he created the avatar in the first place. Thus, gamers in groups have different roles depending on their avatars classes. There are three major roles in a team; the healer takes on the function of healing other players avatars, the damage dealer is an avatar that can make a great deal of damage to mobs, and the tank is an avatar that has a strong and solid armor to stand against mob attacks. Several classes are hybrids that make it possible to shift between different roles.

**Team Gameplay as Task Related and Recurrent Periods of Action**

As MMORPGs are computer games, gamers engage in gaming practices alone or in teams. Engaging in gaming practices are often glossed as gameplay, thereby implying that the gamers interact with the computer game rules in certain ways (Juul, 2005). This paper focus sequences where gamers both interact with the game rules and collaborate with others in small groups (in World of Warcraft this is known as a party, a group with up to five members). There are various reasons why players team-up in such groups to engage in gaming practices. One central motive is that gamers have specific tasks that require the combined strength of several avatars (tasks often stem from so called quests that the game provides). Other causes is that gamers team-up to aid others just for the pleasure that others are in need of help and expertise (cf. Ducheneaut & Moore, 2004), to stage role-playing events in, or they may, as the gamer Peter above described, have feelings of group pressure to take part.

When engaged in team related gaming practices in MMORPGs, there are recurrent and nested periods of actions involving various practices. Firstly, the grouping period concerns issues of deciding to do a joint session with others, negotiating task objectives and meeting up with the team on a specific location in the game world. Secondly, in the way forward period the gathered group then starts moving forward with their avatars in a certain direction. Thirdly, as the game landscape that the gamers are steering their avatars in, hold troubles and threats they will be forced to go into fight with enemies of various kinds and numbers. When this happens the gamers can be described to be within the fighting period. The fighting period can be initiated by one of the gamers by mistake, i.e. coming to close to a mob that then senses the gamer’s avatar and starts hunting the avatar (a response from the game system). Another way, which will be illustrated below, is to use certain abilities that different types of avatar classes use in order to manage several mobs in an efficient and safe way. Lastly, there is the looting and resting period after the mobs have been eliminated. To loot means the activities that take place when the gamers share the treasures that the mob holds. Furthermore, in some cases, the gamers’ avatars need to be ‘restored’ when they have consumed too much energy (i.e. mana or health) and therefore they need to be regaining strength in certain ways. However, if the gamers fail to defeat the mob/s they will be in the grouping phase again due to the fact that their avatars will be resurrected to a place that is further away in the game world (this can be overcome by resurrection abilities that certain avatars are skilled in or have in-game objects that holds such functions).

In the sequences below, we will follow two groups of players that are in front of mobs that stand in their way in their route forward. In this way, the gamers can be seen as situated in the way forward phase that passes over to practices belonging to the fight period.

**Collaborative Gaming Accomplished Online**

The empirical sequences investigate the ways in which two groups coordinate their actions in order to battle against computer-steered enemies. For an outsider of MMORPGs, the first sequence illustrates why it is difficult for novices to participate in them because of their uses of unfamiliar words in an alien landscape. In the second sequence, the gamers are doing what the gamers did in the first example, but with a different way to talk that belong to the ways a minor subgroup act online. Both the first and second example show experienced gamers, but with different ways to coordinate the central task of taking down mobs. In both examples, the avatars’ that are labeled Colt is steered by the second author and the events are video-recorded from the view that the author have in the course of action.

**Coordination Work in Team Gameplay**

The team in the sequence below does not know each other. They have come together for the purpose to proceed into a specific dungeon in order to complete certain quests. When we enter the sequence, the gamers have played for a couple of minutes and have discussed which quests inside the dungeon that is going to be pursued in which order. They have met and fought single mobs on their way forward. In the sequence below there are three mobs standing still in a circle. In the first frame, in Figure 3, the three mobs are seen in the upper left corner and the five gamers’ avatars are facing towards them. The mobs stand in the avatars way on the path they are following in the dungeon.
One of the gamers who steers the avatar named Bid starts to instruct the group by typing in the chat window “sheep moon” and thereafter “ok?”. Subsequently the gamer puts out visual markers on the mobs; firstly on the rightmost mob that gets a moon shaped marker above its head and after this, the mob closest to their avatars is marked with a yellow circle. As a response to the instruction, Mute – the gamer who holds the avatar which has the ability to do the thing Bid asks for – sheep the moon marked enemy. This is seen in the third frame, where this enemy is transformed into a sheep which immobilizes it for a couple of seconds. However, when doing this, the other enemies notices them and attack – this is a game mechanic function that means that mobs have an area around them that senses avatars doings in the game landscape in various ways. In the second after, in Frame 4, Colt asks for a sap (in the event of actions the gamer misspelled). To sap means to immobilize an enemy by putting it to sleep. Game mechanically, a sap has to be accomplished first, because sheep can be managed after, but not the other way around in a particular battle. Hence, Colt makes a request to the other gamers by this remark, meaning that the correct order to do their coordinated attack is a function that his avatar has abilities to do (i.e. to sap). Colt has in this order of tasks no possibility to sap as the mobs are on their way. In the last frame, the two mobs have reached the group and the team members start to fight the mobs (i.e. by pressing keyboard buttons that are tied to various actions that lower mobs energy that is dynamically updated and observable in information bars in the game interface). In this frame we see that another gamer in the group have made an escape action. The gamer used a skill that his or her avatar holds, this ability makes it possible to place out a trap in the direction the mobs attack. A mob that is trapped makes it impossible for it to reach the group. In this way gamers continuously unarm mobs with various abilities while dealing out damage. By trapping the unmarked mob, the gamer can focus on the third mob – the one marked with the circle. Also, in the last frame Bid acknowledge what Colt pointed out by repeating and clarifying the instructions by saying “sap circle” and “next time”, meaning that in the next coordinated attack they will first sap the mob that gets a circle above its head and only after this is completed to use the sheep ability on the moon marked one.

This sequence of coordinated team activity is over in 20 seconds. The gamers continue in the dungeon and adjust to their instructions and make themselves visible for being knowledgeable of the game terms functions in the gaming events. Thus, the gamers can by these typed instructions, game terms and in-game actions decide that the other team members, who they do not know, are skilled in how to handle their avatars and how to act with them in collaboration with other avatars that have different abilities. The gamers are practitioners of a game interface that makes them accountable for their actions – the member Bid instructs Mute, who responds by acting with the avatar, while Coly both assesses Mute’s actions and Bids instructions. In this way, this type of practice illustrates assessments of participants’ doings that in some ways contrast Hung et al. (2008) argument of informal practices. Although the assessment is not related to grading as in schooling, but tied to aspects of being seen as a competent gamer that can be a door-opener for invitation in further jointly activities. For the gamers’, exhibiting skills and graceful coordination are means of success. A successful gaming event is for these gamers about proceeding in an efficient way in the game landscape. And with the success of the collaborative tasks comes phenomena of satisfaction and enjoyment.
Role-Players’ Work in Team Gameplay

The second example takes place on a role-playing devoted *World of Warcraft* server. It must be stressed that the majority of gamers on role-playing servers do not adhere to practices defined as role-playing (Copier, 2007) but are more in line with doing team collaboration as seen in the first example. In the excerpt below, there are five other gamers involved in a different dungeon, called Sethekk Halls. In total this cave takes about two hours for an efficient, balanced and competent team to complete.

The gamers in this excerpt are more or less familiar with each other. In the sequence, we will see how this group uses role-playing discourse and at the same time engages in gaming practices. Gamers involved in these specific linguistic practices are termed to be *in-character*. This means that gamers use various make-believe practices by means of what can be understood as a virtual *puppet*, i.e. using the game interface such as the chat channels and avatars actions to act out a fantasy character (Bennerstedt, 2008a). One example of these practices is to alter between running and walking with the avatar. Hence, the normal way of moving with the avatar is to run. This stems from the fact that online game worlds consist of huge areas that the gamer wants to reach as fast as possible. As the avatar does not become tired of running or walking, the normal settings default of moving in the game is set on running. Therefore the gamer needs to push a specific button in order to walk with the avatar. On role-playing servers walking means something more than just moving forward in slow pace. Instead, this is a common way to show that you are engaged in acting as a fantasy character. Just before the sequence below, two of the gamers *walk* forward with their avatars, moving slowly nearer the next group of mobs that stand in their route forward. If the gamers in the first example had walked with their avatars they would have been questioned about why they proceed so slowly forward. While in the case of this group of role-playing gamers’, this is something belonging to how they go about doing gaming in teams.

![Figure 4](image-url)

**Figure 4.** Five gamers engaged in role-playing in a collaborative game task.

When we enter the situation in Figure 4, the gamers’ have played for about 30 minutes. In frame 1 their avatars are standing as in the first example, in front of five moving and stationary mobs. Instead of instructing by using game specific terms, narrative work is done to coordinate the gamers’ doings in the game interface. In Frame 1, the gamer acting as Rose types in the chat window “I spy a shackle nearby” to direct their attention to the mobs in front of them. The term *shackle* is related to a talent that Rose’s avatar holds that are working in similar ways of that of sap and sheep. After this she types in the chat interface what is termed an *emote*. An emote is a textual description of what the avatar thinks, does or the like. The gamer’s typed emote says “Rose rubs her bandaged hands lightly together.”, to illustrate that the fantasy character Rose, that the gamer is acting as in the game landscape, is looking forward to encounter these mobs. The gamer steering Velvet types “Hm…” In the following seconds the team put up, in silence, visual markers on some of the enemies (see Frame 2). In the third frame, they start to negotiate who is going to do the first action towards the mobs.
The female avatar Velvet continues by asking “Azon would you?” and Azon answers “Sure.”. What is referred to by the gamers is what was discussed in the first example, namely to sap. Azon is then an avatar that has the ability to sap mobs. To sap a mob implies that the avatar sneaks closer to a mob, using certain abilities to avoid getting detected, and then uses the sap function to put the chosen enemy out of action (Bennerstedt, 2008b). However, in the last frame, Azon asks another gamer, Colt, to do this with the remark “Want to have the fun, Colt? Your brightly-glowing swords are rather less brightly glowing than mine I think.” What the gamer steering Azon is commenting on is that the avatar Colt also has the sap function, even more so, that Colt has better equipment (referred to here as his swords) than the avatar Azon that makes Colt being more suited in this situation to perform the sap on the marked mob without getting detected by the mobs in the surrounding. For the players, graphical and textual information in the game interface of their avatars makes it possible to reason in mathematical terms and, hence judge whose avatar have the best chance to accomplish a certain action at a certain time and place. Gamers online are accountable for evaluative epistemologies (cf. Steinkuehler & Duncan, 2008), but this subgroup also needs to account to conceal this evaluation activity by role-playing discourse. Colt then proceeds with the agreed way on who is going to do what by performing and executing the sap function as a starting action to their coordinated fight. For these team members, the yellow circle is commonsense knowledge to use to point out the mob that is going to be sapped; it is not needed to be mentioned. Subsequently, the gamer named Colt steers the avatar towards this marked enemy in order to execute the actions.

These gamers chose to engage in this more demanding ways of speaking based on social values from certain role-playing ideals that only a minor fraction of players online adhere to (Copier, 2007). The gamers’ narrative work (see also Linderoth, 2008) is here used to coordinate the players’ attack and if contrasted with the previous sequence, this sequence illustrates the ways role-players attend to and conceal the game mechanics that are structuring their coordination activities. For these role-players, gaming in teams does not only concern the success of the tasks, but being able to make aesthetically appealing formulations, thereby constructing themselves as skillful role-playing actors.

**Discussion**

This paper has investigated team members’ gameplay practices in their everyday activities to make visible their domains of knowledge. The practices gamers have make visible what they see as relevant objects of knowledge (cf. Goodwin, 1994), such as the use of the terms sheep and sap in particular situations. In and through instructions by means of utterances in chat, gamers accomplish collaboration and coordination in the perceptual field of online gaming. The everyday gaming practices we have investigated concern gamers planning and execution of actions by means of their avatars in order to take down a group of mobs. As a general claim of the two different ways to instruct each other, the empirical examples show that for outsiders of these game worlds, a) the first team use words that are either unheard of outside or used in ways that are unfamiliar in other contexts, b) the second team use narratives that cover the complexity of the underlying computer game mechanics, c) gamers coordinate their avatars in ways that correspond to the underlying game structure.

Continuing on Dewey’s argument that in order to criticize a society, you need to be aware of what social ideals underlie that society, it is possible to expose some additional ideals in MMORPG societies. One neglected ideal is that sitting in front of a computer screen collaborating with others by means of a game interface fosters ways to act online. In relation to previous studies of collaboration online, an often overlooked issue is the reported misunderstandings and problems that arise between participants in chat conversations (cf. Fuks, Pimentel & Pereira de Lacuna, 2006) and when coordinating virtual bodies in 3D environments (cf. Hindmarsh, Heath & Fraser, 2006; Moore et al, 2007; Moore, Gathman, Ducheneaut & Nickell, 2007). The team members in this study accomplish collaboration with the use of game terms, in-game pointing devices and actions with their avatars. By means of these resources, collaboration is managed in an efficient and smooth way, because they show in their interactional work that they are familiar to these activities. Although for newcomers to this domain it will take time to become skilled in the ways to speak and act online as discourse not only differs from the outside world but also among communities in MMORPGs.

The gamers’ engagement and effort are in the analyzed sequences about expertise in complex game mechanics coupled with team roles. The first group can be seen as experienced gamers with the aim to achieve a handy and efficient team. They are skilled in instructing via game specific terms which member is going to do what in what order. While the second group’s practices illustrate expertise in role-playing in order to be seen as steering a fantasy character in a fantasy world, but at the same time the group assesses and instructs each other in the identical way as the first group do. These forms of expertise are tied to identity formation understood as being knowledgeable of certain ways to be and act. Gamers achieve roles online in ways that are seen and heard in-game by others as such (cf. Bennerstedt, 2008a). The coordination practices between the gamers make them accountable to be skilled citizens who know how to interact in teams in proper ways. They have achieved what Goodwin (2007) terms epistemic stances relevant for gaming practices. The ways they use game discourse relevant in World of Warcraft’s game universe and are able to see the order of actions based on the members’
avatars different abilities are commonsense knowledge and activities in this domain. For them, it is abnormal to not know what it means to sheep or sap. As computer gaming is about making sense of an interactive structure (cf. Juul, 2005; Linderoth, 2004) computer gaming online adds the layer of online social order. In this way, gamers of MMORPGs are practitioners with expertise that they are contested to have that also is tied to the type of community the gamer is attuned to in the MMORPG, i.e. various online social ideals.

Implications for MMORPGs as Scenes of Education

In relation to the CSCL field’s interest of describing meaning making practices (cf. Stahl, Koschman & Suthers, 2006), this study present MMORPGs as powerful interactive structures forcing players to team-up that create collaborative arenas for contesting epistemic stances. The studied sequences make visible that a major object of knowledge (Goodwin, 1994) in team gameplay is that of being skilled of seeing events in the game interface and being able to communicate and direct attention to phenomena of game mechanics in the course of action.

Although not yet realized, one powerful scope for imagination is to develop distinct MMORPGs for specific subject matters to be seen as online learning brewhouses. A gamer’s role in a group can be translated to concern a totally different subject matter than World of Warcraft’s knowledge domain but still utilize its gameplay structure. For example, we can take a natural science subject, the human immune system, and have as virtual setting the circulatory system. Gamers of this virtual system might select an avatar with particular functions based on various cells and proteins, that is, different white blood cells and antibodies that we have in our blood. The system might be constructed to force players to collaborate with each other to fight various diseases and viruses, playing on either the attacking side or the immune defense side. Since the immune system is a very complex issue, the system might as well become rich and complex.

However, there are several phenomena to consider. As Schrader and McCreery (2008) point out, the game designers of World of Warcraft advance and change the game’s content and mechanics every other week, making this environment unstable, and hence, it differs from school domains of for example mathematics, making notions of expertise in MMORPGs an ongoing project. Furthermore, to let the made-up science MMORPG become a game and not a simulation, the gamer needs to be able to make informed choices on what is designed to have valued outcomes (Linderoth, 2004) that inevitably restrains the content and interaction in the science MMORPG. Nevertheless, if we assume that an educational online game is done in this delicate design process, we can continue to relate to the empirical examples above. In relation to the first one, this is an example of everyday online game behavior. For these players, they have probably played in this area several times before and played in groups of this kind hundreds of times. They know the game interface by heart, how to work in teams and how to be in a social situation with other gamers online. As for the immune system game, the gamers need to become used to the interface, get a grip of the underlying mechanics of the game structure, that is, what kind of cells are there and their function in this virtual setting and so forth. Following what the gamers did in the empirical examples, the natural science gamers will instruct, when coordinating their effort, each others in the similar way. For example, asking a member to eliminate a cell named hepatit B virus by typing “rel ant” and “neu”. The first utterance can be seen to mean release a specific antibody function on the area and the other to neutralize the virus cell. The players then will have to drill themselves in order to coordinate their attacks as well-functioned teams. However, the drilling will be about coordination, to get things done in the most optimal way in order to proceed forward in the game landscape. This means, that in order to have students as passionate about a natural science MMORPG, the game must be about complex team actions that need expertise for mastery which can be miles apart from concerning issues of grasping how the immune system works in human beings.

Returning to the accomplishment of becoming someone online; gamers’ appropriation of the ways online citizens speak can be related to goals of scientific reasoning and “to know relevant content in ways that would be revealed on measures of scientific achievement.” (Barab, Sadler, Heiselt, Hickey, & Zuiker, 2007, p. 60). When involved in gaming actions in the made-up science MMORPG, the words and the ways science-gamers will talk will not like science discourse (Armsen & Ludvigsen, 2006), but like gaming discourse. By this implying that in order to let students become MMORPG gamers, they will strive for expertise based on a language that the majority of gamers in MMORPGs adhere to online – the efficient instructions and not talking ‘as’ someone else as the case of the minor subgroup of role-players. From a distance, the made-up natural science MMORPG can be understood to blend the two learning metaphors of that of acquisition and that of participation. But as have been illustrated, one main activity in MMORPGs is about drilling of petite gaming actions and to coordinate who is going to do what, using what functions in what situation. Hence, the gaming practices examined make visible that gamers’ main objective are about skills of coordination.

Nevertheless, if we assume that virtual game worlds are used in educational practices in schools with the aim of, for example, acquisition of English for a Scandinavian student in World of Warcraft or teaching science with the made-up game world, we must ask what “particular social ideal” (Dewey, 1985, p. 105) underlies such engagement. Are we to pursue the goal of keeping students busy as of being committed and interested in anything in school, hoping that they will gain knowledge of something (for example English)?
Following this ideal, the notion of participation in MMORPGs work as gatekeeper drugs (Steinkuehler, 2008) to activities valued by the non-gaming society, i.e. skills and competencies relevant outside MMORPGs, and to acknowledge that spending time online foster ways of reasoning that is valued outside these gaming worlds (cf. Barab, Thomas, Dodge, Carteaux, & Tüzün, 2005; Barab, Arcici, & Jackson, 2005; Steinkuehler & Duncan, 2008). For example, Steinkuehler and Duncan (2008) studied gamers posts in online discussion forums where issues related to World of Warcraft where debated and found that they were engaged in scientific argumentation, in this way the authors argue that participation in MMORPGs can foster scientific habits of mind. A related question is to ask if we want students to be knowledgeable in new literacy’s, that is, being skilled in communicating and coordinating in online worlds. Or do we have the goal that the students gaming practices, i.e. mastering the underlying mechanics of the very system implemented, will lead to commitment to and knowledge in a (school) subject matter? Following the last ideal, the imagined science MMORPG will be about an artificial setting with an artificial social community surrounding it (cf. Hung et al., 2008). This in contrast to participating in World of Warcraft that concern crafting online identities and developing expertise in gaming epistemologies coupled with social pressures of being ‘there’ that leads to sustained commitment.

The acquisition of school subjects with the aid of collaboration practices in MMORPGs, i.e. practices that are labeled team gameplay in the paper, has not yet been attempted. Drawing on the empirical investigation, we argue that such attempts need to consider institutional contexts (Arnseth & Ludvigsen, 2006) as participating in MMORPGs can be understood to foster gaming epistemologies that take over other epistemic stances.

In relation to gamers’ skills, competencies and commitments, we argue that we as researchers must be explicit about and also study what gamers recurrently do online in their gaming practices. Continuing on this, another issue sidestepped from a learning perspective that needs to be discussed concerns the mechanism that influences gamers’ passionate involvement in MMORPGs. More specific, the driving mechanism for continued engagement is not always ‘fun’ or positive as it can be about (negative) group pressure that leads to problematic usage. Hence, MMORPGs falls between the categorization of formal and informal practices as participation in them is not always intrinsic motivated as it can be of the extrinsic character of group pressure. Also, gamers are subjects of ‘formal’ assessments in the sense that these online societies are tied to evaluations that stem from the game structure and from various communities ways of behaving in ‘normal’ ways. In this way, MMORPGs become arenas that ‘force’ learners to adapt, i.e. if the gamer has not yet reached some level of skills that are needed to engage in gameplay, the player will ‘fail’. Likewise, if the player is not skilled in the ways to talk and behave online the player will have problems to take part. Although this can be overcome by being instructed by helpful online citizens (cf. Steinkuehler, 2004) it anyhow reveals that these online societies have mechanisms that push and force gamers to adjust (that at times is not unlike structures of schooling).

References


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