Media Rise: Theoretical Framework
The concept for the game Media Rise emerged as a project for a graduate studies course in the Faculty of Education at York University. The assignment was to design a video game that would be both fun and educational for players. The concept of Media Rise emerged as the group of designers agreed that current events and media studies were essential components to the personal and intellectual development of school-aged children. As Media Literacy is a significant component of the Ontario Curriculum for grades K-12, the group felt that creating an activity-based, fun and interactive game, exploring high-profile media events from recent history and contemporary news, would be beneficial for children.

The theoretical framework for the game falls in line with Activity Theory. Activity Theory has grown out of the Russian psychologist Lev Vygotsky’s (1896-1934) belief that artefacts can mediate the development of human cognitive functions, and that play is at the route of cognitive development in general (see “Lev Vygotsky”, http://en.wikipedia.org/wiki/Lev_Vygotsky). Activity Theory suggests that human learning does not occur in isolation, but rather is the result of mediated activities between subject and object; the object is set in cultural environments and social contexts facilitate subject learning. Educational games are one such example of culturally and socially relevant artefacts that mediate learning through the process of interaction. The virtual worlds found in video games are considered to be rich learning environments with embedded sociocultural information.

Alexei N. Leont’ev (1903-1979) reviewed Vygotsky’s theories on psychological development and on the concept of learning as a function of the activities engaged in a shared live-work environment (community?). Leont’ev suggests three levels of activity that are relevant to the process of learning:

1. **Activity.** The subject, or learner, is situated in a sociocultural context. Sociocultural understanding and interaction is driven by object-related motivating factors. For example, through play, work, or education the subject engages in the interpretation or creation of their surrounding environments.

2. **Actions.** Actions are the means by which the learner achieves activities. Actions occur when an individual has a specific goal in mind that is related to the activity motivating the behaviour. Actions can re-occur in multiple situations.

3. **Operation.** Actions are fulfilled through particular and specific movements or processes called ‘operations’ (Brown, 2004).

Video games provide an active sociocultural environment where learners conduct specific operations within specific goals, motivated by real and virtual activities. In The Impact of Digital Games In Education, Gros (2003) discusses the following learning functions that can occur through game play, and fall under the theoretical framework of Activity Theory. The learning functions are: motor development, intellectual development, affective development, and social development (2003). The game Media Rise supports these goals through game play in the following ways:

1. **Motor development.** Media Rise involves an avatar who is a journalist. The journalist has to run, search and discover information relevant to the Editor’s assignment. A variety of tasks are in place whereby the avatar must closely seek out artefacts, subjects, places, and information. Through these interactions the avatar can learn to coordinate movement, speed, and precise motor functions (operations) both through the physical process of game play (interaction with the platform) and the psychological relationship between player and virtual environment.
2. **Intellectual development.** In Media Rise the avatar must consider how her actions within each task will affect the resolution of the entire assignment, as well as how to morally and physically (albeit virtually) face the challenges that are hindering the acquisition of knowledge. The avatar must also put together all of the found information resulting in a newspaper article ready for virtual publication. Through these actions the avatar learns about spatial navigation by moving through the virtual space, journalism, strategy, story development and media literacy. She must resolve problems and conceive of different possible strategies towards resolution.

3. **Affective development.** The scenarios designed for Media Rise are based on real events in modern history. The player has the opportunity to virtually experience the frenzy and fallout of important historical events from the assassination of John Lenon to the explosion of the space shuttle Columbia. The engagement of the player with these real-world situations, as mediated through the virtual environment and its relevant artefacts and characters, invites affective experiences within a safe space. The ability of the player to work through these experiences in a virtual environment can contribute to affective development.

4. **Social development.** The nature of working in journalism and media requires a certain comprehension of larger social dimensions including predominant values and attitudes surrounding the events and actions in question. This game allows the player to exist in a virtual re-creation of Western society whereby civic, social and judicial laws, morals, and values all come into play. The player may also have the opportunity to engage in the real social networks of other players also involved in the game.

The educational purpose behind designing a game based in Activity Theory is to provide players with the opportunity for both real skill and cognitive development through virtual interaction and play. Although there are possibilities for using video games as training modules (eg. Full Spectrum Warrior or theories by David Grossman), video games can also provide less direct, less practical, but equally valuable learning experiences that will be focused in meaningful activities relevant to society. In this way the player has the opportunity not to just learn about various situations through prescriptive information, but rather to experience those situations through the activities of the avatar based in virtual worlds (Shaffer, Squire, Halverson & Gee, 2004).
References


