

# **GAMES: Virtual Worlds and Reality**

Selected Papers of ISAGA 2008

Eugenijus Bagdonas & Irena Patasiene (eds.)

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## **How can the multi-focused methodology applied to role plays improve educational learning / professional knowledge in higher education?**

**Eli Lindblad Rem**

### **Abstract**

The focus will be on the use of role playing games (RPG), to heighten student interactivity and reflection. The application of RPG in the global learning perspective has been shown both to improve educational learning and professional knowledge. And that learning and knowing within a given context creates development. The work is mainly inspired by and grounded on Kolb's experiential learning theory. And through teaching the subject of 'Organisation and Leadership' for students in Business Administration at the Bergen University College, three different role playing games has been applied.

**Keywords:** game, simulation.

### **How can the multi-focused methodology<sup>1</sup> applied to role plays improve educational learning / professional knowledge in higher education?**

Nearly every Institute, College and University that has used experiential methods in education will have reports and feedback on the positives and difficulties. One of the most problematic areas is that of student retention. A high drop-out rate could be a significant indicator that something was not working for the students/participants.

During the period from 1999 to 2004 we implemented a multi-focused methodology inspired by 'experiential learning', studying the subject of 'Organisation and Leadership' at Bergen University College. More than 1600 students followed the courses.

Students who attended the courses after we began applying our multi-focused methodology accomplished their studies in this subject with significantly better results. The failure percentage dropped almost immediately in the first year, and in subsequent years it was kept at an almost zero level. The percentage of students completing the course reached over 90% on average<sup>2</sup>.

The purpose here is not to cite research materials on this subject. The focus will be on the use of role playing games (RPG)<sup>3</sup>, to heighten student interactivity and reflection. The application of RPG in the global learning perspective has been shown both to improve educational learning and professional knowledge. It has also been shown that learning and knowing within a given context create development.

Experiential learning is in the spirit of cooperative innovation that integrates the best of the traditional and the experiential. The tools for this work involve not only traditional methods but also modern activities and techniques. Beginning with small tasks (such as a decision-making problem) there has developed an immense variety: structured exercises, simulations, cases, games, observation tools, role plays, skill-practice routines, for example and the more modern use of software and hardware. In all these methods, learning is experiential (Kolb 1984).

Kolb's experiential learning theory and his learning cycle model<sup>4</sup> has been debated and criticised for many years and from various angles. In our revised version<sup>5</sup> we were very conscious of the fact that the students' learning was situated. It was located and defined by the nature and syllabus of the subject taught, and by the institutional frame of higher education at Bergen University College. By selecting and developing experiential activities precisely adapted to learning goals, a clear path opened for the students towards positive learning and successful exam results.

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<sup>1</sup> A short overview of the methodology will be given in this paper. For further insights, see "Successful Learning Results Inspired by Experiential Learning" by Signe Syrrist and Eli Lindblad Rem. 2006.

<sup>2</sup> Syrrist og Rem, 2006.

<sup>3</sup> 'Role Playing Games' (RPG) are well organized forms for role plays. They are clearly framed and appropriately structured. (<http://nn.wikipedia.org/wiki/Rollespel>).

<sup>4</sup> The four-stage cycle, Kolb, 1984.

<sup>5</sup> Syrrist and Rem, 2006.

I am very grateful to Richard Bucknall, Street House Enterprises, Eng. in preparing this paper for international publication.

Important in our practical application of Kolb's theoretical model were:

1. Selecting and developing experiential activities precisely adapted to reach specific learning goals.
2. Maintaining ongoing feedback processes and reinforcements amounting to a progressive transformation of student-teacher relations.
3. Involving the students in personal application of the model through group participation in reflection, research, analysis and in oral and particularly written expression.

The methodology we applied consists of the three components: groups, activities and reports.

In describing concrete examples of activities, the intention here is to highlight the coherence between these components, their mutuality and dependence. But giving the whole picture, it is also necessary to discuss the teacher role and the institutional framework.

The notion 'activities' has been used in a broad sense, referring to Kolb. Through working with experiential learning at Bergen University College, it has been found that the selected activities have to fulfil the following requirements: be relevant and clear about learning goals, be varied to give preference to all the four learning style types (ref. Kolb), and be possible to implement given practical conditions such as room facilities and the number of students involved (Syrrist and Rem, 2006).

This presentation will only be linked to one type of the selected activities: role playing.

Through teaching the subject of 'Organisation and Leadership' for students in Business Administration at Bergen University College, three different role playing games have been applied in the fields of **recruiting**, **negotiating** and **redeploying/dismissal**.

In playing these games the aim has been to provide the students with the ability to experience the roles, challenges, decisions and relationships involved, structured in a particular context which provided sufficient time for preparation, consideration, engagement and reflection in order to reach the course objectives.

The three different games **recruiting**, **negotiating** and **redeploying/dismissal** are all mainly structured in the same way; they are organized and implemented within the perspective of experiential learning for the students to achieve learning and knowing through experience, and through transactions between the participants and the environment, a process of adapting to the world.

The participants, including the observers, get fixed roles and they get time enough for preparation.

These games have some familiar characteristics; they are closed, rule-driven, require particular materials and facilities, and they have specified group roles and they are goal oriented.

All students participate. Necessary materials are delivered for all the players and the facilities are arranged. Concerning the materials, all that is needed is descriptions of cases: both general overview and more specific characteristics related to the different roles in the plays, together with precise definitions of the playing roles. The plays are to be carried out in contexts much like the real world, arranging tables and chairs and establishing an appropriate atmosphere.

The games are well prepared and written down, but speech and actions are improvised as long as the game lasts. To obtain realism, the participants are instructed to be really true to their roles. For the teacher as a facilitator it has been important to enhance the atmosphere of realism.

Both the preparation work, the accomplishment of the games, and the part of debriefing, are given sufficient time frames.

Role playing is strongly experiential which challenges learners both logically and emotionally. The situation is not all well-defined. The learners are struggling with problems and possible solutions and they are faced with their personalities and private agendas before well-informed and logical solutions can be found. Role playing is therefore transformative as it engages both cognitive and affective domains equally within a whole reality.

This reflects the same problematic situations the students will find themselves in when they are employed. Compared to the real world, the role playing is located in a relatively safe place where the learners can rehearse their negotiating and decision making capabilities/skills with the support of the teacher as moderator, and of their peers.

Experiential learning is based on a dual-knowledge theory: the empiricists' concrete experience, grasping reality by the process of direct apprehension, and the rationalists' use of abstract conceptualization to comprehend reality. The dialectic between the apprehension, the here-and-now, and the comprehension is by its very nature a record of the past that seeks to define the future. The apprehension is a recitative process transformed intentionally and extensionally by appreciation, whereas comprehension is an interpretive process transformed intentionally and extensionally by criticism. The appreciation is intimately associated with the perceptual attention process; it is a process of valuing, and of affirmation (Kolb, 1984).

For the learning process in role playing it is of great importance that the teacher continuously lets the students call attention to and exploit the strengths of the different learning style types; the accommodators, the divergers, the assimilators, and the convergers. Also important is to stress the need for going through all the four steps in Kolb's learning cycle: describing the activity, reflecting upon it, presenting relevant theoretical insights, and discussing how things could have been handled differently, or what, why, how, what if.

The experiential learning theory focuses on the transaction between internal characteristics and external circumstances. Learning is an experience with the potential for movement, and learning is thus a process whereby development occurs (Kolb, Osland, Rubin, 1995). This position can be well articulated by Vygotsky's 'The zone of proximal development'. The learning and the developmental processes do not coincide or converge; they are related to each other in a complex and dynamic way. 'The developmental process lags behind the learning process and this distance gives way for the zone of proximal development'<sup>6</sup>.

Learning creates the zone of proximal development, and this zone makes possible 'good learning', but that will depend on the teacher's capacity and the quality of the group interaction (Vygotsky, 1978).

Using Kolb's learning style types in composing the student groups, makes it possible to emphasise the strength of each of the group roles. In developing 'a good group culture', several 'become known' activities are introduced early in the courses.

*'The collaboration flourished both professionally and socially. We discussed in an open and easy atmosphere ending up deciding what was best for the group as a whole.'*<sup>7</sup>

In the debriefing and before the observers give their evaluation, the participants get the opportunity to give their reactions to the plays: enjoyable, frustrating, confusing, formative.

In solving the given challenges and in the activity of debriefing, it is important for the teacher as a facilitator to be very specific on learning goals structured in a learning context, and to arrange for the best possible facilities.

A crucial factor for the success of an educational application of hypermedia as an experiential learning tool is that any assumptions that are made about the learner and the learning process when the learning goals are identified should be incorporated into the instructional design process. The design process is the consequence of the selection of an educational approach and the development of a model to support it. Therefore, an efficient hypermedia application can be appropriately designed only with clear sense of the theoretical foundations that underpin assumptions about learning and cognition. Design is the bridge between what is to be accomplished in a particular learning setting and how it will be developed and implemented (Pfeiffer and Ballew, 1988b)<sup>8</sup>.

The evaluation reports<sup>9</sup> from both students and teachers are required to enable initial conclusions to be drawn. The students experience reality in the plays which illustrate for them the relevance of the

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<sup>6</sup> Vygotsky, 1978 p.87.

<sup>7</sup> Syrrist and Rem, 2006 p. 14

<sup>8</sup> <http://www.reviewing.co.uk/research/experiential.learning.htm>

<sup>9</sup> The Report nr.3, 2005, contains a detailed evaluations analysis. This Report is referred to in Syrrist and Rem, 2006.

topics. Although the plays are restricted in structure and wide open in participation, and the environment and frames are organised and well-prepared, it is clear that the structure of role playing provides room for participants to try out their doubts, biases, hopes and fears. In this antagonistic situation, the teacher role is of great importance.

The teacher role has several aspects:

As manager, to design educational programs, to be clear on learning goals, and to organise and facilitate the experiences. Within the context of an educational institution the learning goals are highly relevant, both in the connection to the syllabus and in relation to progression towards professional objectives.

As educator, to interact in the group processes, to seek explanations of various theoretical perspectives and evaluate the students work, give feed back and credits.

As facilitator, to support the participants with essential materials and supplies. The plays have to be well prepared and implemented within an atmosphere much like the real world.

As moderator, to work with students' communicative abilities and decision making skills. Through practical argumentation it is possible both to form a basis for learning and to refine an approach to educational practice.

As translator, to help students seek explanations of various theoretical perspectives and to ensure the theoretical understanding of the activities.

And finally as evaluator, to assess the students' work and give feed-back and credits.

In spite of hardly any drop-outs and significantly better results, using experiential methods in education could be problematic in the area of student retention (*"Through traditional lecturing we could have learned the syllabus, but the understanding and the ability to apply knowledge, in short: the change in our behaviour, we have certainly achieved through this labour-intensive methodology"*)<sup>10</sup>.

The students' reports<sup>11</sup> support the relevance of the methodology in improving learning and knowing for further studies and later working life, but it has also involved a lot of effort.

For the teachers the retention has also been high. After more than five years applying experiential learning, more resources were required to be able to continue applying the methodology in full scale. Lack of resources and support in the education system enforced a reorganisation in the study program, and for the time being only some elements of the methodology are being applied in the subject of 'Organisation and Leadership' - a matter of regret in view of results already obtained and documented.

Using exercises or activities in the learning process can both increase the understanding of principles and the understanding of concrete situations in terms of principles, and they can also be useful as means of developing skills for group situations (Kolb, 1995).

To attain these two goals, the exercises must be relevant for the subject matters and the students must participate actively in the group situations. Role play simulation is in essence a social experience: it can not happen without a group of people interacting within a social context to solve a problem. Solving a more complex practical task requires the students to interrelate and communicate. This is essential for learning and development (Vygotsky, 1978).

The three principal elements: groups, activities and reports, are linked together within an ongoing process of experiential learning based on Kolb's theory.

Learning was the key constituent link. Group composition and the understanding of learning in and by groups were directly inspired by Kolb's model. Activities were inspired by the notion of 'learning by doing' embedded in experiential learning, but they had to be relevant to our purpose. We introduced writing reports as essential in the learning process especially in the need for reflection. In introducing this component in our methodology, we have tried to meet some of the criticism regarding Kolb's work.

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<sup>10</sup> Syrrist and Rem, 2006, p.20.

<sup>11</sup> Syrrist and Rem, 2006.

(David A. Kolb's scheme 'has been useful in assisting us in planning learning activities and in helping us to check simply that learners can be effectively engaged', 'it does not help... to uncover the elements of reflection itself' (see Boud et al 1983:13))<sup>12</sup>.

Written reports were to be structured following the circle in Kolb's model and meet academic requirements. In requiring students' writing to follow the structure in the Kolb circle we made a minor revision to Kolb's thinking. At the point of abstract conceptualization we expected that the students could and should apply relevant theoretical contributions in analyzing the activity at hand. By this expectation they were induced to read, inform themselves, reflect upon and apply theories important to the topic they were studying. The three components then became reciprocal and fully interdependent (Syrrist and Rem, 2006:8).

Personal experience is the focal point of learning, but when the students share their experience, they can share it fully: concretely, and abstractly. Learning will be a continuous process grounded in experience, a holistic process of adaptation to the world, a process that involves transactions between the person and the environment. Learning is the process of creating knowledge (Kolb,1984). To put it more explicitly, I will here refer to Kolb's working definition of learning: 'Learning is the process whereby knowledge is created through the transformation of experience'<sup>13</sup>. And to Schön: 'Our knowing is in our action'<sup>14</sup>.

Going through the process (the learning cycle) with acting, reflecting, thinking and experiencing, the students have to argue both individually and in collaboration with the other students and in this way form the basis of learning.

Individual learning styles are shaped by the structure of social knowledge and, through individual creative acts, knowledge is formed by individuals. The learning has to be considered within a cultural accumulated knowledge, its nature and organisation and within the learning processes whereby individual learners contribute (Kolb 1984).

To conduct oneself in a specific cultural context we emphasize the importance of thinking, acting and learning. Culture as a theme is essential in the study of 'Organisation and Leadership' and a variety of topics: power, decision making, gender, industrial relations, are discussed from a cultural perspective.

Several of the professions are themselves multidisciplinary, encompassing specialities that emphasize different learning styles<sup>15</sup>, as is evident in Business Administration studies.

A learning process that has room for students' variations in their learning styles will be essential in current working life with its demand for flexibility and diversity.

There is a mismatch between traditional pedagogy and the situations in working life with their complexity, uncertainty and value conflicts.

The implications for higher education are real and immediate. The educational institutions have the possibility to be curators of social knowledge, especially in the creation of conditions and arranging for variations in learning styles in the study programmes.

Though role playing could be a powerful tool for the institutions and the teacher role with all its aspects, the situation is still constructed. Except for the students' evaluation reports and some feed back from former students, we have not done any systematic study of using role playing games in the study program in relation to the relevance of this methodology for later working life.

## **Conclusions**

From experience over several years it is clear that the participants should for the most part pick out their own roles in the plays. It is also important to give clear introductions about the activities; rules, settings, possibilities and constraints. The situations have to be as realistic as possible and the participants need to get time enough for preparatory work, the accomplishment of the play, and the

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<sup>12</sup> Mark Smith 1999 (<http://www.infed.org/biblio/b-explrn.htm>)

<sup>13</sup> Kolb, 1984 p.28)

<sup>14</sup> Schön, 1991 p.49

<sup>15</sup> Kolb, 1984 p.128.

evaluation afterwards. And in the spirit of Kolb's work, we have experienced the benefit of playing in advance of lecturing on theoretical topics.

The learning environment created in using role playing games facilitates the collaborative process of building knowledge in context, deploying solutions to problems in an interactive and reflexive environment, coping with unintended consequences and coming to terms with the notion of taking on the attitudes of others as if they were our own. In role playing games, the students not only explore attitudes and beliefs they may not hold but also modes of action they would not otherwise take. Playing in teams allows students to challenge and explore their own ideas and beliefs amongst their peers and through interaction with the teachers, as managers, as educators, as facilitators, as moderators, as translators, and as evaluators.

Experiential learning finds its place within constructive learning theories, where the learners have to construct their meanings in a situation that is not well defined, and where they have to reconstruct their existing schemata or mental models.

Experiential learning is transformative. It challenges reflection. It generates the perception of professional roles which are situated within institutional frames where the organising of groups and the role of the teachers are essential active elements.

Modifying perception of the institutional framework opens the door to achieve learning gains and goals. In contrast to traditional teaching through lecturing, the methodology engaged students' commitment and individual contribution to their learning processes.

Role playing games when systematically applied within the multi-focused methodology have been proved to be a wonderfully effective training method to heighten student interactivity and reflection, and improve educational learning and professional knowledge.

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