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New Takes on Learning in Organizations When Using Role Play Simulation

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Abstract: Role play simulations (RPS) as a tool for enhancing learning in organizations are mostly used for military and in crisis training. While training with RPS a lot of effort is put in developing scripts and roles. In other organizations with interests other than military and crisis training, subject matter experts are used to provide best and most relevant scripts and connected roles. In theory regarding using simulations, there are online suggestions of pulling in the "learners" in the script and role development process, and very few of the theoretical research describe how and why such involvement can be done, or share any other experiences related to this approach. Influenced by the American pragmatist John Dewey, we have explored the potential of utilizing early involvement of learners and thus worked on involving the learners in organizations in the process of developing scripts and roles for "their own" learning through role simulations. The data, collected by interviewing, observing and taking field notes show the constraints and benefits of the approach. In the paper we present the related theory and the analysis of the data collected. Based on our experiences, we also offer guidelines for how early involvement will provide a prolonged and enhanced learning process.

Keywords: early involvement, learning in organizations, role play simulation, reflective activities

1. Introduction

In this paper we wish to elaborate on the importance of including the learner in developing script and roles when using role play simulations (hereafter called RPS). This empowerment of the learner towards the learning situation, we claim will support the learning process.

Through three different cases approaches for including the learner in the development process have been tested out. The different approaches range from leaving both script idea, script basis and developing roles to the learner, only with assistance from the mediator, to only be able commenting on the script and roles.

Based on the results from these cases, we have reached a result that has been tested out in a fourth case study, with great success, we may add.

There is little available theory on using participation in the development of script and roles, other than for inspiration, and most of the literature on experiential learning, often refer to scripts and roles being developed by Subject Matter experts (Quinn, 2007) or other types of experts (Lauber, 2007). However, there is research on end users of services and the value of their feedback and engagement that have been useful to our research, as this focus on the ones making use of the knowledge generated (Cegarra-Navarro et al., 2013).

The theory we base the work on is mainly on participation from other disciplines, such as organizational change processes. We have also looked at experiential learning theory and been greatly influence of both the works of John Dewey and Donald Schön, the latter for his contributions towards reflection. Reflection is a major part of using previous experience and is also prominent within experiential learning theory.

The case studies have been conducted at the Norwegian Army Military Academy (NAMA), Tretorget, a response exercise called Exercise Elverum, and at Hedmark University College (HUC). At the first and fourth case the respondents have been students that are training for worklife, at the second and third case the respondents were workers.

We have chosen to structure the paper in the following chapters; theoretical foundation – where we elaborate on the theory we have used to inform our study, methodological approach – where we present how we have collected and analyzed our data, and discussion of findings – where we present and discuss our findings from all the four cases, and finally a concluding chapter – where we conclude and suggest an approach for preparing for sustainable learning when using role play simulations, and where we suggest areas for further research.

2. Theoretical foundation

2.1 Participation in the development process

The aim was to make the participants active and involved in the learning process. It was thus important to us to draw on the learners input regarding what they needed to learn, all within the curriculum. We chose then to build on the learners own experiences and backgrounds. This is supported by John Dewey (1938) (p.21). He does, however, point out the problem of "ascertaining how acquaintance with the past may be translated into a potent instrumentality for dealing effectively with the future" (1938) (p.23). This we have dealt with using the teacher as mediator. This will ensure that the learning stays within the boundaries of the curriculum of the course/training. The

empowerment issue we have from Paulo Freire and his "Pedagogy of the Oppressed" (Freire, 1970). Although our learners are not oppressed as presented in Freire's work, there are still lessons from his methods that will work regarding activating the learners and bringing forward their opinions.

Also we wanted to assure a level of consensus and legitimacy, as well as better identifying the student's needs and problems (Keregero, 1989). This consensus and also commitment is harder to establish the participants are not taking part in the work towards solutions (Eikeland and Berg, 1997). Research on participatory issues is mainly from organizational change processes and from Action Research. In Action Research a major point is to make the process be co-generative regarding the learning process. The researchers are thus co-generators of knowledge (Greenwood and Levin, 2007). For our research this would imply active input from both learners and mediators.

Another framework for involving learners is called "Peer assist" (Faul and Camacho, 2004, Collison and Parcell, 2010). This is a method of using peers to coming up with solutions to a problem using a facilitator to organize the process. The objective of this method is, however, to help towards resolving one peer's challenge. The moderator will have to ensure avoidance of the "Abilene paradox" (Harvey, 1988), and thus make sure that the end product (the script and roles) is the true product of the group.

To achieve this we have chosen to structure the work of bringing in the learners as a workshop, which is defined as "an educational seminar or series of meetings emphasizing interaction and exchange of information among a usually small number of participants" (Farlex, 2011).

It is important to make the workshop as democratic as possible to make sure that the learners will contribute. When the learners contribute on equal terms, the learners will also contribute towards securing the quality of the product(s)(Emery, 1989).

2.2 Aspects of the role of reflection in the learning process

Boud, Keogh and Walker (1985) define reflection as "an active process of exploration and discovery which often leads to very unexpected outcomes". Reflection can be undertaken before, in and after an action(Schön, 1987, Schön, 1991, Cowan, 2006).

Reflection before action prepares for an activity (Cowan, 2006). In this paper we focus on the joint reflection before action, where the objective is to create both focus and awareness, as well as bringing forth the learners own experiences. This will also ensure that the input is relevant to the learning objective.

Reflection in Action as described by Donald A. Schön (Schön, 1987, Schön, 1991) can be facilitated by the mediator. Since this activity aim at changing the outcome or the product, the facilitation of this can be of using time-out's. This allows for status updates and ensures the quality of the product. It is, however, important that these time-out's are not regarded as interruptions that break

flow(Csikszentmihalyi, 1990) and immersion. If this interruption leads to frustration, it may prohibit learning(Kember et al., 1999, Boud et al., 1985). On the other hand, according to Piaget (Piaget, 1951, Piaget and Flavell, 1963) it is through new situations perceived as unsatisfactory, new knowledge is formed and previous knowledge is reorganized.

Reflection on Action offers an opportunity of understanding of what happened during the action and why, in order to plan for future similar situations (Schön, 1991, Schön, 1987). The military uses debriefing after exercises and call this "After Action Review" (AAR). This is a way of evaluating performance in an action, and identifying weaknesses, strengths, and improvements that can be implemented in future action (von der Oelsnitz and Busch, 2006). The Learning Cycle of an AAR is depicted in fig.1.

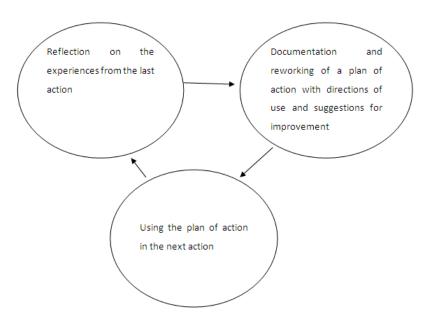


Figure 1 The Learning Cycle of the AAR - translated from von der Oelsnitz and Busch (2006)

Another way of conducting Reflection on action is "Retrospect" (Faul and Camacho, 2004). This is however, done mostly when the project has ended. This type of evaluation of a project is done to discover factors of success and the utilizations for future projects, as well as what needs to be improved.

Reflection is a central part of experiential learning and central to our theoretical backdrop has been Kolb's experiential learning cycle.

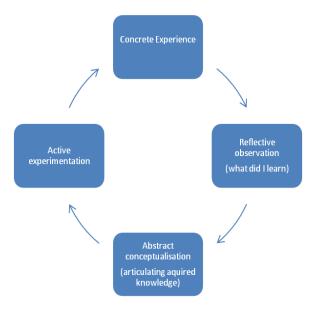


Figure 2 Kolb's learning cycle (1984)

The figure shows the process of having a concrete experience, reflecting upon this with regards to the learning process, using this to articulate knowledge, to put forward towards new experiencing to gain new knowledge from the new experiences(Kolb, 1984).

According to Jennifer A. Moon experiential learning requires an "intention to learn" as well as an "active phase of learning" (Moon, 2004). Also, the effectiveness of experiential learning is dependent on a "reflective learning phase", learning from the action from the experiential learning, and "a further phase of learning from feedback (Moon, 2004).

In order for the RPS to be considered "useful" (Wenger, 2010) and be a learning arena, it is important that the setting is perceived as relevant for the learning purpose. This is best achieved through paying this attention to the role of reflection.

3. Data collection/method of inquiry

The projects undertaken can be categorized as instrumental case studies (Stake, 2000, Stake, 2005). The data has been collected through interviews and focus group interviews(Schensul, 1999, Dalen, 2011, Denzin and Lincoln, 2005). Notes were repeated to the respondents in order to secure that they were correct and that they recognized their statements and responses(Guba and Lincoln, 1989).

There were also a questionnaire handed out and gave both quantitative and qualitative feedback(Creswell, 2003). It was important for us to get as many responses as possible and we thus used a Likert scale for the questionnaires, also adding a few open answer questions.

When interviewing we used an interview guide and for NAMA, Tretorget and HUC, the whole group of participants took part in the focus group interview. At Exercise Elverum, we interviewed those who volunteered for taking part in a follow up interview after the response exercise.

3.1 Differences in the cases

The case studies were also done differently with regards to the workshop. In case study one (NAMA) and two (Tretorget), everything were left to the participants, and the facilitator only gave instructions about the framework of the activity, namely that it was going to be a role play simulation. No learning objective was given, as this was up to the participants to decide for themselves. The participants at NAMA were students in an age group between 18 and approximately 30 years old. The participants at Tretorget were all working and ranging from 30 to 50 years old.

For case study three (Exercise Elverum), the participants were only informed about the RPS and script was made by representatives (senior officers) from some of the response units. The participants here were either working in the administration in the municipality, or in response units.

For case study four (Hedmark University College, hereafter called HUC) the facilitator decided on the learning objective, and provided some guidelines and structures for the participants (students) to work with. The participants here were students and the age was from 19 to approximately 27.

The differences in the participants' ages and work situations (with some students and some in work life) have not seemed to influence the responses. However, we can trace one minor difference. The students at NAMA seem more prone to require more precise information than the ones in the work life. This is however only an observation and we have not followed this up further by conducting test studies to confirm this. We discuss this further in the next chapter.

In the figure below we have placed the different cases on a continuum ranging from no or limited influence on script and roles to complete "freedom" both regarding learning objective, script and roles.



Figure 3 Continuum of influence

3.2 Duration of the RPS's

Both at NAMA, Tretorget and HUC, the RPS lasted for approximately three hours in total. At Exercise Elverum, the response exercise lasted for one whole working day.

3.3 Researchers role

The researchers role in the cases at NAMA, Tretorget and HUC, was firstly to facilitate the workshop in which they were to come up with the script and roles. Secondly it was to facilitate and moderate the RPS and then finally it was to sum up the RPS and moderate the reflection process. In Exercise Elverum the role was to observe and assist the reflection processes, both during and after the response exercise.

4. Findings

The qualitative data were analyzed by forming categories from the interviews and focus group interviews (REF). The questionnaires were analyzed and compared with the feedback from the interviews.

The quantitative feedback from the questionnaires was summarized and compared to the qualitative feedback. Categories emerged from the data and the findings are thus sorted into the following three headings:

• Reported learning outcome from early involvement

Observed engagement in RPS

Observed learning outcome from RPS

We will in the following present the data from the different cases under these headings.

4.1 Findings from case one (NAMA)

4.1.1 Reported learning outcome

The most prominent finding was that the respondents report on being confused. They were genuinely not sure about what to do and how to go about the task. Even though they were informed about that they were to create a script and corresponding roles as well as choosing their own learning objective for the RPS, they were not sure of what to do and what to choose. This leads to a relatively negative attitude amongst the participants in case study one (at NAMA). However, this negativity could in this case study be divided into two types of negativities; one was negative, but came up with constructive suggestions towards what *could* be done, the other type was negative without coming up with constructive suggestions.

They all reported on little or no learning outcome from the workshop.

4.1.2 Observed engagement in RPS

The engagement in the RPS was moderate and the students were clearly executing the RPS because the teacher encouraged them to go ahead with it.

4.1.3 Observed learning outcome from RPS

The communication in the RPS was in this case done within a text based communications system. The teacher at NAMA pointed out parts of the print out that clearly show learning. This is countering what they themselves report, as they claim having little or no learning outcome in the questionnaires. Being "confronted" with the traces of learning from the text based communication; the learners admitted that some learning had taken place.

4.2 Findings from case two (Tretorget)

4.2.1 Reported learning outcome

The respondents from case two report on not having learned anything from the workshop. They were, however, not quite as confused as the respondents from NAMA. They also picked up on how the role play simulation would emerge.

4.2.2 Observed engagement in RPS

Due to some problems regarding the use of the Learning management system used as platform for the RPS, the engagement varied. Some groups (roles) were active and some less active.

4.2.3 Observed learning outcome from RPS

For some groups it was difficult to trace learning. For the groups that showed some form of learning, this was on the realization of the complexity of cases tied to alcohol related issues in a work situation.

4.3 Findings from case three (Exercise Elverum)

4.3.1Reported learning outcome

In case three (Exercise Elverum), the participants were only informed prior to the exercise. A few of the respondents did, however, claim that they had improved learning outcome from the RPS compared to previous exercises, and report on the information part having a positive influence on the learning outcome.

4.3.2 Observed engagement in RPS

The engagement was high with all the involved work groups. The engagement regarding using the exercise as a learning arena was also prominent. An example of this was the engagement regarding a "time out", or as Schön would call it; reflection in action (Schön, 1987, Schön, 1991).

4.3.3 Observed learning outcome from RPS

Most of the respondents claim to have learned from the exercise. However, the most prominent observations of learning are in the "time-outs" (the reflection-in-action-on-action) (Schön, 1991, Schön, 1987).

4.4 Findings from case four (HUC)

4.4.1 Reported learning outcome

In case four (HUC), the respondents (students) all report on increased learning outcome. The suggestion they had to comment on and the work of finding roles and new/improved script, they claim had major impact on their learning outcome. The structured way the workshop was conducted with a clear learning objective decided by the teacher/facilitator, and with a clear framework and goals for the outcome. The respondents also claim that they learned a lot of discussing with peers and doing so over a "real" task.

4.4.2 Observed engagement in RPS

All of the participants in the RPS were engaged and active. They were discussing, writing, drawing and coloring. None were disengaged or disclosed themselves from the playing. They were also engaged in referring to the curriculum (this was a part of the task). They had great discussions and engaged in constructive dialogues and had no problems coming up with relevant roles and script that suited the learning objective.

4.4.3 Observed learning outcome from RPS

Observations and field notes show that they through their discussions used the lectured curriculum to argue their points of views during the RPS. Both within the groups and between the groups, the curriculum and previous lectures were discussed and in a way "validated". One example is the use of colors on the image of the application they chose to develop.

4.5 Summing up

Looking at the overall findings from the four case studies the findings can be summed up in the following table:

	No influence on roles and	High influence on roles and
	script	script
Structured workshop and	Some learning outcome	High learning outcome
fixed learning objective		
Unstructured workshop and	NA/?	No (little) learning outcome
student induced learning		
objective		

Table 1 Learning outcome from different approaches

This indicates the need of a structured workshop and fixed learning objective combined with the learners' opportunities of having influence on roles and script, contributes to an experienced learning outcome. This is contrary to the initiating idea of type of involvement from the learner. The first experiments were based on the idea of that with offering the learner to be completely in charge of coming up with the basis for learning, the learning outcome would be perceived as more relevant and the ownership to the activity (RPS) would be maximized.

In contrary, this turned out to have the opposite result. Instead of greater involvement and ownership, the learners were confused and this was an obstacle for learning. This is supported by Kember et al, when they claim that confusion leads to frustration which prohibits learning (Kember et al., 1999).

The observation of the difference between cases one (NAMA) and two (Tretorget), could have different reasons. We have discussed possibilities as difference of where the participants are situated; in case one (NAMA) the participants are used to be given clear orders, and at the workplace (case two (Tretorget)) they "orders" may not be as clear and they have to interpret work specifications themselves rather than them being clear. There is also an age difference between the groups. These are only discussions of observations made and we had no chance of confirming these anticipations. We thus only make note of the difference and suggest our explanations.

5. Conclusion

From the four different cases, we have reached the conclusion that early involvement from the learner will be important for the experienced learning outcome. However, it needs to be within a clear and communicated framework. The goal of the activity must be decided either from the teacher or from the facilitator and the goal must be clearly communicated from a curriculum or from a learning objective based on the learning and training need defined by an organization. Lack of clear communication and

expressed goals will prohibit learning. Also lack of early involvement reduces the potential of an increased learning outcome.

Our cases show how it is possible to organize learning activities including early involvement supporting sustainable learning. They also show the importance of the early involvement of the learner. Even if the learners report on learning when only informed, it is where the early involvement is actually realized where the experienced learning outcome is most prominent.

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