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Switching Roles: a critique of the constructivist perspective on teach students – the case of online role-play simulation games

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Abstract

The paper examines the way constructivists present the roles of teacher and students and argues that it idealizes both their roles and the nature of their relationship. It takes role-play simulation games, one of constructivists' favorite methodological bastions as a background to show that what actually occurs, in other words, what teachers are actually expected to do and what students are expected to do, as well as the relationship between these expectations, falls short of the constructivist image of the process. The argument is that there is a need to re-conceptualize the role of teacher and student within the constructivist paradigm in order to provide a better understanding of the process of present online education generally and experiential learning in particular and to provide teachers a way to better understand the implications of using experiential learning in general and role-play simulation games in particular.

Introduction

Constructivist and experiential pedagogy, that underlies online role-play simulation games in education which is the focus of this paper, has put the student at the center of the learning process and consequently placed the teacher in the role of 'facilitator' or mentor of learning. At least that's what seems to be the argument taken by many constructivists who examined the role of teachers in online education (Waniganayake et al., 2007; Linser et al., 2004). Yet face-to-face classrooms have certainly not disappeared and online components of education are still far from being the bulk of the teacher-learner interaction. Teachers, for the most part, still stand in front of classrooms applying didactic pedagogies, their authority intact, while students, even in hybrid learning environments, still expect not only guidance from teachers, but for teachers and the school institution to provide not only the tools for learning, but to teach students how to use them and to impart knowledge.

The new role of teachers called for by constructivists, such as facilitators, providers of learning environments, mentors, moderators, etc., therefore seems to provide a metaphor that is hard to sustain. It attempts to present the new roles of the teacher under the light of a mediator of knowledge environments and tools rather than their authority. However it is hard to avoid the reality that most of today's teachers are still under the scrutiny and authority of institutionalized knowledge transmission that includes the expectation and responsibility that they must cover certain content knowledge within certain time frames that are imposed by educational authorities – and these are specifically defined as to how much time should be devoted to each segment of content. Thus, despite valiant attempts by pedagogically constructivist minded educators and theorists the social and structural realities of the classroom are by enlarge oriented towards the transmission of knowledge and not its social constructivist grounding.

Similarly, in the light of constructivism, students are active learners who construct their knowledge through reflection and experience of their social environment, content material and tools at their disposal. But the fact of highly organized class schedules, their expectations of being examined and evaluated individually relative to their peers, the perception that knowledge which is somewhere out there and should be found, acquired, rehearsed and regurgitated in exams, and that the institutions which they attend are the arena in which all these process occur, remains hidden behind the constructivist scheme.

The problem is not to simply to create a new metaphor that would create a more fitting picture to the reality on the ground, but rather to provide a way to understand the profound significance of constructivist theory generally and the switch of roles for both teachers and students which constructivism suggests as a result of new technological possibilities. Teachers are actually learners under pressure of an educational delivery systems – schools, colleges and universities – that demand that they use educational technology tools with which they need to both become familiar and at the same time provide information to students to meet their needs for success in exams (still the authoritative method of evaluation of knowledge and skills for education departments and educational institutions) as well as to prepare them meet social and economic realities which they will face with the completion of their studies.

The way to understand the transformation education is undergoing from constructivist eyes is to focus not only on the communication tools and possibilities they engender as used by teachers, students and institutions, but to understand both the socio-historical and cultural contexts in which these tools are used and their effects. This surely was the vision articulated by Vygotsky and Bruner (Bruner, 1996; Bruner, 1997). Social context does not simply mean the classroom environment or the virtual environments generated by Second Life and other similarly generated technologies. Rather, it means an examination of the socio-historical structures, trajectories, constraints and potentialities in which education takes place, in which teachers and learners are situated, and in which Information and Communication Technologies (ICT) operate as both generators of the socio-historical process as well as their result and effects.

While the above cannot possibly be investigated in this short paper, what is attempted here is to provide a preliminary view with regard to the perceptions of teachers and theorists who have used, examined and recommended one such constructivist method – online role play – as a way of highlighting social context. The paper thus addresses the question: What are the major themes that constructivists use to describe the roles of teachers and students?

How teachers perceive their role and how they perceive the role of their students will impact on the both the interaction that takes place between teachers and students and on the way they use their chosen tools for teaching and learning. These perceptions, in a socio-historical and cultural framework, form the ideological background of the practices found in educational environments. Whether or not they promote constructivist aims and practices is the question. Thus the rest of this paper will examine how educators and theorists who used, or recommended the use of role play simulations as constructivist pedagogy might suggest, perceive the role of teachers and students.

Given that this is a preliminary study, the aim is to elicit some common themes describing the role of teachers and students used by constructivist oriented educators and theorists advocating the use of role play simulations for teaching and learning. The idea is to present what educators expect teachers and students to actually do and thus achieve given constructivist aims.

Methodology

Based on a recent study of 396 papers from 1997 to 2010 on the use of role based e-learning (Linser, 2011), a full text search on the role of teachers and students using the exact phrases "teacher is", "teachers need", "student is" and "students need" produced 63 pronouncements on the role of teachers and 76 such pronouncements on the role of students.

The following are some examples of the pronouncements that were retrieved:

1. "The responsibility of the **teacher is** to present or introduce the phenomenon or problem in a stimulating way." (Nuldén & Scheepers, 1999)
2. "The role of the tutor or **teacher is** central as 'designer' and 'moderator' of the 'discussion activity'..." (Enriquez, 2010)
3. "**Teachers need** help to be a coach and a facilitator." (Wang, 2002)
4. "The assignment reads that each **student is** responsible for leading the discussion of one question." (Kolloff, 2001)
5. "Then, unlabeled examples are presented and the **student is** asked to indicate whether the new examples concur with the hypothesis they have developed." (Colaric et al., 2004)
6. "In any pedagogical approach, **students need** systematic support, which allows them to assimilate new information to pre-existing notions and modify their understanding in light of new data." (Masuyama, 2006)

Each such pronouncement was analyzed in terms of the question: What is the role of the teacher assumed by this pronouncement in the context described? Or what is the teacher expected to achieve? Applied to example 1 above, the question yields the answer: to create the initial conditions for learning; example 2 thus also yields the answer, to create conditions, but example 3 yields the answer to guide the students. Example 4 yields the answer: for the student to contribute to the group, while example 5 yields the answer: to identify; and example 6 also yields: to identify the information. This procedure produced the set of themes and sub themes as shown in Table 1.1 and 1.2 for teachers and Table 2.1 and 2.2 for students.

Results 1: Teachers

Role of the teacher	N	%
Create conditions	36	57.14
Guide	9	14.29
Authority	7	11.11
Mediator	3	4.76
Learner/Researcher	3	4.76
Evaluate	2	3.17
Observer	1	1.59
Participant	1	1.59
?	1	1.59

Table 1.1 Role of the Teacher (N=63).

Table 1.2 describes each of the top 5 themes answering for each the appropriate question: which conditions? How are teachers to guide? Over what do teachers have authority? What do they need to learn? What is it that they mediate?

Which Conditions?		%	Guide - how?		%	Authority - over what?		%	Learn - what?		%	Mediate - between what?		%
Technology Environments	20	58.8	Technology use	5	55.6	Content	2	28.6	Strategies	2		Learning	2	
Learning settings	8	23.5	Coach	2	22.2	Behaviour	2	28.6	Professional development	1		Discussion	2	
Experiences	3	8.8	Advisor	2	22.2	Technology means	1	14.3						
Community	2	5.9				Outcomes	1	14.3						
?	1	2.9				?	1	14.3						

Table 1.2 Five Top Sub Themes for Role of the Teacher (N=63)

Results 2: Students

Role of Student	N	%
Understand	14	18.4
Contribute	12	15.8
Investigate	7	9.2
Communicate	6	7.9
Creative	5	6.4
Engaged	4	5.3
Present	3	4.0
Practice	2	2.6
Identify	2	2.6
Responsibility	2	2.6
Schedule	2	2.6
Solve	2	2.6
Master	2	2.6
?	13	17.1

Table 2.1 Role of the Student (N=76)

Understand - what?		%	Contribute - how?		%
Content	4	28.6	Discuss	7	58.3
Technology	4	28.6	Lead Discussion	2	16.7
Argumentation	3	21.4	Apply knowledge	1	8.3
Information	2	14.3	Participate	1	8.3
Concepts	1	7.1			
Investigate - what?			**Communicate with whom?**		
Information	5	71.4	Peers	5	83.3
Perspectives	1	14.3	Instructors	1	16.7
Choices	1	14.3			
Creative - in what?			**Engaged - with what?**		
Ideas	4	80.0	Environment	3	60.0
SL	1	20.0	Thinking	2	40.0
Present - what?					
Views	2	66.7			
Results	1	33.3			

Table 2.2 Seven Top Sub Themes for Role of the Student (N=76)

Where is the teacher?

Table 1.1 shows that despite advocating that the student is at the center of the learning process as constructivist pedagogy suggests, it does not appear that the teacher has taken a peripheral role. Teachers may call themselves catalysts, moderators or facilitators or are so called by theorists; they are never the less still conceptualized as the creators of learning environments and controllers of the learning process. They are expected to create the conditions for learning, to guide and shape students activities using technological environments, controlling the content that is to be learned, and to observe and evaluate students.

Remembering that the data set is derived from papers that describe or recommend role-plays, the main concern is the role of the teacher as responsible for providing technological learning environments as table 1.2 shows. This role of course requires a skill set and new strategies of teaching as pointed out by many educators and theorists. (Goodale, 1999; Jurica et al., 1999; Lee et al., 2001; Ferry, 2009; Jones & Markus, 2009; Shah & Lee, 2010) But the image that emerges from these themes is of the teacher whose presence is marked by the environment he/she created and oversees. If our initial themes are representative of the general constructivist paradigm with regard to the role of the teacher, it seems that this role has changed less radically than what one may be led to believe. In creating and controlling the learning environment and content teachers may not have to stand in front of classrooms but they do, as in traditional practices, are still responsible for delivering content in a technological environment they create.

Where is the student?

Table 2.1 shows that while students are expected to be more independent learners, they are never the less also expected to do all the things that they were always required to do and achieve as students. Understanding, rather than knowing seems to be a key theme in describing the role of the student, but their role as learners still requires contributing to discussions, to investigate, to communicate with peers, to practice, solve and master the material to be learned. While walls may be disappearing from some classrooms, the majority are still segregated by age group, curricula content and scheduling. The vision may be of learner centered education, but it is centered in environments created by teachers – we are not yet in the stage where students create their own learning experiences. Rather, the environments in which they work are selected, organized and mostly controlled by teachers.

Clearly, the internet and the web provide new socio-technological contexts and resources for learners but what students are required to achieve in these environments is the same in the constructivist paradigm as it is in the traditional one. As table 2.2 shows, they still need to understand the content, the technology, argumentation procedures; they need to investigate information; and to contribute to discussions etc.

Conclusion: Teaching and Learning in Transition?

In a period in which new technological tools are continuously emerging at an accelerating pace with no leveling plateau in sight – a permanent revolution (to borrow Trotsky's phrase) – the best strategy is for both teachers and students is, not to learn how to use specific tools but rather, to develop strategies for learning about technological innovations and what they can be used for. As King (2003) has argued teachers need to be perceived as adult learners (in Jones & Markus, 2009) and from a constructivist perspective need to join their students as collaborators in the learning process (Bruner, 1996). Similarly, digital natives, the students, are not about to lose any of the traditional requirements, but if constructivist pedagogy is to guide our understanding of what they need to do, it must include, understanding them as collaborators in the learning process with peers and teachers – teachers may be book based natives and students digital ones, but it is in their collaborative efforts to learn from one another that constitutes the basis of a constructivist model useful for the future of teaching and learning, While the traditional roles of both teachers and students have not disappeared the switch to a strategy in which both are learners assisting one another is a future in which teachers may indeed disappear and only learning survives.

Given the very limited scope of the paper, the themes that emerged from the data set are only provisional. A broader investigation of these themes is clearly required in order to ascertain a fuller picture of the role of teachers and students as they are conceptualized in the constructivist paradigm. How they can be conceptualized in this paradigm needs to be directed at both the historical and socio-technical environments in which students and teachers operate.

The provisional conclusion of this paper is that the role of teachers and students as conceptualized in the constructivist paradigm is not radically different from the traditional one – though much more emphasis is placed on their relationship to technology.

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