Teacher-Student Interactions Considering Cyberspace: An Action- Based Approach

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Abstract

Teacher-student interactions are one of the critical components of an educational process. Upon an action-based view, human beings are regarded as agents. Thus, teachers and students are all considered actors, who can act and interact with each other actively. Every action is based on cognitive, emotional and willing foundations. Accordingly, students and teachers interact their cognitions, beliefs, emotions and interests forever. However, this kind of transaction is not a balanced one, and it ought to be an unequal interaction, in which the teacher plays a guidance role. On the other hand, in the second decade of twenty-first century our life is interweaved with Internet and digital services. Regarding cyberspace and its consequences on education, this article attempts to redefine student-teacher interactions in a framework of action. In cognition foundations of action, we should accompany some shifts: from knowledge transferring models to knowledge authorizing ones; from knowledge receiving models to knowledge constructing ones and from universal knowledge models to local knowledge ones. In emotional action foundations, we should perform these shifts: from non-reflective emotional models to more-reflective ones; from simple models of interests to complex heterogeneous models of interests. Finally, concentrating on action and decision-making, we should do these shifts: from atomic views to holistic approaches, from simple models to complex models and from impulsive models of action to reflective ones.

Introduction

It passes only four decades since the earliest version of what has become the Internet went online, but leaps in this brand new technology and wide usage of it has made the Internet one of the key factors of the first decades of twenty-first century. It has introduced new terms and opened new opportunities to many aspects of human lives. In social communication new social media and social networking frameworks make people with same interests bind together. In Politics the Internet has this capacity to support collective reflection on participant interests and therefore form a more democratic society. The Internet's effects can also be characterized by its broad changes in entertaining businesses, like the video game industry which now has millions of subscribers in multiplayer games[1]. Thus, these new terms like E-mail, E-commerce, open source and social networking making our lives easier and faster in a way that living without using them is unthinkable.

These innovative activities rooting from the Internet have also found their ways in education, whether in the policies and educational systems, or in some smaller scale of an educational process, like in class rooms. The development of online learning invented in 1980 is one of the major examples of this influence. This brand new approach to learning offers every individual who wants to learn something and would not be able to study in a traditional university setting, the opportunity to participate in online courses and learn whatever they would like. The development of online learning goes so far in the way that the term MOOC[2] was started in 2008 as a connectivist experiment in education with a participatory focus. These courses are becoming part of our educational landscape and may benefit many learners. As other examples in teaching methods, mobile learning and using avatars as a teaching assistance can be named. These fresh changes in education have some advantages. Inclusiveness, being real time and also open for any other usages are some features of them, which are totally fresh in comparison with the traditional educational processes.

On the other side using the Internet, like every other new technology, has also brought some challenges and hazards that need to be taken care of. These information and communication technologies raise complex ontological, epistemological, ethical, and identity issues; they at one and the same time present exciting educational possibilities but also grave dangers[3]. The Net has also this tendency to offer the worst of a series of asymmetrical trade-offs like, economy over efficiency in education, the virtual over the real in our relation to things and people, and anonymity over commitment in our lives[4]. Therefore, it is essential to note that the nature of the network is still in question as innovative usages continue to appear. It is not a fully developed technology like the refrigerator or the ball point pen. Accordingly, in this chain of influences we cannot capitalize all the advantages without being aware of the implications the Internet might bring for education.

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[1] Feenberg, 2010

[2] Massive open online course

[3] Burbules, 2001

[4] Dreyfus, 2001

The focus of this paper therefore, will be on class rooms, where both the teacher and students are present and where it can be addressed as the core of educational process in an educational system. Teachers and students are exposed to the Internet and this would also have some effects on their relationship. In the following, challenges of the relationship between teacher and student implicated by the cyberspace will be discussed and suggesting shifts will be indicated.

Perspective Overview of Student-Teacher Relationship

Student-Teacher relationship is one of the most important components of an educational process, in the way that it can be called as the touchstone of education. There are several different models addressing this relationship, and the most important ones are briefly explained in the following.

"Dialectic model" first inspired by Plato, in which the student achieves the knowledge through a Socratic dialogue and guiding questions of the teacher. "Problem Solving" model stated by Dewey, as one of the first thinkers criticizing the traditional model of teaching-learning process and therefore, the relationship between teacher and student. He explained the teacher's role as a facilitator to the learning process. "Banking model" represented by Freire(1993), corresponds this relationship with some banking transactions, in which teacher is not only transmitting the information, but also expects students to memorize and retrieve those information without any defects. "Liberal Model" first proposed in England, explains this relationship with much focus on knowledge recognition and the forms of knowledge, so this narrows the relationship in theoretical knowledge. "Indoctrination Model" raised by behaviorism viewpoints, in which the proper educational activities always are determined by the environmental stimulus. Therefore, the S-T relationship in this model focuses on forming and preserving the appropriate behavior of students and consequently students are playing a passive role in the class.

In order to demonstrate the desired relationship between student and teacher, it is needed to elaborate the framework in which this relationship is going to be defined.

Theory of Action

In this paper human is identified as an agent, thus he has been referred to his actions rather than his behaviors. Accordingly, action is a behavior based on cognition, conation and rule-following. In this theory the foundation of human actions have three aspects named as cognition, interest and will. These three aspects should be founded sequentially in human in order to lead to an action. To illustrate these aspects in an example the case of a person, who wants to stop smoking can be supposed. First, he needs to know about the damaging effects of smoking, while this knowledge alone is not enough for giving it up. He also needs to have this tendency towards this decision, but unless he has a dogged determination to stop this, he won't be able to quit.

Beside every effect that an action might have in the world, it can be indicated that it is followed by two other effects called as the first and the second reflexive effects. The first one is an effect of one action on its own foundation and the second one is the effect of action on the current position of its agent. Putting it into other words, some effects refer to the foundation of a specific action and reinforce them, while others

just refer to the current situation agent. It is also possible, when an agent ponder about his actions, the foundation of his action will be strengthen as well.

Student-Teacher Relationship in Framework of Action

Based on this framework of action, humans are considered as agents and therefore, the relationship between two humans is the kind of an agent-agent relationship called inter'action'. Asymmetrical interaction and symmetrical interaction are two different forms of interaction. Concentrating on the existing relationships in educational environment, these two forms of interactions can also be recognized. Symmetrical interaction is taking place among the student-student, teacher-teacher and teacher-parents interaction and asymmetrical one is the interaction between teacher and student (Bagheri, 2012).

As mentioned earlier, the desired model considers student and teacher two poles of education, interacting asymmetrically with each other, and this means the teacher is neither the sage on stage with the students being just receivers of knowledge, nor the guide on the side with students ruling the whole procedure in a classroom. There is a bilateral relationship going on between teacher and student, in which both parts are endowed with the privilege of being influential in the educational process. However, the action of teacher is not comparable with action of students, while the teacher has obtained more knowledge and experience and the foundation of his actions are more sophisticated. He carries the knowledge and values, which have been persistent and consistent. Because of this fact the interaction is addressed as an asymmetrical one. Yet, It is needed to note that the condition of teacher being more knowledgeable and experienced, should not let the students be passive learners in the classroom, and this interaction therefore, needs to maintain their independence as individuals who can act based on their own cognitions, interests and wills and, there is a possibility of change both for the student and teacher all the time during the educational process. Unpredictability from the other side is reserved in interaction, not only for teachers but also for students (Bagheri, 2010).

Accordingly, the school is not and should not be understood as a place for just learning, but also as a place for teaching. (Biesta 2012). To apply this interaction more in the learning-teaching process it can be said that a school is a place for 'learning from' in terms of interaction and a place for 'teaching to'.

Based on this framework of action both teacher and student are considered as agents, thus neither is superior to the other one and the focus would be on the interaction between them. The exploding interest in the Internet among teachers, students and other learning communities during the past few years has put this interaction through some challenges. These challenges will be argued in the following.

Challenges of Student-Teacher Interaction Considering Cyberspace

Since the early years of its emergence the Internet has sparked curiosity, debates, and dreams revolving around its likely role in our everyday life, and it is needed to recognize its effects in education, as Burbles(2001) indicates we are in midst of a transformative moment in education. And as Kellner (1999) asserts the information and communication technologies have enormous implications for the organization of

schools, for funding opportunities, for new forms of pedagogy, for new approaches to curriculum, and as the main issue of this paper, for new forms of agencies and therefore new forms of interaction between teacher and student.

As mentioned earlier, the interaction between teacher and student is based on considering them both being agents and acting according to a foundation with three aspects. From the other hand, all these new innovative technologies and especially the virtual space has caused some positive and negative effects on this interaction. The emphasis of this paper would be on the challenges for this interaction. The fact that students have a whole new source of information and place of communication even before they start school, puts the teacher's role into some challenges that it might be needed to set some new missions for the teacher to maintain the desired asymmetrical interaction.

In order to identify the challenges threatening this interaction, we need to return to the definition of action and its aspects and determine the influences of cyberspace on each aspect. What has changed in students and teachers cognitions, interests and wills when they are using the Internet? Does this have any influences on their agency?

Cognitive foundations of action is in relation with the information the learners may obtain in the world. As Siemens (2005) asserts, "educators today face challenges relating to: (a) defining what learning is, (b) defining the process of learning in a digital age, (c) aligning curriculum and teaching with learning and higher level development needs of society (the quest to *become better people*), and (d) reframing the discussion to lay the foundation for transformative education—one where technology is the enabler of new means of learning, thinking, and being". Today we experience knowledge in different formats and at a different pace. We are exposed to an overwhelming amount of information. It is here—where knowledge growth exceeds our ability to cope—that new theories of knowledge and learning are needed. And it is in this space that content inflation might be a hindrance to the interaction between teacher and student, (Bagheri, 2012) since the teacher is no more the only carrier of knowledge and value.

The instruments we use determine our way of thinking and shape them (ref). Those children growing up using these new technologies and computer have different forms of thinking. Their mind structures are not sequential anymore, but parallel. Today's competitors of books and school structures are digital technology and virtual space (Hirumi, 2009). In this situation technology does not have a marginal and supplementary role (Strong and Hutchin 2009). While blogs, wikis, podcasts, and social bookmarking are receiving much attention, the real point of interest lies not in the tools themselves, but in what the growth of the tools represents and what the tools enable. The prominence will continue to grow in as knowledge grows in complexity (Siemens, 2005). In this case, when a student's role is switched from a relatively dependent and passive one towards self-accessed, self-paced, and self-directed learning, the teacher's role undergoes, in tandem, an evolution from 'sage on the stage' to 'guide on the side' that is caused by the dominance of instrument (Bagheri, 2012). Consequently, for holding the interaction in its best way the teacher need to prevent the passivity of himself against all these instruments and keep the dominancy himself.

The Internet is asserting the idea of globalization and it is one of its best symbols as

well, therefore the knowledge and information obtained from the Internet are quite universal rather than local and lack the cultural plurality which exist in localized knowledge learning systems. Everyone from everywhere in the world has also access to the same entertaining and cultural feeds and this universal model neglects the local characteristics of interaction too.

From what Dreyfus believes, hyperlinks indeed have been levelled meaningful differences. Relevance and significance have disappeared, and this is an important part of the attraction of the Web. Nothing is too trivial to be included. Nothing is so important that it demands a special place. (Dreyfus, 2001)

What avoids levelling through the net is choosing between the interesting sites and the boring ones, and every interesting thing would be one click away. Life consists in fighting off boredom by being a spectator at everything interesting in the universe and in communicating with everyone else so inclined (ibid). The process could continue to the condition that everyone is interested in almost similar stuff, that sometimes it is impossible to figure out if this interest is one of the real interests originating from innate dispositions of the student, or it is becoming his interest just because of the sharing feature in the Internet, letting everyone knows about every interest. In other words, the Internet make the interests of people more impulsive than reflective.

On the other hand, when students today enter schools, they do so with a different mindset from even a few years ago. Video games, mobile phones, instant messaging, and online social networking have been constant for many teenagers. And it is much harder for the teacher to make them excited about the content using the same old methods.

Considering both these mentioned challenges and now focusing on the decision making step, there is this possibility that students would resign from making decisions and unconsciously devolve the process to the Internet. They are going to be lost among all the information and interesting things that Internet is choosing for them, if they were not aware of it. On the other hand,

Returning to the teacher's role in the class room in presence of these influences, and his interaction with students, now his previous role as a carrier of knowledge does not help anymore and he also loses this track, in which students' interests are shaping and consequently his human agency will be threatened, as the students has found new interactive ways of learning, that there's no big need for a teacher and they are harder to be engaged.

In order to keep the asymmetrical interaction stable, it is needed to accompany some shifts in every aspect of action relative to the changes these aspects are facing considering virtual space.

Shifts

In order to retain this interaction in cognition level, the teacher now needs more to authorize this flood of information that learner can gain using Internet. Years ago while the resources of knowledge was so limited the process of valuation and authorization was embedded in the teaching-learning process. The rapid evaluation in this connective world is something that teachers need to do instead of transmitting

knowledge and for the learners it is constructing the network of knowledge that plays an important role in their learning process. "Knowledge and cognition are distributed across networks of people and technology and learning is the process of connecting, growing, and navigating those networks"[5]. Learning is now the action of assimilation and comprehension of the whole system and their connection. Accordingly, teacher-student interaction would survive when the teacher teaches how to authorize and valuate knowledge and the student learns how to connect and construct his networked knowledge. They need to know they can and should as an agent choose among the data, those worth knowing about them and those they intend to learn. The Internet cannot give this insight to the students in any ways.

In order to avoid the passivity of students facing the flood of information, the task of making them produce something on the Internet can restore their agency and give them the chance to share something unique with the world. This way prevents the challenge of being consumers of information.

The face to face interaction has local requirements and it is concrete (Bagheri, 2012). It is crucial that the teacher emphasizes more on these local characteristics of knowledge and fill the part that internet cannot meet. The new term of flipping the class room emerges when the old mission of teacher would now be the students' homework, like listening to the lectures and reading texts and the class procedure would have more accent on the personal interaction of students with teacher.

Facing dispositional challenges now the teacher has to use more reflective models in order to keep the desired interaction safe. The teacher's mission with regard to the passivity of interests should be to make the students conscious about their interests and teach them to find the sources of these interests. In this level the teacher does not need to judge whether the interests are reasonable or not. He should also try to ignite genuine interest of students, which are correspondent with their characteristic and type.

And putting all shifts together and coming back to decision making moment as a whole, when the other aspects are reflected in this process, we figure out humans' decision making bases are in rapid change, while new information and dispositions are surrounding us, and thanks to Internet our actions have a broad domain of effects. Now the mission of teacher is to postpone the actions of students for more consideration and contemplation, while there is not much distance between the action and its effect when something is done in the Internet.
Additionally, in the classroom students should have this chance to make decisions and practice the process of decision making with a holistic perspective. Again, the role of the teacher is significant and restore both his and students agency.

[5] Siemens & Tittenberger, 2009, p. 11

Conclusion

Regarding Virtual space and its consequences on education, redefined student-teacher interactions in a framework of action. In cognition foundations of action, we should accompany some shifts: From knowledge transferring models to knowledge authorizing ones. From knowledge receiving models to knowledge constructing ones and from universal knowledge models to local knowledge ones. In emotional action foundations, we should perform these shifts: from non-reflective emotional models to more-reflective ones. From simple models of interests to complex heterogeneous models of interests. Finally, concentrating on action and decision-making, we should do these shifts: from atomic views to holistic approaches, from simple models to complex models and from impulsive models of action to reflective ones.

References

Bakardjieva, Maria(2009)'Subactivism: Lifeworld and Politics in the Age of the Internet',The Information
Society,25:2,91 — 104

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