Future Academy

ISSN: 2357-1330

http://dx.doi.org/10.15405/epsbs.2017.05.02.17

# **Edu World 2016** 7th International Conference

## AGAINST ANY PARADIGM IN EDUCATIONAL RESEARCH

Maria Butucea (a)\*

\* Corresponding author

(a) Teacher Training Department, Technical University of Civil Engineering, Bucharest, Romania, Tacul Tei B-dv, No.122-124, Marrbu23@gmail.com

#### Abstract

The history of science shows that mostly of the paradigms assumed as philosophical conception to guide research in education doesn't work for entire field of education. All paradigms assumed have some controversial outcomes for educational field. There are tricks of paradigms and we should avoid them by become aware of it. Also there are some signs that a new paradigm is coming. This is a philosophical issue regarding the needs of sciences of education for a new paradigm, in order to improve our researches and make our teaching work better. It could be also an invitation to make research free minded, accepting new cultures and philosophical background. Just adjust the meaning of some concepts regarding learning and human condition and it will be satisfactory. We try here to redefine some concept (sciences of education as integrative science, learning as total complex knowledge, mind as infinite creative process) forced by contemporary "object of inquiry".

© 2017 Published by Future Academy www.FutureAcademy.org.uk

Keywords: Paradigm, sciences of educations, research.

## 1. Introduction

Reviewing the history of educational sciences and focusing in research that had been doing over the time, we found three types of difficulties: terminological - the meaning of the concepts borrowed from other sciences, methodological - mimetic transfer of methods and also paradigmatic as philosophical assumptions.

Assuming the last kind of difficulty as a topic of this issue, we claim that it is time to give up and make research freely in education with any preconception or paradigm in our mind. Discussions in literature about paradigm are mostly methodological, less about objects of research. We figure out that there are in literature two groups of paradigms and they have consequences in the fields of education.



This approach might be an invitation for educationist to learn from history of science, successes and failures that had occurred over the times and think more about the field of education as "object of inquiry".

### 2. Some Discussions Regarding Paradigms in Educational Researches

Thomas Kuhn produces several meanings for concept of paradigm and different area of research adopted different point of view. (Kuhn, 1976) We will employ in this paper the definition of a paradigm in education proposed by Bogdan & Biklen as "a loose collection of logically related assumptions, concepts or prepositions that orient thinking and research" (Bogdan & Biklen 1998, p.22, as cited by Mackenzie & Knipe, 2006, para. 5) or how researcher's intentions, goals and philosophical assumptions are inextricably linked with the research they make.

A definition of paradigm includes three elements: a belief about the nature of knowledge, a methodology and criteria for validity (Naughton, Rolfe & Siraj-Blatchford, 2001, p.32, as cited by Mackenzie & Knipe, 2006, para 5) Also, it has been proposed the replacement of the concept of theory by the paradigm. (Heshusius, 1989) However, in the literature of sciences of education and social sciences as well, there are noticed as paradigms: positivist and post-positivist, constructivist, structuralist, interpretative, transformative, emancipatory, critical, pragmatist and de-constructivist. One reason we should be attached to a specific paradigm is that we must somehow follow a specific methodology. (Mackenzie & Knipe, 2006, Niglas 2001)

#### 3. Groups of Paradigms and their Consequences

In our opinion there are two groups of paradigms, classified by methodology used in research and without taking in consideration the practice and real life in education. The first group is strictly *logic* and another one is *contextual*, sometimes called "holistic". First group is the group of Clock paradigms following the matrix of Newtonian classical physic and quantitative methodology (positivist and postpositivist, constructivist, post-constructivist). The second is the group of Cloud paradigms (interpretative, transformative, de-constructivist, post-structuralist and pragmatic) creating mirage of the matrix of qualitative and mixed methodology. Temporally both groups of paradigms can co-exist in 19 and 20 century and after.

Let make an overview of the two groups firstly taking in consideration not only how and what kind of methods are they requesting, but in extended view, considering more elements like: *ideal of knowledge, object of scientific inquires, consequences and relevance of results for educational field.* The using of specific methods can have consequences on objects of inquiry, how it could be seen after conducted research or experiments, labelling and stereotyping people.

#### 3.1. The Matrix of Clock Paradigms and Its Consequence

The group of Clock Paradigms design and lead the researches by an old image about the world. Actually, all are rational, logic paradigms as product of modern science. It is known as Newtonian, "mechanistic" paradigm, after successful part of physic. (Husén1988, Heshusius, 1989, Niglas 2001,

Mackenzie & Knipe, 2006) The world can be understood rational and we perceive and conceive the actual world including society like a sophisticated mechanism- bureaucracy in sociology, or mind like a "black box" with its sophisticated mechanism into it in psychology. How about sciences of education? All methodological and philosophical problems encountered were summarized and criticised by authors like Torsten Husén and Mark Lindsay (Husén1988, Lindsay 2010) and many others cited in their works.

Our comment on this topic is that educational sciences researchers, in this period of time, are always taking in consideration surface culture, official curriculum, visible facts and declarative and explicit explanations and prediction for educational events, processes, acts. School is a fabric of people/ minds for global social mechanism. Many educational events, situation, even process of learning remain explainable and unpredictable. The group of science that study societies, included our filed, cannot assume he total objectivity, repeatability of the experiments, actually, the object of research is involving much subjectivity and less with mathematical expression as we already know.

The *ideal of knowledge / education* is to create a perfect machine that will well operate in the big clock of human society. Methodology is dominate by dogmatic methods (called universal methods), objective that measure things (e.g.IQ measure intelligence), testing the "mind box", how large could it be, how could be filled. Positivism requires creating the perfect human being. This is an *abstract ideal* of how the human beings are more or less conforming to pattern that researchers should look for. Ideal of knowledge is to separate subject and object, but soon we will find that is not suitable for some kind of research (values are embedded in researcher mind).

This paradigms make all of us machine of teaching and learning. According to this vision human beings were reduced to some kind of robots. Doing that sometimes we crash personal and uniqueness of the child/ person. Cultural background (religion, values, suppositions took by granted) sometimes is nothing, but superstition. Textbooks are responsible for that and are summarizing normal science or dominate culture. (Kuhn, 1976, Knipping, 2003). Even nowadays, if we a take en overviews on on-sites and books in the stores and libraries and article in journals researches' hypothesis and topics are regarding autism (as disease), about women in country that take model of western democracy, sometimes how neurosciences can prove what part of the brain is involved in such and such activity. All are describing the test and measurement, group control and experiments that show us that there are somehow abnormal people, homosexual, autistic, religious, people with special needs. People should come to school to become member of society, make them ortho - believers, ortho - nurtured, to have ortho - behavioral and so on.

#### 3.2. The Matrix of Cloud Paradigms and Its Implication

The second group of paradigms is composed by interpretative, transformative, pragmatic and all those which need some liberal assumptions for research. (Mackenzie & Knipe, 2006, Niglas 2001) The matrix of the Clock paradigm, even relaxed or liberal, is still crashing people/ researchers or subjects of research under a lot of requirements to conform.

In this context of discussions, the object of study is the social groups with values desire, intentions. Schools, lessons have purposes and means to achieve it. The methods are les objective, but much subjective. The ideal of knowledge is more liberal and human beings are conceived to be free to follow

personal ideals, but they should fit in a big matrix of society. The philosophical point of view, regarding the world educational processes, is that it can be estimated statistical and sometimes unpredictable as the cloud according to Karl R. Popper view regarding dynamic of science. In education we need to reveal by our studies sometimes invisible things. Pragmatic vision and mixture of methods seems to be more adequate. The pragmatic paradigm is more opened, mixt methods qualitative and quantitative as well. During the time, it becomes so sophisticate that if we try to summarize, we feel lost! Katrin Niglas create a dizzy schema, which show the very participative evaluation with subjectivity of researcher. (Niglas, 2001) For sure, it looks like clouds! Young researches could become confused and at the end they figure out more or less controversial results.

What could be the consequences for education? May be we gained and kept some points in anthropologic studies about curriculum, school culture or individualization of teaching. Even so, we make researches with the image about student as a datum and he must conform somehow to some social and cognitive standards. People become aware that they are not like machines; therefore they break the rules or cross the line. Many questions arose and remained. May be we need more to study and understand the uniqueness. Instead to be a step further, school is always a step back! Educationists do not know how to improve school and meanwhile students follow their own path, they are looking for the easier way of dealing with life problem and sometimes consequences are not so good. So, many articles are just describing reality as it is and doesn't offer any practical solution. It seems we are cached in the tricks of our paradigm and in its standards, as Kuhn said before.

## 4. The Tricks of the Paradigms

Clock paradigm always tricks us and puts us in a circular way giving the model and the tools and asks us to make a "chair" or a "box" and after that push events to set on or enter in it. The second group of paradigm as Cloud is walking around in a dizzy way for a while and after that at the end try to fit the inevitable matrix. Assuming that, we explain everything by accepting standards for conforming events on patterns and simplify the world.

Paradigms are not predictable, they simply exist as background.

All paradigms are some kind of horizon of expectation and a closed world any theory is just a model, program of research or methodology is a limitation for any new possible events. All purist rational paradigms settle what things must be observed, accepted and evaluate with some etalon. They work like a clock, even statistical like cloud remains rational and mechanistic. The mystery and the unknown seem to be avoiding, not possible at all. The conclusion is that definition, concept, prejudge, stereotypes use in methodology and paradigms create limitation and we cannot see the novelty because they are not in the preview list of expectation. The world is always changing and it is time to avoid the tricks of paradigms. Nowadays, we know that previous paradigms of knowledge ideal as a pattern imposed to reality are not proper anymore for complexity. To avoid paradigm mean not to avoid any philosophical ontological or ideas about what is good and what is wrong, true or false. It means to be open minded, just observe at first.

So, the educational sciences must be considered *dynamic, complex and integrative*. We can call educational sciences *integrative sciences* as *natural-social-cultural-special and very complex*.

*Cultural background* and methods we are using shouldn't be dominant. We become aware of this and had encounter difficulties doing some researches in China in 2008 – 2012. (Personal communication, March 2014) Any researches become irrelevant if you carry the European assumptions about subjects, methods and evaluation. Even Chinese, who pretend to make education in universal modern western way, we think they trick themselves.

We can put here some more considerations in order to make effective educational researches. First of all we must change our concepts and their qualities:

a) The object of inquiry (field of education) and subjects are more important then methodology and philosophical assumption. The methods and requirements are stereotyping people.

b) Learning is a total process not only logic, or environmental experiential, it is also as life expression. Direction of learning not only from out-site to in-site, but from in-site to out-side. As example could be experiment conducted by McGreevey that show that sessions of meditation for students can change their brain, experiment realised with any mystical prejudge. (McGreevey, 2011, para. 1)

c) Mind is a continuum infinite creative process. There are theories that demonstrated cultural-mind is soft-ware, like computer program, cultural embedded (Hofstede 1991, Hofstede, & Ger, 2001). There are also theories that emphasize that mind is quantic computation and have a holographic relation with environment (Pribram, 2011). Every new thought is a creation with a weak or strong influence in our life. Psychologists, neuroscientists, anthropologists showed that creativity can rise if the task is somehow interesting and difficult; even it means to take risks.

d) The educational group should be seen as a cognitive system (as cognitive units involved in learning process and educational activities in neuro-anthropological perspective). New perspective, that already take over place here and there, we can call the *Way paradigm* or Dao of research (facts can show the methods of inquiry; students, teachers can find the way). Some characteristics should be noticed and pointed out: The use of mixed knowledge, composed, complex and sometimes wired; the new role for teacher as one possible companion on the way of knowledge-ness; object of inquiry as ethical-oriented inquiry Researchers should interfere as less as possible on the way of knowledge with schools, students (*wuwei*, traditional Chinese concept), be free from prejudge, standardization, methods borrowed, transferred from one culture to another.

#### 5. Conclusions

Paradigm make researcher lazy, they observe just they had presumed, noting more. The researchers are seeing what is pre-programed by paradigm. Let the research create the method, or facilitate the rise of a new philosophy about new things just discovered, enrich the field with new facts.

Briefly, objects of research in Clock paradigms regarding student or teachers, they are enrolled like solders fighting and should be seen like an army. Researches are just mechanism using some mechanical tools (methods) to stereotype people. Cloud paradigms seem to be more democratic. The tasks, targets must be differentiated in the army. The student can travel like a cloud choosing schools, universities, countries, jobs, or become good for nothing.

In the new paradigm awareness is strongly recommended for any educationist in order to decipher any possible impact that could produce limitation in schools. To be free from any paradigms means that teachers and researcher should be innovative and very imaginative.

## References

doi: 10.14704/nq.2011.9.3.447 Retrieved from

http://www.neuroquantology.com/index.php/journal/article/view/447/415

- Heshusius, L. (1989 / 2016 August-18<sup>th</sup>). The Newtonian mechanistic paradigm, special education, and contours of alternatives. *Journal of Learning Disabilities Vol.22*, Issue 7, pp. 403 - 415. Retrieved from http://journals.sagepub.com/doi/abs/10.1177/002221948902200702
- Hofstede, G. & Ger, J. (1991 / 2001). Cultures and organizations. Soft-ware of the mind, (revised and expanded 2<sup>nd</sup> Edition). McGraw-Hill. USA.
- Husén,T. (1988). Research paradigms in education. *Interchange, Volume 19*, Issue 1, p.p. 2-13. doi:10.1007/BF01815504 Retrieved from http://link.springer.com/article/10.1007%2FBF01815504
- Knipping, C. (2003). Learning from comparing A review and reflection on qualitative oriented comparisons of teaching and learning mathematics in different countries. *Analyses ZDM. Vol. 35* (6). Hamburg, *Zentralblatt für Didaktik der Mathematik* (2003) 35: 282. doi:10.1007/BF02656692
- Kuhn, Th. (1976). Structura revoluțiilor științifice. Editura Științifică și Enciclopedică. București. Romania.
- Lindsay, M. (2010). The Philosophical underpinnings of educational research. *Polyglossia, Vol.19*, October 2010, pp. 5-11. Retrieved from http://www.apu.ac.jp/rcaps/uploads/fckeditor/publications/polyglossia/Polyglossia\_V19\_Lindsay. pdf
- Mackenzie, N. & Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Issues In Educational Research*, 16 (2), 193-205. Retrieved from http://www.iier.org.au/iier16/mackenzie.html
- McGreevey,S. (2011). Eight weeks to a better brain Meditation study shows changes associated with awareness, stress in *Harvard Gazette*, January 21st, 2011. Retrieved from http://news.harvard.edu/gazette/story/2011/01/eight-weeks-to-a-better-brain/
- Niglas, K. (2001). Paradigms and methodology in educational research. *Education-line database. Sept* 25<sup>th</sup> 2001.
- Pribram, K. H. (2011) Recollections in NeuroQuantology, Vol. 19, Issue3, Pp. 370 374.

Retrieved from http://www.leeds.ac.uk/educol/documents/00001840.htm