Edu World 2016  
7th International Conference

HISTORICAL RESEARCH - PROMOTING CRITICAL THINKING TO FUTURE TEACHERS

Diana Csorba (a)*
*Corresponding author

(a) University of Bucharest, Bucharest, Romania, diana.csorba@gmail.com

Abstract

Without any doubt, the role of the study programs promoted at academic level consists in promoting and developing the critical thinking among students. Recent studies designed worldwide prove the fact that the issue remains mainly a goal and a challenge for formal education than an undoubtful reality. This educational goal can materialize in exercising and valuing critical thinking among students, at the level of each subject of study, mentioned in the curricula. There are numerous motifs to follow with even more rigour the intellectual formation of our students, in order for them to become not only highly qualified in an area, but also potentially capable to develop and innovate/reform within the respective field. The proposed study argues on the necessity of rethinking the formation programs of the teachers from the perspective of valuing the methodology of critical thinking. It involves the formation of new professional, dynamic and critical skills, by means of objective reference to the history of pedagogy, approached in a synchronic and diachronic way. The new skill profile will be demonstrated in the area of critical interpretation of the problems which the contemporary school is confronted especially in adopting the strategies of educational, convenient and flexible strategies.

Keywords: The History of pedagogy; strategies of developing critical thinking.

1. Introduction: Hypotetical-Reflexive Context

The developing of critical thinking among students represents an essential condition in order to understand and value the history of pedagogy as a resource of active formation of future teachers. From the point of view of general epistemology the issue of scientific knowledge has to be formulated in terms of obstacles which have to be surpassed by means specific to each science. From the psychological perspective, the foundation of a science requires mainly removing the “idols” of spirit which maintain at
each step the dominant prejudices (Bacon). From the point of view of the logic, at the level of the logic of science, it is essential the fundamental research activity which carries the purpose of surpassing the “epistemological obstacles” (Bachelard) situated in the area of the interference between empirical and rational knowledge. Pedagogical theories have a general character, they don’t yet have the necessary epistemological stability because of the lack of capacity of the researchers to totally liberate themselves from the influence of the idols or of the pedagogic opinion defended only at a personal level. It is the area in which the historical research can (also) contribute by means of valuing patterns of critical thinking suitable for this field of knowledge. Pedagogy is pushed to integrate history, time, place of happening in a general process which involves problems which tries to solve by means of appealing to the cultural values of the humanity which correspond to and in whose duration lays their meaning and existence. History therefore becomes an integration factor of a system of human and social visions whereas the connection between the temporal dimensions with pedagogy is not a sign of weakness, but on the contrary.

For instance, pedagogy has historically developed according to the vision and initiative of brilliant personalities such as Comenius or Dewey. The interest of the historian of education can equally head both to the problem and individual aspects. Within this context it appears a dilemma which requires clarifications. Who has to be prior in the history research: the history of pedagogical thinking or the history of the practice of education, at the level of school institutions?; the history of pedagogy within each historical époque or the history of the problems which the world of education confronted or still confronts to?; the history of the pedagogical issues already launched or of those solved already at a social scale, within different time intervals? The solution to surpass the limits of historical research lies in solving the equation: representation – disinterest – maximum of objectivity. “History”, as reflection of the past, is pluralist in interpretation, as reported to the basic frame of pedagogy, to the fundamental concepts in the field. A historian of ideas is needed who studies the systems of thinking in their own dimension. From this perspective “history – in general, and together with it the history of education – is the sequential result, incredible complex, of the large scale interaction of non-sequential systems of thinking. The historic research values, therefore, not only qualitative variables, but also quantitative ones needed for the analysis and interpretation of activities and phenomena specific to the reference field. Confronted with the ensemble of these challenges another list of fundamental questions appears: Which are the most important competences which the students have to acquire in order for them to correctly appreciate educational phenomena from diachronic and synchronic perspective. What should they know? How should they think from historical perspective about the evolution of ideas and practices concerning education?

A relatively new area of research, which developed mainly during the second half of the XXth century, is represented by “critical thinking”. The benefits brought by exercising and developing logical abilities (abilities of critical thinking) are localized in at least three areas: persuasion knowledge and cooperation. Logical abilities of accepting a faith on the bases of strong arguments or restrictive evidence can protect human beings by the side effects of persuasion. Practicing local abilities can also conduct to the extension of knowledge through rationalizing, by means of inferring new information (conclusions) out of previous knowledge (premises) and not in the way of a dependence of vague generalizations, slogans, and customs or thinking stereotypes. Seen as opposites to irrationalism, propaganda and
manipulations, critical thinking and reflexive analysis are considered efficient instruments to explore rationale knowledge which have to be adequately valued within learning activity among students. Most of the times, the teachers believe that these ways of viewing knowledge are already systematically formed and consolidated during the previous study years. And most of the times they are wrong!

2. REFLECTIONS ABOUT CASE STUDY: The History of Pedagogy Seen as Context of Practicing Critical Thinking among Students

The concerns to include in the academic study programs models of argumentations needed for comprehension within any knowledge area have to focus on the idea that “critical thinking means argumentative thinking, as opposed to «opportunistico» or «superficial» thought, without connecting the facts and being dominated by desire by means of substituting the real correlations with false or desired ones, “mythical” ones, involving the transformation of data in myths. (Marga, 2010, p.67).

Derived out of logic and rhetoric, alternatively called: the theory of augmenting, new rhetoric, non-formal logic or critical thinking (Bieltz, 2012, p.13), the studies regarding the logic of argumentation in its own critical spirit became and have gained the recognition of a distinctive area, during the second half of the XXth century. Since the first study which proposes and establishes the expression of “critical thinking” (An Experiment in the Development of Critical Thinking – Edward Glasser - 1941), a considerable period of time has passed. Although out of various motifs other denominations have been proposed, such as “critical reasoning” or “critical argumentation”, the denomination which has been established is the one of “critical thinking”, although there have been expressed from the field of the history of philosophy some objections that we won’t discuss within this context of debate. Nevertheless, we keep in mind the fact that the majority of the opinions under no doubt express the idea according to which “critical thinking” isn’t adequate neither to algorithmic approach nor to those which operate, preeminently, with formal logic (Bieltz, 2012, p. 10). From this point of view, some authors designate critical thinking as “informal logic”, having as final pedagogical goal the building and practicing rationalizing abilities (Stoianovici, 2005, p. 16).

The works on critical thinking revise fundamental topics of logic such as: logic analysis of language, deductive argumentation, inductive argumentation, argumentation techniques, persuasion techniques, principles of correct argumentation, definition and classification, the analysis of errors in argumentation etc. The paradigms of the modern education sifted gradually the original attitudes and principles, redefining continuously the fundamental elements orienting their becoming and building their identity. Likely to the open modern arts creations, where the idea „expressing the through”, the sense and the defining vision are not predetermined in the unrepeatable conception act, multiplying during the time their valences and being recreated by the regards and the thoughts of the contemplating people, the educational paradigms orienting the present schools find their fundaments and relevance in the history of the pedagogical doctrines. In this large frame, every education paradigm transforms all persons willing to understand the sense, in new creators, capable to identify fresh messages and hypothesis for the contemporaneous educational universe. The history of pedagogy is a necessary introduction to pedagogy itself. The possible researches are intending to analyse the apparition and the maturation in their historical evolution of the modern educational paradigms and are using in the investigations the historical method,
a method imposing to collect the data in order to clarify the debated issues through a vertical regard, in their temporal evolution. It should be studied, not for the purposes of erudition or for mere curiosity, but with a practical purpose for the sake of finding in it the permanent truths which are the essentials of a definite theory of education. An algorithm in the historical research approach in pedagogy becomes the context to development the critical thinking. Charles Bush and Stephen Harter (1980) detail six steps for conducting a historical research, where is very important to promote development of Critical Thinking to Future Teachers:

1) recognizing the historical issue or identifying a need for an historical knowledge;
2) collecting relevant information about the studied issue or topic and where appropriate, formulating hypotheses to explain the relationship between historical factors;
3) rigorously collecting and organizing samples and checking the information authenticity and veracity and its sources;
4) selecting, organizing, and analyzing the most relevant collected samples and drawing initial conclusions;
5) recording the final conclusions in a final narrative report.

We will present the historical stages of the research as they were applied at the “History of Pedagogy”, course at the Bucharest University, the Department for Teachers’ Training. We emphasize the relationship between this possible research algorithm, and strategies to promote “critical thinking” to students.

A topic in the educational science can be selected according to several criteria in accord whit strategies to development the “critical thinking”. First, it must meet a pragmatic or purely cognitive need. At this point, what matters is the already accumulated historical culture which being questioned can respond to our dilemmas. Ideal is to start reading the recent works to find the current state of knowledge, clarified areas and open problems. Finding the "unresolved" problems, however, is only the first step. After that, it is necessary to verify if the problem is or not significant from the point of view of the general historical knowledge and if it has not already been questioned and possibly solved by any other researcher. This verification is usually done by consulting the reference summaries regarding the interested period or region. When we decide on an investigation topic, we should carefully reflect if it is or not appropriate for our objectives and also on the available means. Beyond the restrictions imposed by the harmonization of the topic with our resources (time, level of training, available resources), it is important to decide from the beginning on the issue we are examining and to operate a temporal and spatial delimitation of the coverage area.

Rigorously collecting and organizing samples and checking the information authenticity and veracity and its sources is the next and important step. Students drawing up a research plan, as a provisional summary of the paper. This provisional summary is rather a working hypothesis, which allows to ordain our effort and to establish some priorities in the research. Apart the introduction - where one should present the general significance of the research topic, and eventually the evolution of the concepts historically affirmed concerning the respective issue - and the final conclusions, it is preferable that provisional summary would reflect our choice to consider certain aspects as being essential (central) in our research and also the option of expanding the research to aspects viewed as rather secondary.
Based on these options, certain aspects would benefit of entire chapters (parts), while others would be presented only as subchapters or annexes.

In carrying out the documentation itself, we should combine the logic requirements of our research plan with some limitations regarding the time budget and the availability of different types of sources. Selecting, organizing, and analyzing the most relevant collected samples and drawing initial conclusions. In conducting a historical research, documentation blends naturally with material analysis. In fact, when we go through a source or a history work belonging to the secondary literature, we already proceed to the first stage of analysis, the critical reflection and selection of the accessed materials. Issues we are interested in when we critically analyze a new historical stream (manuscript or digital document) can be summarized with the help of the following catalogue of questions: Who? What? When? Where? How? Why? Or, to use an already classic classification, criticism on sources refers to two main aspects: establishing the authenticity of the source (external criticism) and evaluating the reliability of the provided information provided (internal criticism). Explaining historical facts occupies thus an important place in the historical knowledge. In a synthesis made by Drăgan Stoianovici, published in 2005 at the University of Bucharest, there are presented the main abilities the subject called “Critical thinking” can build up. They can be judged and analyzed from the perspective of building strategies of implementing the curricula of the subject “the history of pedagogy” from the first year of formation of future teachers for primary and pre-school education. We enumerate below, also by adapting them for the specific of the subject called the “history of pedagogy”, these abilities which require forming among students: Recognition of the issues that can be rigorously demonstrated, assigned to the area of opinion; Separating the argumentative texts from those descriptive, normative, native; The correct identification of the theses into an argumentative text; Identification and evaluation of the logical connections between the sentences of an argumentative text; Availability to construct a self-correcting thinking; Ability to separate the rational argumentation from the emotional-persuasive one; Availability towards dialogue; Resistance towards manipulation; Attitude towards language; Attention towards the historical multiple context, politically, philosophically, culturally, economically etc. configured.

In pedagogy, the specific strategies of critical thinking could examine categories of pedagogical facts in order to underline any type of inconsistency and in order to derive aspects which can transform, at a normative level, into norms, laws, axioms, values. For this purpose, the critique of any pedagogical text would not reject without any motif, but on the contrary it would keep, after an objective evaluation, everything that looks to be authentic knowledge. Therefore, the students have to be trained in order to initiate learning experiences so that they could build up and practice: The capacity of make observations; Epistemic curiosity, manifested in the capacity to formulate relevant questions; The capacity to examine faiths, assumptions and opinions against facts; The ability to recognize and define the real problems of our times education and of any time education and also the geographic, social and cultural context; The ability to access the validity of the sentences and of arguments proposed by different schools and movements of pedagogic thinking; The ability to take wise decisions and to build up and go through the process of historical research in an objective/ scientific manner; The ability to identify and argument solutions for the problems derived from the historical study of education; The ability to understand the logic and the logic argumentation of a pedagogical discourse or of praxeology theories and models.
The historical research represents a systematic process of looking up for pedagogical facts and ideas significant in the past and also their interpretation in order to offer a perspective over the present and future. It involves two complementary methods: the primary method through which significant initial data are collected; the secondary method, based on interpretation. Both are integrated by sociologists under the generic term ”secondary analysis” of some primary sources (newspapers, magazines, census data, statistics, documents, pictures, recordings, polls etc.) which are interpreted by main stream studies. They involve proceedings of validating sources through sources of internal and external critique. The limits of the historical method have to do with the problem of research objectivity. There are various risks that one has to be aware of: a) the ethnocentrism which imposes the observer’s cultural perspective and his values; b) the illusion of discovering some general laws, together with the refusal to accept the temporary character of the conclusions; c) the lack of the theoretical and methodological resources needed for the historical affirmation of an normativity in the field of education and pedagogy; d) the interference between approaches of a particular type (national, area type) and of a global type (international) and also synchronic and diachronic ones; e) the susceptibility connected to the bias character of some interpretations, high time consumption, the cost of quantitative and quality analyses by means of classic methods (statistical, standardized) or modern ones (computer based), inherent subjectivity, the lack of control of external variables and internal requirements.

3. New Perspectives for Historical Research Education

Why should we appreciate as being necessary a special training of students in the cultivation of specific critical thinking skills in order for them to objectively and scientifically explore pedagogical theories and practices in different historical periods? Why do we fight for valuing critical thinking in the historical research of educational phenomenon?

Looking back into history, an answer can be found in one of the Aristotle's works, Nicomachean Ethics, which distinguishes the proof based reasoning from the dialectical one. Centuries ago, Aristotle showed us not to require the same precision in all things, but in each, according to the subject's nature and the character of the research. Thus the carpenter and the geometer examine the right angle differently: the first, as the measure of its usefulness to some other thing, whereas the other seeking to know its nature or quality, because the geometer investigates the truth (Aristotle, 1098a.). The study of the history of pedagogy can be taken from multiple perspectives; we take into account the reference to the historical truth as a specific philosophical category, and then some strategies of critical thinking must be exploited conclusively, or we consider education problems concerning present time and seek their make-up and solving key through a certain opened and interpretative logic which does not separate us from the present time. In this sense, critical thinking has a direct practical character and it is in the service of solving some problems. For this, we think that there is the need from some applications in the form of tests, questions, exercises that are useful for testing, practicing and assessing the students' reasoning abilities. We reflect upon them, and we put a lot of thinking into developing questions for the themes specific to the history of pedagogy study, in order to verify the ability to understand a history of pedagogy text, the ability to evaluate an argument, or to extract conclusions within a text about education, with theoretical and / or
practical features. Applications can pursue three specific sections: Analytical Thinking, Logical Reasoning and Reading Comprehension.

A careful reading of the history of pedagogy, by valuing specific strategies of critical thinking, will allow: The identification of premises or assumptions of an argument; The identification of the conclusion of an argument (deductive or inductive); The identification of an argument structure - the role of each sentence in the construction of the argument; Identifying the general principles and rules involved in reasoning; The recognition of a reasoning pattern that is common to a particular type of argument, and its capitalization in similar new conditions; The ability to recognize a pattern of reasoning as being wrong or submitted to subjective bias; The ability to recognize which proof / evidence strengthens or weakens further the force of an argument.

In the Reading Comprehension section, we consider testing the students' abilities to understand a pedagogical text by: Identifying the main point of view, the central idea, the main and the secondary descriptive-explanatory ideas; Understanding the meaning of an idea within the context in which it was proposed for reflection; Understanding of certain implications of the text for the historical period in which the text was written, as well as for the present period; Identifying / recognizing of traits or patterns, analogous models of pedagogical reasoning; Capturing the author / work (subjective, partisan, objective, etc.) attitude and the additional information.

In pedagogy, the truth experience contextualizes itself and it depends on the productive and idealistic feature of the systemic comprehension of specific realities. The concern to substantiate pedagogy – in an epistemological way - as a social science, is considering, systematically, the references to an axiological and methodological framework of historical type. Hermeneutics of any pedagogical text makes reference to a specific period, well defined in time. This approach does not account for eminently historic reasons, but in particular and most often (more or less declared), for pedagogical concerns. The impossibility of a system of absolute truths in education brings pedagogy in a dependent relation with history. Indeed, it could reduce pedagogy to its history. Not necessarily in the restrictive and harmful sense, that to reduce such a complex branch to an amount of associations between ideas and educational practices of some times, but especially in view of accepting the dynamic character of the field, as a space of becoming and continuous transformation.

Historical research therefore appears as the process of formulating questions and finding the answers that triggers the critical thinking skills of the students, in an active way! The assumptions can be formulated as answer attempts, before giving its reason, and as a response to the asked questions, after its construction. In the process of formulating specific questions for the historical research, as well as during the reflective process, we operate with three types of questions which present themselves as fundamental: factographic questions such as : What happened?

The answers are considering reality description, their complete presentation, in most situations from narrative perspective; explanatory questions: Why did it happen like that? How did it happen that it came to that? What relevance has a current problem in the recurrent problematical context of past/ but future-like educational theories and practices? Theoretical questions: what scientific laws can be established by studying past educational experiences at the level of general theory and practice? Narrative type answers can be formulated in many ways, theoretically infinite, but if we consider the answers with
prescriptive-law-like character, we expect possible precise formulations, which call for rigor and objectivity in the reflective process of drawing conclusions for our studies.

4. Conclusions

Recourse to the past allows a better understanding of the concepts, their emergence and their dynamics, their reflection not only in the educational practices, but also of the current scientific methods. History allows practicing skills to achieve interpretations and correlations between categories of facts, ideas, realities, allowing the clarification of the relations between individual thinking and the development of scientific ideas temporally configured. History helps to explain and understand the nature of research/ knowledge activity, allowing the distinction between some epochs' ideologies, between initiated scientific theories and promoted school practices. Routine, action models proposed for imitation are critically examined in the light of clear landmarks within their theoretical foundation and in that which has in view the educational practice with advantages and limitations, vulnerabilities, special conditions. Interpretation of current practices will be achieved by reference to a coherent theoretical ensemble of models and pedagogical applications, validated or invalidated by time, or temporarily ignored for objective or subjective reasoning (Csorba, 2011, pp. 20-22).

On the basis of the same sources - representations of educational facts, pedagogical theories which are accepted and proven (in an argumentative way) in educational practice, one can achieve restorations more or less similar with the past, as well as reflective projections of some future formative actions. In the area of historical research and that of the pedagogic reflection in action, the valuing of critical thinking strategies still represents a new ground that needs to be carefully explored, for which real benefits are just assumed. Within this context, a significant number of issues still remain open for reflection and enquiry.

Thus, we anticipate the fact that the revival of historical research and the openness towards critical and reflective thinking of contemporary school practitioners will allow, over time, the developing of a "constructivist" vision on pedagogy in its theoretical field and its defining practices.

References