METHODOLOGICAL SPECIFICS OF COMPARATIVE RESEARCH IN EDUCATION

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Abstract. Research interest in comparing education took place in parallel with the study of society and social achievements. Contemporary context, in which there is interdependence and reciprocity, demands re-focusing on the role of comparative research in analyzing the structure, resources development, social function of education in relation to the position in the structure of the world. In this paper, by analyzing the methodological characteristics, with special overview to the methods, seeks to highlight the problems of comparative researches and ways to overcome them. From the theoretical point of view, changes will be considered as well as analyzing the arguments about the need to mixed-methods approach in comparing educational phenomena. At the same time, it seeks to identify tendencies which reflect both directions and contradictions in the development of comparative research, as well as the factors of this development.

Key words: comparative researches, school systems, education, quantitative methodological approach, qualitative methodological approach.

1. INTRODUCTION

Thanks to the impact of the technological revolution, problems of the methodology of comparative research in education have become the subject of growing research interest. The process of comparison provides the ability to fathom into the dynamics of educational processes and impact in each country. Adequate considering, analysis and understanding of the specifics of education of any country is almost impossible without comparison. For this reason, the comparison is a very important and necessary instrument of cognition. Given that the nature of comparative studies of educational phenomena is even more complex, research endeavors in this field open numerous questions, dilemmas and problems. One of them refers to the terminological inconsistency. For example, in the study of foreign systems of education researchers often face with difficulties due to the multiple meanings
and the inadequacy of existing concepts in comparativeness of education. The very name of comparative education (comparative study of education, comparative education) is often used in the Anglo-Saxon-speaking world, while, for example, in Russia the term represented is pedagogie comparative (parallel or comparative pedagogy). Bražnjik (2006) states that the reason for the frequent use of the term comparative education is in changing attitudes towards education during the 20th century, fueled by social, cultural and economic processes. The process of education is extended, lifelong, formal and informal, and as such provides an opportunity for new research. Education is also a field of study of scientists from different disciplines, which enables comparison of various aspects, the barriers of different contexts, different preferences and perspectives of researchers. Speaking about the significance of the relations between the concepts of comparative education and comparative study of education and international education (international education) researchers have clearly highlighted the view that the concept of distinguished academic, analytical and scientific character, while the second relates to a process of cooperation, understanding and exchange (Rust et al., 1999; Rust, et al., 2009; Spasenović, 2013).

The development of comparative study of education has increasingly extended, and therefore, as such it has gained a broader meaning and significance. More specifically, the comparative study of education was gaining on its systematicity, complexity and scientific merits (Green, 2003). The close relationship of comparative educational research with other humanities and social sciences and their theoretical and methodological approaches, the result of the complexity of the educational phenomenon, was often the main argument for disputing their scientific identity. However, many pedagogical issues and problems that are the subject of comparative research study set requirements for combining different methodological strategies, methods and research techniques, selection stages and the units of analysis. Therefore, it is undeniable that many of the social sciences are an important prerequisite for the development of comparative study of education. Interdisciplinary character is not a weakness of comparative research in the field of education but guarantees the validity of results, a deeper insight into the essence of educational events and more solid and convincing proposals for the improvement of practice.

1.1. Different methodological approaches to comparative research of educational phenomena

The application of information about school systems and other educational phenomena, which were created on large teaching trips, the adequate interpretation and practical application solutions required proper theoretical and methodological foundation. Since the beginning of the first research that can be subsumed under the Comparative Educational Research, a problem of adequate access appeared. Former approaches, historically and philosophically conceived, developed a structural set of interactive variables, meta-structure. Application of meta-research school system was aimed at identifying the conditions that determine individual education systems, and national differences in the variables explaining the differences in education systems and their outcomes. The methodology of research was constructed by implicit ethnocentric historical approach to the school systems in Western European countries, standardized and unified in order to be implemented among countries (Vrcelj, 2005).

After a period of historical and comparative approach, there was a tendency for objectification of data. Already in the mid 20th century in the comparative studies of education a greater diversity to approaches and greater methodological orientations emerged. The reason
for this can be found in unreliable travelogues arising from their subjectivity and lack of comprehensiveness of the data collected from which it was not possible to carry out any valid conclusions. Comparatists sought the solution in positivism and methodological and empirical strategy. From such methodological orientations, the “value” or objective comparative pedagogy was reflected upon, the establishment of generalized assertions about education that is generally accepted for the analysis of more than one country, respectively, for the creation of international evidence which will be similar to the laws about teaching and learning, and other educational phenomenon. Positivism in comparative pedagogy meant that "only the empirical claims of education are scientific and that only scientific claims are of significance for comparative pedagogy" (Vrcelj, 2005: 53). These approaches are characterized as quantitative due to the fact that positivist strategy involves abstraction of reality through mathematical models and quantitative analysis (Burbules & Torres, 2000; Vrcelj, 2005; Kulić, 2011; Marginson & Mollis, 2001; Lauder, et al, 2006; Picciano, 2004; Spasenović, 2013).

Quantitative approaches have contributed to the understanding of certain educational processes and their dynamics, and allowed their measurement. It was time to arrive at reliable and predictable generalization, based on analyzed scientific principles of legality, on the relationship between education and social factors or to typologies that allow international understanding, and that means to design theory arising from research findings or based on them. In addition, Bray & associates (2007) as well as Marginson and Mollis (2001) emphasize the role of researchers, which consists of objectivity and value neutrality. Quantitative data of international level were used to test the hypotheses and formulating laws for predicting the educational changes. The main objective was by using "exact" scientific methods to establish connections and to discover causal relationships among phenomena. If these relationships hold for a larger number of countries, they would gain characteristics of generally applicable rules and laws. Once set up, the general law would be applied in different countries, regardless of their cultural and social traditions.

Macro-research positivist orientation in comparative pedagogy gained its critics. It has been said that it does not reach the daily school life which is essential to the education process. In addition, some authors have considered that we should not deal with school systems in all their dimensions, but with the study of specific pedagogical problems. This is supported by a micro orientation, which would mean in methodological terms commitment to qualitative research approaches (Spasenović, 2013).

Since the late '80s began the intense discussion about the need for the implementation of micro-research, which lasts to this day. Comparatists think that it is necessary for the comparative pedagogy to replace macro-research orientation and focus its research efforts on the organization of education to exploring classroom curriculum, student experience, teaching styles, evaluation and relationships between carriers of different cultures working together in a particular school. In that way qualitative methodology that is basically connected with the interpretative epistemology (symbolic interactionism, phenomenological sociology, ethnomethodology, ethnography, etc.) emphasizes the understanding of social reality.

Qualitative approach to comparative research to education has taken as an analysis unit the school, the class, a particular group of students, the individual as a carrier of a specific phenomenon or manifest features of the school day. This approach is based on "observation and analysis of the interaction and causal processes among the participants at the micro level" (Kulić, 2010a), where special attention is given to understanding the phenomenon being studied from the perspective of the participants, not researchers. The role of researchers is reflected in the identification and sympathy with the respondent (Bray et al., 2007). Qualitative research is a "holistic understanding of the studied phenomenon, characterized
by a nonviolent, natural observation, dynamic reality where researchers’ dosed subjectivity is allowed” (Vrcelj, 2005: 80). In qualitative comparative research of education hypotheses are usually not set but the data collected is later, through the inductive process, synthesized and generalized. For information resulting from the application of qualitative methodology, it is characteristic that they are not always expressed in figures and do not have to be distributed in frequencies and graphically; data can be expressed in words, images, concepts, gestures or tones that reflect events or reality (Mason, 1996). In line with such development is the qualification of qualitative research of social reality, and in the comparative education, considered as "subjective", while quantitative research is declared as "objective" (Marginson & Mollis, 2001).

Quantitative and qualitative approach to comparative research of education were observed from the point of “irreconcilable differences” between two separate paradigms based on different epistemological and methodological concepts (Bray et al., 2007). Today the exclusive division between quantitative and qualitative approach to the study of education is largely outdated and accepts the view that the research of pedagogical phenomena welcomed their joint action (Spasenović, 2013). Accordingly, Halls (1990) notes that quantitative research strategy can't be imagined without qualitative analysis, which will give the collected data a wider meaning and significance (Kulić, 2010b). The need to respect the situation that shaped the education of a society, social groups, certain regions of one or more countries is emphasized, but also the pursuit of common elements among the areas being compared.

1.2. Certain methodological characteristic of comparative research on education

The importance of comparative research has been recognized by many sciences and disciplines, primarily because of the existence of a multitude of phenomena which are subject to comparison. Scientific comparison is unlike to daily comparisons of the world that surrounds us, more complex because it involves defining criteria taking into account the historical and current context of the phenomenon being analyzed. This is especially important for the comparison of social phenomena, which are dependent on the context in which they occur.

Contemporary comparative research is characterized by a cultural approach that seeks to understand the traditions of education in terms of different cultures. It also allows the application of another, mutually complementary approaches such as systemic, fruitful and axiological, which allows analysis of the aspiration is organization-specific education at different levels: the value, and a content of technology. In addition to cultural coloration during comparison of complex phenomena such as educational, there is a problem of research coloration (Bražnjik, 2006; Vrcelj, 2005). This means that sometimes the researcher wishes, for personal or other reasons, to emphasize diversity (diversity), and sometimes strives for universality in order to ignore the differences that reflect the specifics and peculiarities of a certain culture (Vrcelj, 2005; Crossley & Watson, 2003). The theoretical and methodological foundation of comparative research depends on the meaning of the context in which the comparison occurs. For example, globalization context most often emphasizes the universality, and national and local context emphasize the diversity, uniqueness in comparison to others.

In accordance with contextual interdependence, adequate scientific and methodological foundation of comparative research of individual researchers as Vuljić and Maljkova is seen to rely on clearly defined principles, which include: the principle of dialectical
approach when considering the rich experience of foreign countries; the principle of the constitution of an integrated knowledge of actual problems of modern didactics based on a comprehensive conception of the educational process; the principle of adequacy of selecting methods and technology education in relation to the objective logic of the development of didactics and its knowledge of the scientific method; the principle of alignment of practical realization of the principle of generalized knowledge and objectivity (Вульфсон и Малькова, 1996 according to: Брашник, 2006).

In respect to the foregoing it can be concluded that different educational contexts require a contextual adapted theory and methodology of research that will take into account the social, political and cultural characteristics. For these and other special features, the direction of the development of scientific research in the field of education should seek to establish patterns of explanation and application in educational practice, ie, the creation of the best possible theory and practice for all contexts.

1.2.1. Methods of comparative research on education

The modern age is characterized by outdated viewpoint about one method in comparative pedagogy, ie, that it does not rely only on the comparison method. Today, there is a prevailing attitude of complementarity in the use of various research procedures and methods. For this reason, there is a need for combined approaches and methods to the understanding of research problems resulting in success and quality of the comparative studies and more valid conclusions. However, despite the diversity of methods and techniques applied in comparative research, comparison of data on two or more phenomena or processes is an essential part of comparative studies. More specifically, although it is possible to apply various research procedures in the data collection process, in the comparative studies, the next step would be a comparison of the data related to two or more entities (the ground) in order to isolate the observed differences and similarities, the interpretation of the results obtained and the presentation of certain implications and conclusions (Vrcelj, 2005; Kulić, 2011; Сavičević, 1984; Spasenović, 2013).

More contemporary authors (Bray, 2003; Padilla, 2004; Phillips, 2006) suggest toward developmental dynamics of method, its dependence on the subject matter and the nature of comparative research in the field of education. Taking into consideration the complexity of the phenomenon of educational research the selection of appropriate research methods in this area is of great importance. This process is often assumed to use general and special (comparative-educational) methods, as well as theoretical and empirical methods and techniques.

The system of methods, which as a classification model in theoretical and empirical comparative research is highlighted by Kulić (2011) include: historical method, descriptive method, method of theoretical analysis, method of educational statistics. The following techniques of comparative educational research are also included: content analysis, survey, interviewing, and others.

From the point of view that different theories can check different types of research methods, it is implied that the nature of the theory depends on which methods can be verified (Kulić, 2011). Accordingly, a method is seen as an integral part of the theoretical basis of specific scientific disciplines. The advantages of a combination of qualitative and quantitative methods can be seen in the fact that different sides of the aspects of the case studies are highlighted, the complexity of social events can be presented and analyzed and so can be differentiated in order to acquire knowledge. Also, the advantage is in the fact that the disadvantages of the individual methods can recognized and equalized in the combination
with others (Gojkov, 2006). It is in diversity and branching of methods and strategies of research ways to modernize and develop research in the field of education can be sought.

1.2.2. Units of analysis in comparative research on education

Selection of appropriate units for comparison is one of the main methodological issues of comparative research in the field of education. Comparisons are traditionally most commonly performed among the education systems of certain states, and the states as units of analysis, most commonly. In addition to the comparison of geographical entities, comparisons are also based on the analysis of the different units, such as culture, time periods, political decoration, demographic groups. Spasenović (2013) points out that, in cases of studying of analysis unit there is an implicit attachment to the location or geographic entity. This is somewhat understandable given the role and place of countries within the international system, the legal, political and economic point of view.

One of the most important classification of comparative research in relation to the type and level of the selected units of analysis can be found in the book of Comparative Education Research: Approaches and Methods (Bray, et al., 2007). By showing the classification in the form of a cube, the authors show on one of its sides demographic groups (ethnicity, age, religion, gender, other groups as well as the entire population), whereas on the other side there are educational and social aspects (a program of education, teaching methods, financing of education, the levels and types of management, policy changes, labor market and other aspects), and on the third side of the geographic or locational units of analysis (on the seven levels: region, state, province/provinces, districts, schools, departments and individuals) (Bray, 2005).

Traditional comparative researches are mainly focused on the higher levels of school system and policies. Although in recent years may be noticed increased interest in what happens in the classroom, but still these kinds of researches, in which the unit of analysis is the level of class as well as research directed to individuals, are rare. Many factors contributed to increased interest in comparison on the level of classrooms, such as the development of research on school effectiveness and their focus is not only on the level of the school system, but also on the level of the classroom; realizing educational authorities, after a major international achievement tests, that what is happening at the level of the classroom should be paid more attention. In this way, it is possible to observe nature, the meaning and reasons for certain behaviors in the context in which they occur (Spasenović, 2013).

Research should include multiple levels, because it allows the selected problem to be examined from different angles and thus to be more completely and more comprehensively perceived (Cohen, et al., 2005). At the same time, it is important to note the tendencies that reflect the trends and contradictions of the development of certain units of analysis and the factors that characterize this development. Thus, it is possible to analyze significant information and experience of the education system of the phenomena being studied within the interplay along with the development trends of national or supra-national system of education.

1.2.3. Phases of comparative research on education

The importance of understanding and analyzing the methods of comparative research in education was pointed out by one of the first American comparativist Bereday (1964). His methodological approach involves four phases of comparative approach. The first step is to describe the studied school systems, and the systematic collection of data, so-called.
"geography". Phenomena that are studied in the field of education are very complex and they need to be studied in details. The study of the structures and the detailed analysis of the phenomenon is the second phase, i.e., the interpretation of the collected data on education. At this stage, education facts are interpreted through methods of other sciences (sociology, anthropology, psychology, philosophy, economics). A third phase sequencing (juxtaposition), is characterized by stacking date parallel in order to select the elements that will be compared. At this stage hypotheses are defined, formulated in such a way that they express purpose of comparison that will follow. After this phase is carried out, comparison follows, i.e., comprehensive analysis which tests the hypotheses. This phase leads to the formulation of laws and typologies that allow understanding of the functioning of schools and school systems (Kulić, 2011; Spasenović, 2013).

Their vision of a methodological approach to the study of comparative education Noah and Eckstein (1969) presented in the book "Problems in education: a comparative approach". They base a comparative study of education on an empirical approach and state the following stages: problem identification; formulating a hypothesis (dependent on the degree of exploration areas under study); empirical research to verify the hypotheses (it is necessary to define the concepts and indicators in order to avoid terminological problems in the study); selection regions or aspects which will be compared (may be global, regional, multi-national, international and time-crossed); collection of data must be relevant; processing and analysis of data (Vrcelj, 2005; Savičević, 1996; Spasenović, 2013).

Listed and briefly explained, classifications of current studies of specific comparativist indicate to the possibility that comparative researches on education provide: to detect tendencies and contradictions in the development of the education system, the influencing factors and the operation of a given development, to make the selection of most successful experience, that the experience is acquired and transformed in practice.

1.3. Developmental tendencies of comparative research on education

The phenomenon of globalization deals with all aspects of identity which are relevant to comparative research in the field of education. Processes of globalization have changed the contents of questions such as what, how and when to learn and, according to Crossley and Watson (2003), traditional means of adopting and transferring knowledge give a preference to the wider use of ICT in educational process. Nation (state) as a central unit of analysis has transformed, and with it relations between countries, too. On one side is the globalization trend of homogeneity and on the other a trend toward diversity. Thus, it seems undeniable for comparative pedagogy the request for enriching the theory and practice of research in order to reach specific guidelines in the search for the best models of education.

Contemporary comparative researches on education are characterized by the transition from the single methodological approaches (examination of one country) to the general, common methodology (examining of the country in the regional context and overall world's space). In addition to determining similarities and differences, it is necessary to understand the context in which school system functions, principles and methods of realization of education. Moving from the specific to general cross-national studies not only contributes to the improvement of theoretical knowledge but also prevents incorrect generalization of the results which derive from only one country (Vrcelj, 2005; Spasenović, 2013).

In accordance with the tendency to emphasize causal relations and developmental direction of educational system, Bražnjik (2006) suggests the most important issues of comparative researches with regard to internal and external factors: progressive character of
development revealed in the context of the essence of qualitative changes; a significant emphasis is put on the objective factors of the development, primarily to the impact of specific historical conditions; comprehensiveness of analysis is provided by the inclusion of philosophical, theoretical and historical roots of leading theoretical approaches in the designing of changes; the problem of analysis which defines the change is in the focus of researchers; the depth of analysis can be achieved with detecting the succession within the developmental cycle, and which is associated with the transition of some of the discoveries of the previous period to a new one; typology of change is of great importance to the generalizations that are made.

Today is the cultural approach to comparative research of educational systems more popular than ever. The reasons are numerous: (1) this approach has wider application and includes several levels (organizational, local, regional, national, and farther); (2) controversies related to the phenomenon of globalization indicate to the importance of cultural achievements of society as well as the danger of an underestimation of the same; (3) researches in the field of education and educational institutions are oriented towards the actions of the groups and individuals, and which are under the significant influence of the culture; (4) cultural approach to overcome the effects of ethnocentrism that exist in many societies and educational systems (Dimmock, 2007).

The globalization process, despite the expansion of research field for comparativists in educational process opens up the opportunity for reform and reconceptualization in this area. Through the wider framework of analysis and taking into account global context and mutual differences between cultures, regions and institutions the impact of globalization on the developmental tendency of comparative research could be viewed (Bray, 2003; Cook, et al., 2004; Crossley & Watson, 2003; Dolby & Rahman, 2008; Marginson & Mollis, 2001.). Also, the unit of analysis of comparative research needs to be modified from geographical area to global influence and equivalency, diversity, dominance or subordination of educational systems and policies. Mobility and cross-border cooperation in the field of education are the subject of growing number of researches today. Attending educational courses abroad, preparation of teachers and institutions, but also a sudden increase interest in learning by the Internet are the current issues and ways of learning for the contemporary comparativists. Among others, another result of the globalization influence is the establishment of supranational identities. Due to these reasons, cultural and religious identity increasingly impact the approach, resources and outcomes in educational policies. On a national level globalization impact implies that the contemporary systems of education are within frameworks of national educational policies. Encouraging mobility and interculturalism today aims to educate active citizens and in this area comparative research can make a significant contribution.

Taking into account mentoined above, it seems appropriate to note, as like as Zdravković and Malinović (2014: 31) made, that the "considerations of more human face of globalizational social reality should demonstrate, on micro and macro level of each country, to the guidelines which provide better life conditions, cultural cooperation and social integration". Having that in mind the authors conclude on the need to the "...profiing a new logic of treatment of education and science as the most powerful resource of overall social development" and the need for refocusing "...to the possibilities of European integration through education and with the aim of raising the quality of education" (Zdravković & Malinović, 2014:31).
2. CONCLUSION

Comparative researches are not only determine the similarities and differences in educational systems, but they examine internal dynamics of educational process. Although contemporary theorists emphasize the importance of the context in comparative researches, there is no generally accepted theoretical and methodological orientation for now, ie, the question of how to create contextually adapted methodology for the needs of comparative pedagogy, is still open.

Having in mind integrative and globalization processes which characterize post-industrial period, it can be concluded that comparative educational study in its development tend toward openness of research field for examining different educational issues, from educational process in concrete educational institution to thematic global researches on global worlds level, in which educational practice in globalization context is treated as object and subject of research. Also, it is important to develop sensitivity to local and social issues and strengthening research capacities of less developed countries in the field of comparative pedagogy.

The development of comparative researches need to be characterized by the methodological openness for the different humanistic sciences, philosophical attitudes and combining different methods, qualitative and quantitative approaches. Future perspective of comparative research in education is seen in improving teaching process with the aim of developing authentic personal traits and social solidarity. This can be (partly) achieved by respecting the principle of humanity which many authors, such as Jovanović, Jevtić and Minić, considers as a "basic postulate and the imperative of modern teaching". According to them, "...the challenge of its implementation today is conditioned by phenomena that modernization and automation carry with them in terms of growing dehumanization of communication models and neglect of the primary and direct forms of communication" (Jovanović, Jevtić, Minić, 2014: 147). Statements like this can serve as a basis of a deeper, more analytical and systematic approach to the research to this problem.

REFERENCES

METODOLOŠKE SPECIFIČNOSTI KOMPARATIVNIH ISTRAŽIVANJA U OBRAZOVANJU

Istraživačko interesovanje za komparacijom obrazovanja odvija se paralelno sa proučavanjem društava i društvenih tekočina. Savremeni kontekst, u kojem vlada međuzavisnost i uzajamnost, nosi zahtev za refokusiranjem na ulogu komparativnih istraživanja u analiziranju strukture, potencijalnih razvika, socijalne funkcije obrazovanja u odnosu na poziciju u strukturi sveta. U ovom radu se kroz analizu metodoloških karakteristika, uz poseban osvrtnu na metode, nastoji da ukaže na probleme komparativnih istraživanja i načine njihovog prevazilaženja. Sa teorijskog aspekta, razmatraju se promene i analiziraju argumenti o potrebi miks metodologickog pristupa u poredjenju obrazovnih fenomena. Istovremeno se teži ka identifikaciji tendencija koje reflektuju kako pravce tako i protivrečnosti razvoja komparativnih istraživanja, kao i faktore toga razvoja.

Ključne reči: komparativna istraživanja, šolski sistemi, obrazovanje, kvantitativni metodološki pristup, kvalitativni metodološki pristup


