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Improving the Academic and Investment Research Through Innovation Development Based on the Adriatic-Ionian Macro-region: The Case of Albania and Italy

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Abstract

The aim of the present paper is to explore the impact of the academic research and investment collaboration in the progress of sustainable development and innovation in Italy, as an industrial country, and Albania, as an aspiring European Member state, from the viewpoint of the Adriatic-Ionian macro-region' agreement. We conducted a meta-analytic research based on research, innovation and economic policies between different countries of the European Union and the Western Balkans, the methods of micro and macro social-economic growth applied, the criteria used and the qualitative increase of research and economic growth. As for its core aim of the Strategy of European Union, the significant benefit of the project enhance the construction of a unique template of growth between each country which will later reflect on the trends of a broader growth in the field of tourism, security, science and innovation. We observed a qualitative change of trends in Albanian and Italian socio-economic growth towards the scientific and innovation development. Finally, our data revealed that the higher the inter-economic exchange collaboration, might gain more strength to our countries regarding social, educational and researching development policies.

Keywords: scientific research, collaboration, innovation development, educational policy.

1. Introduction

Speaking about the macro-regional Adriatic and Ionian project certainly assumes a variety of primary sections that focus on the educational exchange and achievement. The Adriatic-Ionian macro-region consists of the following countries: Albania, Bosnia and Herzegovina, Croatia, Greece, Slovenia, Serbia, Montenegro and the Italian regions of Abruzzo, Friuli Venezia Giulia, Veneto, Emilia Romagna, Marche, Molise, Puglia, Basilicata, Calabria and Sicily. The process for the recognition of Adriatic-Ionian macro-region is generally understood as a functional

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area with autonomous and innovative ways of promoting and implementation of territorial cooperation, at the interregional, transnational and institutional levels. The model is based on the previous partnerships inside the macro-region of Baltics and Danube countries. On 11 October 2011, with the initiative of the Regional Committees' meeting in Brussels for the "Territorial Cooperation in the Mediterranean line through the Adriatic-Ionian macro-region", were constituted this regional card of collaboration between parties and recognized in every land hall. We could recall here citation from the "Forum of the Adriatic and Ionic Cities" at Ancona: "...the engagement to develop in the appropriate locations, in the local, interregional and international, between social and productive parties, in the reality of associalization, through citizens, through various active networks in the area (Commerce Rooms, Universities, Adriatic Euro-regions and cultural and contextual links), all the suitable initiatives of the recognition of the Adriatic-Ionian macro-region at the European Union" (the 13th plenary session in the constitution of the macro-region articles 14-16, 2011, Ancona, Italy).

Thus, cities and communes established the foresight of the local communities so that the overall contribution would be able to engage the roots of many networks and links, citizens, associations and social forces which make their territories more feasible for the growth opportunities of wide range of people. That is why on the first meetings of the macro-region, there were a union of various professors, students, principals, head-mayors and local administrators from each country which created the Adriatic-Ionian macro-region for the field of education, scientific research and youth! Participants of the mentioned countries discussed of the strength of relation between the Government and one of the strategic-economic sectors for every unique area.

The Region of Emilia-Romagna, as the Managing Authority for the Inter-regulation Directives of Adrion Program 2014-2020, has announced that the second EU tender in support of the Strategy for the Adriatic-Ionian macro-region (EUSAIR) will be published in February 2018, as the EUSAIR Strategy for the Adriatic-Ionian macro-region. It will include the areas of inter-exchange, hospitality and social inclusion, juvenile mobility and facilities, continuing education at the fight against racism and xenophobia, cultural and religious pluralism, institutional twinning, etc.

So far, activities have focused mainly on the development of governance structures and rules, through extensive consultation among the main stakeholders, also in light of the participation of non-EU countries with significant socio-economic and administrative disparities. The chosen structure provides full access by third countries to the governance of the strategy, for example through the open rotating presidency to all participating States, while the administrative and technical support was guaranteed with a strategic project approved in May 2016 within the framework of the Program the Eusair Facility Point, Interreg Adrion 2014-2020.

The Interreg Adrion 2014-2020 Program intends to support the European strategy for the Adriatic-Ionian macro-region (Eusair), with reference to 4 thematic objectives:

- Innovative and intelligent region;
- Sustainable region;
- Connected region;
- Better governance for Eusair.

The available resources amount to a total of over 117.9 million euros, of which 40 million allocated in May 2017 for 35 projects and 10 million for the strategic Eusair Facility Point project.

The launch of the second Interreg Adrion call is scheduled for February 2018 on a budget of nearly 45 million euros to support initiatives on innovation, culture, tourism, the sustainable environment and transport networks.

2. The implementation of the Adriatic-Ionian macro-region in the field of educational and scientific research

The field of educational and scientific research is certainly one of the most delicate to be treated for every country and project. Thus, each state has its own policies and viewpoints in the implementation of Adriatic-Ionian card. On 2004 and later reviewed on 2012, it was founded the Adriatic-Ionian Network of Universities (UNIADRION), with 36 universities from the nine project countries: Albania, Bosnia and Herzegovina, Croatia, Greece, Italy, Macedonia, Montenegro, Serbia and Slovenia. The UNIADRION is a network created to establish a permanent bridge between the universities and research centres of the Adriatic-Ionian macro-region and to strengthen inter-university cooperation and collaboration. It is of crucial significance in the project improving academic curricula with the updates and directions of the card from which we could build potentialities for a capable professionality and skills, in coping with challenges of globalization, economic changes e the decentralization of the academic area and the richness of their autonomy.

In the actual prospect, the objectives which could process for a further prospect might be:

1. Contribution to the improvement of the quality and efficiency of the education system and training of citizens as shown in the European LLP – Lifelong Learning Program for the academic education;

2. Promotion of the equity, social cohesion and active participation of citizens and intercultural exchanges;

3. Providing equal opportunities to the youth;

4. Foster creativity, scientific research, innovation, including entrepreneurship at all levels of process of continuing education and training, in the same line with the local and international development strategies;

5. Realization of a unique, opened, integrative and dynamical system of education between every state of the macro-region.

The beginning of the project at the educational level was stipulated when the Faculty of Medicine of the University of Zagreb and the Aristotle University of Thessaloniki made the first exchange of researchers in the field of medicine and informatics, on September 2012. In the mid-2012, the European Commission for Education and Training adapted many of the proposals of the macro-region for the increment of financial funds, constitution of internships exchange, the development of institutions in every Adriatic-Ionian country responsible for the implementation of the card.

Another important aim of the Educational Card is the harmonization of the learning inter-system through:

- dynamic confront of viewpoints between the various organizational patterns and structures of the educational system;
- an identification of the a unique definition of disciplines in the transversal mode including cultural and environmental education;
- arguments for the specific territorial evaluation within Adriatic-Ionian and the suitable economic development;
- implementation of the professional education for a renew pattern between school and entrepreneurship; supporting the creation and realization of innovative strategies and policies in the permanent learning cycle;
- monitoring and coordination qualification diplomas to a recognised educational

system as a EU;

- identification of new professional skills and competencies in the synchronization of the economical sustainable strategies;
- formalization of degrees and an European portfolio for every single strategy;
- supporting European programs of trainings, such as Erasmus+, Horizon 2020, etc.;
- Comenius towards students and juvenile orientation programmes; recognition and free access to academic mobility of extra communities countries;
- creation of the Engagement and Educational Card for the macro-region system of education within adherent countries.

3. The macro-region as an opportunity of juvenile education between EU member states and Albania: The case of Italy

Both our countries are opened to new prospective collaborations and opportunities for the academic growth and scientific research innovation. Different universities of Italy have allocated funds and projects for the sustainable development of various specters in Albania. As the University of Urbino in the Region of Marche, a 5 centuries university have provided unlimited generations of wisdom, science and professionals, 5 centuries of engagement and involvement for the prosperity of Education. Albanian universities are surely younger than the 500 years experienced but, with the foresight and eagerness of betterment and progress, for taking and giving, for learning and lecturing within.

We could gently recall that the milestone of our educational policies and similarity is a postulate Mandela gave to the overall humanity: "Education is the most powerful weapon which WE can use to change the world" (N. Mandela, 1993).

Working as a unique team brings things easier to everyone of us for the fulfillment of our educational prospective. Our mutual collaboration will consist in the improvement of the bilateral relationships our two countries have and on the distribution of education as a science for citizens. Since 2011, Italy recognized the Educational Card which included either European adherences as Albania. The educational reform and engagement in Albania has been attached as a significant academic source which will give voice to the new educational amendments that entered into force in the beginning of 2017, with a mid-term longevity.

The countries' aims from this collaboration are the following:

1. to work together in the spirit of equality, transparence and scientific engagement regarding professional, academic and research increase;
2. to promote the mutual scientific activities and cultural exchange for the raise of human competencies such as didactical activities, lectures, seminars and workshops, academic symposiums and conferences and other common interests;
3. to encourage the applicability of higher standard researches, ethical issues and integrity in the field of scientific research;
4. academic exchange between lectures, professionals and/or students within academic profiles and periods;
5. to promote policies in behalf of the mutual collaboration and macro-region applicability;
6. to support and supervision of the PhD researchers, post-doctoral and fellows on the mutual institutions;

7. to cooperate in the academic writing field, publication in the research journal centres and enhancement of masters/doctoral level researchers;

8. to allocate financial funding projects in the fulfillment of research field;

9. to enhance of social and integrity organization towards global issues for research and prospects interests.

These objectives relates the institutional cooperation and collaboration in the line of the macro-region recommendations and our governmental policies and institutional strategies. Promoting innovative research and scientific progress let us build bridges and paint prospects. Realization of the Engagement Card and our academic agreement and cooperation, will contribute to the strengthen approaches of a unique system for the economic, political, cultural and institutional growth ring science to improve itself for the betterment of the citizens' lives.

4. Conclusions

At the end of this reflections we would like to emphasis some concluding remarks:

First, the development of mutual collaboration between Italy and Albania will certainly help in the substantial change and improvement in the field of scientific research, human relationships and citizens' education. It is of significant remark to remember that each of our institutions will contribute and engage in the fulfillment and realization of the Education Card and economic investment strategies.

Second, participating in the macro-region assesses the potentialities of our countries and institutions to the improvement of the educational policies as UNIADRION and other engagements of youth in the scientific process.

Third, the primary relationship of the academic science is to bring in innovation and qualitative research for the human contextual progress. Being within the macro-region will therefore help in the empowerment and increase of potentialities for the academic and citizenship raise.

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References

Unione Europea (2015). Assocazione Italiana per Consiglio dei Comuni e delle Regioni d'Europa [AICCRE]. www.europaregioni.it.

Forum of Adriatic and Ionian; Ministero del'Istruzione, del'Universita e della Ricerca (2011-2020). Carta degli Imegni Educativi Delle Citta Aderenti al Forum Macro-Regione Adriatico-Ioniana, Ancona, Italy.

Celotti, P., Familiari, G., Levarlet, F., Colin, A., Gramilliano, A., & Valenza, A. (2013). Options for Building a Macro-Region, Scenarios for the Development of the Adriatic-Ionian Macro-region.

European Commission Staff (2018). Communication from the Commission to the European Parliament, the

Council, the European Economic and Social Committee and the Committee of Regions, concerning the European Union Strategy for the Adriatic and Ionian Region, Brussels EU.

Forum of Adriatic-Ionian Cities (2018). 13 Plenary Session, Forum of the Youth and Schools. Ancona, Italy.

Institute for Central-Eastern and Ballkan Europe (IECOB) (2015). Published dataset: Ministero del'Istruzione, del'Universita e della Ricerca (2012). Esperienze e speranze della regione euro adriatico mediterranea. Scuola e territorio per comunità inclusive, Scuola Marche In forma, Ancona, Italy.

Passarani, A. (2014-2016). The interregional work already underway on the Adriatic-Ionian Area, Brussels Office Marche Region.

Strocchiero, A. (2015). La Strategia dell'Unione Europea per la Regione Adriatico-Ioniana e la Politica Estera Italiana.

Centro Studi di Politica Internazionale – Ministry of Education Regional Board (2017). USR per le Marche Ancona, Italy Research Center.

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Efficiency and Effectiveness of Education as Pedagogical and Economic Categories: Problems of Evaluation and Measuring

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Abstract

There are different dimensions of the quality of education that have a distinctive role and importance for the preview of the basic features of education quality. In this paper, effectiveness in education is considered as one of the key dimensions of the quality of education, which will be seen also as economic category. In order to clarify conceptualization of the quality of education, main differences in the meaning of the terms efficiency and effectiveness in education were highlighted. System and process characteristics of education were emphasized, and based on these two distinguishing features of education, the specificity of evaluation of effectiveness in education were accentuated. In this paper, main characteristics of assessment of overall effectiveness in some fields of education, including assessment of effectiveness in particular segments (teaching, learning, usage of different methods and organizational forms, assessment in teaching, etc.). Different characteristics of constitution of the teaching effectiveness' evaluation model, and the potential dilemmas and difficulties during these processes were discussed.

Keywords: quality of education, efficiency of education, effectiveness of education, effectiveness evaluation model.

1. Introduction

Different approaches in studying the quality of education exist, as a series of significant characteristics (dimensions) that occur within the educational process. Differences in the ways of studying the quality of education are conditioned by the settings that arise in the theoretical starting points that serve as the basis of theoretical analysis. In most cases, the starting point for determining the essence of quality of education is the answers to two important questions: (1) what is the quality of education, and (2) what does the content of quality of education mean? (Anderson, 2012). In accordance with the theoretical orientation, which is the basis of asking for answers to these questions, a certain way of conceptualizing the quality of education is constituted, as well as everything that makes the content of the quality of education. This is expressed by the description of certain dimensions of the quality of education that are considered significant, describing the basic constitutive characteristics of the quality of education, the description of factors of quality of education, as well as in other ways.

There are also some other approaches in regard to the quality of education. One of these approaches refers to the consideration of quality of education' factors. For example,

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according to one UNICEF document, when considering the basic children's rights, it states that quality of education includes the following (*Definition quality* ..., 2000):

- Learners who are healthy, well-nourished and ready to participate and learn, and supported in learning by their families and communities;
- Environments that are healthy, safe, protective and gender-sensitive, and provide adequate resources and facilities;
- Content that is reflected in relevant curricula and materials for the acquisition of basic skills, especially in the areas of literacy, numeracy and skills for life, and knowledge in such areas as gender, health, nutrition, HIV/AIDS prevention and peace.
- Processes through which trained teachers use child-centered teaching approaches in well-managed classrooms and schools and skilful assessment to facilitate learning and reduce disparities.
- Outcomes that encompass knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society.

In our paper, special attention will be paid to the effectiveness of education (effectiveness in education, education effectiveness) as one of the undoubtedly significant dimensions of the quality of education, and it particularly relates to the effectiveness of teaching as a whole, as the most organized form of education. Therefore, we will pay attention to a phenomenon that can be labeled as the *overall effectiveness of teaching*, which can be seen through the effectiveness that appears as a phenomenon and can be examined in different areas of teaching.

Potentially, an integral approach to improving the quality of education refers to a set of different efforts to improve the level of overall quality of education through improvements designed and implemented within the specific dimensions of the quality of education (Anderson, 2012). This implies the creation of an approach needed to synchronize adequately the changes that relate to the improvement of the basic features of education, thus achieving the improvement of the general level of quality in education.

When considering the essential characteristics of the effectiveness of education as one of the dimensions of quality of education, it is necessary to point out the existence of a complex relationship between the *efficiency of education* and the *effectiveness of education*. Within the wider consideration of the problem of assessing the quality of education, it is necessary to determine whether there are and what constitutes the key elements of differences between these two dimensions of the quality of education. For the purpose of analysis undertaken in this paper, the general characteristics of the relationship between these two dimensions of quality of education will be pointed out. In general, efficiency and effectiveness are terms that are often in everyday use, in all areas of professional activity and in everyday life of people. In that sense, it is necessary to start from the most general meanings of these terms and differences that exist in their use.

2. Efficiency of education

Efficiency in general can be related to the *way in which a system operates*, as the level of interdependence between the functioning of certain parts of the system structure, in relation to the structure as a whole. Starting from the fact that there are different approaches in determining the relationship between the terms of "structure" and "system", in this case, the system will be considered as a particular structure with the operating modes that are realized within this structure. If systems can be conditionally classified into spontaneous and non-spontaneous

systems, then in this respect we will consider efficiency in the first place as a property of a non-spontaneous system, that is, one that is pre-planned and organized, as a system of human creation. In addition to this general classification, non-spontaneous systems can be classified into static and dynamic systems, as well as technical and social systems. All these systems are distinguished by the presence of a certain level of optimization of the system's functioning, so that the efficiency of system can be considered as the *optimal functioning of system*. Similarly, in addition to the functioning of whole system, the efficiency also refers to the optimality of functioning of each individual element in the system, the mutual compliance of these functions, and the role and function of each individual element for the optimal functioning of system as a whole.

It should be emphasized that in the case of such a way of determining the meaning of term "efficiency", that is, the efficiency of system as an optimality in the system functioning, it is also necessary to determine the meaning of term "optimality", i.e. "optimality of functioning". This could be also applied to systems that are constituted in the field of education (education system, school system, teaching system, system of evaluation in education, and others). If that were not done, we would have come to the situation of trying to determine an unspecified phenomenon by another, also unspecified phenomenon. In order to clarify the meaning of terms such as "optimality", "optimum" and "optimal", we will point out three different levels (modes) of functionality of any system: (1) the real functionality of the system, (2) the complete functionality of the system, and (3) the best possible functionality of the system.

The first mode of functionality relates to a real state of the functioning of whole system and its particular parts. This includes simultaneous presence and high level of functionality, but there may also be various functional shortcomings, different types of disfunction, mutual mismatch in the functioning of certain elements in the system, etc. This is characteristic for the systems where there is a lower level of efficiency of the system's functioning. For example, in the teaching when a teacher presents new material, there is a real situation of achieving a certain level of efficiency in the transfer of knowledge, definitions, explanations, different data, etc. (information transfer). In addition, each student receiving information from teacher makes it at a different level of acquisition efficiency, so it can be expected that better students adopt the full range of transferred information, and that other students receive information on a smaller scale, based on a lesser capacity to fully understand what teacher transfers.

The second mode is characteristic for the high-precision systems, for example, for technical, technological and information systems, which implies that there should be complete functionality without interferences, as a condition for the existence of a system. For example, the functionality of a system in this sense is an algorithm of a computer program in which each of the program implementation' elements must have full functionality, otherwise the program will not work at all. Systems of this level of exactness and functionality cannot be realized in the social environment, in the case of social systems. In this area, complete functionality is usually only an ideal state of the system' functioning and its elements, it is a condition that is trying to achieve, but it cannot be fully realized.

The third mode is characteristic of systems in which the internal functions of system are at the best possible level of functioning and this way of functioning of the system can be labeled as *optimal functioning*. So, in addition to having an ideal state of functioning, one can also talk about this mode of operation, in which there is the best possible level of functioning, which we can label as optimal functioning. And in this work under the "optimal state" we mean the "best possible state" of functioning of a system.

In the field of different social systems, we consider that efficiency refers to the level of optimality in the functioning of a social structure, which consists of certain elements, their particular functions, mutual relations and the way of functioning of the whole structure as a system. Efficiency also refers to the optimality of process (level of optimality), which especially

refers to the processes of social and interpersonal character, and especially to those whose implementation is part of some previous conceptualization and planning. In general, the *efficiency of process* can be determined as the *optimality of process*, of the whole as well as of the specific parts of process (sub-processes) that are part of that whole. For a pre-planned and organized process of social character, it can be considered to be effective if each subsequent phase in the process represents, as far as possible, if there is the unimpeded optimum movement towards a predicted outcome (effect) of the process. This also applies to the way in which specific processes are carried out within the whole of a process. An example of this is teaching as a general process, while learning and learning in the classroom are particular processes that take place within the whole process of teaching.

3. Effectiveness of education

Effectiveness as a phenomenon is closely related to the emergence of efficiency and it is only conditionally possible to separate these two dimensions of the education quality. On the other hand, the confusion of these two concepts is present. In principle, effectiveness of education refers to the results that are achieved in the process of education, and represent the relationship between those results and all that is undertaken in education. In other words, the effectiveness, when it can be determined in an objective way, is a measure of the effects of some realized activities in the process of education (Lockhead & Hanushek, 1994). Also, the significant fact about the effects of education refers to the sustainability of a progressive change in a student's competence, or whether it is a change that may have a more or less lasting effect.

In this paper, we accept the view that effectiveness of education refers primarily to the result (outcome, effect) that is realized in a certain area of functioning of the system, or in the realization of a process (Kovač Cerović, 2004). However, it must be emphasized that in this case the economic perception of the phenomenon of effectiveness prevailed, which implies the perception of effectiveness as the relationship between the invested financial means and the achieved results. Regardless of the fact that the economic (financial) framework represents a significant factor in the success of education system' functioning, the effectiveness of education as a phenomenon needs to be viewed in a wider context, but also deeper and more comprehensive, through the complexity of education system, the way of functioning of the whole of that system and its specific parts, and the synchronization of the special processes in the system. In general, efficiency and effectiveness in education can be seen as complementary phenomena, but in this way the effectiveness of education refers to the outcomes of functioning of various systems and the realization of various processes in the field of education.

In the most general sense, education as a whole is a process that, on the basis of its basic characteristics, also has certain specificities of the flow of process. And this process consists of specific and relatively separate processes, such as teaching process, learning process, student assessment process and others, which form an integral part of the whole education process and whose specific characteristics are conditioned by the characteristics of the education process as a whole. From this point of view, the problem of relationship between general and special processes in the field of evaluation of effectiveness in education needs to be considered.

Evaluating the effectiveness of education is conditioned by several different factors. To the complexity of the problem of assessing effectiveness within the education system contributes the simple fact that students do not learn only at school, but at home and elsewhere, from different sources of learning (Lockhead & Hanushek, 1994). In fact, as well as adults, students also learn, develop and improve their cognitive and other capacities daily, through a variety of different learning situations, which exist in school and out of school.

If education and learning take place only at school, then a more exact model for evaluating the effectiveness of education could be constructed, which would relate to activities within the school curriculum. This model of assessment would include different parameters that are economic in nature and that can be related to the describing of financial values of different inputs, such as the following forms of investment: general-purpose school equipment, quality of learning space, school technological equipment (computers, Internet), initial teacher education, professional development and teacher training, students' qualities, etc. All of these input fields can be exactly esteemed, so a precise level of general input can be provided, when it comes to a particular school.

The problem of broader understanding of the effectiveness of education and learning, which would include learning at school and outside of school, consists in the fact that it is not possible to clearly divide in a more comprehensive way the segment of learning in the school, in relation to the learning appears out of school (Lockhead & Hanushek, 1994). In this regard, a number of different issues will be posed, which would be necessary to resolve, with the aim of constituting an objective model for assessing the effectiveness of education. The starting point should be at the very purpose of assessing, whether the model of assessment relates to the effectiveness of school education for a particular group (age) of students, or to the overall effectiveness of education (which would include education and learning that takes place both in school and outside the school).

4. Model of the education effectiveness' assessment

The effectiveness of education can be assessed by both qualitative and quantitative approaches. A quantitative approach in assessing the effectiveness of education is necessary to be applied. For example, on the basis of organized systematic observation of the development of a segment of the teaching process, certain conclusions about effectiveness of the observed segment of teaching process can be carried out in qualitative terms, and without the help of means of quantitative assessment. In this respect, a qualitative approach to assessing, if applied without a comparative application of a quantitative approach, could have some disadvantages that would significantly reduce its value and objectivity. Therefore, in situations of comparative application both qualitative and quantitative approaches, some conditions for achieving a fuller and more precise assessment can be achieved.

The design and implementation of quantitative (statistical) methods of measuring the level of effectiveness in an area of education is subject to the rules that need to be taken into account when choosing adequate procedures, choices that need to be made in accordance with the nature of effectiveness that is to be assessed (Kyriakides, 2006). In addition, instruments used to collect data to assess effectiveness in an area od education should meet key methodological criteria, which relate to reliability, validity, objectivity, and others.

The basis for constituting a certain model of evaluation (measurement) of effectiveness in education is determining with the facts, what is being measured and how this could be most appropriately applied. When it comes to measuring the effectiveness of teaching, Berk (2005) points out precisely the need to start from these two questions in the process of building a model for assessing effectiveness, that is, what is measured and how could be measured. These are two interrelated and conditioned questions. It is undoubtedly that ways of measuring (how to measure?) will be directly dependent on what is measured in education.

Regarding the field of measuring effectiveness in education, there are a number of different areas in which potential measurement can be conducted. For example, Berk (2005), discussing the possibilities of measuring the effectiveness of teaching, lists the following sources of effectiveness measurements in teaching: (a) student ratings, (b) peer ratings, (c) self-evaluation,

(d) videos, (e) student interviews , (f) alumni ratings, (g) employer ratings, (h) administrator ratings, (i) teaching scholarship, (j) teaching awards, (k) learning outcome measures, and (l) teaching portfolios.

One of the simple statistical procedures and indicators that enable to run the effectiveness measure in education is to calculate the percentage of effectiveness. In the case of the application of this procedure, the starting point is the statistical logic of percentage as an assessment measure, which implies acceptance of the measure of 100%, as measure of maximum effectiveness, i.e. full effectiveness. However, in spite of the fact that it is statistically simple to perform the measure of effectiveness expressed in percent, there are certain dilemmas that need to be considered and resolved in an adequate way. Or, in other words, there is a problem of interpreting a certain statistical measure.

Among other things, in some situations (but not necessarily) there can be a problem as the following: how from the statistical scale of quantitative description can also be constituted a model that enables the qualitative (descriptive) meanings of certain measures of the level of effectiveness in a segment of education (Bos, 2002). It is clear that the measure of 0% can be descriptively labeled as the absence of any level of effectiveness, while a 100% measure can be labeled as a level of total effectiveness. Thus descriptive levels and effectiveness sectors can be set up through the formulations of "minimum effectiveness", "low effectiveness", "mid-level effectiveness", "high effectiveness", "very high effectiveness", and with the similar formulations. For all these descriptively expressed levels and sectors of effectiveness, there is a problem of determining the range of percentages to which they relate, that is, determining the lower and upper boundaries of the sector. For example, there may be a dilemma for determining the "low effectiveness" sector. Depending on which sectors are represented in some constituted model of describing the level of effectiveness, the range of this sector can go from 5 to 50%, or up to 60%. A similar dilemma may also arise when deciding on which percentage range the description refers to as "mid-level effectiveness". It is assumed that the central part of that range should always be at the level of 50%, but the overall range may in some cases be determined to be between 45 and 55%, while in some other cases it could be as high as 30 to 70%.

Some of the dilemmas that arise in this area relate to the use of term "ineffectiveness" and the relation of this term to the term "effectiveness". For example, can a low level of effectiveness in some area be marked as ineffectiveness? Is the measure of the lowest level of effectiveness (0%) an indicator that can be characterized as a complete ineffectiveness? Is ineffectiveness always unambiguously opposite phenomenon in relation to the phenomenon of effectiveness? Is there a real boundary between "effectiveness" and "ineffectiveness"? These are some of the most important issues concerning the relationship between these two phenomena. The complexity of relationship that exists between these two phenomena points to the differences that occur in their relationship, in different concrete situations of assessing the effectiveness in education, which also results in different theoretical and practical problems in constituting the model of describing the level of effectiveness (inefficiency) in examined area. The dilemma of this kind occurs in the significance of statistical indicators of students' success in a certain field of work in teaching, at a certain age. In this case, it concerns the determination of the boundary between success and failure, or which would be the lowest level of achievement of the student under which any measure of achievement can be marked as a failure.

Such and similar questions and dilemmas should be considered when constructing the model of estimation of effectiveness in a certain area of assessment, and they relate in principle to the interpretation of other statistical measures that serve as a quantitative means of assessing the level of effectiveness in some area of education, which is also present in so-called large scale (sample) studies (Bos, 2002). In addition to using percentages as a means of assessing effectiveness in some area of education, and other statistical procedures that belong to the descriptive statistics can find an adequate application for the implementation of estimation

measures for the levels of effectiveness. Among others, those are measures of arithmetic mean, standard deviation, coefficients of correlation and contingency, measures of statistical significance and others. In the case of application of the other statistical procedures for assessing the level of effectiveness, it is necessary to take into account and consider various dilemmas, in order to achieve a better quality of assessment.

4. Conclusion

Finding adequate approaches and permanent work on the establishment of different models of evaluating the efficiency and effectiveness of education, and in particular the efficiency and effectiveness of teaching, is one of the important tasks of pedagogy and economics of education in the studies of contemporary education, especially the forms of education that are organized through an institutionalized education system in each state and which is of general social interest. The basis for the existence of this task is the need for continuous improvement of the education quality, through the improvement of its various dimensions. It is undoubtedly that efficiency and effectiveness within the education system represent the dimensions that are crucial for achieving better level of quality of education as a whole.

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References

Anderson, Ch. (2012). *What is quality in education?* Retrieved 16 May 2012, from http://www.bizmanualz.com/information/2009/07/15/what-is-quality-in-education.html.

Berk, R. A. (2005). Survey of 12 strategies to measure teaching effectiveness. *International Journal of Teaching and Learning in Higher Education*, 17(1), 48-62.

Bos, K. T. (2002). *Benefits and limitations of large-scale international comparative achievement studies: The case of IEA's TIMSS study.* Enschede: University of Twente.

Defining quality in education (2000). The International Working Group on Education, Florence (Italy). New York (NY): UNICEF, Education Section.

Kovač Cerović, T. i drugi (prir.) (2004). *Kvalitetno obrazovanje za sve – Izazovi reforme obrazovanja u Srbiji* [Quality education for all – The challenges of education reform in Serbia]. Beograd: Ministarstvo prosvete i sporta.

Kyriakides, L. (2006). Using international comparative studies to develop the theoretical framework of educational effectiveness research: A secondary analysis of TIMSS 1999 data, *Educational Research and Evaluation*, *12*(6), 513-534.

Lockhead, M. E., & Hanushek, E. (1994). *Concepts of educational efficiency and effectiveness*. Human Resources Development and Operations Policy. Retrieved 18 August 2018, from https://www.researchgate.net/publication/44820444_Concepts_of_educational_efficiency_and_effectiveness.


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