

# FOREIGN EXPERIENCE

DOI: 10.15838/esc/2017.6.54.15

UDC 37:338.4, LBC 74.04

© Barabaş M.

## Co-Production Between the Provider and the Recipient, as a Method of Increasing the Performance in Educational Services



**Maria Barabaş**

West University of Timișoara

Timișoara City, Romania, Timiș County

E-mail: marybarabas@yahoo.com

**Abstract.** The paper proposes the shaping of the concept of co-production in services and specifically refers to the educational process, respectively the cooperation between the supplier and the beneficiary of educational services. A “teacher-student” partnership is considered because we want to capture the system made up of the educational services provider and the active subject of educational training. The “teacher-parent” partnership isn’t the subject of our research because we believe it may be a separate subject of research that transcends our current interest. After defining and clarifying the concept of co-production, an analysis is applied to a number of 500 respondents in education by giving concretely a questionnaire such as to provide adequate information for our purposes. The importance of the research undertaken resides in the conceptualization of the co-production between the offerer and the beneficiary in light of the elements through which it is reflected and in establishing connections between the availability of the beneficiaries to coproduce and certain elements taken into consideration such as the belief there will be some future advantages. Co-production is also one of the ways through which the European Union objective regarding the school dropout under 10% until 2020, can be reached. The results of the data analysis indicates the fact that the consumers of educational services take part in the co-production with the offerer as long as the working environment is a positive one, the communication teacher-student is at a significant level and there is the certainty of correlation with a satisfactory professional future. Conclusions reveals interesting facts, allowing both knowledge of the elements related

---

**For citation:** Barabaş M. Co-production between the provider and the recipient, as a method of increasing the performance in educational services. *Economic and Social Changes: Facts, Trends, Forecast*, 2017, vol. 10, no. 6, pp. 234–247. DOI: 10.15838/esc/2017.6.54.15

to the co-production, and reassessment of resource management at stake. The beauty of the phrase “co-production in education” is confident that after the supplier and the beneficiary’s resources were put and used together, then results the product: the knowledge.

**Key words:** co-production, cooperation, performance, mutual adaptation.

### 1. Introduction and research objectives

The meaning of the concept of co-production has gained different nuances from what it represented a few decades ago. They come primarily from the different way in which it is perceived, at present, the ratio between producer and consumer, in both the goods and services sector.

In the present study we wish to assess the existing connection from co-production between the provider of educational services – teacher – and the recipient of educational services – student, on the one hand, and the individual and organizational performance, on the other. For this, the performance is taken in the meaning in which is highlighted by Annick Bourguignon: “Performance is achieving the organizational objectives” [8]. We will use the term “performance” at the same time with that of effectiveness, that includes, with more accuracy, the meaning of achieving the objectives proposed.

A “teacher-student” partnership is considered because we want to capture the system made up of the educational services provider and the active subject of educational training. Moreover, an educational system that puts the pupil first, with his needs and desires, is targeted. Of course, the family has an important role in education, but this research is centered on students and teachers as the main actors in the system, motivated and rewarded by individual progress, but also as members of society.

We will use the concept of co-production with the meaning of active, constructive participation, of teachers and students, in the work of transmitting, receiving, deepening, consolidating and putting into practice the educational services.

The essence of knowledge is transmitted when it returns in the economy as professionals in the areas for which they have specialized [4]. The study indicates that the recipients of knowledge – students – influence to a large extent the quality of the product, i.e. of education. To develop a strategy in order to increase the efficiency of education is a challenge, but what we are trying to achieve is to assess the co-production between teachers and students from the perspective of the elements through which is reflected and of the changes that which each of these components can induce to the educational activity.

We also have in view the essential difference between immediate, medium and long-term results, respectively between *output*, *outcome* and *impact*. Educational output is reflected in the immediate results and we have in view the prizes, students’ participation in olympics and other school competitions. The *outcome* is to be found in the number of high school graduates who attend a college, as well as in the small/large number of students choosing a particular educational institution or later, in the number of graduates employed in job positions for which they have specialized. Third indicator, namely the *impact*, is that

in which are to be found the investments in human capital calculated on the basis of lifetime earnings and of the educational level of the population (e.g., a system of values to which they refer).

In the educational sector, performance perceived in terms of outcome or impact can be considered more important than the performance perceived as output, having serious consequences highlighted in the economic calculations. In this paper we aim to observe the influence that co-production between the provider and the beneficiary has on achieving performance.

The special nature of our approach consists in (1) detailing of the elements through which co-production is reflected and (2) the nuance that delimits the meanings of the two terms: *cooperation* in education and, more specific, *co-production* in the educational process. This stage of research is limited to studying coproduction from the perspective of the beneficiaries of educational services, the students. A future research is taken into consideration, about questioning educational service providers. For this reason it is important the highlighting of the strengths and limits of the research as an additional objective.

The article is structured as follows: components by which co-production is reflected are described in Section 2. Sections 3 and 4 analyze the data sources and applied methodology, with the descriptive analysis of the questions of interest. The analysis and verification of the hypotheses are done in Section 5. Section 6 includes the strengths and limits of the research, and Section 7 the conclusions and future papers.

## 2. Components by which co-production is reflected

In the case of educational services, their peculiarity of not always having a commercial character does not also mean an essential differentiation from other services. Beneficiaries come with certain expectations, while the providers have, from the beginning, clearly defined objectives, transformed in terms of performance of students. Performance, as we said, can be interpreted in terms of achieving short, medium and long-term goals. The achievement of common objectives depends, to the greatest extent possible, on the physical and spiritual presence of beneficiaries, their contribution to the progress, in the best possible conditions, of each of the stages. From the case study which we will present below it can be seen that respondents understand “working together” as being one of the tasks specific to co-operation (“working together” taken not in the meaning of “working side by side”, but in the meaning of communication, mutual support, share of knowledge in order to achieve the planned educational objectives).

**Co-production** requires **cooperation**; but, as compared to co-operation, which is a way of action, co-production is by itself a *process*, which follows certain specific stages (as a “production” process, but, in our case, with elements specific to learning/education), a process which must be reflected, after it was carried out, turned into a *plus of usefulness*. This result, the newly created extra value consists, in the case of education, in training (additional, as compared to the previous states of every moment in the process, or formative stage, in part), is represented by the education level (superior to the starting level): this is the stake

of the teaching services and of all processes relating to the education system.

**Co-involvement** of the beneficiary of educational services in the activity of teaching – learning – evaluation depends, to a high level, on the importance that he gives to the education institution, generally, and to the educational discipline, particularly. Although specific by the peculiarity about which we made a reference above, educational services operate with market relations, speaking ultimately, still about supply and demand. It is a sort of educational marketing, in which the provider of education promotes and sells its “product”. Co-involvement of the provider and beneficiary is based on a binary relationship in which the availability of collaboration is applied to a first level, such as an initial investment of attention, time and other resources of the two parties.

**Co-planning** refers to the participation of providers and beneficiaries in the development of study topics, to the programming of activities and even to the teaching methods to be used. It is important for the beneficiaries of educational services, that their responsibilities to be clearly identified. Co-planning strengthens the trust between providers and beneficiaries, creating an environment favorable to professional communication. Planning together, the needs of the beneficiary will be better understood, this being one of the most important aspects in any collaboration. Among other aspects, co-planning must include the development of strategies to deal with unforeseen situations.

**Co-management of time** admits that the most important external resource must be managed together, by the provider and the beneficiary. And does not relate only to the time spent in hours, but also to the individual

time, but which was, previously, organized together. Considering the sharing of time [9], which is an individual resource, means an efficient operation. Co-management of time involves a succession of processes which are parts to a whole: organization, naming of priorities, the delegation.

**Co-learning (intellectual co-training)** depends, to the greatest extent possible, on the teacher’s ability and the student’s favorable disposition to listen and to collaborate. It is about a form of mutual adaptation, in which the provider and the beneficiary of education base their actions, on the joint consideration of problems. Co-learning means changes of behavior determined by communication and by assimilating the essence of new issues, but also mutual changes of expectations and of actions of each of the parties. Co-learning is the stage which depends to the greatest extent on the teacher’s ability to deliver educational services, but the student’s ability and willingness to listen to him and to participate actively in the learning process should not be ignored. Co-learning is a form of intellectual co-training through which knowledge and skills are actively and methodically transmitted through the systematic participation of the provider and of the beneficiary in the work of achieving performance.

**Co-evaluation** is a central activity of the learning process, providing the necessary information for self-adjustment and for making future decisions. Co-evaluation means:

- The evaluation of students by teachers;
- Self-evaluation, a process of self-appreciation by which the student learns to become self-aware, having many implications at motivational level;

- Mutual evaluation of students;
- The evaluation of teachers by students.

Co-evaluation is considered one of the evaluation methods with wide training purposes, allowing the product's evaluation, but also that of the process, from the inside, in which the recipient of educational services shall exercise his role as a participant in his own training.

**Mutual adaptation** is a phrase taken from Whitaker's *mutual adjustment*, which in 1980 defined co-production under three dimensions: assistance, cooperation and mutual adjustment [1]. Adapted to the educational sector, mutual adjustment occurs through cooperation and mutual change of expectations, states and actions of the parties. Is a form of adaptation, a mobilization, a permanent effort made by the provider and by the beneficiary in an attempt to fill the gaps and to achieve balance in the complex process of teaching – learning – evaluation. In education, more than in other sectors, mutual adjustment is felt at high levels

because the “product” that results after the production process and of co-production is the knowledge, involving theoretical concepts, but also conduct, behavior, attitude.

### 3. Data sources and evaluation methods

For the analysis that we show here, it was important to note to what extent the co-production between the provider and receiver is one of the causes of activity's effectiveness and of the subsequent performance at the level of the two actors. The case study on education has a special note by the fact that is a public service, for which the recipient does not pay directly (especially as we approached the pre-university education). It produces a few major consequences, as well as the perception of gratuitousness as an obligation or as a favors.

The research starts from a set of hypotheses which are designed to achieve a direct connection between co-production from the provider and the recipient of educational services, on the one hand, and the effectiveness

Table 1. Study sample

No.	Education unit	Locality	County
1.	Theoretical High School “J.L. Calderon”	Timișoara	Timiș
2.	Technical College “Emanuil Ungureanu”	Timișoara	Timiș
3.	Technical College “I.C. Bratianu”	Timișoara	Timiș
4.	National College “Coriolan Brediceanu”	Lugoj	Timiș
5.	National College “Iulia Hasdeu”	Lugoj	Timiș
6.	Technical College “Valeriu Braniște”	Lugoj	Timiș
7.	Theoretical High School “Traian Vuia”	Făget	Timiș
8.	Theoretical High School Recaș	Recaș	Timiș
9.	National College “Traian Doda”	Caransebeș	Caraș-Severin
10.	Greek-Catholic Theological School “Timothy Cipariu”	Bucharest	Ilfov
11.	Technological Highschool Dorna Candrenilor	Dorna Candrenilor	Suceava

of the two actors in the educational process. In order to achieve the intended purpose, we have conducted a survey based on a questionnaire, addressing to a number of 501 students in the 12th grade from different areas of the country. We have taken into account some features of the co-production term between producer and consumer, used in particular in the goods sector, but which match to our study and among these we have found the need for participation (otherwise, specific to services, in general), the mutual use of assets, *a meeting of minds who come together to find a common solution* [15].

The importance of this research is given by the fact that each recipient of educational services can provide essential information about the factors that make up the stages of co-production. Thus, from the questionnaire are obtained information on how co-involvement, co-planning, co-management of time, co-learning, co-evaluation and mutual adaptation are perceived and how the connection between education and performance can be anticipated. The questionnaire applied consists of 33 questions, of which, questions with ranked answers, open questions and closed questions, including also identification questions.

In order to avoid creating confusion, the term “co-production” has been used only once, in question Q1, because it is less commonly used in the current language, its meaning being outlined by the way in which the other questions were formulated.

The research methodology has provided for the conduct of questionnaires, which necessitated the construction of a representative sample: the sample of students. Persons to

whom the questionnaire is addressed are 501 students aged between 17–19 years. The decision to involve, exclusively, students from the last year of high school has been taken into account the fact that they have the level of maturity, age, cognitive abilities and accumulated knowledge necessary to capture the connections of interest as accurately as possible. The assimilation of knowledge and the shaping of abilities and skills to the students in the last year of high school enable them to have a systematic and objective vision on the questionnaire’s theme.

The research starts from the common vision on education, in the meaning that it takes into account, through hypotheses, an usual meaning on the progress of the educational process (especially at pre-university level). Namely, we have decided to check the following hypotheses:

H1: Cooperation between the provider and recipient of the educational services is a prerequisite for a good co-production of the values specific to education (educational).

H2: The commitment of the beneficiary of educational services in the co-production with the provider is positively related with the conviction in the professional success.

H3: The higher the level of co-production between the provider and the recipient of educational services, the greater is the satisfaction perceived emotionally.

H4: The decision to co-produce together with the provider of educational services varies among recipients, depending on their geographical area of origin.

H5: The decision to co-produce together with the provider of educational services varies among recipients, depending on gender.

The software used to analyze the data obtained was a specialized tool for analyzing quantitative data: SPSS. The motivation for choosing this software was that SPSS is adapted to analyze the data we obtained as a result of our field research. In a concrete way, for the statistical analysis we used operations of the type: the numerical and percentage statistical interpretation, the statistical mean interpretation, the analysis of frequencies and the analysis of the correlations between the variables.

#### 4. Descriptive analysis of the questions of interest in the questionnaire – questions addressed to students

Some answers to the questions in the questionnaire are worthy of consideration.

For example, with regard to what performance means in school, the highest proportion of students considers that performance in school means the effectiveness of teachers, followed by the results obtained subsequently by students, in the future, at college and at the

workplace (*Fig. 1*). Educational management should take this into consideration when proposing its axiological foundations.

Question Q3 is an open question, of the word association type. Most of respondents have associated the teacher-student cooperation with mutual understanding (52.9%), followed by communication (30.5%) and achieving performance (9%) (*Fig. 2*).

Regarding the enhancement of school performance, the most motivating thought is, according to the answers received, that in the future will be obtained a better place of work, followed by obtaining good marks and the idea of going to college. The last places, as regards motivation, are the participation in school competitions and the competition with colleagues.

Question Q6 refers to the first three things suggested by the enhancement of school performance. As seen in the illustration below, 46.91% of respondents associate the enhancement of school performance with

Figure 1. Views of the beneficiaries of educational services with regard to what performance means in school

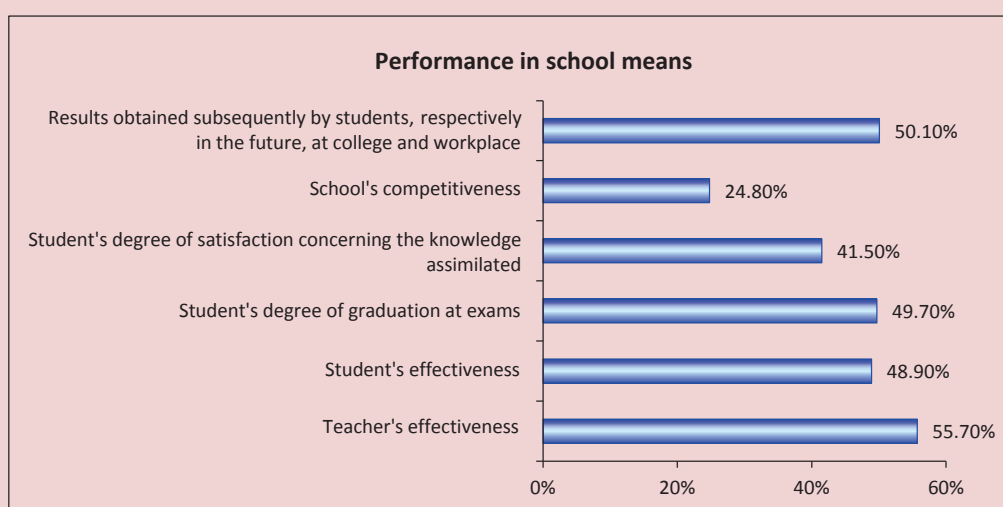


Figure 2. If you are considering the teacher-student cooperation, which are the first three things that come to your mind

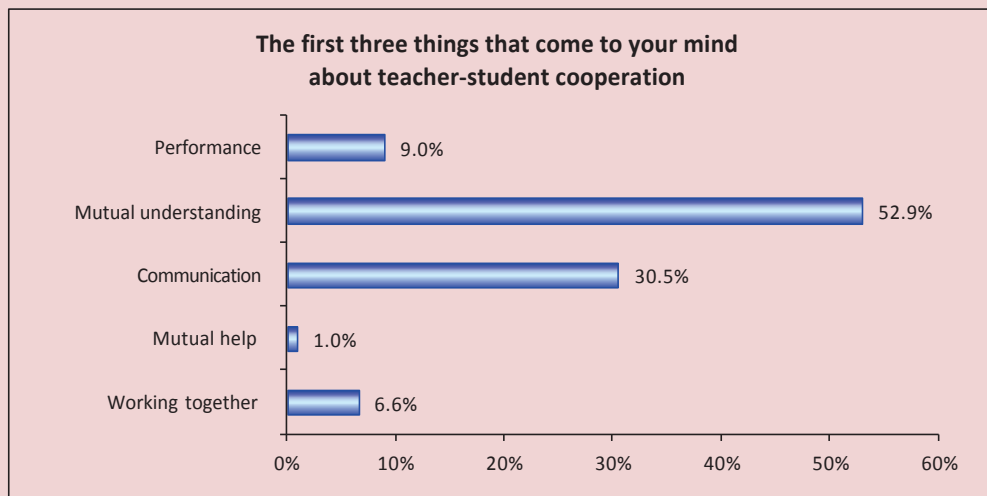
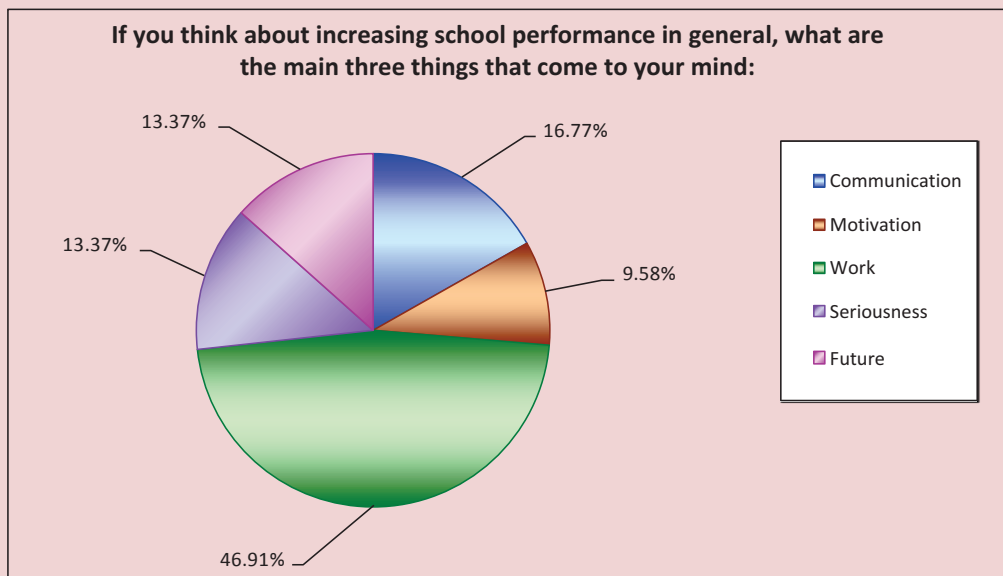


Figure 3. Notions with which the enhancement of school performance is associated



work, then, at a fairly large distance, with the communication between provider and beneficiary, and thirdly, on equal footing (13.37%) are the seriousness and the future. (Fig. 3).

The results provide information on motivation, clarity of information and the principle of reciprocity as the determinants

of co-production. Communication and mutual understanding are fundamental, reflecting the clarity of information. The principle of reciprocity outlines the double meaning of each stage of the co-production phenomenon, whether it is about involvement, time management, learning or evaluation.



## 5. The analysis and verification of hypotheses

We conducted an internal consistency and reliability analysis for all involved scales. After eliminating the variables with low loadings ( $< 0.5$ ) on their respective factor, we let all the scales with an acceptable level of alpha Cronbach ( $>0.6$ ) [11].

The operationalization of co-production by the six conceptual components mentioned (co-involvement, co-planning, co-management of time, co-learning, co-assessment and reciprocal adjustment) enables the specification of observable behaviors. The issues raised concretely in our study on samples were: “What is coproduction in education?”, “How is coproduction perceived?”, “To what extent and how does the behavior of the beneficiary of educational services change over time under the influence of the interaction with the offerer?”

A Pearson’s correlation was run to determine the relationship between the variables (Tab. 2). The first four hypothesis were found to be valid, with Sig 2 tailed level of .000, which shows that there is statistically correlation between our variables: cooperation as a prerequisite for co-production, commitment to the co-production and the belief in professional success, co-production and emotionally satisfaction, the decision to co-produce and the geographical area of origin. This means that changes in one variable are correlated with

changes in the second variable. According to the results, there is not a very strong correlation between the variables, but the fact that they influence each other to some extent, confirms the hypotheses from which we started. Thus, cooperation represents, in a percentage of almost 30%, a precursor of co-production between the offerer and the beneficiary of educational services. It is interesting that the level of co-production influences by more than 40%, the satisfaction perceived emotionally, which confirms that each co-production relationship is unique due to the subjective notes that intervene in the equation.

The last hypothesis has a great value of Sig (2 tailed)  $>0.05$  which shows there is no evidence of correlation between the two variables and the hypothesis is not sustained.

*H1: Cooperation between the provider and recipient of the educational services is a prerequisite for a good co-production of the values specific to education.*

The survey results show that the beneficiaries of educational services perceive cooperation as mutual understanding, communication and performance, issue that leads in time to welfare and a better future. Among the factors which motivate the enhancement of school performances, *professional interaction with teachers improves the learning environment*, is ranked on the first place. Over 90% of the recipients consider that

Table 2 Hypothesis testing results

Hypothesis	Pearson Correlation	Sig (2 tailed)	Result
H1	.266	.000	Sustained
H2	.321	.000	Sustained
H3	.406	.000	Sustained
H4	.303	.001	Sustained
H5	.048	.280	Unsustained

in order to enhance school performances, the teacher-student cooperation is relevant. Under the conditions in which the cooperation between the providers and recipients of educational services influences the attitude toward learning to the latter and their self-esteem, it results that, working together, occurs their axiological adaptation according to the values and knowledge transmitted to them. It is the very achievement of the educational ideal, of shaping of the type of personality that society aspires to. The results of the sample research signal the conditionality of co-production existence by co-operation, thus a strong positive association between co-operation and co-production.

*H2: The commitment of the beneficiary of educational services to the co-production with the provider is positively related to the belief in professional success.*

Bendapudi and Leone (2003) have demonstrated that, generally, consumers participate in the co-production of value together with the manufacturer of goods and services, when they have to make a choice, partly also because they expect to achieve positive results [5]. We will analyze to what extent the beneficiaries of educational services are determined to get involved in co-production.

The large number of respondents who agree and totally agree with the fact that by co-production in education are used more efficiently the resources of both parties and thus performance increases, is an important indicator. Of the participants, 55% assimilate performance with the effectiveness of teachers, hence the importance that they give to co-involvement and co-learning of the provider and beneficiary of educational services. Also

a high percentage (50.9%) of the recipients considers that performance is reflected in the results obtained subsequently by students, respectively in the future, in college and at the work place, thus in the professional success.

Among the factors that motivate the enhancement of school performances to the recipients of educational services, the thought that they will succeed in getting a better job in the future is ranked on the first place.

The H2 Hypothesis is validated: the results of conducting the questionnaires show that the commitment of the beneficiary of educational services to the co-production with the provider is positively related to the belief in professional success.

*H3: The higher the level of co-production between provider and the recipient of educational services, the greater is the satisfaction perceived emotionally.*

The level of co-production means the intensity of co-production and the quality level achieved. In question Q9 on the relationship between the performance in school and that from the future workplace, the majority (62.6%) replied that the two factors influence each other in a positive direction. The thought that in the future they will have a better workplace is also an element that constantly motivates the recipients of educational services. Over 90% of the students consider that a high degree of cooperation between the teacher and student increases motivation and the student's degree of satisfaction, which means that the emotional satisfaction is also greater. Therefore, the hypothesis H3 is validated.

*H4: The decision to co-produce together with the provider of educational services varies among recipients, depending on their geographical area of origin.*

In order to validate the H4 hypothesis, we use the following analysis strategy. We conduct a *crosstabs* type analysis between the opinion on what co-production means in education, if this is a better way of mutual use of resources, on the one hand, and the county to which the respondents belong, on the other hand. The Chi-Square test indicates a value  $p = 0.001$ , which means a strong relationship between the variables. If only 19.1% of the respondents in the Caraş-Severin County totally agree that co-production means a better way of mutual use of resources, a percentage share of 80.9% agree with the statement Q1. Counties of Timiş and Ilfov are the only ones that have a percentage of respondents who disagree with the question Q1, and 1.4% of the respondents are in total disagreement. But, we notice that the answers “agreement” and “total agreement” between the counties are balanced at this level, both variants being statements, reinsurance acceptances on the question.

Question Q5 – *Students’ performance is influenced by the optimal communication between them and teachers* – indicates a large difference between the counties of Caraş-Severin and Suceava. If 55.3% of the respondents in Caraş-Severin consider that students’ performance is influenced to a great extent by the optimal communication between them and teachers, only 26% of the respondents in Suceava County agree to this. It is also noted that in Suceava County, a fairly high percentage, namely of 22% of respondents believe that students’ performance is only slightly influenced by the optimal communication between them and teachers.

With regard to the relationship between increasing school performance and student-teacher cooperation, the answers are mostly

affirmative; one interesting thing to note is that in Caraş-Severin County the percentage of affirmative answers is 100%. All students consider that in order to increase school performances, the cooperation teacher-student is relevant.

A difference between the counties is observed when asking for the first three things that suggest the teacher-student cooperation:

- Timis County: mutual understanding, communication, working together;
- Caraş-Severin County: communication, mutual understanding, working together;
- Ilfov County: mutual understanding, communication, performance;
- Suceava County: performance, mutual understanding, working together.

The data analyzed show that the area in which the beneficiaries of educational services originate counts for the decision to be involved in co-production. In this case there is the influence of the cultural factor specific to each area, as a way of selecting the values, attitudes and skills that the members of a society share.

*H5: The decision to co-produce together with the provider of educational services varies among recipients, depending on gender.*

If, according to gender, individuals are more prone to be involved in co-production or not, it is interesting to be established. By comparing the percentage of boys and girls who believe that by co-production is achieved a better mutual use of resources, by the teacher and student, in order to increase performance, we notice that the ratio is, approximately, equal: total agreement – 31.4% boys and 29% girls; agreement – 63.3% boys and 67.6% girls.

With regard to the first thing that it is suggested to them by the idea of teacher-student cooperation, most of the respondents

of both genres indicate mutual understanding, followed by communication. A difference is observed at the third thing suggested by cooperation, male students choosing “working together”, and the girls “performance”.

By analyzing the questions Q2, Q5, Q8, Q22 we have noticed that there is no significant connection between the decision taken by the recipient to co-produce with the educational service provider and gender. The Hypothesis H5 is invalidated.

### 6. Strengths and limits of the research

A strong point is that the data used come from 11 high schools in various developing regions of the country, providing information based on which can be drafted improved plans to ease the involvement of teachers and students in co-production.

In the research undertaken, the main problem that I have encountered was the reluctance of some school organizations to grant me permission to conduct the questionnaire. Personal movement in certain towns was necessary, noting that people are more open to cooperation when dealing directly with a person.

Another limitation of this study lies in the fact that the sample used consists of students from the 12th grade, thus lowering the degree of generalizing the results for the general population of beneficiaries of educational services. However, this is also a strong point, because the students in the last year of pre-university education are in the best position to provide complete answers to the questions in the questionnaire.

The answers of the interviewed persons have a few limits determined by the influence of certain factors: themes approached by the questionnaire, novelty of certain notions, the

time of the survey. In most cases, the time allotted to complete the questionnaire was one hour for about 25 people, which included the explanation of unknown or ambiguous terms.

An important limitation is given by the fact that the number of respondents was about 25 people at the time of completing the survey questionnaire, and could influence each other in respect of the answers.

We mention that an important aspect was also the omission of using the term “co-production” in the questionnaire (is used only in question Q1) because in the current language is less frequently used and therefore we intended to avoid creating confusion among the respondents; its meaning took shape over time from the way the other questions were formulated.

### 7. Conclusions and future paper works

The main contribution of this paper is the conceptualization of co-production between the provider and the beneficiary of educational services through the elements indicated (*co-involvement, co-planning, co-management of time, co-learning, co-evaluation and mutual adjustment*), that sets the direction towards an approach to address in stages the training and educational process. Co-production in the education sector is not a one-dimensional concept, our results showing that it consists of the six items listed since the very beginning, as a theoretical basis for this research. By proposing this strategy of staging the phenomenon, it is supported the idea of its complexity, but also of the uniqueness due to the adaptation to individual contexts. According to Vargo and Lusch [20], the consumer is always co-producer. According to our results, co-production is slightly nuanced as compared to the statement quoted, in the meaning that

students (consumers of educational services) *participate in co-production if a few conditions are met*. Namely, the recipients of educational services actually participate in the co-production with the provider to the extent to which the working environment is positive, the teacher-student communication is present at a significant level and they have the certainty of the correlation with a satisfactory professional future; it also shows the importance of the social and cultural environment to which the receivers of educational services belong to.

Although the empirical research has shown various results as regards co-production between the provider and the beneficiary of educational services, it is interesting to note a few ideas arising from the data analysis: we emphasize in particular the conclusion that performance is related, firstly, with the effectiveness of teachers. Educational management should take account of this aspect, when proposing its indicative axiological foundations.

Secondly, the results of the study provide information regarding motivation, the clarity of the information and the principle of reciprocity as determining factors of co-production. A powerful motivation with regard to obtaining, in the future, a valuable place of employment, shows among the beneficiaries of educational services, an important association with co-production. Communication and mutual understanding are fundamental, and reflect in the clarity of

the information. The principle of reciprocity outlines the double meaning of each phase of the co-production phenomenon, whether it is about involvement, management of time, learning or evaluation.

Important implications can therefore have the development at the recipients of educational services, over the years of study, of the conviction that the effort made during the school years will be reflected, by default, in obtaining knowledge, skills and useful abilities for their professional development.

Also, many forms of communication from the teaching and learning activity can be improved, in such a way that the providers of educational services to better meet the needs of their recipients. Teachers are a source of information, expertise and orientation of learning (and of professional guidance in general), and must also be prepared to respond to the requests of recipients.

Last but not least, by increasing, at the recipients of educational services, of the motivation to co-produce, the teaching-learning-evaluation experience becomes a fair activity. By being perceived in this way by the recipients brings a plus of motivation and emotional commitment toward the organization (in this case, a learning institution). Coproduction in educational services could be one of the ways through which the European Union objective regarding the school dropout under 10% until 2020 can be reached.

## References

1. Andreassen T., Gustafsson A., Gebauer H. Co-production: A Fair-Weather syndrome? *Journal of the academy of Marketing Science*, 2010.
2. Baqer S.M. *The value of Customer Co-production in Developing New Products*. The University of Texas Arlington, 2006. Available at: [www.citeseerx.ist.psu.edu](http://www.citeseerx.ist.psu.edu)

3. Bateson J.E.G. Perceived control and the service experience. In: Swartz T., Iacobucci D. (Eds.). *Handbook of services marketing and management*. Thousand Oaks: Sage, 127–144, 2000.
4. Becker G.S. *Capitalul uman*, editura All, Bucureşti, 1997.
5. Bendapudi N., Leone R.P. Psychological implications of customer participation in co-production. *Journal of Marketing*, 2003, no. 67 (1), pp. 14–28.
6. Bettencourt L.A. Customer voluntary performance: customers as partners in service delivery. *Journal of Retailing*, 1997, no. 73 (3), pp. 383–406.
7. Bhappu A.D., Schultze U. The role of relational and operational performance in business-to-business customers' adoption of self-service technology. *Journal of Service Research*, 2006, no. 8 (4), pp. 372–385.
8. Bourguignon A., L'évaluation de la performance: du rationnel au symbolique. *Universalité et contingence de la gestion des ressources humaines*, 1993, vol. 2, pp. 19–33.
9. Cahn E. Time Banks – A Radical Manifesto for the UK. *New Economics Foundation*, 2001. Available at: <https://www.mruniversity.com/sites/>
10. Etgar M. Ways of engaging consumers in co-production. *Technology Innovation Management Review*, 2008. Available at: [www.timreview.ca](http://www.timreview.ca).
11. Garson D. *Statnotes: Topics in Multivariate Analysis – Reliability Analysis*. 2010. Available at: [http://faculty.chass.ncsu.edu/garson/PA765/rel\\_iab.htm](http://faculty.chass.ncsu.edu/garson/PA765/rel_iab.htm)
12. Grönroos C. *Service management and marketing: Customer management in service competition (3rd ed.)*. Chichester: Wiley, 2007.
13. Gummesson E. Return on relationships (ROR): the value of relationship marketing and CRM in business-to-business contexts. *Journal of Business & Industrial Marketing*, 2004, vol. 19, no. 2, pp. 136–148.
14. Jivan Al. Productivité et servicité. *Economies et Sociétés*, No.4/2014, *Cahiers de l'ISMEA*, No 4/2014 (Série «Economie et Gestion des Services» EGS No 15, Avril 2014), pp. 579–599.
15. Needham C. Realizing the potential of co-production: negotiating improvements in public services. *Social Policy and Society*, 2008, no. 7(2), p. 221.
16. Ostrom E. Crossing the Great Divide: Coproduction, Synergy and Development”, *World Development*, 1996, vol. 24, no. 6, pp. 1073–1087.
17. Risch R.A, Schultz Kleine S. Customer participation in services production and delivery. In: *Handbook of services marketing and management*. 2000.
18. Schultze U., Bhappu A.D. Incorporating self-serve technology into co-production designs. *International Journal of e-Collaboration (IJeC)*, 2005, vol. 1, no. 4, pp. 1–23.
19. Terblanche N. S. *Some theoretical perspectives of co-creation and co-production of value by customers*. 2014. Available at: [www.actacommerci.co.za](http://www.actacommerci.co.za)
20. Vargo S.L., Lusch R.F. Evolving to a new dominant logic for marketing. *Journal of Marketing*, 2004, vol. 68, pp. 1–17.

### Information about the Author

Maria Barabaş – Master, Ph.D. Student, Faculty of Economics and Business Administration, West University of Timișoara (Timișoara City, Timiș County, Romania; e-mail: [marybarabas@yahoo.com](mailto:marybarabas@yahoo.com))

Received July 19, 2017.