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THE ESSENTIAL DETERMINANTS OF CO-PRODUCTION, RELATED TO THE EDUCATIONAL SPHERE

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ABSTRACT

The intensification of the concerns about the co-production process is due to the awareness of its importance as a phenomenon. The attention of the scientific community, those involved in economics, management or marketing, as well as psychologists, has turned over the past decades into the coproduction phenomenon. They considered the aspect of co-production between companies that put together resources to achieve a common goal, but especially the aspect of co-production between the producer of goods and services, on the one hand, and their beneficiary, on the other. The emergence of the new producer, which allows the beneficiary to co-produce with him and the new informed consumer, eager for innovation, emotion, experience, illustrates these changes. In our view, coproduction theory provides useful information about the quality of collaborative work, which inspires the mechanisms necessary to generate the new product, the importance of each party's involvement in the coproduction process, the importance of emotional satisfaction in determining the improvement of results. Sample research had as a general objective the deepening, from the point of view of the respondents - with conceptual conclusions - of the coproduction between the bidder and the beneficiary in the educational process, in light of several elements through which the co-production can be reflected, namely: co-involvement, co-planning, co-administration of time, co-learning / intellectual co-training, co-evaluation and inter-adaptability of the bidder and beneficiary. In this article I took into consideration the relationship between co-production and co-planning, on the one hand, and between co-production and the offerer's attitude as a trigger or inhibitor, on the other.

INTRODUCTION

"Co-production" is an economic term increasingly used within the New Economy, but also in other fields, such as those relating to political and civil life. In the public services it was observed that service providers are required to do increasingly more with diminished financial resources. In response, they adopted co-production as alternative, being a way to use budgets more effectively. In this area, co-production is a work based on equality and mutual links between citizens, professionals, consumers and suppliers.

Many parents take the decision to send their child to a particular school, based on its reputation and positive experience shared by other parents. So, at one level, co-production in education takes place between citizens and school as a result of an exchange of information but also as a result of the involvement of citizens in the value creation. The educational system can talk about co-production between the teacher as a provider of knowledge, and the student as a recipient or beneficiary of knowledge and conduct, but also between the school and its representatives, teachers, on the one hand, and citizens represented by parents, on the other. In all sectors, coproduction helps to strengthen links between consumers and suppliers of goods and services and to improve outcomes for everyone. Thus, the first feature of co-production is networking. Coproduction implies a potential relationship between suppliers and customers, the latter providing to the first resources of knowledge, skills and competences.

The link is created between consumers and producers involved, by adapting to customers' expectations, triggering and keeping their emotions, especially developing consistency of emotional states.

In Romania, the Educational Law states the harmonization of the traditional values with the contemporary values implied by a dynamic society. In this context, coproduction in education aims at creating a global model of personality, consisting of values that describe the complex individuality of the contemporary world in terms of cognitive, motivational and attitudinal components. Moreover, education itself must be regarded as having more importance than economy, and having, as Jivan (2016) points out, its own course, that is superior to economy. Education should not be prioritized by market rules.

BASIC CONCEPTUAL DELIMITATIONS OF CO-PRODUCTION

The perception of the role of producer and consumer has changed, under the impulse of the transformations determined by the development of the immaterial economy and the expansion of the internet network as an alternative to information, socialization, economic transactions. Under these circumstances, the reconciliation of the relationship between the one who sells and seeks profit, on the one hand, and the one who buys and pursues the satisfaction of needs, on the other hand, was inevitable.

Literature indicates several forms of co-production, most often associated with certain types of collaboration: co-production between private commercial entities, between public services and citizens, co-production of private commercial entities and individuals and co-production between producers of goods and services on the one hand and their customers on the other. But to classify a subject, first, it has to be individualized, therefore defined.

First, the definition of Elinor Ostrom and his team at the University of Indiana in 1970: "The co-production implies a potential relationship between producers (eg. Police, teachers, doctors) and customers who want to become safer, better educated and healthy citizens .

Co-production, therefore, "is the process by which the resources used to produce a good or service are provided by individuals who are not in the same organization. (Parks et al., 1981)"

Coproduction enables a better way of creating or producing a good or service, depending on personal tastes and desires of each consumer. There was a tendency for customers to increasingly engage in co-production of goods and services, on the one hand due to lower costs and, on the other hand due to the desire for customization. (Michael Etgar)

Ordanini and Pasini says: "The co-production means using customers' knowledge to maximize the benefits of sharing services."

Jacob and Rettinger describe co-production as "interaction between buyer and seller to create a new product."

In the context of service-dominant logic, co-production is defined as "participation in the creation of the core offering itself".

"Coproduction describes the degree of overlap between the sphere of a conventional producer and the sphere of a conventional consumer." (Brudney and England, 1983)

Co-production central idea is that people who use services or end customers are hidden resources, so any system that ignores them can not be effective. Co-production refers not only to effectiveness, but also to "humanised" services, mobilizing significant resources represented by people.

The current educational model fills the knowledge's society in an attempt to rethink the traditional way of perceiving the value creation. The New Economy has entered into all areas, including the educational environment, which is the first step in the development of a new society consciousness

DETERMINANTS FOR CO-PRODUCTION

Professor John Alford says there are two factors that contribute to the consumer's decision to invest time and effort in co-production. One of these factors is the willingness to co-produce, which is influenced by motivational elements like sanctions, material rewards and intangible rewards.

The other factor is the ability to co-produce, which depends, mainly, on the complexity of the tasks performed and the abilities of the person who co-produces.

In education, teacher-student co-production is materialized by replacing traditional methods of teaching and learning with the participation-active ones, in which the communication becomes bi-directional and multi-directional and the participation, initiative and creativity are encouraged.



International Journal OF Engineering Sciences & Management Research

Regarding the ability to co-produce, the educational system works with all three motivational elements mentioned by Alford. Sanctions are a problematic motivational element because they do not generate adequate positive action. The most common sanctions are scoring, which can have positive effects on learner' mood to co-produce. Other penalties such as warning, written reprimand, temporary or permanent withdrawal of the merit scholarship / money, removal from school for a period of 3-5 days, transfer to a parallel class in the same school or another educational unit, notice of expulsion or expulsion in the worst case may be, as well, counterproductive.

Hasenfeld and Weaver, in 1996, showed that the habit of punishing may produce adverse and unwanted behavior. The issue raised is that all students who have been under sanctions will be demotivated to co-produce. The penalties are insufficient motivators in education for two reasons. One claim is that a certain behavior is perceived as something unpleasant. The other is that, not giving students confidence, they will develop a defensive behavior and will not have the tendency to co-produce. While experiencing these problems, sanctions remain a motivational element for co-production with the appeal to the sense of justice that all people have.

From the specialized works it can be concluded that one of the determinants of the beneficiary's involvement in the production process is the manifestation of a positive attitude towards the effort made. Material type, material rewards, merit scholarships or awards based on the idea that giving students rewards commensurate with their performance, they will be motivated to become increasingly proficient. Although the material rewards include an economic exchange such an exact amount to be changed, they do not create feelings of obligation. Intangible rewards relates to self-determination of the type of intrinsic motivation and skills to sociability, to the shared values. Intrinsic motivation is strong as it keeps the feeling of respect felt by students and increases their sense of self-efficacy too. Bloom, Hill and Riccio found that "personalized attention according to customer's needs" has a strong impact on it. Likewise, it is recommended to pay attention on the student , that leads to the most favorable results, but since that can be a waste of time, is not always recommended. Another example of intrinsic motivation is sociability like identifying oneself as a member of a group. The tendency to co-produce is influenced by normative or expressive values, norms and commitments on social and moral issues, such as saving the environment and elimination of corruption. Desire and willingness to co-produce in education depend on several factors. More so, different students are motivated by different factors. Besides willingness to co-produce it is important the ability to co-produce. One way to promote this skill is by easing the tasks to be performed. For example, students will be willing to cooperate in a problem if requirements are clearly formulated task which will seem relatively simple.

CONDUCTING EDUCATIONAL CO-PRODUCTION

Co-production involves collaboration, but also includes other valences than participation. The newly created learning elements as a result of the co-production process are characterized by the fact that they represent the common contribution of the offerer and the beneficiary who have engaged, planned together, spent time together, learned together, evaluated each other and adapted to each other's requirements.

As I have shown in other researches, co-production is a step-by-step process that consists of six stages:

1. Co-involvement;
2. Co-planning;
3. Co-administration of time;
4. Co-learning (Intellectual co-training);

Co-learning depends to a large extent on the teacher's ability and the student's favorable disposition to listen and collaborate. Co-learning means changing communication behavior and assimilating the essence of new issues, but also mutually altering the expectations and actions of each party. Co-learning is a form of intellectual co-engagement through which knowledge and skills are actively and methodically transmitted through the systematic participation of the bidder and the beneficiary in the work of achieving performance.

For example, co-learning is considered to have the following dimensions

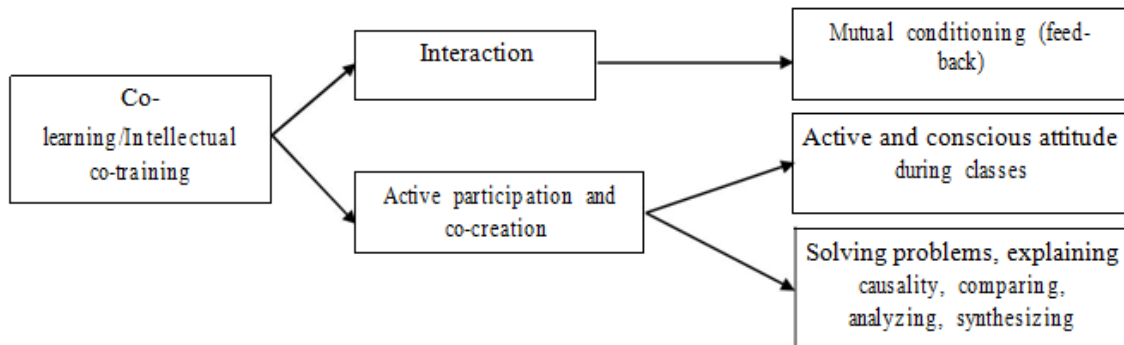


Figure 1. The dimensions of 'co-learning' construct

5. Co-evaluation

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

- student assessment by teachers;
- self-evaluation, a process of self-appreciation by which the learner learns to self-acquire, with many implications on the motivational level;
- mutual evaluation of pupils;
- teacher evaluation by students.

Co-evaluation is considered as one of the evaluation methods with wide formative valences, allowing for product evaluation, but also for the process from the inside, in which the beneficiary of educational services performs his role as a participant in his own training.

6. Offerer-beneficiary inter-adaptability

Adapted to the education sector, mutual adjustment takes place through cooperation and mutual modification of the expectations, states and actions of the parties. It is a form of adaptation, mobilization, a permanent effort put forward by the offerer and beneficiary in an attempt to fill the gaps and achieve balance in the complex process of teaching - learning - evaluation. In education, more than in the other sectors, the reciprocal adjustment is felt on high levels because the "product" that results from the production process and co-production is knowledge, involving theoretical notions, but also behavior and attitude.

DATA SOURCES AND EVALUATION METHODS

The empirical research was conducted on a sample of 270 12th grade students from 7 schools belonging to different areas of the country. 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). Hence, a few major consequences, as well as the perception of gratuitousness as an obligation or as a favor.

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 are perceived and how they take place in the educational process. The questionnaire applied consists of 18 questions (most of the questions having 10-12 sub-questions), managed personally (directly).

Namely, we have decided to check the following hypotheses:

H1: A high level of co-planning leads to an increase in co-production.

H2: The co-production is directly and positively correlated with the offerer's general attitude.

THE ANALYSIS AND VERIFICATION OF HYPOTHESES

The regression analysis highlighted the fact that among the indicators with which the co-production has a linear relation of moderate intensity there are planning and designing together the topics of learning. We chose only a few of the variables describing the dimension of co-planning, among which the most important ones are outlined in the following table

Table 1 Regression analysis results for co-planning dimension

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2,542	,205		12,417	,000
My objectives are the same as those of the teacher and are defined by the final performance	,025	,041	,038	,596	,552
Many times, we design together with teachers some themes	,094	,038	,151	2,461	,014
Planning together with the teachers certain topics of study, the chances of educational activities being enjoyable and the objectives to be achieved, increase	,099	,043	,146	2,310	,022

Analysis of the correlation table can lead to some interesting conclusions. Thus, the offerer's general attitude is an activator or inhibitor of co-production. It is important to create a favorable channel of communication between teachers and students, based on trust, but also on recognizing and promoting the positive elements observed in students.

Table 2 Regression analysis results for co-learning dimension

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2,542	,215		11,820	,000
I like to participate in school activities, along with colleagues and teachers	,027	,035	,048	,785	,433
Professional interaction with teachers improves my attitude towards learning	,158	,053	,224	2,960	,003
Professional interaction with teachers improves the learning environment	,096	,050	,144	1,941	,053

According to statistical analysis, the H1 and H2 hypothesis are validated.

CONCLUSIONS

If for Chesbrough (2006) co-production means co-innovation or consumer involvement in the innovation process, for Etgar (2007) co-production takes place in the stages described as follows: development of pre-conditions for co-production, cost-benefit ratio calculation for co-production, activation, output generation. From our point of view, co-production takes place in several stages, called: co-involvement, co-planning, co-administration of time, co-learning / intellectual co-training, co-evaluation and inter-adaptability.

From our data analysis, the co-production between the offerer and the beneficiary is directly and positively correlated with planning together the study topics, on the one hand, and the professional attitude of the offerer, on

International Journal OF Engineering Sciences & Management Research

the other. In our view, coproduction theory provides useful information about the quality of collaborative work that inspires the necessary mechanisms for generating the new product, the importance of the involvement of each party in the coproduction process, the importance of emotional satisfaction in conditioning the results, and the aspects that need to be exploited, on the issue in question

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