

## **Entrepreneurial competences from syntegrative perspective**

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**Abstract:** This article nuances a distinct approach for entrepreneurial competences, key category in contemporary education, which is addressed to an individual who can choose himself and give meaning to his becoming by exploitation of learning opportunities in different moments of the life. The starting point is the holistic approach, as reflected by their definition in “Key Competences for Lifelong Learning – An European Framework” from 2006, narrow in this case because it does not sufficiently capture the perspective of becoming. Personal meditations of professor Florin Felecanu who signals that XXI century predicts a new holism, as syntegrative type, have conducted the literature review to professor Stafford Beer achievements from Manchester Business School, U.K. Amazing discovery of syntegrative principles, basis of Syntegration® method that prof. Beer has proposed to solve complex problems, it caused transposition and connecting them to an educational context that has becoming the main reference. The paper presents a syntegrative model of entrepreneurial competences, illustrated by a cube, perfect figure, specifically chosen to involve components (knowledge, skills and attitudes) in a syntegrative functionality, three by three. It aims to show that in entrepreneurial competences training, three procurement categories work simultaneously in several basic steps of entrepreneurial process and can be common landmarks for different types of education. Because this last consideration were selected eight major stages of the entrepreneurial process

and 12 types of acquisitions (four types of knowledge, four types of skills and four type of attitudes) after recomandations of 2004 national curriculum for Entrepreneurial Education in Romania high school, but also after 2006 “ Key Competences for Lifelong Learning – An European Framework”. Those correspond to the cube with 8 tops and 12 sides and all participate equally and simultaneously to the formation of entrepreneurial competences, necessary to start a business at any opportune moment of life. The model can be adapted to other types of competences, being a matrix of individual success, possible today or tomorrow.

**Keywords** entrepreneurial competences, holistic approach, knowledge, skills and attitudes, syntegrative model, start a business.

### 1. Introduction

The New Millennium shows the contemporary individual the importance that it has in shaping the best the knowledge of society and challenges it to anticipate the sense of human destiny and the domination of possible existing realities through innovative strategies and approaches. Burdened with demiurgic responsibilities, as world creator, today's human through its enthusiasm and the bold modeling capacity, has responsibility for the success and perfection within a complex existence context whose challenges can confirm in the same measure success and failure. The current state of the world reflects the effects of global changes which are rapid and profound in different areas of the social, showing accelerated development on the horizontality of human species and infiltration of artificial intelligence in the most intimate areas of human life, individual and collective. Globalization and the expansion of the Internet on all continents generated new forms of dependency justified by exaggerated holism, which “tied” to the Whole any infinitesimal flounder of the parts. Undoubtedly, the 20<sup>th</sup> Century has designed and built existential models on the basis of holistic approaches whose roots are found in the ancient philosophical thought of Parmenides and Aristotle. Holistic theory supported the idea that the whole is more than a simple sum of parts; it is a whole that determines essentially singular and it precedes; Aristotle himself described his own conception of the state by analyzing the working of the human body, seen as a system involving its structural components, the vital organs (Andrei C., 2007). In addition he pointed the problem of the precedence of whole from part, very

important clue in understanding contemporary holistic approach. Prospective changes have glimpsed in education field too, but the final results were not in line with economic, social and the political realities due to its continue change in the Twentieth Century. Connected to tachycardia pulse of society that thinks itself as a transforming power and the result of it, education has reformulated paradigms, deeply rooted in a world affected by globalization, inclusion and integration. Acceptance and promotion of educational alternatives, the school opening to the world, focusing on educated, lifelong learning, access to learning opportunities for all and key competences training- that have become landmarks of the contemporary educational system which in turn fall back as holistic principles. Such recovery and inclusion of all forms of education as a valid part of human education effort required the focus of what distinguishes them by a focal point to tend and to link them. Introducing competences as a common result of current education set up an favorable context for the rehabilitation of non formal and infomal education, opened alternative learning and opportunities for diversity during lifelong period. However, orientation of educational process towards competences has generated controversy and confusion related to the definition and their translations in National Curriculum contexts. Although there are several points of view on what represents the distinctive notes belonging to the term competence, although subtle nuances of different languages have emphasized some existing ambiguities, all national education policies of the EU common space have validated the holistic approach to its (European Commission, 2006) by initiating educational reforms in this regard. In the following lines I shall attempt a conceptual clarification for educational competences after holistic perspective, starting from the definition proposed in the “Key Competences for Lifelong Learning - A European Framework”, by the European Parliament in 2006, as necessary moment for identifying the added knowledge that synteegratory perspective will bring it for this issue.

## **2. Holistic dimension-specific difference in understanding competences**

In 2006 the European Commission Working Group has published in Official Journal of the European Union the “Key Competences for Lifelong Learning - A European Framework”, as an annex to the European Parliament and Council Recommendation. In this document has been defined competences as “combination of knowledge, skills and attitudes appropriate to a context” (European Commission, 2006, pg.5) and

highlighted their importance in contemporary individual road to success. I will start from this definition because it reflects the changes in the formal curriculum in Romania and its at the base of it. Therefore, according to this understanding, competence in education can be considered a complex outcome, as unitary type, involving operation of a structural triads within a given context. Knowledge, skills and attitudes bear n combination depending on the particular context, the success is directly conditioned by choosing the best form. Competence is more than the sum of these parts because the structural functionality is not randomized; it is directed toward a final manifest noticeable, in terms of performance, the quality and success

(European Commission, 2006, pg.5). In fact this aspect of opening to the outside has created confusion between the terms competence and capacity subtly reinforced in some languages from apparent synonymy between them. Indeed human individual has a set of capabilities (such as analysis, synthesis, argumentation, teamwork, capacity etc.) reflected by the possibility of doing things, a manifest outcome as an indicator of development level and a degree of exercises within a period of time. (Gerard, F.M. Rogiers, X., 2002). In other words the capacity develops gradually, with practice, being an inner growth influenced by the time and expressed outwards just as a fruit tree grows over time and becomes able to produce fruits, if external factors are favorable for this to happen. Instead competence is a whole which is formed, which includes some essential elements:

\*A challenging context that raises questions, being likened to a network that can navigate from one point to another (Gerard, F.M. Rogiers, X., 2002).

\*Attitudinal power to purchases as strategic combinations, best among the parties and to start a structural functionality.

Forming is a complex process that starts from a first project, from a summary that guides the parties functionality and blends it so perfectly into their original purpose that their own analysis of it becomes an appropriate time, just like a puzzle. Under these conditions the human capacity for fragmentation and analysis of all parties is actually a reference to the original global shape that defines itself and take part. Such competencies reflect the mastery to put in the right form existing acquisitions at a particular time by mobilizing impulse of a specific and provocative context. Holistic education competences perspective draws attention for the actors involved to the fact that within current life context, to focus only on one particular type of procurement is not sufficient (as required to connect) to

reach success. The contemporary reality is itself a network connection that works on behalf of existence, its performance being translated in terms of survival. However the current holistic approach is narrow and urges to dominate a stable reality, although all human projections are thought in terms of becoming. In the New Millennium will not be enough to focus on a present time thought that separate from future moment and previous to it, but will devote their simultaneity and interconnection, every second of life itself comprising the beginning and end. Education as human development project will reconfigure itself as system and process consistent and in interaction with the other areas of human knowledge, it will reshape from new existential trends as complex answers from Questioning Being

### **3. Educational competences from syntegrative perspective**

Competences in education reflect a complex jump from project to act, from possible to real, each step being a summary of simultaneity that the human mind is used to separate them and to think of it in terms of temporal and spatial sequence. Those are more than simple aggregates of human knowledge subtle or tumultuous involving all components, are implementing form, also becoming exercises, simulations, and variants of human creation, fusion. In this way any individual can exercise demiurgic skills and activate transformer power, if this tends towards performance. The ability to connect the possible with the real from the perspective of becoming, to close the curve and linear thinking in the single point of overlapping time dimensions, that prefiguring another type of holism in 21st Century (Felecanu, 2009) reflected by infiltrating in the scientific vocabulary of a particular term that was born on the realm of cybernetics: Syntegration®. Since 1991 Professor Stafford Beer of Manchester Business School –UK worked in a very efficient method for solving complex problems, starting from the cybernetics. He tried to develop a model that integrates perfectly with as many different views and to gather as much information about an issue proposed, inspired by sacred geometry of perfect geometric shapes whose description can be found in the book „Timaeus” of Plato (which is spoken by five regular solid forms and the underlying material to which correspond the five elements of nature). Prof. Beer was inspired by icosaedru whose form suggests movement and flowing and was associated to water. It has 12 points, 30 edges and 20 sides, all equilateral triangles congruent. So he designed a three-dimensional structure of communication after icosahedron model which allows the interconnection of human brains as a whole and function together as one (Diringer, Fr. J. 2010). The method makes it possible to address 12 different topics related to the 12 points of the

icosahedron, dynamic integration and interconnection of 30 participants which may have two meetings simultaneously on two different topics without promoting any form of organisational hierarchy and functional. It was appointed Syntegration, the term reflects a combination of Synergy and Integration (S. Beer, 1994). It is now a registered trademark and belongs to Team Syntegrity International Company, which can find details at [www.syntegrity.com](http://www.syntegrity.com). As defined in the romanian dictionary (Dicționarul Explicativ al Limbii Române, 1975) synergy is seen as combination of several parts to perform the same function. In 1971 german physicist Hermann Haken has put the basis of the science called synergy, starting from the analysis of how the dynamic systems selforganise through synchronous cooperation of the internal components-as interaction towards a target (Mânzat, 1999). Instead the integration can be considered a process prior of synergy moment because first supposes the inclusion of parties towards harmonizing them into a whole. Therefore syntegration term effect can be thought of as manifestations of the term integration and their functional connections towards perfection. Under this principle which formed the basis of its genesis, its meaning can be considered one that is more than would appear out of the simple combination of parts (Felecanu, 2009). It not only shows the inclusion and harmonization with other elements involved through other elements towards an immediate end, but towards the end beyond the immediate, in other words reality is connected to the furthest possible by immediately possible, its anticipation giving this relationship bilateralism. This explanation is the best reflected in the empirical plan, in case of karate man performance who can break a stone with his bare hand; his secret is that mobilizes its force at a point which is beyond the target itself. Projection of a possible distant links the future to a real environment and optimizes the way in which the parts combine and work together. In education the problem is similar, meaning that individual training is becoming a process linked to the society they live in. The mobilization and combination of acquisitions in terms of competences should be aimed not only at practical problems of immediate reality but especially to anticipate the future, since they themselves are the goals towards which the whole aggregate of contemporary education works in some syntegrative way to avert the failure of human race. But we must not forget that education manages realities thought in terms of probability (Mânzat, 1999) which means that the change of perspective is just a progressive transition through the points of perspective of human development project..

#### **4. Syntegrativ model of entrepreneurial competences**

J.A. Timmons reported since 1999 in paper "New Venture Creation: Entrepreneurial for 21<sup>st</sup> Century" that between Europe and the U.S. is an economic gap caused by the education and American culture which focused on entrepreneurship has created premises of infrastructures to successful companies and has stimulated innovative process (Timmons, 1999). But in recent years most European documents validate the importance of entrepreneurship in shaping a competitive knowledge-based society and encourage entrepreneurship as a pillar of socio-economic development. In this sense, "European reference framework on key competences for lifelong learning", Annex to Parliament and the Council of Europe Recommendation from 2006 includes entrepreneurial competences among the eight categories of key competencies which determine the success of the European citizen in the New Millennium. But entrepreneurship issue is not so simple. Brinkmann in "Competence of top management teams and the success of new technology based firms: a theoretical and empirical analysis concerning competencies of entrepreneurial teams and the development of their ventures" draws attention to that, although entrepreneurial competences are important, the discussion about it on scientific literature are still in early stage (Brinkmann, 2007). Siwan Mitchelmore și Jennifer Rowley in work "Entrepreneurial competencies: a literature review and development agenda" from 2010, identify differences in the way in which those terms are understood in U.S. and European space. The authors clarified that U.S. school uses the term competency to describe the skills necessary to initiate and manage a business with success while the British school uses the term of competence to specify minimum standards of performance in the additional field, as distinctive competences from managerial competences. This article is based on the European understanding and tried to propose a model of syntegrative competences necessary to initiate a business, in order to be a landmark accessible for all type of education, not only for the formal education (Mitchelmore and Rowley, 2010). As I mentioned before syntegrative approach shows that future, content now as latency and foreseen as potency and is depending on the force which reactivates and merges human acquisitions; because that entrepreneurial competences are very important but not necessarily for an immediate reality but for a removed potentiality. Challenging context and opportunity may activate and/or accelerate fundamental acquisitions to starting a business whenever an individual's lifetime, provided that creative tension is greater than the force which could oppose. The process of forming of entrepreneurial competences as syntegration involves a fusion rather than a sum, because rearranging the

components into a whole which can bring elements of originality, depends on the force for integrative and synergetic work, more power like any type of internal or external, restrictive or destructive influences or tendencies. The proposed model is a transposition in the educational plan of the operating principles of Professor Beer method, but with necessity to adapt at another perfect figure that supports three combinations, three being the number of components proposed by „European reference framework of key competences”, guide document for education reform in most European countries at this time. Figure was chosen as hexahedron( transl.Platon,1998), which is why I have identified eight fundamental steps of entrepreneurial process corresponding to the eight corners and 12 key acquisitions for the 12 sides. They can participate simultaneously in two stages and can be combined with other four types of acquisitions, two by two. The identification of these elements was made following the recommendations made by European Reference Framework of key competences from 2006 and the national curriculum for entrepreneurship education at junior highschool.

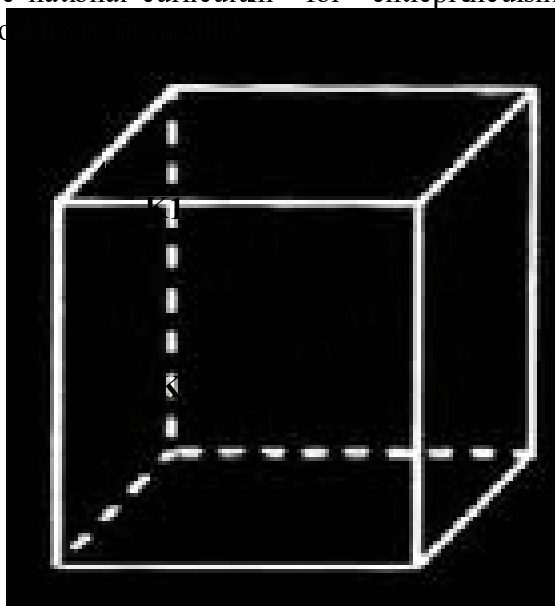


Figure 1 - The syntegrative model of entrepreneurial competences  
Symbols explanation:

\* The key moments of entrepreneurial process:

- 1- Identification and orientation toward the value-creating opportunities.
- 2- Selection of product or service to create a niche market.
- 3- Making a business plan.



- 4- Identifying and defining the resources needed for the business.
- 5- Diagnostic analysis.
- 6- Taking prudent risks.
- 7- Framing and adoption of ethical principles.
- 8- Team building and coordination.

\* Key Components:

Attitudes:

- A1- Proactive attitude
- A2- Critical and reflexive attitude
- A3- Responsibility and determination
- A4- Prodemocratic attitude

Capacities:

- C1- Capacity to identify and evaluate opportunities
- C2- Capacity to assemble information in a context
- C3- Capacity to anticipate and respond to threats
- C4- Capacity to build and work in a team

Knowledge:

- K1- Knowledge about human-environment: the natural, social and economic
- K2- Knowledge about the legitimacy of the market economy
- K3- Knowledge of risk and ethical rules
- K4- Knowledge about human needs and expectations

To achieve each key moment the three categories of procurement are simultaneously involved according with syntegetic function. For example capacity to identify and evaluate opportunities is simultaneously involved in moment 1 (for Identification and orientation toward the value-creating opportunities) and also in moment 2 (for selection of product or service to create a niche market) while proactive attitude is simultaneously involved at moment 1 and 8 (team building and coordination). So entrepreneurial competences are a whole where the components working syntegetic towards a final harmony which can occur immediately or at any future of the individual existence when this matrix can be activated by a tense context. The model was developed following analysis of documentary considered as the first stage of the thesis „Contribution of non formal education at development of entrepreneurial competences among young people with visual disabilities ” in order to be a common benchmark to measure results that young people with visual impairment can perform following formal and non formal educational activities. Being a proposal, it may be supplemented or amended after other indicators involved with the condition of not cancelling the operating principles.

## Conclusions

This theoretical analysis aims to highlight the fact that definition of competence from which I started can be improved. The accent on the combination of components impoverishes the term of key particularities that would not cause more confusion among educators. Synteegratoare approach, starting from prof. Beer and inspired from personal thoughts by some Romanian teachers such as prof. Florin Felecanu (about philosophical perspective on becoming) and prof. Ion Mânzat (about synergistic psychology) is an transposition in educational plan of understanding becoming as progressive advance, by synthesis of subsistence and existence, between the real and possible. To omit important notes out of the term sphere of competence would mean to limit the horizon of knowledge and action on the border of that immediate possible whose nearby fascination could create the illusion of success. Such a restriction is not allowed in a Millennium that glorifies reason and which thinks itself in terms of performance. The mobilizing force, the leap from idea to action, anticipation and exploration of the Possible remain intrinsic and existential constants without it our projections, in the most beautiful and useful words, lose their value. Therefore synteegrative in education is an invitation for “questioning human being” to rediscover their own ontological dimensions, an invitation to authenticity as a seal on the transiency.

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