

ISSN: 2357-1330

http://dx.doi.org/10.15405/epsbs.2017.05.02.1

# Edu World 2016 7th International Conference

# INTEGRATIVE LEARNING PATHWAYS IN COMPETENCE BASED CURRICULUM

Emanuel Soare (a)\*

\*Corresponding author

(a) University of Pitesti, Tirgu din Vale Street No. 1, Pitesti, Romania, emanuel.soare@upit.ro

#### Abstract

The article focusses on a theoretical inquiry of the ways to implement the *competence based curriculum* (CBC) in the actual postmodern society, with an analytical emphasis on the *integrative learning pathways* (ILP) that must be designed and implemented in the didactic activity as concrete ways of operationalization of the curriculum paradigm. There are identified various perspectives of defining the competence as an ability construct that determines the architecture of the school curriculum. The competence development is linked with the design of the *complex learning situation* (CLS) as the specific pathway in CBC to foster original and efficient integrative learning of students as the basis for the development of the competence. Also, the paper links the CLS with the necessity to develop the students' *integrative learning* that is viewed as a paradigmatic shift in curriculum development with focus on integrated didactic activities that leads students toward making logical and social-valued connections across curricula.

© 2017 Published by Future Academy www.FutureAcademy.org.uk

Keywords: Competence based curriculum; integrative learning; integrative learning pathways.

#### 1. Introduction

The postmodern pedagogy affirmed in the postmodern, postindustrial, knowledge society, imposes a new approach of education, as specific study object, with impact on curriculum design. It promotes a *finalities based curriculum* (FBC), designed as a unity of *psychological* dimension of education - defined as the competences that must be developed and the *social* dimension - as the activity domain/basic contents that are being validated at social level (Cristea, 2016, p. 50).

This way the global and opened character of postmodern education is assured, context in which the competence based curriculum (CBC) becomes the implementation of the curriculum paradigm as a specific type of a project, adapted to the actual society. This new model of curriculum design emphasizes

the central role of *competence* in designing the *integrative learning pathways* (ILP) that must be anticipated and implemented in school context.

They are developed as an effect of the knowledge society that promotes the overcoming of the traditional borders of the disciplines and the raising of an *integrated curriculum* that must advance a global and unified education plan with the capacity to promote the *integrative learning* as personal aspiration of a new curricular product able of efficient professional and social integration, e.g. the *integrated individual*.

As we considered elsewhere (Soare, 2015a, p.975) there will be of a great importance to identify the *methodological landmarks* we must rely on in defining the competence: a) the competence is based on various *psychological traits* of the students who needs to solve a problem or to act in a specific situation; b) the competence presents itself as an *integrated ensemble* of various acquisitions previously acquired by students (knowledge, skills, attitudes etc.); c) the potential competence manifested in action must presents a series of *indicators* of its presence; d) the manifestation of the competence is gradual and related with a situation or a *family of situations*, being dependent of the designed characteristics of these learning situations.

### 2. Competence Development

The development of competence is based on the identification and valorization in the educational context of the *personality traits* that make possible the realization of the student actions and that allows the solving of the situations they are confronted with. As an expected result on a medium and long time frame of students' activity, the competence integrates a series of *students' acquisitions* made possible by involving them in the learning activity. Those acquisitions could consist in knowledge, skills, attitudes, resolutive/behavioral patterns linked with the designed learning activities. They can group themselves in *integrative ensembles* used when students are asked to resolve complex learning situations relevant for their lives and which exceeds the disciplinary boundaries. The way students approaches the learning situations emphasizes the competence presence *indicators* and assures the continuity and coherence of the process of the development of competences on a medium and long time frame. Also, the competence manifest itself gradually in the learning activities students are involved and which requests, progressively and ascending, elements of competence needed for their solving. The indicators that proves the development of competence are intrinsically linked with the designed learning situation, being dependent of the specific of the learning activities students are involved in.

These methodological landmarks will lead to the definition of the competence as an *ability* construct depending on the context, an assembly of dispositions that facilitate the acquisitions that are specific of a learning context. Always linked to situations and demands specific to certain areas, belonging to a very specialized field or a general one, the competence is always linked to a context and is acquired through learning (Soare, 2014, p.13). As a multidimensional concept that reflects the students' potential and available personality traits that facilitate the integrated mobilization of the resources acquired in time in unintended or designed learning situation, aiming at solving complex and significant situations (Soare, 2015a, p.976), it becomes the ones capacity to mobilize the necessary resources to solve a particular task in a given context, or a series of more or less complex life situations (Soare, 2015b, p.2).

Thus, the *competent processing* of contents and situations becomes the indicator of the development and evaluation of competence (Soare, 2016, p. 28).

## 3. Complex Learning Situations Design

This concept of competence is intrinsically linked with the designing of the *complex learning situation* (CLS) as the specific pathway in CBC to foster original and efficient *integrative learning* of students as the basis for the development of the competence. The CLS is based on learning: a) the *decontextualized knowledge* and skills through *punctual mobilization* of resources in *structured learning activities* focused on concrete and behavioral learning objectives and b) learning *the connections* of punctual acquisitions through *reunited mobilization* of acquisitions that foster the *functional learning activities* which are linked to real life situations (B.I.E.F., 2012, p. 27-29). The competence is developed when combining the *structured learning activities* with the *functional learning activities* in an *integrative learning pathway*.

As we emphasized in another context (Soare, 2015b, p.4), these two types of activities become the main *axis of competence development* and determines the way CLS are being designed. They will always combine the interiorizing of knowledge and skills with their use in real-life situations.

Also, as Langa (2016) states, by developing a blended learning system in the initial training process and continuing education of teachers, consideration has been taken on the creation of a powerful, interactive learning environment, focused on the students' needs, in which they should be involved and motivated, assuming responsibility for the studies attended and knowledge acquired.

#### 4. Integrative Learning Pathways

The process of developing the competence through CLS leads to the development of students' *integrative learning*. From Dewey work to Brunner's we can see this emphasis on the necessity of holistic and interdisciplinary education that offer students a deeper understanding of the world.

As Dressel (1958) emphasizes, it is important to distinguish between the concept of *integrative/integrating*, which are active student-centered processes, and *integrated*, which is used to describe an educational context and emphasizes coherence and complementarity of functions. To be *integrative*, in Haynes perspective (2002), the connection students make must blend and synthesize various perspectives. Even the synthesis may be of different points of view or perspectives that are (inter)disciplinary, or different views outside of the academic context, the learning must come from multiple perspectives. They can be from academic disciplines, cultures, subcultures, or individual life experiences (Newell, 2001a, p. 197).

Also, according with Kendall *et all.* (2005, p. 1), the integration of learning is the demonstrated ability to connect knowledge across disciplines, and from disparate contexts and perspectives. Its development is fostered through participation in *intentional* academic and co-curricular experiences during school. This perspective is coherent with the *global* and *open* perspective of the curriculum paradigm vision of the postmodern education and which is specific of the postmodern pedagogy.

The pedagogic literature treats integrative learning as presenting a double dimension: *cognitive* and *non-cognitive*. The *cognitive dimension* considers how different perspectives contribute to an enriched

whole (Taylor Huber & Hutchings, 2004) and the *affective dimensions* involves student attitudes manifested in the learning process. Students must have interest and motivation in order to really engage in the integrative act as the learning could be ego threatening as old understandings are abandoned for new and more complex ways of making meaning (Alexander, 1997, Baxter Magolda, 1987, Newell, 2001a, Perry, 1978).

In mapping the integrative learning, other authors focuses on the capacity to bridge the curricular and co-curricular, to explore connections across the general education curriculum and the major or between academic knowledge and practice, and to integrate previous learning with new material, (Brownlee & Schneider, 1991; Huber & Hutchings, 2004; Baxter Magolda & King, 2004; Haynes, 2002).

In integrative learning we can start from redesigning teaching and learning from a delivery, directing, authority-driven approach to a new model where the teacher becomes a facilitator, mediator or even a coach that *intends* to produce teaching and learning, to connect knowledge and skills specific to various disciplines in a deeper comprehensive understanding of the world. Thus, the *intentional teaching* and *intentional learning* are becoming the keys of *integrative learning pathways*. Teachers can choose for alternative application of modern methods of education, thus combining the activities based on individual effort of the student with the activities centered on group (Petruţa, 2013, p. 649).

We can consider *integrative learning* to be a paradigmatic shift in curriculum development that focuses on integrated didactic activities that leads students toward making formative and social-valued connections across curricula. It presupposes the development of the students' capacity to connect the skills and knowledge from different disciplinary sources and learning experiences in order to apply them in complex school and real-life contexts, the implementation of skills and practices in these complex settings, the utilization of diverse points of view or the capacity to understand issues and positions contextually. As Boss (2011) explains, the *interdisciplinary understanding* of things is crucial for modern-thinking students.

The integrative learning and interdisciplinary understanding of real-life contexts are at the core of the development of students intellectual skills that are required to integrate diverse perspectives they are learning in educational settings and that are expected to be developed in the 21<sup>st</sup> Century. These skills can contribute to solving many of the problems of the postmodern society.

Integrative learning means focusing on the cognitive processes students are activating when they approach the curriculum. The emphasis is on the psychological processes involved in the students' activity rather than on the content. The quality of thinking will foster students' capacity to identify the relevant disciplinary insights and integrate them from various subject related discipline, interdisciplinary curriculum and then, with a deeper understanding of the phenomena, applying them to real-life contexts.

There can be used various pathways to foster integrative learning like Klein (2005, pp. 8-10) identifies: a) team teaching and team planning, b) clustered and linked courses, learning communities, c) interdisciplinary core seminars at introductory and capstone levels, d) thematic or problem focus in courses, e) proactive attention to integration and synthesis, with process models theories and methods from interdisciplinary fields, f) collaborative learning in projects and problem-based case studies, g) integrative learning portfolios.

On the other hand, in an experimental study, Leonard (2012, p. 56) promotes the concept of integrative learning as a four steps process that ranges from least to most cognitive complexity. It consists in: application, comparison, understanding context and synthesis.

Application means applying an idea learned in school context to a new context that is relevant for the student. It is foreseen as the first step of an integration process. To compare means to examine the similarities and differences of various ideas, theories or experiences. Understanding context focuses on identifying the source of information or knowledge and considering the social or political backdrop of an idea, different contexts producing different perspectives. Synthesis is about blending different perspectives to improve understanding.

Designing a competence based curriculum focused on creating relevant complex learning situations, using experiential learning, creating portfolios or writing reflectively facilitates the engaging of students in *personally relevant* curricular activities that leads to self-knowledge and understanding, identifying *multiple perspectives*, *encountering conflict*, and *reconciling conflict*, thus, integrative learning and integrative students are produced (Leonard, 2012, p. 57).

#### 5. Conclusions

The postmodern pedagogy promotes a curriculum centered on educational finalities defined as a unity of psychological dimension of education - reflected by the competences that must be developed - and of social dimension defined by the activity domains/contents validated by the actual postmodern and knowledge society. This kind of competence based curriculum will represent the operationalization of the curriculum paradigm (as the theory of postmodern education) that emphasizes the central role of competence in designing the methodological integrative learning pathways.

The competence is conceived as a *multidimensional ability construct* that depends on the context, and reflects the integrated mobilization of the resources acquired in time by students, aiming at solving complex and significant life situations through a competent processing of contents and situations as the indicator of the development and evaluation of competence.

In this context, the complex learning situation becomes the specific pathway to foster original and efficient integrative learning and interdisciplinary understanding of real-life contexts of students as the basis for the development of the competence. Thus, the integrative learning becomes a *paradigmatic shift* in curriculum development that reflects a new aim of the education systems that reorients toward an integrated individual and a more intentional teaching and learning environment.

### References

- Alexander, P. A. (1997). Mapping the multidimensional nature of domain learning: The interplay of cognitive, motivational, and strategic forces. Advances in Motivation and Achievement, 10, 213-250.
- Baxter Magolda, M. B. (1987). The affective dimension of learning: Faculty-student relationships that enhance intellectual development. College Student Journal, 21, 46-58.
- Baxter Magolda, M.B., & King, P.M. (Eds.). (2004). Learning partnerships: Theory and models of practice to educate for self-authorship. Sterling, VA: Stylus.
- Boss, Suzie, (2011). Integrated Studies: A Short History. Available at: https://www.edutopia.org/integrated-studies-history.

- Brownlee, P.P., & Schneider, C.G. (1991). Liberal learning and the arts and sciences major: The challenge of connecting learning (Vol. 1). Washington, DC: Association of American Colleges.
- B.I.E.F., Gerard F.-M., Pacearcă Șt., (2012). Evaluarea competențelor: ghid practice [Competence evaluation: practical guide]. Bucharest: Aramis.
- Aramis.Cristea, S. (2016). Pedagogia. Științele pedagogice. Științele Educației. [Pedagogy. The pedagogical sciences. The Educational Sciences]. Bucharest: Didactica Publishing House.
- Dressel, P. L. (1958). The meaning and significance of integration. N. B. Henry (Ed.), *The integration of educational experiences: The fifty-seventh yearbook of the National Society for the Study of Education* (3-25). Chicago: The University of Chicago Press.
- Huber, M.T., & Hutchings, P. (2004). Integrative learning: Mapping the terrain. Washington, DC: AAC&U and the Carnegie Foundation for the Advancement of Teaching.
- Haynes, C. (2002). Introduction: Laying a foundation for interdisciplinary teaching. C. Haynes (Ed.), Innovations in interdisciplinary teaching (pp. xi-xxii). Westport, CT: American Council on Education/Oryx.
- Kendall Brown, M., Jiang, C. X., Newell, W. H., Tobolowsky, B., Haynes, C., & Schneider, C. G. (2005, November). Integration of learning as a collegiate outcome. Paper presented at the Association for the Study of Higher Education, Philadelphia, PA.
- Klein, J., T. (2005). Integrative Learning and Interdisciplinary Studies, AAC&U, Summer/Fall.
- Langa, C., (2016). The impact of blended learning approach in the field of initial teacher's training. *The International Scientific Conference eLearning and Software for Education* 2: 126-130. Bucharest: "Carol I" National Defence University.
- Leonard, Jeannie Brown (2012) Integrative Learning: A Grounded Theory. Issues in Integrative Studies No. 30, pp. 48-74.
- Newell, W. H. (2001a). Powerful pedagogies. B. L. Smith & J. McCann (Eds.). *Reinventing ourselves: Interdisciplinary education, collaborative learning, and experimentation in higher education* (196-211). Bolton, MA: Anker.
- Petruţa, G.-P., (2013). Teacher's opinion on the use of interactive methods/techniques in lessons. *Procedia Social and Behavioral Sciences* 76, 649-653.
- Soare, E. (2014). Approaching competence as a situational construct and its impact on learning. *SBESS Journal* / XI (2) 2014 / University of Piteşti Press, pp.4-13.
- Soare, E. (2015a). Perspectives on designing the competence based curriculum. *Procedia Social and Behavioral Sciences*, 180, 972 977.
- Soare E., (2015b). Using the complex learning situation model in the evaluation of competences. *Procedia Social and Behavioral Sciences*, 180, 1 6.
- Soare E., (2016). Situation-centered Approaches in Postmodern Curriculum Design. *The Book of abstracts of the International Conference on Electronics, Computers and Artificial Intelligence* ECAI, Vol 8, No. 2, 27-30.