CYBERGOGY IN THE CONTEXT OF THE AUTOFORMATIVE PARADIGM

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Abstract: The paper is focused on the use of the cybergogy in the framework of the self-formative paradigm. The new knowledge society requirements have as main pillar the continuous learning as a premise for generating knowledge and innovation. The online access to information and the specific topics related to informal and nonformal learning stand for important assets the cybergogy relies on. In this context, the paper approach related to the synergy between andragogy, cybergogy and self-formative paradigms represents a contribution for changing contexts and attitudes related to self-education and e-Learning. A study case related to the implementation of a pilot e-Learning tool will complete the conceptual approach with a practical perspective.

Keywords: cybergogy, andragogy, self-education, self-formative paradigm

I. THE CONTEXT OF THE KNOWLEDGE SOCIETY

The studies related to the education of the 21 century demonstrate the experts' concern related to the students' learning capacity development, in order to acquire and use knowledge, and also to learn how to communicate in the global socio-economic context and to become adults able to understand their own dimensions as persons and also as active social actors. Consequently, the self-awareness capacity and the sense of own evolution represent essential modern adults' features, which could be developed only using new models for the continuity of the learning process and through the development of the self-formative capacity.

In the context of the knowledge society, the European strategy 2020 is focused on the smart, sustainable and inclusive growth. Moreover, the strategy for education and training 2020 (ET 2020) has very ambitious objectives, such as: the share of 30-34 year old people with tertiary education attainement should be at least 40%, the share of early leavers from education and training should be less than 10%, an average of at least 15% of adults (age group 25-64%) should participate in lifelong training, the share of 15-years youngsters with insufficient abilities in reading, mathematics and science should be less than 15%. The ET 2020 strategy has as main objectives: continuous learning and mobility, quality and efficiency in education and training, equity and social cohesion, as well as the improvement of the the creativity and innovation at all educational levels (Council of the European Union, 2009).

In order to create the premises for a better social insertion, the European Union is concerned to develop for its citizens new competences for new jobs. In this context, the key competences considered as mandatory for all the persons attending the compulsory education level within the European space have been defined (***, 2006):
- communication in the mother tongue;
- communication in foreign languages;
- mathemetics abilities and basic competences in sciences and technologies;
- abilities regarding the information and communication technologies;
- *learning to learn*;
- civic and interpersonal competences;

➢ antrepreneurship;
➢ cultural awareness.

It should be emphasised that "learning to learn" represents a key transversal competence in a creative and innovative society, facilitating the individuals' self-formative capacity development and the evolution to the "knowledge & learning society".

The doctrine of the permanent education has been formulated in the first quarter of the 20th century within the framework of the Memorandum attached to the report of the Committee for the Adult Education in Great Britain (London, 1919). In this report the role of the continuous education has been clearly emphasised: "The adults' education does not represent a luxury for a limited number of persons, being a component of the social life. Consequently, the adults' education should be accessible for all and should represent a continuous process" (Pos an, L., 2007, p. 60). Though the permanent education is not a new concept, only during the second half of the 20th century, the concept became a vehicle creating equal chances for the personal development along the whole life. Beginning with the years `60s, the concept has been implemented, through the special efforts of the UNESCO and the Council of Europe. The main characteristics of lifelong learning education have been formulated by Dave (Dave, H. R., 1992, p.65-66), who has underlined the necessity of changing the objectives of education and to focus on the adult education.

II. SELF-FORMATIVE PARADIGM

As it has been revealed the lifelong learning, based especially on the self-education represents the main direction responding to the social and individual challenges. From the personal perspective, the self-education has an important contribution to the self-awareness, acquiring the capacity of self defining, modeling and development in the cognitive, affective and volitional plan. The self-education directly linked to the person and his psychological dimension, has simultaneously a social determination, creating the premises for the self-improvement and for the social progress.

The definition of the self-education concept has various approaches, representing:
➢ "the search of the personal direction of learning discovered by each person together with the others, a search process based on performance, will and self-realization (Second World Meeting on Education, June 2000, Paris);
➢ "a direction of the evolution of the activity of the personality development which transforms the object into a subject, i. e. the learner into a teacher" (Cristea, S., 2008, p. 348);
➢ "the human being activity aiming at improving his personality" (Barna A., 1995, p. 23);
➢ "the work of the person with itself for self-modelling his intellectual capacity, his feelings, attitudes and personality traits" (Comanescu, I, 1996, p. 33);
➢ "the development of his own personality and behaviour, according to models and specified requirements and based on personal efforts" (Neveanu P, 1978).

In the context of the lifelong learning paradigm, the self-education becomes a natural process with a better valorisation of the internet and information technologies potential.

The delimitation between education and self-education is represented by the changing perspective between subject and object, so that in the self-education process the object becomes subject, able to design his own pedagogical curricular approach and to self-evaluate his performance. The whole process relies on "a new balanced approach between external and internal factors of the personality development... where education, initially perceived as an external factor, becomes gradually through self-education and lifelong learning a stable internal factor reflecting the human beings' capacity of permanent self-improvement of his individual and social activities" (Cristea, S., 2000, p. 23). Education is positioned always before self-education, providing the sense and the direction of the personal development as a basis for the independent behaviour and the awareness of the personal evolution. In the context of the continuous education, the self-education becomes a dimension of the complete education. As Dumitru Salade underlines, the self-education compared with the lifelong learning represents its core, as "both self-education and permanent education address the development of the desire of learning continuously and of self-improvement". Simultaneously, it

has been stressed that "the main support for the self-education is represented by the awareness and the power of organising and leading the personal life according own rules, and the permanent education has the role of accepting the self-learning tasks as a continuous internal process." (Salade, D., 1998, p. 210) .

The role of the self-education consists in developing all the human beings' abilities and creating a "bridge between the self-education and the permanent education, as an ideal of complete education"... "The emphasis is placed on one side or on another side, as the self-knowledge and the aspiration level changes during the self-development" (ibidem, p. 223).

The main dimensions of the self-education refer to:
➢ self-learning;
➢ self-training;
➢ self-formative approach.

The self-learning represents an autonomous activity enabling the independent achievement of the learning tasks, circumscribed to the framework and objectives designed by a trainer.

The self-training represents a superior phase, enabling a complete autonomy of the learning process, independently carried out. In this case, the premises of a real internalisation of the training process have been created, facilitating the development of the self-education capacity, generating new knowledge relationships.

The self-formative process is a complete independent learning approach, when the subject does not rely on a trainer's, teachers' or resource-person's support. This stands for the final goal of the educational process, the person being able to acquire and use new knowledge in a creative way. The self-formative process could be defined according to various approaches and phases:
➢ self-formative process based on documents and structured situations, i.e. computer based learning, online learning;
➢ self-formative approach based on non-structured documents and situations, i.e. questions lists, bibliography, text analysis etc.;
➢ self-formative approach based on an independent identification of the documents, their analysis and evaluation in order to solve new problems and to find an adequate answer to new situations or to formulate solutions based on the knowledge acquired (Raynal, Rieunier, 1997, p. 48-49).

A major difference between the self-formative approach, and the self-learning and self-training consists in the development of the capacity of the systemic and autonomous design of the own educational path. The self-formative paradigm becomes the core of the self-education as a continuous process.

At a strategic level, the abilities related to the self-formative capacity rely on:
➢ objective self-knowledge and awareness;
➢ formal, nonformal and informal learning;
➢ pursuit of the objectives;
➢ prospective view on the self-evolution in various contexts (educational, social, professional);
➢ a balanced approach between aspirations and opportunities;
➢ self-evaluation of the results and achievements, in terms of success and failure;
➢ motivation/self-motivation to obtain new performances, i.e. knowledge, competences, skills, attitudes and mentalities.

Consequently, the discussion about self-education is possible only when learning to learn represents an acquired competence, as a premise for the self-learning, self-training and self-formative processes. The operational premises of the self-education consist in the development of the subject's capacity to design its own educational path (Cristea, S., 2008, p. 356).

III. ANDRAGOGY

Taking into consideration that the self-formative paradigm addresses especially the adults' needs, it is important to integrate the specific elements of the self-education with the adults' formative

paradigm, defined as andragogy. From the etymologic point of view, the concept comes from joining the Greek words Andros Ageing Logos, with the significance of man conduct science, clearly distinguished from the pedagogy, a concept addressing especially the children's education (Matai, P., H., L. d. S., 2009). The andragogy concept has been introduced by Alexander Kapp, German teacher, in 1833 (Kapp, A., 1833), but the development of the whole paradigm belongs to Malcom Knowles, American teacher.

As Malcom Knowles has emphasised, the andragogy represents a special theory for the adults' learning style, characterised by the responsibility of the decisions, i.e. the independent decisional process related to the development directions, which stands also as the main difference from the pedagogy and the children's learning processes. The hypothesis considered by Knowles (Knowles, M., 1980) for the basis of the andragogy refers the main adults' characteristics:

a) changing the concepts according to new experiences;
b) independence and autonomy;
c) increasing own motivation level, according to the social role assumed;
d) a pragmatic approach concerning the immediate use of the knowledge, being focused on solving the practical problems.

Accordingly, the knowledge resources for the adults and the education programmes should be focused on solving problems faced in socio-professional and family life. The adults are interested in topics with an immediate value and prefer the experimental way of learning. The andragogy's principles have been presented by Knowles. Comparing these principles with the premises of the self-education paradigm, it is obvious that the Knowles' principles represent important factors for the self-formative processes (table 1).

Table 1. Comparison of andragogy and the self-formative paradigm

Principles of the andragogy (Knowles)	Premises of the self-education
Adults need to be involved in planning and evaluating their training process	Self-education involves the capacity of self-designing the learning sequences and the full internalisation of the capacity of the objective self-evaluation
Experience, even mistakes represent a basis for the learning processes	Self-education is based on action and experiences
Adults' interest is focused on relevant topics for the professional carrier or for the personal life	Self-education is based on psychological premises, referring the responsibility for the own development, and also on social premises, referring the socio-professional and the family life
Learning for adults stands for a process focused on problems and not on content	Continuous motivation/self-motivation for acquiring new knowledge and skills

The theorists' and practitioners' approach ranges from acceptance to criticism and denial. In many countries, this concept has been capitalised for the adults' education as a science for the substantiation of the lifelong learning ("lifelong and life wide education for adults"). In the USA, andragogy represents a theoretical and practical approach based on the humanistic concept of the self-directed and autonomous learning. In Europe, the conceptualisation of this theory is only a reflection topic, not being fully accepted. Even Knowles has changed his position, considering that "pedagogy-andragogy represents a positioning from the teacher-centered education to the student-centered education, being suitable to the children's or adults' education according to the context" (Merriam, 2007, p. 87).

The principles of the andragogy have been intensively used in the development of the online resources and programmes. Although Knowles had in mind the andragogy as a framework for the adults' education programmes and for redefining the role of the trainer or facilitator, the andragogy principles are useful also for the self-education and for the development of specific online resources (e-Learning programmes).

IV. ARTICULATION OF THE SELF-FORMATIVE PARADIGM WITH THE WEB TECHNOLOGY

The need for new learning opportunities based on information and communication technologies positioned the online learning in the center of various discussions about education. In this context a new concept emerged: cybergogy. This concept refers the online self-formative process (Carrier & Moulds, 2003; Wang & Kang, 2004, Wang, M, 2008). The cybergogy represents the synergy between the fundamentals of the andragogy and pedagogy articulated with the web paradigms. This new paradigm has been developed by *Minjuan Wang* who has highlighted the facilities provided by the virtual space for the autonomous and collaborative learning. In this case, the learner has the opportunity to achieve his learning objectives in a flexible way, according to his profile and to his personal way of managing his time. Cybergogy describes strategies for new learning experiences based on the active engagement of the subject in the learning process. Through the learner's active involvement in the self-formative processes, the online educational processes interfere with the self-formative paradigm.

4.1. Cybergogy Model

The theoretic cybergogy model integrates the cognitive, emotional and social processes of engaged online learning (Wang, M. J. 2008 - figure 1). The cognitive goals settled in relation with the personal interests related to the social and family life could be achieved taking into consideration personal features and emotional factors.
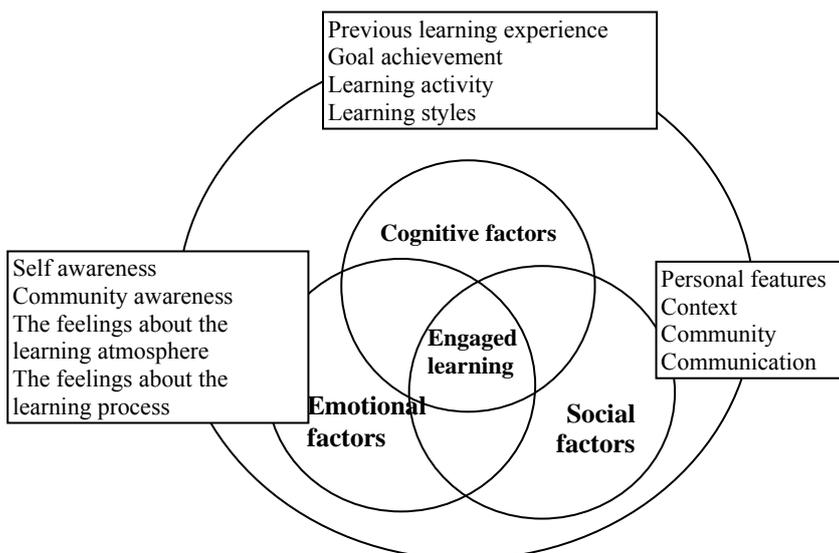

Figure 1. Cybergogy model

The social environment could represent a challenge and a stimulus for the self-formative processes. Due to the lack of time, the adults prefer the online learning which enables a flexible planning of the time and a greater accessibility to the information. In this new created context the self-formative paradigm is strongly linked to the intensive use of the virtual environment, in an informal and nonformal way. The subject/learner could be involved in self-formative processes aiming at finding solutions to various personal or professional problems or improving his professional profile. The cognitive web resources cover a wide palette and various structured or unstructured presentation forms (wikis, virtual libraries, virtual dictionaries, blogs etc.). In addition, the web space provides online self-training facilities, integrating structured resources (online learning units, self-evaluation tests and links to other related web resources) and providing a single access point for a specific topic. The web space facilitates an autonomous and independent learning process in an informal way, based on e-Learning or blended-Learning processes. The e-Learning represents a self-training tool based on web 2.0 technologies, characterised by a flexible accessibility via internet to the structured learning

resources. The learning resources are processed by a trainer/teacher and the whole process could be supervised by a tutor.

4.2. e-Learning in the Perspective of the Cybergogy

The implementation of the self-learning paradigm articulated with the cybergogy concepts has been carried out within the framework of a research project ("Educational portal for foreign languages learning and the development of an intercultural dialogue", code: 3257, financed under the national budget for research and innovation). Besides the design of the online resources and learning modules, the research team has implemented an advanced methodology focused on active and engaged learning, using problem and project based learning.

The project goal focused on the development of linguistic competences and the improvement of the intercultural sensitivity, as basis for an efficient intercultural dialogue in an organisational environment. The educational model has been designed using the Ulla Lundgren's trinomial approach (Lundrgen, U. 2005), articulated with the organisational culture dimension (Hofstede, G., 2004). The model (figure 2) aims at facilitating the acquisition of new competences in a foreign language and of new communication skills in a multicultural organisational environment, with direct impact on a better social integration (Muresan, M. 2011).
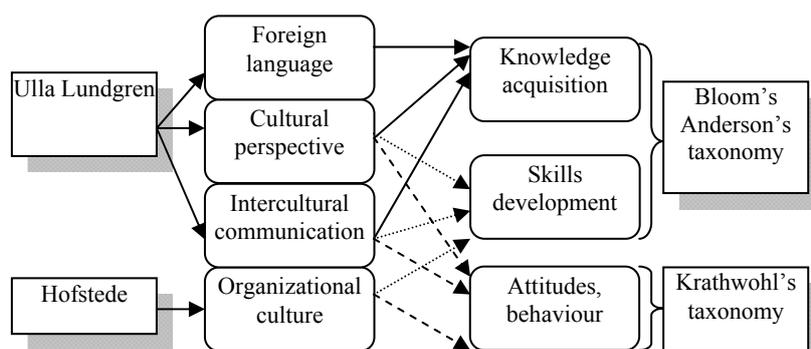
Figure 2. Conceptual educational model for foreign languages learning

The implementation of the model has took into consideration the Bloom and Anderson cognitive and affective taxonomies (Bloom, B.S. 1956), articulated with the intercultural sensitivity dimension introduced by Kratwohl (***, 2005) and with a pragmatic approach introduced by the research team. This holistic approach integrates various views related to foreign languages learning, accordingly with the European Framework for Foreign Languages.

The concrete implementation of the e-Learning system refers the English language learning, including the American English approach. The cultural context and the specific organisational model according to the Anglo-Saxon perspective stand for important goals of the auto-formative approach. Structured and unstructured resources have been combined in order to understand the organisational culture and the communication in a multicultural environment. The link to various unstructured knowledge resources (online dictionaries and libraries, specific articles related to the topics addressed and various approaches in different cultural perspectives etc.) stands also as an important asset of the portal. The learning units integrate the self-learning and self-evaluation tools, for the continuous assessment of the level of knowledge and skills acquired. The scenario implemented requires a minimum level of knowledge for moving from a module to another. The interactive tests represent the main tool for an efficient self-assessment (figure 3).
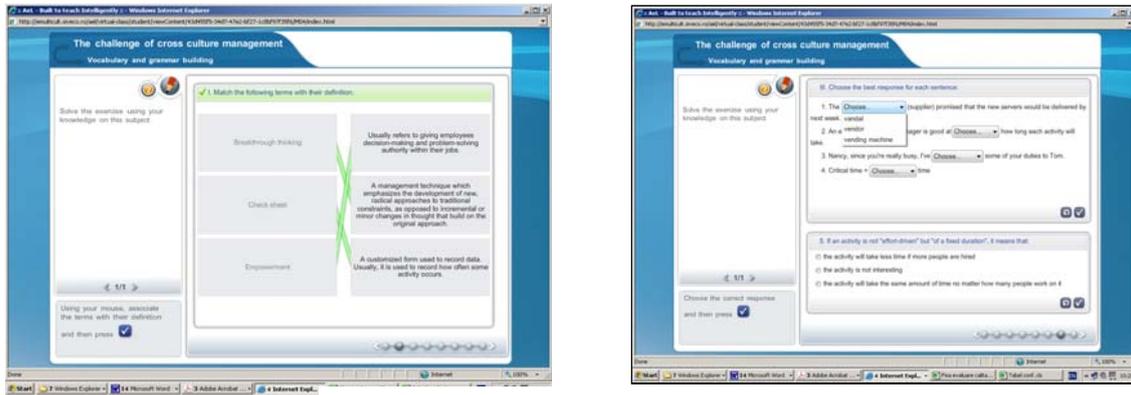
Figura 3. Interactive exercises

The e-Learning system combines synchronous (interactive tests) with asynchronous evaluation tools (essays, speaking exercises etc.). The students are able to self-evaluate their achievements and are motivated to improve their performance.

A real interesting issue has been revealed through the survey organized with the students participating in the e-learning programme. From 100 students, participating in the e-Learning programme, 94 have answered the questionnaire. The majority of the students (94,6%) agreed the online self-formative process. The usability of the e-Learning system has been well appreciated by the students. The main advantages of the systems revealed through the survey consist in:

➢ the flexibility of the system concerning the time management (33% from the students participating in the survey);
➢ the better assimilation of the knowledge during the self-conducted learning process (31% from the students participating in the survey);
➢ the open access to the information (26% from the students participating in the survey).

The intensive use of the new web technologies facilitates the self-formative processes. In this perspective, the cybergogy represents an extension of the auto-formative paradigm, facilitating a better social insertion.

V. CONCLUSIONS

The self-formative paradigm is interfering and partially overlapping with other adults' educational paradigms addressing active and engaged learning adults' needs. The cybergogy represents an implementation of the self-formative paradigm in the specific web environment. In the postmodernist perspective, the practical self-education issues have been amplified, inducing specific delimitation from other educational paradigms and the integration and the interference of the specific views emerging from different theories and approaches, aiming at developing and designing the framework of the integral education. The self-education increases its role in the perspective of the personal and societal development, facilitating the self-knowledge and the social insertion processes.

The self-education in general and the autonomous, independent and self-conducted learning process increases the memory potential with increased creative valences (Neacșu I., 2006, p. 15). Taking into consideration the internal motivation, the permanent self-regulation of the formative process and its continuity, there are favorable conditions for a superior capitalization of the educational process in the personal and social level.

The self-formative paradigm becomes an important factor of the self-improvement, a major challenge of the actual knowledge society, characterised by a quick technological progress, based on creativity and innovation.

The self-education should be perceived, on one side as a component of the lifelong training and an important social development factor, and on the other side a component of the permanent human personality development.

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