FOR A NEW MODEL OF (INTER)ACTIVE LEARNING

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Abstract

Strongly concerned with improving the assimilation of pedagogical notions, we intend to exploit a relatively new model of interactive learning.

Research *objectives*:

1. identifying a relatively new model of interactive learning with an increased degree of efficiency, capable of being exploited in the process of teaching-learning pedagogy concepts;
2. presenting/analysing aspects characteristic of the new model;
3. specifying its implementation and usefulness in didactic practice;
4. highlighting issues of formative relevance of the model.

Research content: By studying the reference literature, we have identified, presented and analysed the *structural-functional* model of *interactive learning developed by L. Dee Fink (1999, 2003)*. It is built by reference to two experiment categories (practice and observation) and two types of dialogue (with oneself and with others).

Conclusions: The model's structure and functionality leads to a series of effects and suggestions for any type of pedagogic practice. These are extensively discussed in the research.

Key words: active learning, interactive learning, structural-functional model of interactive learning

1. Argument and objectives

The concern with ensuring efficient learning is a constant in the work of teachers. Even more so for those involved in initial didactic training and in a context where the overall level of students' training, their motivation for learning, the learning techniques used and their interest in didactic training do not show progres.

The methods, (inter)active didactic strategies respectively, have shown a higher contribution to the improvement of learning during the last years. Teachers have either learned about them punctually and have been trained to use them, or have discovered them independently and have been caught by their unquestionable value. At the same time, theoretically, the local reference literature does not contain any substantial analysis of (inter)active learning as a process and a systematization of possible models of this type of learning.

Based on these findings and an experience of nearly 25 years in the didactic field, I have obviously reached the question: Is there a model of (inter)active learning in foreign reference literature? If yes, which is it? How does it show its novelty and efficiency? In this context, we have formulated the following *research objectives*:

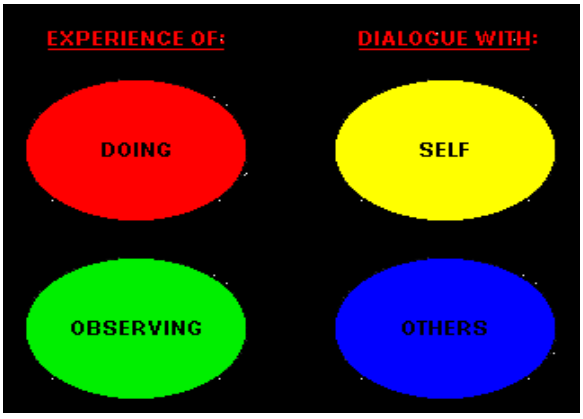
1. identifying a relatively new model of (inter)active learning, highly efficient and capable of being used in teaching-learning pedagogy concepts;
2. presenting/analysing the specific aspects of the new model;
3. indicating the means of implementing and making the best use of it in didactic practice;
4. highlighting issues of formative relevance of the model.

To this purpose, we have proceeded to identify some reference sources and to study them analytically, critically and comparatively with the aim of singling out and presenting a model of (inter)active learning.

We shall start by distinguishing between the concepts of "active learning" and "(inter)active learning". *Active learning* is that type of learning which implies the direct, unmediated and obvious involvement of the learner in the process (an involvement which can eventually be achieved also individually). *Interactive learning* is that form of learning which implies the direct, unmediated and obvious involvement of the learner in the process as a result of building and activating certain relationships with the others involved in the same process. Therefore, one can notice the fact that *interactive learning is a species of active learning*. In order to emphasize the close and complex relations among them, we shall further use, throughout the entire text, the (inter)active word thus written.

2. The structural-functional model of (inter)active learning

L. Dee Fink (1999) suggests a *model of interactive learning* precisely because many teachers (and not only beginners, certainly!) would like to improve their teaching method by resorting to some model that may allow them to identify the best ways to get learners involved in the learning process, but they do not exactly know how this may be done.



The proposed model offers a way of conceptualizing the learning process which, according to the above-mentioned author, can offer teachers support in their effort of identifying important (inter)active learning strategies.

This explanatory structure of the learning process reveals, according to L. Dee Fink (1999), that in order to be interactive, a didactic process must compulsorily ensure a *learning combination by/through action and conversation*. The ways of conceiving these two are also systematized into two categories (effectively achieving something and observation, dialogue with oneself and dialogue with others respectively), the total number of the combinations being 4.

acting...	**dialogising with oneself...**
- Refers to any type of learning activity where the one in question does something (designs, directs, runs an experiment, criticizes or supports a work of art, investigates historical sources, makes an oral presentation).	- Involves reflecting upon a topic; - Implies the analysis of his/her emotional relation to a topic; - Refers to thinking about one's own thinking or feeling; - Can be accomplished through: diary, portfolio.
observing - Watches or listens to what somebody else does related to what they should learn (directly or indirectly)	**dialogising with others** - Communicates indirectly and implicitly with the author of the text in the handbook; - Communicates directly with the teacher; - Communicates with the team mates in order to accomplish tasks; - Communicates with others (experts, practicioners) (directly, in writing, via e-mail)

As one can see from the presentation above, this is a *structural-functional model*. A mere attempt at connecting it to the topic of didactic strategies validates its *general*, *systemic*, *holistic nature* where any method, be it classic be it modern, relatively passive or openly dynamic, can be integrated with activization conditions, generated by the teacher's creativity.

For the teacher who tries to provide a more active learning, the author we have mentioned proposes the following *3 suggestions* (L. Dee Fink , 1999):

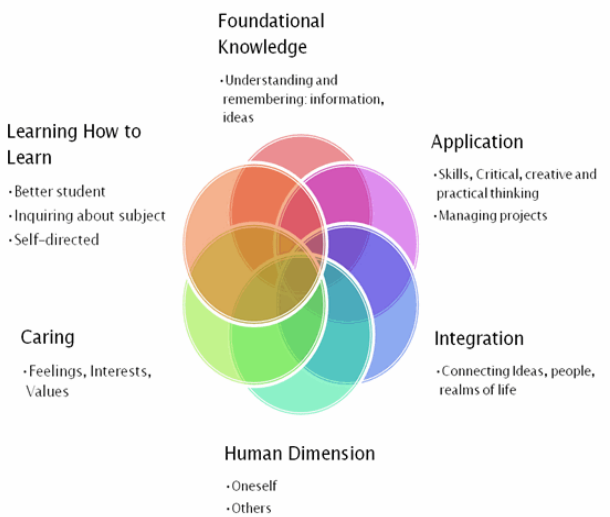
1. *Expanding the types of learning experiences created* – Traditionally speaking, teaching consists, most often, in reading a text or presenting a text, a reading, as well as a rather limited range of types of conversation with the others. In order to activate learning, it is recommended to:
   - Create small groups of students and stimulate them in order to find solutions to problems or to take decisions periodically;
   - Find ways to engage students in authentic (direct, written, e-mail) conversations, also with other persons than one's classmates who know the topic they are supposed to learn;
   - Determine students to write a diary or to make a "learning portfolio" about their own experiences, knowledge, thoughts, feelings;
   - Find ways of helping students to grasp (directly or indirectly) the topic or the action they are trying to learn;
   - Find ways of providing students with the real possibility of (directly or indirectly) doing what they are supposed to do in order to learn.
2. *Capitalize on the advantage given by the "power of interaction"* – since each of the 4 elements of the structural-functional model has its own value, then the more ingeniously they are combined, the more numerous will the formative effects be. For example, if students write, first of all, their own thoughts concerning a certain topic before engaging in a group conversation, then the group conversation will be richer and more active. If they can do both and then they can observe the phenomenon, the observation will also be more dense and participatory. If, subsequently, the observation is followed by the student's engagement in a direct process of action led by him/herself, then the student will understand better what s/he has to do and learn by doing. If, eventually, the student describes his/her learning experience by writing or discussing with his fellows, this will provide better understanding and retention.
3. *Creating a dialectical relationship between action and conversation* – The new experiences undergone by students (through observation or action) have the potential to offer them new perspectives concerning what is true (beliefs) and/or what is good (values). Conversations help students build more possible significations of actions and their effects. A teacher who creatively ensures dialectical learning relations where students take steps forwards – backwards between having rich experiences and engaging in dense meaningful conversations can maximize the likelihood that they have meaningful practice and learn consciously.

The essence of the presented model is but a simple review of the classic educational paths, generously offered by the sages of Antiquity (Socrates) or by the representatives of classic pedagogy (Comenius, Rousseau), by the representatives of the new education (Key, Montessori), until the master of the learning by doing, J. Dewey. *A reactualization of some partially forgotten lessons*, an *awareness* of the need of balance and interrelationship between the inside and the outside, reflection and action, a *restructuring of the didactic conception* concerning the flexibility and versatility of teaching approaches, a *revival of the attempts of differentiation and individualisation* (at least in relation to learning styles!), an *invitation to creativity and education for change* addressed to teachers themselves, irrespective of their training and experience, the supraordinate professional paradigm or the environment where they carry out their activity. Although the presented model shows nothing cognitively new, one cannot say that it does not own a certain *degree of utility*, precisely by its simplicity, structurality and suggestiveness with which it can persuade and draw the expected concrete results in school practice.

3. Strategic steps for an (inter)active learning

As shown both by school practice and reference literature, D. Bell and J. Kahrhoff (2006), *selecting, designing and using the most appropriate didactic strategies* represent vital processes in ensuring efficient learning. The option most often used for structuring a curriculum is a *pedagogic model* (most commonly that of *Bloom*, containing the 6 hierarchical categories characteristic of the cognitive domain) and the subsequent design of objectives, strategies and assessment with a view to ensuring their practical application. Although this model has been recently improved, too, according to J., M. Pickard (2007), this does not mean that it is the only model which can be used. On the contrary, the diversity of approaches is generated by the ebullience of researches in the field of the sciences of education. Many of those concerned with improving approaches and, implicitly, didactic strategies with a view to applying them, choose more and more often L. Dee Fink's model (proposed in 1999, improved in 2003) which puts forward what he calls "significant learning" (significant learning!).

Subsequent references made to this model by authors such as D. Bell and J. Kahrhoff (2006), R., C. Walker (2007), D., J. Klooster and P. Bloem (2007), Patten, K., Boudreau, D., V. Craig (2007), N. Simpson, L., Willingham-McLain (2007), A-M. Armstrong (2008), D. Hamilton (2008), G. Rathbun (2008), A., L. Phelps, L. Dostilio (2008), Guide to Taxonomies of Learning outcomes (2009) emphasize the author's concern with "learning to learn" and his choice of a 6-step model (it is not by accident that his model also departs from Bloom's model!), steps which are, however, structured according to a logic different from the one of thinking, much more complex and comprehensive, rather illustrating *interdepencies* than hierarchies among the component aspects: 1. basic knowledge; 2. application; 3. integration; 4. human/interhuman dimension; 5. concern for feelings, interests, values; 6. "learning to learn". The plan of the intersection is precisely the one which configures "significant learning".



As can be seen, the taxonomy proposed by Fink (2003) promotes the idea that students will learn more and retain more thoroughly if they learn by applying the content, connecting it with the previous ones, understanding the social meanings of what they have learned, also taking care of the feelings and values involved as well as of how to maintain long-term learning (apud R., C. Walker, 2007).

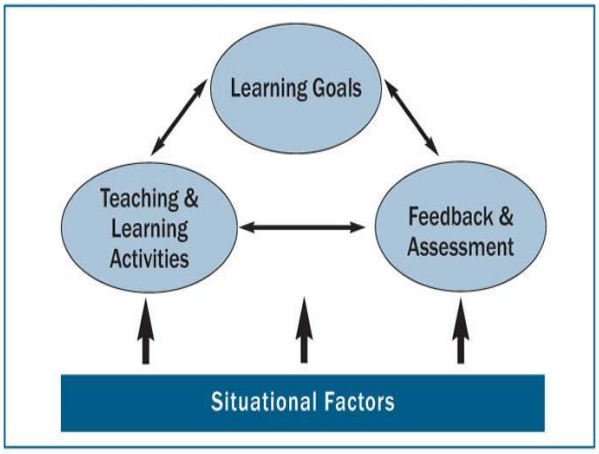
An important aspect of Fink's model is *feed-back*, both in monitoring the students' learning process, improving their performance and in the self-regulation of the teacher's future activity. In order to have high-quality feed-back, this should be characterized by "*FIDeLity*", that is, it should occur *frequently* (daily, if possible, weekly, each time it is necessary!), *immediately, discriminatorily* (based on criteria which should highlight the difference between low, average and outstanding activity) and *affectionately* (empathetically in the way in which it is given) (L., Dee Fink, 2003; L., Dee Fink, f.a.).

Concerning assessment, Fink believes that it should be done in at least two ways: an *educational* and an *anticipatory assessment*.

For added efficiency, assessment should be anchored in the future, should consider the way in which students will apply knowledge and skills in the real world. To that effect, Fink constantly and repeatedly highlights the efficiency of effectively integrating certain learning strategies in the process – an evaluation fully in agreement with the essence of the model such as the *diary* and the *portfolio* (L., Dee Fink, 1999; L., Dee Fink, 2003; L., Dee Fink, f.a.; L., Dee Fink, 2007.

Once the choice of the model established, "significant learning" respectively, the subsequent strategic steps aim at *designing*, *implementing* and *evaluating* it.

Starting with the 6 possibilities of providing efficient learning, through combination and interaction, (as it has been previously analysed), L. Dee Fink (2007) shows that the means of endowing students with this learning is *to teach teachers*, first of all, how to design their classes in a more interactive way, achieving in fact the *design* of an *integrated class*. The basic idea of such a class is that instead of developing, within a class, a list of topics and then asking students for a lot of knowledge concerning these topics, we need to design classes *centred on learning, systematic and integrated*. If we succeed in doing this, students will answer by becoming increasingly involved and engaged in the learning process and will succeed in "learning several types of learning" (idem). The steps that need to be followed are illustrated in the following scheme and based on it we shall present the viewpoint of the already mentioned author (idem):



1. *The situational factors* emphasize the context differences involved in the didactic process which vary it and which we must be aware of and take into consideration when making decisions:

- *specific context*: How many students are signed up and how many attending? What is the level of the class and its temporal structure? Will it be done directly, on-line or in a combined manner?
- *the others' expectations*: This class is expected to ensure the achieving of the goals of a department, university, a certain professional training?
- *the nature of the content:* Real sciences are often "convergent" (they work in search of a single correct answer), whereas humanities are often "divergent" (looking for, as if willingly, multiple interpretations of a topic). How can these differences be taken into consideration?
- *the nature of the students:* How do students feel towards the content of the class? What knowledge and experiences related to it can students bring and use in the classroom?
- *the nature of the teacher:* What beliefs and valued does s/he bring into the lesson? What is the relation between these and those of the students?

If we compare the classic view with the one of L. Dee Fink's model (1999, 2003, 2007) one can see that in the first approach some of these preoccupations constitute the *object of constant reflection* of the majority of teachers (specific context, the others' expectations), others are the object of only a *partial reflection* (nature of content, nature of students) and others cannot be found at all in the teacher's anticipative – projective effort (nature of teacher).

2. Setting the objectives (goals): what we intend the students to learn? (L. Dee Fink, 1999, 2003, 2007) In a relevant manner, they should learn the essential about the major topics, that is why we should formulate *the objectives in attractive and captivating terms*. At this moment, the 6 sides of the taxonomy of significant learning become important (1. basic knowledge; 2. application; 3. integration; 4. human/interhuman dimension; 5. concern for feelings, interests, values; 6. "learning to learn") because they suggest 6 approaches to learning which can be used during any class. The mentioned author suggests that when formulating objectives, we should do it in the terms of a full statement, of the type: "I hope that by the end of this class students will …" after which the content of the respective objective is added. The following list presents several examples of using the taxonomy of significant learning in the generic formulation of a set of objectives. "I hope that by the end of this class students will …"

- understand and remember key concepts, notions, relations;
- know how to use the content;
- be able to correlate this topic to others;
- identify personal and social implications derived from knowing this topic;
- make the best use of this topic – and any other future learning concerning it;
- know how to continue learning about this topic after the class ends (idem).

If the *procedural point of view* reveals a great resemblance to Mager's operationalization procedure (except the violation of some of the basic rules of operationalization: the existence of two verbs within a statement; using verbs that indicate subjective, internal processes and not behavioural, observable realities (to understand, to know), in strict terms of content one can notice how the examples do not follow Bloom's taxonomy but are an obvious illustration of the announced taxonomy. Although there are obvious elements of continuity between the 2 taxonomies, we would like to make a few brief *comments*:

a. While Bloom's taxonomy is characteristic only of cognitive objectives, that of significant learning has a holistic nature which extends the cognitive into the social, personal and interpersonal;

b. While using Bloom's taxonomy will produce effects only on a cognitive level, using the significant learning taxonomy will extend the sphere of formative effects to all previously mentioned fields, contributing to an integrative impact;

c. If, when using Bloom's taxonomy, we have to complete the objectives with the affective, psychomotric and psychosocial objectives, the significant learning taxonomy is complete from the outset.

3. *The learning activities: How will students learn?* (L. Dee Fink, 1999, 2003, 2007) Once we have established the most important learning objectives, we will have to identify the *learning activities* that will make students capable of reaching them. A good starting point could be, according to L. Dee Fink (2003), the approach proposed by Bonwell and Eison (1991), as being, in his opinion, one of the most significant in the reference literature. If we want students to acquire new, more "powerful" learning types, we will have to organize "more powerful" learning activities. For this, the mentioned author suggests an adaptation of the central principles of active learning within a model that he calls "*the holistic model of active learning*". According to this model, students should act in the following 3 *directions*:

- acquire the *required basic knowledge* – which may be done usually through study in class or outside it;
- making *observations* – case studies, problem solving, decision-taking exercises, role-play, listening to others' experiences;

- providing a serious reflection regarding the signification of knowledge and experiences – the 1-minute essay, weekly diaries, portfolios.

L. Dee Fink (2003) stresses the fact that it is very important for the teacher to find different ways of including all the three types of learning activities for each topic but also for each section of the class.

If we compare our current practices of didactic planning and the model presented above, we find *two major differences*: one is given by the argument of *presence* and the other by that of *weight*.

When we say the *argument of presence* we mean that very few times, if not usually never, "we do not have the time" required by and sufficient to plan reflection and self-reflection (one of the probable causes may be the "omission" of such an objective, explicitly stated, from the set of operational and/or reference objectives!). *The argument of weight* expresses the painful (but true!) reality according to which most of the objectives in our studies and activities plans are cognitive and, here and there, they are completed by one, two at the most, affective, psycho-social or psychomotric objectives (rather due to procedure reasons than to conviction, although they are achieved at the level of the action!!!).

4. Feed-back and evaluation: How are we to know whether students have reached the objectives that we established? (L. Dee Fink, 1999, 2003, 2007) The solution offered, borrowed from Wiggins (1998, apud Fink, 2007) is "*educative assessment*". According to his principle, assessment is good if it ensures more than just a highlighting of a training level reached at a given moment. It educates, at the same time. For this, it should include the following *key elements* (L. Dee Fink, 2007):

- *authentic tasks* – A part of the assessment is about knowing whether students have understood and retained the content. Educative assessment should focus upon identifying their possibility of actually doing something with this content;
- *criteria and standards accuracy* – When assessing complex learning, we should develop accurate criteria (measures) and standards (the level of reaching a certain measure);
- *opportunities for self-assessment* – After completing the classes, graduates will have to assess their own performances in numerous situations. We can help them to do that well by endowing them with practices to this effect and offering them feed-back about the assessment;
- *"FIDeLity" feed-back* – students need Frequent, Immediate feed-back in their learning efforts which should correctly highlight (Discriminate) the differences among them and which should be given in a friendly, empathetic manner (Lovingly) (idem).

Esentially, the known *formative assessment aims at the same aspects*. The items of emphasis outlined in the model presented (authentic tasks meaning practical tasks, assessment opportunities and "FIDeLity" feed-back) are the expression of a continuous assessment, always achieved in agreement with learning and for increasing its soundness. Basically, it is the same concept and the limit could be translating through synonymy (educative assessment and formative assessment).

After analysing these components of significant learning planning, the author points out that we must make sure, before actually proceeding to the implementation of the model itself, that these are well articulated and integrated, that they reflect and support each other. To this effect, Lee D. Fink (2007) suggests that we should:

1. *build and fill in a table* where the boxes should be filled in from left to right, ensuring coherence and cohesion among the contents (a process that is identical to the curricular way of realizing planning).
2. achieve a serious *reflection* upon the didactic strategies that we intend to use (from our point of view, identifiable as a part of the first approach, inside the process of curricular planning which cannot be achieved without this step!!!). A good strategy implies including certain various learning activities subordinated to different ends, throughout the entire process (to ensure data and information, for action, observation and reflection). It is also highly important that each designed learning activity should prepare students for the future process.

The experimentation of this model has brought the cited author the satisfaction of validating and supporting with evidence (presented in the mentioned paper for the field of social sciences, 2004-2005; engineers–2003) the fact that designing and carrying out the significant learning process leads to obvious differences in terms of engagement/involvement and learning as compared to the traditional way for all the 6 parametres (basic knowledge; application; integration; human/interhuman dimension; concern towards feelings, interests, values; "learning to learn"). Very interesting, from this point of view, are not only the better results obtained in the didactic process (as objective effects!) but also the students' opinions about the improvement of the process (as subjective feed-back!). In the analysed paper, L., Dee Fink (2007) shows that they have appreciated the change of the process as "phenomenal" (which even the researcher could not have expected!), motivating and determining them to get involved and work hard but happily in class, in order to learn. The students' becoming aware of this major change has also produced a predictable effect for the teacher: improving his/her state of mind! "Teaching for such an active and engaged group has been an unforgettable experience. It has made my work seem to be worth being done and I feel professionally fulfilled. I wish I always had such students" (idem).

On this basis, teachers in the higher education found out that by using the model of planning an integrated class in order to restructure/use the students' learning experience, they will determine students to become more engaged in the process and to assimilate different types of significant learning. This happens because students become co-creators of their own learning process, having the possibility to choose the ways of learning, most often working closely with others, promoting mutual learning.

Other experimental studies based on Fink's model and used as resources on the topic (apud R., C. Walker, 2007) also show that there were no negative comments in the students' diaries concerning the model of active learning presented.

Conclusions

1. The model proposed by L. Dee Fink profits by the *structural-functional perspective* which gives it so much additional *explanatory power* as compared to other approaches as well as the *practical value of efficiency* (validated by experiments carried out by the author);
2. The great achievement of the presented model is the complementary and productive *connection* of *communication* (of the self and the social) with *experimentation* (by action and through observation) which opens numerous, and sometimes new ways for observance of the didactic principles, particularly that of intuition, on the one hand and on the other, of the individual learning styles; ;
3. One of the positive effects of using the model consists in *creating a triple prolific relation* for the individual and the group, action and communication, communication with onself and communication with others;
4. The concept of "*significant learning*" proposes a common and complex nucleus of relevant acquisitions not only cognitively but also, highly important, from complementary viewpoints which ensure the *holistic nature* of this approach;
5. Suggesting *another approach* than the curricular one for the *planning of an integrated class* (without meaning that its key aspects are ignored or left out) significantly opens the horizon of didactic learning towards the "learning of learning";
6. On the level of didactic strategies, we should stress the *need and importance of metareflection* as a practice "to be trained and formed" for the beneficiaries of the process;
7. Practicing a type of *"FIDeLity" feed-back* increases the value of formative assessment with the attributes "Discriminating" (which should highlight correctly the differences among students) and "Lovingly" (given in a friendly, empathetic manner), transforming even more the process in the direction of positivating and humanizing it.

Without revolutionizing the teaching theory and practice, the model analysed is clearly valuable both by the new systematizations provided, the efficiency of the complementarity of its sides, as well as, a fact not to be omitted at all, for the positive effects that it brings to the teacher, too, to his/her professional satisfaction and motivation.

REFERENCES

ARMSTRONG, A-M., 2008, *It's Worth Reading: Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses*, Office for Teaching & Learning, http://www.lib.wayne.edu/blog/otl_newsletter/2008/10/23/its-worth-reading-creating-significant-learning-experiences-an-integrated-approach-to-designing-college-courses/, accesat în 23X2009;

BELL, D., KAHRHOFF, J., 2006, *Active Learning Handbook*, Institute for Excellence in Teaching and Learning, Faculty Development Center, Webster University, http://www.webster.edu/fdc/alhb/alhb2006.pdf, accesat în 16.X.2009;

BONWELL, CH., C., EISON, J., A., 1991, *Active Learning: Creating Excitement in the Classroom. ERIC Digest*, http://www.ericdigests.org/1992-4/active.htm, accesat în 10.X.2009;

BOUDREAU PATTEN, K., CRAIG, D., V., 2007, *Pulling Them In. Active Learning for the University Classroom*, http://mtsu32.mtsu.edu:11218/Active%20Learning%20Resources.pdf, accesat în 23. X. 2009;

FINK, L., D., 2007, *Designing Courses for Significant Learning*, http://ctl.byu.edu/wp-content/uploads/2007/08/designing-courses-for-significantstudent-learning-long version.pdf, accesat în 23X2009;

FINK, L., D., 1999, *Active Learning*, http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/active.htm, accesat în 10.X.2009;

FINK, L., D., 2003, *Creating Significant Learning Experiences : An Integrated Approach to Designing College Courses*, San Francisco: Jossey-Bass;

FINK, L., D., 2007, *The Power of Course Design to Increase Student Engagement and Learning*, Peer Review, Association of Amercian Colleges and Universities, Winter 2007, Vol. 9, No. 1, http://www.aacu.org/peerreview//pr-wi07/pr-wi07_analysis3.cfm, accesat în 23X2009;

FINK, L., D., F.A., *A Self-Directed Guide to Designing Courses for Significant Learning*, http://www.ou.edu/idp/significant/selfdirected1.pdf, accesat în 22X2009;

GUIDE TO TAXONOMIES OF LEARNING OUTCOMES,2009,http://www.ucd.ie/t4cms/taxonomies3.pdf, accesat în 23X2009.

HAMILTON, D., 2008 *Creating Powerful Learning Experiences. Possibilities, Pitfalls and Promising Practices*, UNBC Teaching and Learning Conference 27 August, 2008, http://tandl.unbc.ca/wp-content/docs/Creating%20Powerful%20Learning%20Experiences%20Handout.pdf, accesat în 23X2009;

KLOOSTER, D., J., BLOEM, P., 2007, *Significant Learning*, Thinking Classroom Journal, Volume 8 - 2007, http://ct-net.net/tc_ann_8-3_Blo-Kl, accesat în 23X2009;

PHELPS, A., L., DOSTILIO, L., 2008, *Studying student benefits of assigning a Service-Learning project compared to a traditional final project in a Business Statistics Class*, Journal of Statistics Education Volume 16, Number 3/2008, www.amstat.org/publications/jse/v16n3/phelps.html, accesat în 23. X. 2009;

PICKARD, J., M., 2007, „*The new Bloom's Taxonomy: an Overview for Family and Consumer Sciences*", Journal of Family and

Consumer Sciences Education,Vol. 25,No. 1, Spring/Summer 2007;

RATHBUN, G., 2008, Review by Wehlburg, C. (2007) *Meaningful Course Revision: Enhancing Academic Engagement Using Student Learning Data*, Jossey-Bass, 2007 în International Journal for the Scholarship of Teaching and Learning, Vol. 2, No. 2/2008, http://www.georgiasouthern.edu/ijsotl, accesat în 23X2009;

SIMPSON, N., WILLINGHAM-MCLAIN, L., 2007, *Toward the Best in the Academy*, Essays on Teaching Excellence, Vol. 18, No. 3, 2006-2007, http://www.ucdenver.edu/faculty_staff/faculty/center-for-faculty-development/publications/Documents/18_program_assessment.pdf, accesat în 23. X. 2009;

WALKER, R., C., 2007, *Creating Significant Learning Experiences in the Business Communication Classroom*, Proceedings of the 2007 Association of Business Communication Annual Convention, http://www.businesscommunication.org/conventions/Proceedings/2007/Washington/17ABC07.pdf, accesat în 22 X 2009.