PRAGMATIC BENCHMARKS IN DEVELOPING THE LEARNING TO LEARN COMPETENCY AT STUDENTS WITH LEARNING DIFFICULTIES

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Abstract: The students not possessing the learning to learn competency will have to face in the future the educational, social and economic exclusion, and this would create, furthermore personal and social problems. These chronic difficulties and obstacles at the level of student learning activity affect the input, the actual processing and the output of the information, including the metacognitive and non-cognitive aspects, for some people which otherwise prove their structural and functional integrity of basic intellectual capacities of thought. The non-categorial perspective on learning difficulties represents a point of view on the educational phenomenon, inviting each agent at taking responsibility in training, in a world where individual differences are a reality that calls for tolerance and respect. Therefore, the paradigm through which we analyze the issue in question focuses on the positive reinforcements that a stimulating social environment has. The research undertaken in the field of development of the learning to learn competency aims to investigate, argue and describe the importance and the necessity of an educational intervention focused on developing these skills at students with learning difficulties in 11th grade classes. Therefore, the development of learning to learn competency at students with learning difficulties is an important pedagogical stake.

Key words: learning to learn competency, learning difficulties, learning strategies

Current perspectives on learning to learn competency

The concern of contemporary education for training the competencies rather than the transmission of knowledge is motivated by the major changes occurring on the market of beneficiaries aspiring to qualifications and employment. The educational systems must ensure the competencies development for all members of society, not being concerned only with educating young people. Education for competencies is a challenge in all segments of the education system.

Many recent approaches of the concept of competency reveals in its definition not so much the competence’ product represented by performance, but rather it explores and emphasizes its formation process. Therefore, the definitions of many authors, both foreign and Romanian, (Delory, C., 2002; Jeris, L., Johnson, L., 2004; Dooley, K.E. et al. 2004; Bocoş,
M., 2008; Potolea, D., Toma, S., 2010) converge to consider competency as a set of knowledge, skills and attitudes that selected, interacted and used properly, allow the successful implementation of tasks in professional or social contexts. Constructivist approaches and interpretations (Eraut, 1995; Dall’Alba and Sandberg, 1996; Stoof et al., 2002; Sandberg and Pinnington, 2009 apud Ripamonti, S., Scaratti, G., 2011) believe that qualitative manifestation of competency is directly influenced and dependent on context and contextualized experiences that individuals are living. It is not only the context itself that can influence the quality of the competency manifestation, but also subjective experiences of individuals, determined by that context. Therefore, the definition of competency should be guided by context and by area in which it manifests itself.

It may be that the most solid exploration of the concept was realized by OCDE within the program DeSeCo. Relying on this, the term competency was defined by Rychen and Salganik (2003) as being: “the ability to successfully satisfy complex requirements in a particular context, through the engagement of psychosocial prerequisites including cognitive and non-cognitive aspects” and as “internal mental structures, namely abilities, dispositions or resources incorporated in the individual when interacting with a real life specific assignment or requirement” (Hoskins, B., Crick, R. D., 2010). A competency, as a holistic notion, could not therefore be reduced to its cognitive dimension (Rychen and Salganik, 2003).

Among all the basic competencies, more or less possible to be built at the discipline level, the **learning to learn competency** requires the most complex approaches, varying according to the features of every European educational system. "Learning to learn” competency has been identified in many contexts as being fundamental for achieving success in a knowledge based society (European Council, 2006). Learning to learn is a meta-learning which means it is a self-motivated, a self-directed learning towards lifelong learning. Research shows that students who reported more self-regulated learning strategies perform better in school learning (Boekaerts, M., Corno, L., 2005). Hofmann (2008, p. 173) describes the term learning to learn as the most important and vital one for people trying to cope with the changing world. He considers this competency as a ”method-in-action” and argues that people have to engage the method itself. On the other hand, Candy (1990 apud Hofmann, 2008, p. 175) describes learning to learn as a competency that allows people to become more efficient, flexible and self-organized learners in a variety of contexts. The learning to learn competency is understood as a meta-competence (Hofmann, 2008, p. 175), because it has an
impact on the selection, the implication and the acquisition of other competencies for XXI century.

In this paper we choose the definition of the European Union (European Commission, 2006), which supports the existence of three structural dimensions of learning to learn competency: cognitive, metacognitive and emotional and motivational dimensions combined with the socio-cultural learning environment. The learning to learn competency is also present in many school programs, but schools and teachers require more support to systematically include this competency in teaching and learning and to promote learning ethics throughout the entire educational system. A clear tendency is the more personalized approach to learning for disadvantaged students, the supporting of students experiencing learning difficulties.

**Main directions in approaching the learning difficulties**

The Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning has requested Member States "to ensure that education and training offer all young people the means to develop key competences to a level that equips them for adult life and learning in the future, and to specifically pay attention to those with educational disadvantage".

In any school, any student may have learning difficulties at a specific time at a specific object of education, in a certain or more activities. Learning difficulties may be present for a short period of time or can mark all the student's school. The contemporary school is a great diversity of individual school, that tends to be a school for all - an inclusive school and categorization of learning difficulties should reflect this diversity as well as the diversity of educational support that students need. The definition and the coverage of the concept of learning difficulties are still controversial in the scientific literature. We are in the position of those researchers who define and report learning difficulties to the great individual diversity.

In the scientific literature there are various definitions of learning difficulties phenomena, definitions elaborated from different perspectives. "The integral, complete and harmonious training of autonomous and creative personality requires interdisciplinary and especially transdisciplinary perspectives" (Chiș, V., 2005, p. 24). Each approach of learning difficulties - unilateral, according to the aimed discipline (psychology, pedagogy, psychopedagogy, social education) and interdisciplinary, non-categorial, integrative - focuses on certain features which emphasize the diversity of interpretations, as well as the necessity of a complex approach of learning difficulties. A synthesis of this approach offers the opportunity of a profound understanding of learning issues and the search of an efficient solution.
Recent studies (Winebrenner, S., 2006, Cairo, M., 2008; Crescenzi, F. et al., 2011) advocate a non-categorial vision of learning difficulties, insisting on the fact that every child has its own trajectory of cognitive development, more or less typical. The non-categorial perspective on learning difficulties represents a point of view on the educational phenomenon, inviting each agent at taking responsibility in training, in a world where individual differences are a reality that calls for tolerance and respect. We have chosen to position ourselves in this conceptual perspective because we strongly believe that the ultimate goal of the school is not to make the difference to disappear, but it seems more important for the goal to be accepting differences as a given and focusing of educational agents in order to help student to effectively diminish the problem and learn to face them when they occur, transforming them into challenges, not obstacles. Therefore, the paradigm through which we analyze the issue in question focuses on the positive reinforcements that a stimulating social environment has.

These chronic difficulties and obstacles at the level of student learning activity affect the input, the actual processing and the output of the information, including the metacognitive and non-cognitive aspects, for some people which otherwise prove their structural and functional integrity of basic intellectual capacities of thought. Thus, learning difficulties are different from mental deficiencies, characterizing the children within the 'normality' sphere, a normality understood from the point of view of at least an average intelligence coefficient. The learning difficulties could be temporary and they are not related to learner’s intelligence. They are obstacles in learning and manifests itself in delay, through learning punctual imbalance: trouble concentrating, difficulty in reading, writing, mathematics, behavioral problems.

The researchers believe that the key points on which there are different opinions are heterogeneous nature of these disorders and also the different profile, manifesting through dysfunctions in school, behavioral and socio-emotional areas. The learning difficulties are presented as being part of the decisive individual factors of school failure. Both the scientific studies (Weinfeld, R., Barnes-Robinson, L., Jewelser, S., Roffman Shevitz, B., 2006; Winebrenner, S., 2006) and our didactic experience emphasize the existence of a particular group of adolescents quite difficult to identify. They seem to be ordinary learners, but the average level of performance that they have is a consequence of their reduced learning abilities, thus hiding their learning difficulties.

Studying the learning difficulty means to consider it as an usual moment in learning, because it is not about punishing, but approaching it as an indicator of student’s activity. In
their schooling, almost all students are at one time or another in a learning difficulty. Whether they occur during or at the end of learning activities, learning difficulties may be oftenly caused by the following factors: the way how they learn, insufficient time learning, previous learning gaps, lack of techniques and procedures of effective learning, the lack of an organized scheme of work and life, poor quality of teaching in the classroom, school overload, truancy, various diseases etc. (Ungureanu, D., 1998). Therefore, we consider that any learning difficulty is an obstacle or a barrier that all educational actors should be involved in order to overcome it. The presence of students with learning difficulties confirms once again how different we are. In this range of diversity, each must define its own path of learning and the school - to give him/her this chance. While these negative aspects don’t appear at many students with learning difficulties, they should not be seen as obstacles too difficult to be overcome by teachers, but rather as a clear indication of the need to prove a high quality teaching.

The idea of deficit (Peterson, J.M., Hittie, M.M., 2010 apud Westwood, P., 2011) emphasizes at least, that there are certain difficulties areas, which have to be considered in projecting and conducting school activities. Rather than focusing exclusively on deficits, it is usually more efficient to investigate factors outside the student, as the quality and type of education, teachers’ expectations, curriculum relevancy, class environment, interpersonal dynamics inside the group and relationship with teacher(Westwood, P., 2011, p. 7). The attempt to identify best ways to help a student with learning difficulties implies finding the most significant factors, which have to be approached, offering students a high level education. This type of teaching usually implies a clear presentation of information, abilities and strategies by the teacher, explicit and direct teaching, active engagement of students, practice guided with feedback, independent practice and frequent revisions (Bellert, A., 2009; Wendling, B.J., Mather, N., 2009 apud Westwood, P., 2011).

In conclusion, the chronicity of learning difficulties constitutes the essential premise for the emergence of other difficulties, not only for the same discipline (particular learning difficulties) but even for the whole curricular area and for other curricular areas as well. Reducing and even eliminating the learning difficulties must be the solution for removing school failure caused by them. The teacher is the person who can take the most appropriate decisions (individualized educational intervention plans, differentiated tasks, additional activities for these students, patience and pedagogical tact).

Methodology
Research objectives

In view of the aforementioned aspects, the research undertaken in the field of development of the learning to learn competency aims to investigate, argue and describe the importance and the necessity of an educational intervention focused on developing these skills at students with learning difficulties in 11th grade classes. Therefore, the main aim of this research is to stimulate the development of learning to learn key-competency by means of implementing an intervention program to 11th grade students with learning difficulties in studying Romanian Language and Literature, so that the learner reaches the authentic, reflexive and strategic, efficient, autonomous/independent learning based on comprehension.

The general research question from which the research started was as follows: Is it possible to stimulate the learning to learn key-competency to 11th grade students with learning difficulties by implementing an intervention program in studying Romanian Language and Literature? From this general question derive the following specific research questions:

- Is it possible that the high school students, respectively 11th graders to become more competent in learning to learn and, thus, become independent learners?
- Under what conditions and in what ways the Romanian Language and Literature teachers are able to develop the learning competency of high school students and, therefore “learning to learn”?
- How do we know if the educational interventions on the students are effective?

Further, we intend to answer some of these questions, although we are aware of the complexity of learning to learn competency, the difficulties posed by the processes of conceptualization and experimental studies of this competency.

The ascertaining stage of the experiment undertaken consisted of a broader investigative approach in terms of the issues and of the subjects involved. During the planning of the investigative and observational research as well as of work research instruments, we operated with the following general aims of the observational stage:

1. Identifying the opinions of Romanian language and literature teachers regarding the frequencies in manifestations of learning difficulties and regarding an appropriate educational intervention concerning the development of learning to learn competency;
2. Identifying among teachers and 11th grade students from technical high schools and colleges, the degree of awareness and regulation of learning strategies.
Participants

The sample of subjects of the research is represented by 81 professors who teach Romanian language and literature discipline in Cluj County, 186 teachers and 560 students from eight technical high schools and colleges from Cluj-Napoca.

Instruments

The investigation with observational purpose from this preliminary stage of our formative experiments was realized and structured by means of questionnaire inquiry. There were three types of questionnaires destined to each main category of subjects: teachers and learners.

The questionnaire for teachers of Romanian language and literature was created for Romanian language and literature teachers, who gave online answers on the website www.isondaje.ro The purpose was noticing the following essential aspects: the types of learning difficulties that students encounter, the frequency of learning behavior at the cognitive, metacognitive and non-cognitive levels, the identification of frequent learning difficulty to 11th grade students and ways of overcoming it, the opportunity of displaying some intervention programs for developing the learning to learn competency.

Teaching and Learning Strategy Questionnaire (TLSQ) according to Abrami, P. C., Aslan, O. and Nicolaidou, I., 2007 was translated and adapted by us for teachers from technical high schools and colleges, receiving the authors’ approval. From this questionnaire we have selected the scale of students’ learning strategies and the scale of approach to teaching, in which the teachers would have to express their approval regarding the affirmations on a Likert scale rated from 1 to 5 (1 - strongly against, 5 - strongly approving).

Students were offered a second questionnaire The Student Learning Strategy Questionnaire (SLSQ) according to Abrami, P.C. and Aslan, O., 2007, as well translated and adapted by us. The items were reformulated in order to match the ones from the students’ learning strategy scale in the teachers’ questionnaire. Both questionnaires were piloted in ascertaining stage.

Data analysis and interpretation

We select below the most significant results obtained from the the questionnaire of Romanian language and literature teachers. Thus, regarding the general opinion the extent to which lack of learning strategies is reflected in students behavior, after analyzing the data, we can observe that a significant percentage of teachers (33.3% large extent and 17.3% very large extent) believe that students lack learning strategies, aspect reflected in their learning
difficulties. A very low percentage of respondents (16% in a small extent and 2.5% not at all) states that students do not lack learning strategies as reflected in the data interpreted statistically.

Following the opinion of the teachers on the extent to which students are not interested to learning activity it is observed that a percentage of 37% large extent and 12.3% very large extent of teachers consider that students' lack of interest towards learning activity generates their school difficulties. We notice a small percentage (19.8% in small extent and 8.6% not at all) of teachers who consider that students are motivated to learn, that shown interest to their main activity as a student. We also note that a large percentage of Romanian language teacher involved in observational research consider precarious previous experience is among learning difficulties to a large extent (40.7%). From the answers of the majority of teachers (43.2% and 17.3%) results that a weak teaching affects students' learning difficulties in a small extent or not at all. However, there is a percentage of Romanian language teachers (11.1%) who recognize that a weak teaching generates learning difficulties at a large and very large extent, requiring as measure the continuous teachers improvement and the curricular adaptation to students with learning difficulties requirements.

We choose the selecting of learning cognitive behaviors seldom manifested to show that their low frequency and even their absence are a prerequisite of learning difficulties, of gaps in the development of intellectual, disciplinary and transferable skills. Thus, the use of reference materials (50.6%) such as dictionaries, web resources, textbooks, notes, collections etc. is a learning behavior with rare/never frequency, representing a reason to increase teachers' concern for the use of various learning resources, for understanding the interests and needs of students.

Following Romanian language teacher opinions regarding the rare frequency of learning behaviors manifestation related to the metacognitive dimension, from the analyzed data it appears that exposure of personal goals and the appropriate selection of strategies meet the highest share (74.1%), followed by the reflection over the degree of assimilation of the material (64.2%) and then the verification and correction of a fact understanding or a task performance adjustment (56.7%).

In the analysis of the results obtained for learning behaviors related to the non-cognitive dimension, Romanian language and literature teachers consider necessary to place on top emotional self-monitoring practices such as “hearing” his own body - emotional body reactions, the use of checklists, writing a journal, discussing feelings (56.8%) as well as
anxiety control and the use of stress reduction techniques (51.8%). The rare frequency of these behaviors slightly above average indicate the need of explicit students involvement in activities that require more focused exploitation of these practices in terms of developing their emotional self-regulation. It is well known that the students with learning difficulties are predisposed to failure and maladjustment, especially to violence and indiscipline and show evident emotional reactions, easy to observe in their behavior.

The most answers have put learning difficulties often encountered in 11th grade students in relation to the lack of verification of understanding level of a text (I Rank). The answer is somewhat predictable, because students with learning difficulties have less knowledge about learning, are usually less competent in self-regulatory aspects of metacognition, approach the surface learning and do not use creative and deep processing of information and have low self-control skills. Students with learning difficulties are looking for less sense when they are reading and tend not to monitor what they have read.

A slightly above average frequency represents answers that associated learning difficulties with the skills of argumentation, explanation, deepening of reading materials (II Rank). Many students of 11th grades are facing the comprehension difficulties what they read, despite oral reading fluency. They are cognitive processing problems, including limitations of working memory, deficits of lexical processing, making inferences inadequate and poor monitoring the understandings. Other reasons could include a limited vocabulary (V Rank), difficult participation in explaining meanings of the text, identifying main ideas and lack of connection of new information to previously known facts (VII Rank). Most of the Romanian language and literature teachers’ answers shows that students' learning difficulties are found in the organization and structuring the material, the information presented in texts (III Rank). A conclusion that emerges from the analysis of Romanian language and literature teachers’ responses on students' learning difficulties in 11th grade is that, although there are indications on the availability of teachers to optimize their teaching, development of learning management skills such as learning autonomy, the development of the decision capacity or the information processing capacity should be at the forefront of teachers concerns.

The teachers’ concern for approaching students, considered as personality and for understanding their development needs appears evident from their answers regarding the ways to overcome these difficulties: using interactive teaching and learning methods (debates, examples, case studies, videos etc.), repeated and deepened reading of texts, practicing skills of organizing information (highlights, notes, keywords, etc.), creating
situations in which students give reasons, think, differentiated and personalized approach of learning tasks, creating learning situations that require students' prior experiences etc. We believe that the teachers' enhancing concern for understanding the needs and interests of students is an indicator of the increasing availability of teachers to recognize the diversity of students and to adapt to this diversity through differentiated and individualized approach. Positioning in hierarchical order, by frequency, of the ways to overcome learning difficulties that teachers stated students from 11th grade have, emphasizes once again the focus on the cognitive dimension learning, the metacognitive one remaining secondary. Stimulating metacognition is reflected in the choice and the proposal for learning tasks that incite, invite, facilitates questions (tasks that offer open searches, solving complex problems, proposing attempts, challenges) and any activity that requires the students, especially those with learning difficulties the opportunity to analyze, in a reflexive manner, their own actions.

The analysis of the feedback from Romanian language and literature teachers to the online administered questionnaire items regarding students' learning difficulties frequencies allows us to formulate the appreciation that, although there is a tendency for teachers to concentrate their educational concern on developing students’ learning competency, the most frequent learning difficulties are concentrated in the metacognition area: planning, monitoring, metacognitive evaluation. This statement draws attention on students’ involvement through coherent pedagogical interventions on covering of various learning situations and gaining cognitive and metacognitive experiences which enable the student to overcome his learning difficulties and perform important transfers to new learning situations.

One of the objectives underlying the present ascertaining study integrates a separate component on evaluation of teachers and 11th grade students of technical high schools and colleges regarding the use of self-regulated learning strategies in order to develop students' metacognition. Concerning the data provided by the Romanian language and literature teachers, especially those related to the dimension of metacognitive learning difficulties, mentioned as the most frequent, it is obvious the need for investigation of self-regulated learning processes/strategies among both teachers and students of 11th grades.

The largest percentage values obtained by synthesizing responses to the approach to teaching scale from questionnaire for teachers is found towards students' learning self-regulation, in the extent to expressing the consent with this teaching behaviors. We observe in these behaviors current educational practices that are present at a frequency quite large in the teachers’ repertoire. The teachers’ awareness of the formative role assigned to these practices
in the direction of transferring towards students of responsibility for learning control, would be likely to increase the frequency of these behaviors and to optimize their formative exploration. We obtained slightly below average for behaviors of reflection over students' learning strategies to achieve goals (48.9%) and for making a list of learning strategies that they can use when students solve learning tasks (46.2%). These data support the conclusion already formulated from data provided by the Romanian language and literature teachers, that stimulating the metacognitive reflection, exercising self-regulation strategies, putting in the forefront the student learning as a source of information about the quality of student performance and as a source of learning for students.

At the level of students and teachers, assessment relating to the use the self-regulated learning strategies was possible based on comparative analysis of the response data to learning strategies scale in both questionnaires. Thus, we selected from this scale only the agreement and strong agreement regarding the learning strategies used by students in the self-regulation of their own learning. A representation of the subjects’ responses eloquently illustrates a situation almost reversed regarding teachers’ responses compared with those of students. Thus, the high frequency responses given by students had in the case of teachers much lower frequencies on most items. Lower frequencies in the use of learning strategies obtained from both teachers and students responses are recorded at listing the strategies when students work on task (teachers - 11.83%, students - 38.39% ), reflecting on learning strategies (teachers - 21.51%, students - 48.21%), reviewing versions of student work (teachers – 26.88%, students - 63.04%) and monitoring progress (teachers - 27.96%, students - 61.07%). A possible explanation for this situation is that the students in self-regulated learning strategies overestimated their study skills as a self-protection factor to compensate their learning difficulties and to diminish the effects of school failure from previous years. Students with learning difficulties have repeatedly experienced by definition, the school failure. They think they cannot learn, do not want to be engaged in difficult tasks, use fewer learning strategies and attribute success to luck rather than their own efforts. It is interesting to observe the scoring by both subjects of similar frequencies for using feed-back from teachers, using feedback from peers, attribution of success to their own efforts and work well with other students, which shows the unanimous recognition of the importance of self-evaluation, causal attribution of results, teamwork in future learning regulation.

Regarding the answers of 11th grade students we found significant differences from those of teachers in terms of planning, monitoring, evaluation of learning. Students who prove
self-regulation capabilities use a variety of learning strategies, they have responsibility for their own learning by identifying, implementing and monitoring the strategies that help them in learning. However, there are students whose academic or social difficulties may occur due to problems in self-regulation of strategic behavior. The results of this category of students highlighted in the scientific literature indicate that students with learning difficulties assessed themselves as being weaker on self-regulated learning components compared to peers who don’t have these difficulties, in the case of comparable classifications between students with and without learning difficulties.

Conclusions

Data obtained from the responses Romanian language and literature teachers reveals that the cognitive dimension of learning behavior is better represented quantitatively and with the most frequent manifestation, as evidence of the student profile that knows how to learn, and metacognitive as well as non-cognitive dimension (motivational, socio-affective) are poorly acknowledged. To develop the learning to learn competency, the teachers emphasized the need of educational intervention to create formative learning opportunities, practice reflective and strategic capacities, direct their own learning, knowledge and understanding of learning strategies and making decisions about their use. The teachers’ feedback analysis regarding the learning strategies offered by teachers from technical high schools and colleges reveals that some students have a low level of awareness and regulation metacognitive skills. They have difficulties in setting their own learning goals, in identifying, modifying and adapting learning strategies, in monitoring their progress. They have low reflective capacities on the strategies and all of which generate learning difficulties in one or more disciplines. The teachers’ concern for improving the learning difficulties by means of stimulating metacognition, practicing the critical and reflective abilities or choosing the most efficient strategies requires the necessity of planning certain intervention programs to develop students’ responsibility for their own learning, to determine the student to adopt an active role in the learning process, to stimulate the profound processing of information and the self-reflective capacities. At the high school students, interventions should build on strategic repertoire that students have already acquired.

The results of the observational stage represented the premises of the display of the psycho-pedagogical experiment destined to diminish the frequency of the learning difficulties to 11th grade students by means of reflexive and strategic learning. Thus, we propose a model for the development of learning to learn competency that articulates systemically the
combination of knowledge, abilities and attitudes according to the levels of learning taxonomies. It values entirely the processes of critical reflection, of metacognitive reflection and strategic decision making within a socio-constructivist context. Therefore, the development of learning to learn competency at students with learning difficulties is an important pedagogical stake.

Acknowledgements

This work was possible due to the financial support of the Sectorial Operational Program for Human Resources Development 2007-2013, co-financed by the European Social Fund, under the project number POSDRU/159/1.5/S/132400 with the title „Young successful researchers – professional development in an international and interdisciplinary environment”.

References