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SELF-REGULATED LEARNING AND ACADEMIC SUCCESS

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Abstract

Self-regulation is a behavioural acquisition which constitutes an important factor of school adaptation. Self-regulated learning represents a synthesis of several – motivational, strategic and self-control factors of performance. This type of learning provide explanations for two main problems: the first is connected to pupils' learning motivational resources and the second targets the specific behaviours which externalize pupils' individual learning. Pupil's abilities target his use of different cognitive and metacognitive strategies whereas the motivational orientation refers to aims, values and expectances. The option for one strategy or another in solving certain problems, no matter whether cognition, metacognition or motivation are implied, depend on pupil's expectances and convictions, on the values and goals related to learning. Self-regulated learning implies a reciprocal construction relation between subject (the learner) and the object (what is learned), construction and reconstruction of meanings in an interative relationship. Knowledge is constructed and transformed during the interaction of the subject with the academic environment.The strict preservation of old meanings is replaced by the „discovery" of meanings and significances, able to trigger pupils' dynamic, active own approaches of the learning material. The determinant factors in achieving self-regulated learning belong to the learner's personality but also to the educational/academic context he is part of. Consequently, pupil's instruction to approach the learning material in a dynamic and flexible way becomes very important. The aim of learning strategies is represented by a judicial management of the pupil's cognitive and motivational resources in order to problem solving.

Keywords: Self-regulated learning; motivational factors; metacognition; development strategies of self-regulated learning.

1. Introduction

Success in the academic learning activity is not only the result of some aptitudes and capacities, as it is acknowledged that pupils with superior intellectual aptitudes do not always attain academic performance. Then, the issue under debate is: what determines a pupil to attend a school, to learn, to meet the academic requirements and hardness, to obtain performance and what determines another pupil not to follow the same path?

In order to answer these questions and others related to the manner some pupils obtain performance and others don't, teachers directed their atention to pupils' strategic efforts to manage their own achievements through specific processes and convictions. Self-regulated learning, a recent concept in the psychology of education lays the emphasis on the personal and learning environment, on metacognitive, behavioural and motivational processes used to obtain academic performance.

This learning approach is distinct from previous models since it explains why pupils learn and what kind of personal behaviour they develop, how they think about themselves and about school tasks, obtaining results independently. Thus, the accent is not laid on pupils' learning abilities and on the home or school learning environments but on the strategies used individually to obtain academic performance.

In the traditional education activity, the learning process is guided and controlled to a large extent by the teacher who sets the learning objectives, selects the contents, the didactic materials, structures the learning environment, motivates pupils by giving rewards, qualifications, grades,etc. Pupils cannot manage their cognitive, affective and motivational resources and mainly they cannot regulate their own learning activity.

The development of self-regulation capacities, of guide and control of one's own thoughts, reasons, emotional experiences and behaviours contribute to the formation of one of the human capacities vital for developing harmonious relations and psychical health. Self-regulated learning strategies acquired in school (flexibility in problem solving, generation of dynamic, alternative, solutions, creative thinking, team work) will be used mostly afterwards, on the labour market which is in a perpetual dynamics and transformation. (Zimmerman, 1998)

We observe the fact that school is not yet prepared to meet pupil' expectances and needs as they are beset with a multitude of new information, either through the internet or through diverse massmedia channels. Due to the conservatism of the educational process which ignores pupils' potential and capacities to operate with a huge volume of information simultaneously, school becomes an ominous learning environment.

Educational objectives have to be reconsidered so that pupils should develop control abilities of their learning behaviour and information and abilities about the processes and mechanisms with a role in personal management should be provided. Self-regulated learning offers the opportunity to monitor multiple informational processes and at the same time it constitutes the requisite of deep informational processing. The development of self-regulated abilities can be achieved in the instructive process by enhancing the activities which mediate the experiences through which the pupil learns to explore a learning situation sistematically, to self-monitor cognitive processes, his learning activity and the way of organizing information, to formulate hypotheses and to use strategies for testing hypotheses, to plan his

learning behaviour, to reflect upon his own way of learning/understanding and to generate personal significances.

2. Theoretical Frame of Self-Regulation Learning

Generally, self-regulation can be defined as a characteristics of any biological or cybernetical system, characteristics which allow the reception of information from the environment (from other systems), their processing and the formulation of an adequate answer so that self-conservation could be ensured in an environment which tends to unsettle the system. The answer mechanism becomes possible due to the inverse connection (the feed-back) through which the answer of the system is communicated to the control centre and compared to the given order.

Self-regulation represents those personal natural answers, often automatized, which aim at reducing the existing disparities between an individual's expectances and the perceived reality. At human level, it implies cognitive and/or behavioural processes and is always accompanied by emotional control. An efficient self-regulation which presumes the control of thoughts, feelings and behaviour constitutes the foundation of a healthy psychical functioning. Synthetically, self-regulation refers to thoughts, emotions and actions which are planned and adapted to personal goal attainment (Zimmerman, 2000).

Self-regulated learning refers to pupils' capacity to exert an active, metacognitive, motivational and behavioural control over their own learning activity and over its results.

From the perspective of the operant learning theories, the basic processes of self-regulation are self-observation (monitoring own behaviour through recording its duration and frequency), self-instruction (stimuli which guide the answer), self-evaluation (comparison of own behaviour with the standards of its development) and self-improvement (Zimmerman, 2001).

Constructivism emphasized the fact that the development of the learning capacity conforms with cognitive deveopment and acts upon individuals' beliefs about their own competence, upon the learning control and academic performances and upon the used learning strategies. (Paris, Byrnes şi Paris, 2001 in Cazan, 2013)

The socio-cognitive approach of self-regulated learning is considered to have a cyclic nature. Zimmerman (2000) elaborates a cyclical triadic model: forethought period for goal setting and social modelling, volitional control period which include processes taking part during learning (social comparison, instruction strategies, verbalization of action for oneself) and self-reflection which implies self-monitoring and self-evaluation processes. This model suggests that self-regulation can be improved through practice (individuals with a high level of self-regulation will start from previous experiences to build new strategies which will support efficient learning.

From this perspective Pintrich (2004) develops a similar model of self-regulated learning which includes four phases of self-regulation in four domains – cognitive, motivational, behavioural and contextual. The first phase implies planning and goal setting, the second phase includes monitoring the learning process which implies perception of own cognitions, motivations and emotions, elaboration of metacognitive expertise about the task and about own abilties and competences, the third stage includes the effort to control and regulate different aspects related to the self, to the task and context and the fourth stage contains elaboration of reflections about the self, about the task and the context.

According to the cyclic model, self-regulated learning is an active, constructive process through which cognition, motivation and behaviour are monitored, regulated and controlled, based on one's own goals and on contextual characteristics of the learning environment.

These models of self-regulated learning include in the system of factors which determine the development of self-regulated learning not only self-regulation strategies but also the motivational factors. Self-efficacy, learning goals, interests, intrinsic motivation are implied in the regulatory processes, as conditions of self-regulated learning. Along with cognitive factors, motivational factors can influence the development of self-regulated learning through the modification of the learning goals and the optimization of the regulatory processes (Pintrich, 2004). The goals oriented towards performance or towards learning are associated with the use of self-regulated learning strategies (pupils who set goals oriented towards optimizaton and learning monitor their progress, control and regulate their learning effort, use efficient learning strategies and obtain performances in learning).

To learn how to learn presumes the cognizance of the learning needs, the identification of opportumities and the ability to persevere in learning, to organize personal learning with a view to overcome obstacles for successful outcomes. The learning motivation and a positive self-image, incremental beliefs about one's own intellectual and physical possibilities are determinant in forming this capacity during school years (Negovan, 2004).

Self-directed learning (self-directed learning, autoformation, selbstgesteuertes Lernen) designates an extremely complex process in/through which the individual has the initiative of learning, sets his own learning needs (with or without others'support), formulates his goals, the learning objectives, identifies the necessary human and material resources, chooses and applies adequate strategies and evaluates his own results. (Siebert, 2001)

Self-directed learning or self-instruction must not be mistaken for independent learning which is achieved outside an organization and without the support of an educator or of an educational institution despite the fact that the learning responsibility is transferred from the institutiton/educator to the learner (pupil, student).

From a psychological point of view, in the systemic and constructivist theory (Siebert, 2001) self-directed learning lays the emphasis on the acquisition of knowledge and not on its transfer. „To instruct" becomes equivalent with „to support", „to assist" the one who wishes to learn structures of essential knowledge. The educator must organize the educational space only, so that this responsibility could be developed.

3. Development Strategies of Self-Regulated Learning

Self-regulated learning consists in acquiring, processing and assimilating new information and capacities/skills but also in asking and using guidance/counselling. It presumes the implication of the learners in the making of knowledge, starting from thier previous experience, in order to be able to apply their expertise and capacities in diverse contexts: at home, at the working place, in education and individual professional training.

The traditional perspective upon self-regulated learning, which analyzes the development of self-regulated learning in connexion to maturity, advocates that at early ages, children are not capable of self-regulated learning, due to the fact that they do not have mechanisms of regulating their own behaviour.

Maturity allows the acquisition of information, the develoment of representations and then development of learning strategies and of metacognition.

In a recent perspective, the emphasis is laid more upon learning and less upon development and the individual's capacity to face more and more difficult challenges becomes essential. Self-regulated abilities are necessary for the acquision of knowledge and the improvement of abilities but they do not lead implicitly to an enhancement of performances. (Zimmerman, 2000)

Self-regulating abilities begin as early as childhood which develops functions with a major role in self-regulation - attention, working memory when the individual becomes capable of inhibiting certain behaviours. One can identify self-monitoring learning abilities at 4-5 years but they begin to be used scarcely around 11-12 years. During early schooling, pupils can acquire specific strategies for the study of mathematics and the strategies of understanding texts are used during the middle school period.

Recent research demonstrated that some preschoolers are capable of regulating the learning processes and the abilities formed at early ages predict academic competences and performances in the learning activity. (Perry, 2004). Pupils' voluntary effort and academic self-efficacy condition academic performances at fundamental disciplines in the primary cycle.

Whereas pupils with high academic performances use a series of strategies specific for self-regulated learning – self-evaluation, organization and elaboration of information, monitoring of learning, the structuring of the learning environment, the use of efficient memorizing techniques etc., pupils with low academic performances use non-regulating learning strategies. Researches showed that the combined use of self-regulated strategies determine academic performances but also performances at a standardized test of knowledge. (Ley şi Young, 2006)

The specialty literature registers a series of studies which also take into consideration other variables that intervene in the relation between learning strategies and academic performances. Thus, they emphasized the existence of an indirect relation between motivational learning strategies and academic performances. (Aniţei, Chraif, Papasteri, Neacşu, & Pioarcă, 2010). Researches assert the hypothesis that intelligence influences academic performances not only directly but also indirectly through the agency of self-regulating learning strategies. It is considered that persons with a high intelligence quotient uses self-regulated strategies more efficiently, in that intelligence includes self-regulating capacities as a central element.(Grigorenko&Sternberg, 2001 in Cazan, A.M., 2013).

Many children have a low level of self-regulated learning capacities, although they begin to develop as early as preschool years which advocates the use of didactic strategies which would contribute to the development of these abilities since the primary cycle.

Self-regulated learning (to lear how to learn) can be achieved either through an independent approach, based on the learning of the study techniques, methods and strategies, independent in relation to traditional disciplines, or through specific teaching activities of the disciplinary or interdisciplinary approaches.

Since the abilities of self-regulated learning improves as their development strategies are practised, they need the use of efficient learning methods, the stimulation of self-efficacy, self-monitoring and self-evaluation abilities of the learning outcomes.

Self-regulated learning implies the embracement of efficient learning strategies and techniques which improve as they are practised. There are efficient learning strategies specific for a certain field of

study (mathematics is learned differently from history or geography) and strategies that have a general character which can be used for learning in any field and can be transferred from one field to another.

4.   Problematics of Study

Our observational study proposes to identify pupils'/students' opinions about self-directed learning, about the competence to learn how to learn obtained during schooling years with a view to be prepared for the learning for life.

4.1.   Hypothsesis of Research: *We asume that pupils / students with poor acaemic performances have poorly structured self-directed learning.*

4.2.   The Sample: The target group in our research is represented by 50 high-school pupils (17 – 18 years) and 80 students, I-st and II-nd year of study, with academic results below average.

4.3.   Methodology: The diagnosis had been achieved through a questionnaire with open-ended and closed-ended answers and through structured interviews about the strategies they use in the learning activity. The results had been analyzed on the basis of subjects' annual mean.

5. Analysis and Interpretation of Results

In the analysis and interpretation of results we intended to emphasize: if the subjects hold and use operational and scientific information about the self-directed abilities; if they have knowledge and administration capacities of the internal resources of personality involved in self-directed learning; if they have projecting/implementation/evaluation competences of some personalized learning strategies: if they have metacognitive elements specific for learning; how necessary and beneficial is to create self-reflection sequences in the learning activity.

Concerning the importance given by subjects to the necessity to know how to learn as well as to the modalities in which self-directed learning abilities are used, the answers are different between the two categories of subjects. Most pupils does not consider it is important to know how to learn independently in the sense of choosing the learning contents and strategies, as they are offered by teachers to the utmost extent. Instead, students considered it to be very important because „we will not have a teacher near us to guide us how to overcome social problems". They also affirm the fact that for achieving self-directed learning is important to know your own needs, aspirations and chiefly to know how to obtain what you need, namely the self-directed strategies (goal setting, cognizance of own necessities, motivations and of modalities of attaining objectives).

As compared to pupils, students largely ponder over the problem of setting clear learning goals, but they consider it as a very difficult problem, which determines a rise in the level of awareness and resposibility in relation to academic results.

Among the methods used to a large extent they indicated: the use of helping schemes, the structuring of contents in learning units and time intervals, repetitions, revisions, accentuation of keywords, association of words, main ideas. Among the less used strategies we noted: assignation of the study steps, early preparation of homework, the use of questions, clear goal setting, ensuring ambient conditions, avoidance of external influences.

Pupils indicate as dominant learning strategies those based on memory while students use besides these, metacognitive, motivational, of cognizance and use learning styles, too. This thing demonstrates that students, unlike pupils, have a certain self-directed learning experience but it must be diversified to overcome the memorizing situation of a material.

As concerns the subjects' motivation in the matter of participation to training courses in the field of development of self-directed learning competences, they offered a list containing the following reasons: it would train me to cope in every learning situation and at any age; it allows me to acquire some efficient learning methods and techniques; I will become a good manager of my own learning activity; I will know my learning style better; it would help to improve my academic performances; it would offer the opportunity to know the learning methods of many persons; I would obtain a bigger number of credits.

Most pupils consider that they would participate to such a course in order to obtain academic performances, being less motivated by certain perspectives in using these forms of learning.

Instead, students wish to attend such a course in order to obtain high grades through little effort and to know and use the learning style efficiently but also to use these strategies in other situations outside the learning environment. Another lot of students consider that such a course can contribute to their own formation mainly because after graduation they have to continue the learning activity without external guidance. Although they affirm that teachers' and school contribution is important, they mention that the interest for their own developement is also very important, by studying some independent learning guides but the bases of such learning must be built during schooling.

6. Conclusions

To learn how to learn constitutes one of the primary, permanent but difficult challenges of the whole didactic activity.

Most educators affirm that efforts invested in study, as systematic academic learning and even the quality of pupils' and students' learning styles are inferior to their results obtained in school. The inefficiency of the learning activities and academic failures implicitly arise from the fact that both pupils and students do not use the strategies of self-directed learning.

The sense of modern education is to transfer not only information but to train pupils and students for learning for life, to familiarize the learner with the strategies of self-directed strategies, to transform the human who is educated and trained by others in the human who can educate and train himself.

Both pupils and students need training in the matter of the self-directed learning strategies in order to achieve the learning for life.

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