The connection between emotional regulation and learning regulation in Low-achievement students

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School is an influential factor in the lives of children and adolescents, because it is a gathering of different aspects in their lives – the learning aspect and the emotional aspect.

Self-regulated learning is a process in which the learner sets his own goals and manages cognition, motivation and behavior according to these goals (Pintrich, 2000). However, the process of learning also contains emotional components that influence the process of learning; hence emotional regulation is very important for the student. The question is - what is the influence of the relationship between learning regulation and emotional regulation on the process of learning in low-achievement students?

The process of earning in low-achievement students in middle-school is expressed in two main components: low school functioning and low school achievements (Conroy & Elliot, 2004). The low-achievement students have a low academic self-esteem because of failures they had experienced in school; their learning functioning is inadequate and they may have behavioral difficulties at school. They don't see school as a source of empowerment or success and they do not believe it is valuable for them. Ruvolo and Markus (1992) show that the process of developing an academic self-image occurs when educational accomplishments are valuable for the student. A lack of a proper ability to regulate emotions is a risk factor for inadequate cognitive development (deGangi et al., 2000).

In order to succeed academically the student needs skills that would be able to assist him in becoming integrated in school and benefit the process of learning.

The hypothesis is that when the low-achievement student acquires tools for self-regulated learning in the process of learning and tools for emotional regulation in order to improve their behavior in school, they succeed in school and therefore improve their achievements and refrain from behavioral difficulties.

There is an agreement in the literature about the importance of self-regulation for promoting achievements. Zimmerman and Martinez-Pons (1986; 1988) conducted a set of studies showing that students with high achievements used regulation strategies as oppose to low-achievement students. Learning regulation was found as a good predictor for grades students were given (Pintrich & De Groot, 1990). Zimmerman (1994) examined a number of studies that show how a lack of self-regulation causes learning difficulties. He claims that a lack of academic success is caused by students' inability to control their learning, therefore they act impulsively. In addition, he suggests a cognitive-social perception that sees regulation as an interactive process between self-processes and behavioral occasions (Zimmerman, 2000; 2002).

Lichtinger (2010) claims that students who regulate learning are willing to face challenges and a lack of knowledge; they were reflective and deal more flexibly with difficulties. Studies show there is a need for developing programs that promote self-regulation for students, which may improve learning process and improve their grades. Different studies show that self-regulated learning is connected positively to school accomplishments.

As-stated, in the process of learning there is an emotional ability; studies showed that controlling the emotional ability is related to better accomplishments in school; however, a failure to regulate emotions can cause learning difficulties (Eisenberg, Sadovsky & Spinard, 2005). emotional regulation is important to the mental process needed for learning (Blair, 2003); students, who are able to regulate their feelings, can lead themselves towards behavior that promotes learning (Eisenberg, Sadovsky & Spinard, 2005). A research conducted with 907 students from 16 different schools in Slovenia found that certain learning behaviors are related to school accomplishments (Sonja, Melita, Milena, Jana & Cirila, 2009). These behaviors include self-management and self-

regulated learning, which are qualifications that allow students to independently plan learning activities and to criticize and control them when they are performing different activities.

Rowe, Hirsh, Anderson and Smith (2007) claim that there is a connection between students' emotional well-being and their achievements in school. An ability to deal with stress and emotional regulation influence learning and academic accomplishments in a direct and close manner. For example, it was found that a positive mood usually elevates the ability to concentrate and has a positive effect on the academic accomplishments of adolescents (Bryan, Mathur & Sullivan, 1996).

In fact, the emotional involvement predicts the behavioral involvement and this has a direct effect on the student's performance (Skinner, Furrer, Marchand & Kinderman, 2008). Archambault, Janosz, Fallu and Pagani (2009) found that students, who don't feel involved in school, distance themselves behaviorally and cognitively and achieve a lower educational outcome.

Gumora and Arseino (2002) conducted a research among students of the 6<sup>th</sup> to 8<sup>th</sup> class in middle-school, and examined the connection between emotions related to studies and academic performance. This research proved that there is a connection between the emotional status related to school work and the amount of academic success among middle-school students.

Therefore, it seems that the component of emotional regulation acts as a component of stability; on the one hand it preserves positive feelings and on the other hand it moderates negative feelings, in a way that allows the student to persist in learning tasks and achieve better grades in school (Garner, 2010). Students, who regulate emotions in a better manner, can use their emotions for success in school (Lopes & Salovey, 2004).

Modern schools that act according to contemporary pedagogies, deal with identifying and developing structures for effective and active learning. In the modern era, there is movement towards pedagogy that creates students who are more responsible and more aware to their learning process (Chis, 2002). Integrative science of education and contemporary pedagogy, as a kind of observation on education, put themselves in an axiological-normative perspective and at the same time have a theoretical-explanatory and practical character (Bocos & Jucan, 2008).

Therefore, intervention programs in school that assist the student to acquire tools for self-regulation and emotional regulation, are very much effective and needed mainly for low-achievement students. These intervention programs will assist the student to persist with his studies. These two components- emotional regulation and learning regulationare the main components during the process of learning of the lowachievement student. For example, the SEL (social and emotional learning) is a universal program for students, in order to promote emotional-social learning and success in school and in life (Zins & Elias, 2007; Guerra & Bradshaw, 2008; Weissberg, Kumpfer & Seligman, 2003; Catalano, Berglund, Ryan, Lonczak & Hawkins, 2002). The main goals of this program are self-awareness, self-management, social awareness, social skills and decision making (Collaborative for Academic, Socia and Emotiona Learning, 2005). This program can set a basis for better adjustment and a better academic functioning, expressed in behaviors and improved grades (Greenberg, Weissberg, O'Brien, Zins, Fredericks, Resnik & Elias, 2003). Catalano, Berglund, Ryan, Lonczak and Hawkins (2002) show that SEL is related to a decrease in the level of problematic behavior and improvement in academic performance. This program, that promotes school performance, developed students with higher selfdiscipline, aimed at learning, who accomplished higher grades (Duckworth & Seligman, 2005).

My research deals with the influence of the intervention program "a Bridge to Emotion" on the process of learning in low-achievement students. I wrote this intervention program - the goal of the program is to teach the student tool for regulating emotions. These tools were adopted from the cognitive-behavioral approach in order to succeed in schools and improve achievements.

The conclusion is that a student, who acquires tools for learning regulation, improves his learning functioning. Since one of the components of learning regulation is behavior, then when the low-achievement student controls his behavior with emotional regulation and promotes himself towards learning by managing emotions, hence his process of learning would be effective.

As presented in this article, there is a connection between emotional regulation and learning regulation - both affect the process of learning. Low-achievement students need, more than anyone else, to acquire tools for emotional regulation that will influence learning regulation. When the low-achievement student learns to manage their emotional

through capabilities of emotional regulation and learns to organize their learning through capabilities of learning regulation, we can assume that their learning process would be more effective.

## **References**

Archambault, I., Janosz, M., Fallu, J., Pagani, L. S., 2009. Student engagement and its relationship with early high school dropout. *Journal of Adolescence*, *32*, 651–670.

Blair, C., 2003. Behavioral inhibition and behavioral activation in young children: Relations with self regulation and adaptation to preschool in children attending Head Start. *Developmental Psychobiology*, 42, 301–311

Bocoş M., Jucan D., 2008. Teoria şi metodologia instruirii. Teoria şi metodologia evaluării. Repere şi instrumente didactice pentru formarea profesorilor, *Editura Paralela* 45, Piteşti.

Bryan, T., Mathur, S. Sullivan, K., 1996. The Impact of Positive Mood on Learning *Learning Disability Quarterly 19, pp*:.153-162,

Catalano, R. F., Berglund, M. L., Ryan, J. A. M., Lonczak, H. S., Hawkins, J. D., 2002. Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *Prevention & Treatment 5*(15).

Chiş, V., 2002. *Provocările Pedagogiei Contemporane*, Presa Universitară Clujeană, 221 pag.

Collaborative for Academic, Social, and Emotional Learning., 2005. Safe and Sound: An Educational Leader's Guide to Evidence-Based Social and Emotional Learning (SEL) Programs. Chicago, IL: Author.

Conroy, D.E. Eliot, A.J., 2004. Fear of failure and achievement goals in sport: Addressing the issue of the chicken and the egg. *Anxiety, Stress, Coping* 17(3), pp: 271-285.

DeGangi, G.A. Breinbauer, C. Doussard Roosevelt, J. Porges, S. Greenspan, S., 2000. Prediction of childhood problems at three years in children experiencing disorders of regulation during infancy. *Infant Mental Health Journal*, 21 (3), pp: 156-175.

Duckworth, A. L., Seligman, M. E., 2005. Self-Discipline Outdoes IQ in Predicting Academic Performance of Adolescents. *Psychological Science*, *16*, pp: 939-944.

- Eisenberg, N., Sadovsky, A., & Spinrad, T., 2005. Associations of emotion-related regulation with language skills, emotion knowledge, and academic outcomes. *New Directions for Child and Adolescent Development, 109*, pp: 109–118.
- Garner P. W., 2010. Emotional competence and its influences on teaching and learning. *Educational Psychology Review*, 22, pp: 297-321.
- Greenberg, M.T., Weissberg, R.P., O'Brien, M.U., Zins, J.E., Fredericks, L., Resnik, H., Elias, M.J., 2003. Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *American Psychologist*, *58*, pp. 466-474.
- Guerra, N. G., Bradshaw, C. P., 2008. Linking the prevention of problem behaviors and positive youth development: Core competencies for positive youth development and risk prevention. *New Directions for Child and Adolescent Development*, 122,pp: 1–17.
- Gumora, G. Arseinio, W.F., 2002. Emotionality, Emotion Regulation, and School Performance in Middle School Children. *Journal of School Psychology*, 40 (5), pp: 395-413.
- Lichtinger, E., 2010. The Influence of the Learning environment on Students' Self-Regulation and Motivation. *Dvarim Journal*, pp. 135-150.
- Lopes, P. N., Salovey, P., 2004. Toward a broader education: Social, emotional and practical skills. In J. E. Zins, R. P. Weissberg, M. C. Wang, & H. J. Walberg (Eds.), *Building academic success on social and emotional learning: What does the research say?* (pp. 76-93). New York, NY: Teachers College Press.
- Pintrich P. R., 2000a. The role of goal orientation in self-regulation learning. In M. Boekaerts, P. R. Pintrich & M. Zeidner (Eds.), *Handbook of self-regulation: Theory, research and applications*. San Diego, CA: Academic Press.
- Pintrich, P. R., De Groot, E. V., 1990. Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82, pp: 33-40
- Ruvolo, A. P. Markus, H., 1992. Possible selves and performance: The power of self-relevant imagery. *Social Cognition*, 10, pp: 95-124.
- Rowe, G., Hirsh, J. B., Anderson, A. K. and Smith, E. E., 2007. Positive affect increases the breadth of attentional selection. *PNAS Proceedings of the National Academy of Sciences of the United States of America* 104, pp. 383-388.
- Skinner, E.A., Furrer, C., Marchand, G., & Kinderman, T., 2008. Engagement and disaffection in the classroom: Part of a larger motivational dynamic? *Journal of Educational Psychology*, 100, pp: 765–781.

- Sonja, P., Melita, P.L., Milena, V.Z., Jana, K., & Cirila, P., 2009. Students' social behavior in relation to their academic achievement in primary and secondary school: Teacher's perspective. *Psychological Topics*, *18*, pp. 55-74
- Weissberg, R. P., Kumpfer, K. L. Seligman, M. E., 2003. Prevention that works for children and youth: An introduction. *American Psychologist*, *58,pp*: 425–432.
- Zimmerman, B. J. Martinez-Pons., 1986. Development of structure interview for assessing student use of self-regulated learning strategies. *American Educational Research Journal*, 23, pp. 614-628.
- Zimmerman, B. J. Martinez-Pons., 1988. Construct validation of strategy model of student self regulated learning. *Journal of Educational Psychology*, 80, pp. 284-290.
- Zimmerman, B. J., 2002. Achieving self-regulation: The trial and triumph of adolescence. In F. Pajaers & T. Urdan (Eds.), *Adolescence and education:* Vol. 2, Academic motivation of adolescents (pp. 1-27). Greenwich, CT: Information Age.
- Zimmerman,B. J., 1994. Dimensions of academic self-regulation: A conceptual framework for education. In D. H. Shunk & B. J. Zimmerman (Eds.), *Self-regulation of learning and performance: Issues and educational applications* (pp. 3-21). Hillsdale, NJ: Erlbaum.
- Zimmerman, B. J., 2000. Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich & M. Zeidner (Eds.). *Handbook of Self-Regulation: Theory, Research and Applications* (pp. 13-39). San Diego, CA: Academic Press.
- Zins, J. E. Elias, M. J., 2007. Social and emotional learning: Promoting the development of all students. *Journal of Educational & Psychological Consultation*, 17,pp: 233-255.