PROBLEMS OF EDUCATION IN THE 21<sup>st</sup> CENTURY Vol. 76, No. 6, 2018 760

## TEACHING HOW TO LEARN

## Ivana Z. Bogdanović

University of Novi Sad, Republic of Serbia E-mail: ivana.bogdanovic@df.uns.ac.rs

The problem that teachers meet in every educational system is how to teach efficiently, while at the same time students are facing the problem how to learn efficiently. These two problems are closely related and if they are not treated well, they result in poor students' performance. Teachers should find the way to help students to learn better and that should result in better students' performance. Moreover, if the learning process is efficient, students would need less time for learning, and their mental effort would decrease, while their motivation for learning would increase.

A number of students may struggle with learning because of the way how they are being taught. Since different students react differently to particular teaching and learning strategies, it is desirable to develop various strategies that are possibly useful in order to enhance students' acquiring of knowledge (Zouhor, Bogdanović, Skuban, & Pavkov-Hrvojević, 2017). It is shown that using an adequate learning strategy is in correlation with students' performance in different subjects (Sağlam, 2010). Learning strategies can be defined as "behaviors and thoughts that a learner uses for processing information during learning" (Weinstein & Mayer, 1986; as cited in Selcuk, 2010). Students use learning strategy in order to process, understand and adopt the information during teaching and learning process or while learning independently (Tay, 2013); it includes a number of activities that give meaning to information (Kafadar, 2013). The use of learning strategies leads to greater learner's autonomy and increases self-regulation (Griffiths, 2015). Can learning strategies be taught? Is the best way to find an appropriate learning strategy for a student; to help him/her to master that strategy and to direct him/her to always use it? Maybe although one learning strategy is fitting student's learning style, it is not efficient to use it for different teaching contents. Besides, it may be necessary for students to use different strategies so that they would not perceive learning as uninteresting. The question then arises, "How to help students to learn better?"

A very good way to improve students' learning is to make a special effort to develop students' metacognition. Metacognition enables student to retrieve and deploy strategy that he/ she has learned, in order to solve an unfamiliar problem (Kuhn & Dean, 2004). The concept of metacognition is attributed with different meanings, they have in common that they are referring to one's thinking process, monitoring and control of thinking. Flavell (1979) used the term metacognition with the meaning "knowledge and cognition about cognitive phenomena." Simpler it is "thinking about thinking," "cognition about cognition" or "knowing about knowing". Three components of metacognitive experiences. Metacognitive knowledge includes: declarative knowledge, procedural knowledge and conditional (strategic) knowledge (Schraw & Moshman, 1995). These types of metacognitive knowledge refer to: content knowledge, understanding one's own capabilities and limitations; skills, strategies and resources required to perform the task (knowledge of how to perform something); and knowledge of when to apply certain strategy, respectively. Metacognitive regulation includes activities such as planning, information management, monitoring, evaluation and debugging in the process of thinking and

PROBLEMS OF EDUCATION IN THE 21st CENTURY Vol. 76, No. 6, 2018 761

learning (Schraw & Dennison, 1994). Metacognitive experiences refer to feelings, estimates, or judgments related to learning, for example: feeling-of knowing, judgments-of-learning, ease-of-learning judgments (Hacker, 1998). In order to enhance students' metacognition, teachers should raise awareness of the strategies that students are using at the moment; develop and present strategies so that the students would become aware of their own thinking and learning processes; help students to move toward autonomous use of the strategies; and get students to evaluate used strategies (Cohen, 2011).

Student with highly developed metacognition knows how to use different learning strategies and also to recognize when particular strategy should be used in order to achieve the best results. Accordingly, it can be suggested that teachers can make big improvement of their teaching practice if they implement instructions that will both, help students gain good subject knowledge and enhance students' metacognition. In other words, besides teaching subject contents, teachers should teach students how to learn.

## References

- Cohen, A. D. (2011). Second language learner strategies. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 681-698). Abingdon: Routledge.
- Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *American Psychologist*, 34 (10), 906-911.
- Griffiths, C. (2015). What have we learnt from good language learners? ELT Journal, 69 (4), 425-433.
- Hacker, D. J. (1998). Self-regulated comprehension during normal reading. In D. J. Hacker, J. Dunloskey & A. C. Graesser (Eds.), *Metacognition in educational theory and practice* (pp. 165-191). New Jersey: Lawrence Erlbaum Associates.
- Kafadar, T. (2013). Learning strategies of 7th grade students in the course of social studies. *The Journal* of Academic Social Science Studies, 6 (5), 417-431.
- Kuhn, D., & Dean, D. (2004). A bridge between cognitive psychology and educational practice. *Theory into Practice, 43* (4), 268-273.
- Sağlam, M. (2010). Students' performance awareness, motivational orientations and learning strategies in a problem-based electromagnetism course. Asia-Pacific Forum on Science Learning and Teaching, 11 (1), Article 16, 1-18.
- Schraw, G., & Dennison, R.S. (1994). Assessing metacognitive awareness. Contemporary Educational Psychology, 19, 460-475.
- Schraw, G., & Moshman, D. (1995). Metacognitive theories. *Educational Psychology Review*, 7 (4), 351–371.
- Selçuk, S. G. (2010). Correlation study of physics achievement, learning strategy, attitude and gender in an introductory physics course. Asia-Pacific Forum on Science Learning and Teaching, 11 (2), Article 4, 1-16.
- Tay, B. (2013). Elaboration and organization strategies used by prospective class teachers while studying social studies education textbooks. *Eurasian Journal of Educational Research*, 13 (51), 229-252.
- Weinstein, C. E., & Mayer, R. E. (1986). The teaching of learning strategies. In M. C. Wittrock (Ed.), Handbook of research on teaching (pp. 315-327). New York: MacMillan.
- Zouhor, Z., Bogdanović, I., Skuban, S., & Pavkov-Hrvojević, M. (2017). The effect of the modified Know-Want-Learn strategy on sixth-grade students' achievement in physics. *Journal of Baltic Science Education*, 16 (6), 946-957.

Received: November 27, 2018

Accepted: December 08, 2018

Ivana Z. Bogdanović

PhD, Assistant Professor, Faculty of Sciences, University of Novi Sad, Trg Dositeja Obradovića 4, Novi Sad, Serbia. E-mail: ivana.bogdanovic@df.uns.ac.rs