

The Metacognitive Strategies of College Students in Emilio Aguinaldo College-Cavite, Philippines

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Abstract:

In educational psychology, metacognition is regarded as a pivotal component of successful learning, involving awareness and control over one's cognitive processes. This paper investigates the metacognitive strategies employed by college students at Emilio Aguinaldo College - Cavite, Philippines, with a focus on how these strategies contribute to their academic and personal growth. The study pursued a mixed-methods research design, integrating a survey adapted from renowned Filipino scholars to ascertain the metacognitive approaches of 25 Teacher Education majors during the Academic Year 2021-2022. The findings illuminate that the predominant strategy among students is self-motivation, despite encountering distractions that impede their task performance. Interestingly, it also uncovers the resilience of these students in navigating educational challenges amid the pandemic, harnessing metacognition to enhance learning and fortify their future teaching vocations. However, the study's scope is confined to examining metacognitive strategy improvement, relying solely on the self-assessed metacognitive levels of the participants. This research contributes original insights into the metacognitive strategies within the unique context of Philippine higher education, centering on a select group of Education majors and their self-regulatory learning techniques.

Keywords: *Metacognition, Academic Resilience, Self-Motivation, Mixed-Methods Research, Teacher Education*

INTRODUCTION

In order to learn, one must be aware of and in control of student thinking. Strong metacognitive abilities have the capacity to influence student performance and learning. While the ability to participate in metacognitive processes in a meaningful way can be developed over time with effort, many students find it difficult. Ann Brown (1978) was an early researcher and writer on the topic of metacognition. She proposed that the two most important principles of metacognition for learning are "knowledge of cognition" (what we know about our cognition) and "regulation of cognition" (how we regulate or control our cognition to perform something). Declarative knowledge (knowing "about" things), procedural knowledge (knowing "how" to accomplish things), and conditional knowledge (the "why" and "when" parts of cognition) all make up what is known about cognition. In contrast, cognitive regulation includes tasks like planning and assessing. A person's ability to strategically allocate resources and employ methods is directly correlated with their knowledge of cognition, while the ability to regulate cognition is associated with more systematic abilities like planning, monitoring, and evaluation. The study's research goal was to determine the metacognitive strategies of college students at one higher education institution in Cavite, Philippines. It focused on determining students' levels of metacognitive strategies in the areas of motivation, organizing and planning your work, working with others and utilizing resources and feedback, managing school-work stress, note taking and reading, and assignment and project preparation.

Students' awareness of how they learn best and their ability to manage these aspects is referred to as metacognition. A student demonstrates metacognition when she recognizes that studying with a stereo on reduces her ability to concentrate and hence turns it off. Metacognitive students are more able to alter techniques to match learning demands than their less metacognitive counterparts, and as a result, they are more effective students (Eggen & Kauchak, 2004). Encouragement of metacognition is

one of the most fundamental ways that reflective activity helps learning in general. The awareness of one's own cognitive functioning — in this case, learning – is known as metacognition. Being conscious of one's own thinking process and coping mechanisms. It permits students should be more aware of their actions and their motivations and of potential applications for the abilities they are learning differently depending on the circumstance. Jaleel and Premachandran (2016) used a survey to determine secondary school students' levels of metacognitive awareness using the standardized awareness assessment to assess their mental awareness. The investigation aims to determine if there are any significant Gender and Locality differences among the various sub samples and the school's management style based on their mental awareness of oneself. The authors came to the conclusion that the activities that promote a strategic and reflective approach to learning should be incorporated into a classroom's regular activities. Such reflective tasks are extras that detract from ongoing assessment, review, and modification as well as work strategy. Teachers can have a long-lasting effect on how their students learn long after they leave the classroom by making learning and problem-solving processes apparent and by assisting students in identifying their own strengths and tactics.

Metacognition is a skill that can be mastered with time and practice, just like most others. Teachers can purposefully include succinct and powerful metacognitive techniques into their lessons to motivate students to participate in reflective activities. This can be accomplished by openly modeling metacognitive practices, such as by being transparent about your own thought and reflection processes or by engaging in any of the activities (Major, Harris, and Zakrajsek, 2015). You can include a sequence of metacognitive prompts in an assignment to encourage students to reflect on their learning and instruct them to use the comment tool in Microsoft Word to answer (LaVaque-Manty & Evans, 2013). Students have the chance to check their comprehension of the material and pinpoint any gaps in their learning via self-testing. Students can also activate pertinent knowledge and encode information from prompts through self-testing, making it easier for them to recall it later (Dunlosky et al., 2013). This study focused on the college students' use of metacognitive strategies in a variety of areas of concern and how these students could manage coping with these strategies at school.

The research is driven by Kolb's Experiential Learning Cycle, which asserts that this theory of learning can be defined as the mechanism by which knowledge is formed through the transformation of experience. Learning and experience transformation combine to produce knowledge. Experiential learning is distinct from cognitive and behavioral theories of learning in that cognitive theories place a premium on mental mechanisms, whereas behavioral theories downplay the potential role of context in the learning process Kusmawan, U. (2022). Due to its emphasis on reflection and experience in this new normal, this theory was instrumental in evaluating the various METACOGNITIVE STRATEGIES OF college students at one HEI in Cavite, Philippines. Acquiring knowledge requires direct experience, which serves as a springboard for contemplation. These thoughts absorb knowledge and generate abstract ideas. Individuals then transform these concepts into hypotheses about the modern world, which they rigorously evaluate. Once again, knowledge is gleaned from experience by verifying these theories, completing the process. On the other hand, the process does not always begin with practice. Rather than that, depending on the circumstance, each student must choose the method of instruction that works best for them.

The study was limited to the analysis of the metacognitive strategies of colleges students in a higher education institution in Cavite. It also included some strategies to improve the various categories based on the students' responses. The experiential approach was helpful in the analysis of these metacognitive levels of students.

Research Objectives

The Metacognitive Strategies of College Students in Emilio Aguinaldo College-Cavite, Philippines, explores the realm of metacognition in the context of higher education. Thus, this study delves into the metacognitive strategies employed by college students and their impact on academic and personal growth. The research objectives are as follows:

1. To assess the predominant metacognitive strategies used by college students, particularly focusing on aspects such as self-motivation and resilience in the face of distractions.

2. To examine how metacognitive strategies contribute to students' ability to navigate educational challenges, especially during challenging circumstances like the pandemic, and enhance their learning experiences.
3. To understand the metacognitive levels of students in various areas, including motivation, organization, collaboration, stress management, note-taking, and assignment preparation, and identify areas for improvement.

METHOD

This study utilized mixed methods of research using the survey on metacognition culled from the book "Facilitating Learning" authored by Lucas and Corpuz (2014). It focuses on the six (6) categories of metacognitive levels. The research demonstrated the value of these metacognitive strategies by assessing the levels of metacognition of the college students based on their own experiences, perspectives, or outlook. These 25 students were the respondents of this study in Emilio Aguinaldo College – Cavite. They were all taking up Teacher Education in SY-2020-2021. The survey questionnaire was adapted from Lucas and Corpuz's (2014) textbook, which was delivered to all students enrolled in the "Facilitating Learning" course in AY-2020-2021. Because the learners' interpretation was already part of the survey, the students carefully evaluated the answers to the questions. Google Link was used to send the survey questionnaire.

The study was conducted to 25 college students from Emilio Aguinaldo College – Cavite. The study was conducted using the Google Form and the result was automatically received by one of the authors as their professor during that particular semester. Since it was part of the lesson in Week 2 in the syllabus, the students were aware that the survey was also part of determining their metacognitive levels using the six categories mentioned above. A matrix of the participants' answers was created the group leader and their perspectives were carefully analyzed and interpreted based on the survey questionnaire interpretation. Sets of themes of experiences were also established in this study.

Data Analyses

After conducting this survey, the results were gathered, analyzed, and interpreted based on the interpretation from Lucas and Corpuz (2014). The experiences were basis for improvement of the learners in different aspects or categories in the metacognitive strategies. The professor in-charge conducted an interview among the respondents who willingly shared their experiences that created a theme of this study.

RESULTS

The table below shows the different categories answered by the student respondents. The categories are divided into six categories. It shows that in the first Category on Motivation, the majority of respondents (getting a frequency of 20) do not seem to have many difficulties starting and finishing their work, while only five (5) students occasionally start and finish their work but can be distracted and may not always be aware of why they are required to do so. They probably stand to gain from learning some methods that will enable them to work harder and more consistently. According to Siqueira, M.A.M., Gonçalves, J.P., Mendonça, et al. (2020), one's motivation to learn is influenced by their perceptions of the significance of a particular subject and how it will enable them to deal with novel situations or find solutions to pressing issues.

Metacognitive strategies help students to examine their own thinking. They have more influence over their own learning now that they comprehend the learning process. It also increases one's personal capacity for self-regulation and management of one's own learning motivation. Metacognitive activities include planning how to approach learning tasks, selecting acceptable ways to finish a task, evaluating progress, and gauging comprehension (Lucas & Corpuz, 2014).

Table 1: Metacognitive Survey Results Per Category

FREQUENCY (Students)	Score	Interpretation
CATEGORY 1 (MOTIVATION)		
2	45	Scores from 35 to 50 mean that you sometimes get down to work but you can be distracted, you might not always be certain why you are having to work. You probably could benefit from learning some techniques that help you get down to work more consistently and keep at it.
4	50	
7	60	Scores from 55 to 80 mean that you do not appear to have many problems in getting down to work and keeping to it.
8	65	
3	65	
1	70	
1	75	
CATEGORY 2 (ORGANIZING AND PLANNING YOUR WORK)		
2	55	Scores from 40 to 65 could mean you are not as well-organized as you could be. Your time management might benefit from a closer analysis
6	65	
2	70	Scores from 70 to 100 mean that you are well-organized and plan ahead for your work.
2	75	
3	80	
4	85	
2	90	
4	100	
CATEGORY 3 (WORKING WITH OTHERS; UTILIZING RESOURCES AND FEEDBACK)		
1	0	There are important resources around you that you are ignoring.
9	45	Scores from 35 to 50 mean you probably collect resources, but you need to ask yourself how you are going to use them more effectively.
1	50	
4	55	Scores from 55 to 85 mean you make full use of resources available, listen well and take an active part in seminars.
6	60	
2	65	
2	70	
CATEGORY 4 (MANAGING SCHOOL WORK STRESS)		
1	10	Scores of 35 and under mean that you are likely to get over-whelmed with your problems which will make you much less effective as a student. You need to acquire the skills of managing stress more effectively. You need to take action.
1	15	
2	20	
1	25	
3	30	
6	35	
4	40	Scores from 40 to 65 mean that you handle your anxieties and concerns moderately well but could develop manage them more effectively.
3	55	
2	60	
0	65	Scores from 65 to 80 mean that although you sometimes get stressed and worried you have the skills of knowing how to minimize problems and look after yourself.
CATEGORY 5 (NOTE-TAKING AND READING)		
1	50	Scores from 45-70 mean your reading and note taking skills are adequate, but could be improved
5	55	
1	60	
2	65	
3	70	
3	75	

FREQUENCY (Students)	Score	Interpretation
3	80	Scores from 75 to 110 mean you prepare well and read efficiently, learning as you go. You waste little time reading irrelevant material.
2	85	
4	95	
1	100	
CATEGORY 6 (PREPARING AN ASSIGNMENT/PROJECT)		
1	50	Scores from 40-65 mean that there is room for improvement although you do demonstrate some skills
2	55	
5	65	
3	70	Scores from 70-100 mean that your essays are well thought out, researched and clearly written
3	75	
8	80	
1	85	
2	90	

In Zulkipli's (2006) research, the relationship between metacognition and students' academic achievement was investigated. Metacognition is defined as thinking about one's own thinking. It has been predicted that students who demonstrate metacognition are more likely to be successful learners because intelligence and metacognition have been related in a number of earlier studies. It also examined the students' academic progress and metacognitive awareness that was carried out at a private secondary school in Kuching, Malaysia. She utilized the widely used Shraw and Anderson Metacognitive Awareness Inventory (Zulkipli, 2006). It explicitly determined the connections between students' academic progress and each of the five metacognition control strategies—planning, information management strategies, understanding monitoring, debugging strategies, and evaluation. Students' awareness of metacognition across all academic years and genders were studied. Overall, the findings revealed no significant differences between male and female students across all academic years in terms of metacognition awareness, a significant difference in terms of metacognition awareness, and a significant positive relationship between students' academic performance and metacognitive awareness. She finally discussed some tips for encouraging learners' metacognition and offer potential directions for further study.

Zulkipli (2006) mentioned that successful learning is made possible by metacognition, which is higher order thinking that involves intentional control of the cognitive processes involved in learning. Metacognitive processes include deciding how to tackle a particular learning assignment, keeping track of comprehension, and gauging how far along you are. It is crucial to foster metacognition in students because it is essential for successful learning. To do this, teachers, parents, and students themselves should play their respective roles in creating a metacognitive environment, whether it be at school or at home, by encouraging more metacognitive activities. Students who keep a thinking journal can improve their ability to reflect on and analyze their own cognitive processes. Teachers may very much aid with this by asking students to write a reflection on what they have learned, the things they comprehended and the things they do not grasp on the day itself. The third technique is students should identify what they know and what they do not know at the beginning of any new topics learnt and this may be done by self-asking approach at the beginning of any lessons. The goal is for students to have enough information to make educated decisions about their learning responsibilities and goals for the current topic or course they are enrolled in. This session is significant since it works as the initial step to improve metacognition skills in our students. There is a lot of overlap between the fourth and fifth habits. Earlier literature has stressed the importance of the three processes of planning, self-regulation (monitoring), and self-evaluation for effective learning (Zulkipli, n.d.).

Seventeen (17) respondents are well-organized and have their work ahead of time planned, according to the second category on organizing and planning your work. Even though there are only eight (8) of them, they are not as organized as they could be. A closer examination of their time management might be beneficial. Your success is greatly influenced by your capacity for organization,

and your team and colleagues may also be affected. You can think more clearly by keeping things organized. Clear thinking, as well as quick access to the appropriate knowledge and resources, are necessary when making decisions and resolving issues (Content Team, Mind Tools, 2021).

In the third category, "Working with Others, Using Resources, and Receiving Feedback," the majority of respondents fully utilize the resources at their disposal, listen intently, and actively participate in seminars. Ten (10) students gather resources, but they need to consider how they will use them more effectively. Only one (1) respondent chooses to disregard the valuable resources that are available. Reynolds (2021) reminds us that feedback is reciprocal and that as educators, we should constantly work to improve our skills.

Use icebreakers, team-building exercises, and reflection exercises to help students build rapport and group cohesion. Students are more likely to develop into resilient and self-directed learners if they have the chance to use their voice, agency, and leadership in designing, developing, and assessing their own learning. In order for students to truly have agency over their own learning, teachers co-create learning opportunities when they: (1) Encourage students to take ownership of their learning by developing strategies that will enable them to accomplish learning goals. (2) assist students' gradual development of self-direction and self-assurance in their capacity to perform learning tasks. (3) provide students with opportunities to evaluate their learning and make growth plans for the future. (3) letting students decide on assessment criteria and procedures that are suitable for their learning goals (education.vic.gov.au).

The majority of respondents, with a frequency of ten (10) in the fourth category on managing school and work stress, need to develop the ability to manage stress more effectively and they need to take action. While nine (9) respondents manage their worries and anxieties only a little bit well, they could improve. Only one (1) student has the skills to know how to minimize problems and take care of herself/himself, whereas four (4) student respondents are likely to become overwhelmed with their problems, which will make them much less effective as students. The American Institute of Stress estimates that four out of every five college students experience regular stress. Unmanaged stress can result in physical symptoms like trouble concentrating, irritability, lack of energy, changes in appetite, a weakened immune system, and trouble sleeping. Setting up a stress-management routine is one of the best ways to prevent and treat disorders related to stress (Broderick, 2021). Stress is typically defined as a divergence from the body's and mind's usual functioning. Stress can arise in a workplace for a variety of causes, including job control, manager management style, etc. Stress in moderation is good for both the company and the employee. It aids in achieving organizational objectives as well as personal ones. However, excessive stress can have negative impacts on a person's health, mind, and personality (Panigrahi, 2017).

Hermamalini, et al (2018) mentioned that stress is a frustrating condition that includes too much work and an overload, which lowers pupils' concentration, mental health, and ability to function normally. This study investigates the effects of stress on students and student stress management. The major goals were to find out how much stress interferes with students' ability to succeed in school, their health, and their overall quality of life, as well as to find out what impact existing stress has on students (Hemamalini, et al, 2018). People who experience stress at the educational level develop a variety of psychological issues, such as diminished motivation, absences from class and exams, incomplete work, etc. Every management should focus on stress management as a key factor in order to manage both their personal and academic lives. All pupils should be handled equally and managed without the need for any dissatisfaction, regardless of their age, gender, income level, or any other priority. One of the main sources of stress was academic issues. The inclusion of stress management instruction in the curriculum may help to address this issue. Students themselves should train others in stress management. This trend will undoubtedly help students feel more empowered and successful in both their academic and personal lives Kusmawan, U. (2018). It is recommended that stressed-out students take stress management classes, which will enable them to develop coping mechanisms and reduce their tension.

The majority of respondents in Category 5—Note-Taking and Reading—with a frequency of thirteen (13) are well-prepared and read quickly while picking up knowledge along the way. They don't waste much time reading pointless things. The reading and note-taking abilities of the twelve (12) students are adequate but could be improved. Making changes to the material to improve understanding

through summarizing, paraphrasing, organizing, idea mapping, and vocabulary mapping is cognitively demanding when taking handwritten notes. Note-taking evolves into note-making: a practical method of understanding and interpreting data for later reflection, research, or the exchange of notes with lab partners or fellow students to gauge comprehension. This turns into a useful study strategy because conversation can help one's own thinking become more concrete (Roessingh, 2020).

During the academic years, taking notes is a skill that is commonly used. Taking notes is favored in daily life beyond college as well; it is typically utilized from elementary school through the university years. Taking notes is a talent that has two parts when timing is taken into consideration. The first one focuses on the act of taking a note, on what is being seen, read, or heard, and on paying attention to that specific instant. The latter involves writing down notes to be used later. In terms of understanding the course's key concepts and remembering its material, students who take notes benefit. The main benefit of note-taking is that it spares pupils from having to read the entire book. Since it draws students' attention to the reading or listening material, it enhances students' understanding abilities. It keeps them from missing what is being taught in class (Ozcakmak, 2019). He looked at how taking notes while reading and listening affected the comprehension of aspiring Turkish language teachers. Additionally, the study looked at the groups' comprehension ratings in relation to academic performance and gender factors. The study was created using comparative and causal analysis. The Department of Turkish Language Teaching at the Education Faculty of Hatay Mustafa Kemal University recruited 72 students in the third grade to participate in the study. To calculate the students' reading and listening comprehension performance scores, the Comprehension Achievement Test was used in the study. A 640-word educational book titled "Childhoods of the Famous Scientists" was employed in the study. At the conclusion of the study, it was discovered that the comprehension scores of the Listening-Note Taking groups were statistically superior to those of the Reading, Reading-Note Taking, and Listening groups. The students' academic grade point averages and their comprehension scores were found to be positively correlated. Additionally, there was no statistically significant gender difference between the students' genders.

Eight (8) student-respondents in the most recent Category 6 Preparing an Assignment/Project report having some writing skills but still need to improve, while seventeen (17) respondents say their essays are well-planned, thoroughly researched, and written clearly. according to Fry et. According to al. (2018), the assignments may test their comprehension, but they may also be quite creative and distinctive, which helps to ignite the spark that learning should ideally bring.

Both PISA 2003 and the OECD (2013), using data from PISA 2012, confirm that when specific school and student-background variables are taken into account, schools where pupils have more weekly homework show superior outcomes. In a nutshell, homework has a multilevel nature (Trautwein and Köller, 2003), meaning that the variables have different significance and effects depending on the level of analysis. In this case, there is a positive effect at the class level and, in most cases, a negative or null effect at the individual level. In addition, the fact that the impacts are most noticeable at the classroom and school levels emphasizes the importance of homework policies in schools and instruction, in addition to the amount of time that each student spends on homework (Alonzo, et al, 2017).

DISCUSSION

The majority of the respondents who identified themselves as students use self-motivation at work, but some of them are easily distracted, which makes them feel uneasy about carrying out the tasks. Student engagement takes into account the historical positioning of the individual within contextual factors (such as personal and familial circumstances) that affect an individual's (or group's) level of engagement in their learning at any given time. This acknowledges the complexity of engagement beyond cognition, behavior, emotion, and affect (Sitwat Saeed & David Zyngier, 2012). Interestingly, it also expresses how organized these students are in terms of their academics while very few seemed to have problems in organizing their work due to some workload. There is a need to improve their time management on this issue. Their individual school/college should prepare some student development series to strengthen these skills. Some resources are not apparent for the students to use. There was

misunderstanding on how they should implement the learnings they gained from the many webinars or seminars they attended. Half of the responders need to manage their stress at work. This suggests that these students require additional pieces of guidance in order to cope with the many activities and to control their stress both at work and at home. On the other hand, majority of the respondents could read efficiently and they only studied those things pertinent to their study. In preparing their assignment or project, most of the responders have the skills in writing and they could exhibit their competency in writing essays. There is a small progress but their willingness to enhance all these talents is clear.

CONCLUSION

College students have successfully employed metacognitive strategies in six (6) areas or categories to learn from a variety of courses despite the COVID-19 epidemic. Students used a variety of coping mechanisms to deal with their own difficulties, but they all made an effort to succeed in their studies, extracurricular activities, and dealing with personal issues. They also believed that any situations they would face as students working as a team would be successful and wouldn't put them under as much stress. They feel relieved to have their close friends or loved ones around. The results show that, despite a few minor missteps on their part during the epidemic, students at this college were able to cope with the difficulties and complete their education. They made use of the metacognitive techniques described in this study. Although other people felt that some of these learning tactics needed to be improved. They used the themes to enhance their learning and get ready for a future profession in education. They think that challenges faced by students are commonplace and that they can still manage the daily pressure of academics. Finally, despite their heavy workloads, these education major students are highly motivated to learn.

REFERENCES

- Broderick, T. (2021). *The Student's Guide to Managing Stress in College*.
- Brown, A.L. (1978). Knowing when, where and how to remember: A problem of metacognition. In R. Glaser (Ed.), *Advances in instructional psychology*, 1 (pp. 77-165). Hillsdale, NJ: Erlbaum.
- Edgen, PD & Kauchak. (2014). *Strategies for Teachers*. Boston: Ellyn and Bacon.
- Fernandez-Alonzo, R., Alvarez-Diaz, M., and Suarez-Alvarez, J. (2017). Students' achievement and homework assignment strategies. *Educational Psychology*. In: <https://doi.org/3389/psyg.2017.00286>.
- Hemamalini, R., Ashok, V., and Sasikala, V. (2018). A study on stress management and its impact among students. *International Journal of Academic Research in Economics and Management Sciences*. In: hmars.com. pdf.
- Fry, H. Ketteridge, S. & Marshall, S. (2018). *A Handbook For Teaching & Learning In Higher Education Second Edition* <https://people.utm.my/ariva/files/2018/01/a-handbook-for-teaching-and-learning-inhigher-education.pdf>.
- Jaleel, S. and Premachandran, P. (2016). A study on the metacognitive awareness of secondary school students. *Universal Journal of Educational Research* 4(1): 165-172, 2016 <http://www.hrpub.org> DOI: 10.13189/ujer.2016.040121.
- Kusmawan, U. (2018). Online Microteaching: a Multifaceted Approach to Teacher Professional Development. *Journal of Interactive Online Learning*.
- Kusmawan, U. (2022). A Virtual Lab As A Vehicle For Active Learning Through Distance Education. *International Journal of Research in STEM Education (IJRSE)*, 4(2), 18-38.

- LaVaque-Manty, M., & Evans, E. M. (2013). Implementing metacognitive interventions in disciplinary writing classes. In M. Kaplan, N. Silver, D. LaVaque-Manty, & D. Meizlish (Eds.), *Using reflection and metacognition to improve student learning: Across the disciplines, across the academy* (122-146). Stylus Publishing, LLC.
- Lucas, M. R. & Corpuz, B.G. (2014). *Facilitating Learning: a Metacognitive Process*. 4th ed. QC: Lorimar Publishing.
- Major, C. H., Harris, M. S., & Zakrajsek, T. (2015). *Teaching for learning: 101 intentionally designed educational activities to put students on the path to success*. Routledge.
- Mind Tools Content Team (2021). *How to be more organized, Declutter, Take Control, and Achieve More at work*.
- Ozcakmak, H. (2019). Impact of note taking during reading and during listening on comprehension. *Educational Research and Reviews* 14 (16) 580-589. In: <http://www.academicjournals.org/ERR>. ISSN: 1990-3839.
- Panigrahi, A. (2017). Managing Stress at Workplace. *Journal of Management Research and Analysis*. 3. 154-160. In: https://www.researchgate.net/publication/323393909_Managing_Stress_at_Workplace/citation/download. Retrieved: October 22, 2022.
- Reynolds, L. (2021). *Giving Student Feedback: 20 Tips to do it Right*.
- Roessingh, H. (2020). *Note-taking by hand: A powerful tool to support memory*. University of Calgary
- Stanton, J.D., Sebesta, A.J. and Dunlosky, J. (2021). Fostering metacognition to support student learning and performance. *CBE – Life Sciences Education*, 20 (2). Athens: University of Georgia. In: <https://doi.org/10.1187/cbe.20-12-0289>.
- Siqueira, M.A.M., Gonçalves, J.P., Mendonça, V.S. *et al.* Relationship between metacognitive awareness and motivation to learn in medical students. *BMC Med Educ* 20, 393 (2020). <https://doi.org/10.1186/s12909-020-02318-8>
- Teacher tip: use metacognitive strategies to empower your students (n.d.). In: <https://www.education.vic.gov.au/school/teachers/classrooms/Pages/ppn14metacognitiontip.aspx>. Retrieved: October 20, 2022.
- Zulkipli, N. (2006). Metacognitive and its relationship with students' academic performance. In: <https://core.ac.uk/download/pdf/11777326.pdf>. Retrieved: October 22, 2022.