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# Metacognitive Behaviors in the English Academic Writing e-Learning through Zoom Online Application

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## Abstract

The conditions of the Covid-19 pandemic have required us to carry out online learning activities by utilizing various electronic applications such as zoom. The objective of this research is to observe the students' metacognitive behaviors in English Academic Writing e-learning through zoom online application. The method used descriptive qualitative research. The source of the data for the research is the observational data from 20 participants who got the English academic writing subject in 2019/2020 academic years. The data are taken in English academic writing e-learning. The results showed that the students had metacognitive behaviours in the process of academic writing in English, namely planning, identifying and correcting errors, revising, rereading, monitoring and evaluation. Metacognitive strategies are defined as strategies used by authors to consciously control the writing process. This is caused that metacognitive knowledge is a segment of one's stored world knowledge. The implication of this study is the behaviour of students applying metacognitive strategies in developing English academic writing and zooming into a suitable medium for online learning. Zoom is more recommended in the learning process for the internet era.

Keywords: Academic Writing, Behaviors, English, Metacognitive, Zoom

## Introduction

English writing is effective that has long been a challenge in teaching English. For most people, writing is a very difficult task if they are trying to grapple with their language with new ideas and ways of looking at them. Thus, writing is complex, because it combines a series of linguistic, stylistic, and discourse-related elements to make form and meaningfully functional. For this reason, learners need to use different strategies to deal with this complexity head-on. With the development of cognitive psychology, metacognition has attracted more and more researchers' attention and provided new perspectives for EFL writing. Metacognitive theory mainly includes metacognitive knowledge and metacognitive strategies. Among all learning strategies, metacognitive strategies are high-level executive skills that include planning, monitoring and evaluation. Once learners have a good command of metacognitive strategies, they will become more independent and autonomous and will be better able to plan, monitor, and evaluate their

learning process and become efficient learners. This teaching approach embodies the idea of student-centred teaching and is targeted to foster students' metacognitive strategies, monitor and evaluate the English writing ability(Lv & Chen, 2010). For students in China, the application of cognitive and metacognitive strategies in English learning has a positive impact on students' English skills (Liu, 2009).

Rahimi & Karbalaei (2016) investigated the role of metacognitive strategy in developing writing skills among Iranian EFL students. Written self-regulated strategy instructions are implemented in the classroom (Paris, 2003). Recently, Nemat Tabrizi & Rajaee (2016) tried to show how cognitive and metacognitive writing strategies can affect the total writing score of elementary level learners. Metacognitive strategies help students to achieve their desired goals and have better control over their behaviour and learning which is consistent with the results of this study (Zimmerman & Schunk, 2011). Therefore, learners in different age groups and contexts make use of metacognitive strategies to develop their writing performance (Nguyen & Gu, 2013). This can be confirmed in the investigations of learners in different age groups and contexts (Abdollahzadeh, 2010; Al-Jarrah, Al-Jarrah, Talafhah, & Bashir, 2019; Panahandeh & Asl, 2014; Teng, 2016).

Several previous studies have proven that metacognition can also be integrated with teaching English writing (Xiao, 2007). Cognitive and metacognitive strategies, as two writing strategies, have been extensively researched over the last few decades. Meanwhile, metacognitive strategies also have a positive impact on writing learning. Meta-cognitive strategies increase students' motivation to set their goals and plans through cooperative learning, which helps in improving their academic writing in English (Al-Zubeiry, 2019). There are different interventions in terms of content in implementing cognitive and metacognitive strategies. There was a significant relationship between the cognitive and metacognitive groups. In other words, the metacognitive group outperformed the cognitive group in writing content (Pitenoee, Modaberi, & Ardestani, 2017; Al-Zubeiry, 2019).

Therefore, the metacognitive strategy has many steps in writing learning. It influenced many factors to build perception and the appropriate writing strategies. Arndt (1987) has categorised the English writing strategies, including planning, global planning, rehearsing, repeating, re-reading, questioning, revising, and editing. Larenas, Leiva, & Navarrete (2017) have found that strategies such as *summarizing*, *reaffirming*, and *selecting ideas* were only evidenced during the post-intervention essay. While Sasaki (2000)used eight writing strategies, these are planning, retrieving, generating ideas, verbalizing, translating, re-reading, evaluating, and questioning, but Cer (2019) used the classic and metacognitive strategy-based writing instruction with their expected learning outcome, including; a) Basic Training (Declarative Knowledge (Person Knowledge), b) Declarative Knowledge (Task Knowledge), c) Procedural Knowledge, Conditional Knowledge), d) Expected Learning Outcome (Self-Planning and Drafting, e) Self-Monitoring, Self-Evaluation and Revision), and f) Expected Quality.

This study uses an online application, namely zoom. The reason is, the conditions of the Covid-19 pandemic require us to carry out online learning activities by utilizing various electronic applications. However, the learning process provides effectiveness on the results of learning to write. Many previous studies have proven this. Technology makes it easy for distance learning or online today. Social media has been used as a learning medium (Vie, 2018; Keengwe & Georgina, 2012). Other study concluded that five face-to-face oral discussion tasks and five online text-chat tasks influenced the composting process (Jianling, 2018). Besides that students has a positive attitude in online learning (Rendahl & Breuch, 2013)

Thus, writing plays an important function in the learning process, where the writer makes a difficult meta-cognitive effort by selecting and organizing ideas, then reviewing and adapting them taking into account the requirements of the assignment. Previous research revealed a study on metacognitive strategies in English writing learning, either face-to-face or online. This study has similarities with other studies, namely implementing metacognitive strategies in English writing classes, however, this study focuses on observing student behaviour in implementing metacognitive strategies for English writing classes.

This study examines students' behaviour towards the metacognitive strategy stages of learning English academic writing which is conducted online. Thus, this study aimed to have a deeper look at student behaviour at the stage of students' metacognitive strategies in e-learning English Academic Writing through an online zoom application. The results of this study are expected to have an impact on the development of the lecturers' understanding that each writing learning strategy must be understood through student behaviour so that the results of implementing these learning strategies can provide new knowledge about student perceptions. Besides, this research is also a new insight for developing research related to learning strategies in terms of student aspects.

## Materials and Method

The method used descriptive qualitative research. Qualitative research focused on understanding social phenomena from the perspective of the human participants in natural settings (Ary, Jacobs, Sorensen, & Razavieh, 2010). The source of the data for the research is the observational data from 20 participants who got the English academic writing subject in 2019/2020 academic years. The data are taken in English academic writing e-learning. The data were analyzed using five classifications of writing strategies proposed by (Cer, 2019), (Larenas et al., 2017), (Sasaki, 2000), and (Arndt, 1987). The procedure of analyzing the data were taken, including; 1) observe students behaviour in Academic writing learning, 2) identifying students behaviour in doing the academic writing task which reflected the metacognitive strategies during the process of learning using a zoom, 3) categorizing the strategies under the theoretical framework, and 4) analyzing the strategies encountered.

## Result and Discussion

The finding displays the data metacognitive strategy that was taken from (Cer, 2019), (Larenas et al., 2017), (Sasaki, 2000), and (Arndt, 1987) during Academic writing e-learning using zoom. Teacher applied the metacognitive strategy stages in an online academic writing class. The process of observing student behaviour towards the implementation of metacognitive strategies is reviewed by how many students do writing activities at each stage of the metacognitive strategy. This means that during the academic writing process can carry out repeated activities at each stage of the metacognitive strategy. The following is the number of activities carried out by each student at each stage of learning academic writing using metacognitive strategies.

Table 1. Number of Students Activities as Metacognitive Behavior

| No | Metacognitive Strategy | Expert | Number of Students Activities |
|---|---|---|---|
| 1 | Planning | Arndt (1987), Sasaki (2000) | 43 |
| 2 | Identifying and correcting errors | Larenas.et.al (2017) | 55 |
| 3 | Revising | Larenas.et.al (2017) | 40 |
| 4 | Rereading | Larenas.et.al (2017) | 57 |
| 5 | Monitoring & Evaluation | Sasaki (2000), Cer (2019) | 35 |

Data table 1 shows several student activities in implementing each stage in the metacognitive strategy. In the first stage of planning, it is known that students have made two changes in planning writing topics. At the stage of identifying and correcting errors on a written draft, each student does this process 2 or 3 times. Then at the writing revision stage, students made changes 2 times. Revised writing, reread it carefully for errors. Students do this activity 2 or 3 times. The final stage is monitoring or evaluation carried out to determine the reciprocal process of writing that has been corrected by friends or lecturers, students do this activity 1 or 2 times. Therefore, the students had metacognitive behaviours in the process of academic writing in English, namely planning, identifying and correcting errors, revising, rereading, monitoring and evaluation. Metacognitive strategies are defined as strategies used by authors to consciously control the writing process. This is caused that metacognitive knowledge is a segment of one's stored world knowledge.

The metacognitive strategy is a special case of cognitive strategy, distinguished by its conscious and active application to control a process when monitoring has indicated that some modification, correction, or resolution must occur for the task to proceed successfully to goal completion. Metacognitive strategies in writing learning can improve writing performance and increase their satisfaction. During the implementation of the metacognitive writing strategy, students showed a significant improvement in their writing skills (Goctu, 2017). Mistar, Zuhairi, & Parlindungan (2014) stated that metacognitive and cognitive strategies have an important role in writing learning. Therefore, lecturers can pay attention to these strategies because they can help students improve their writing. Researchers assume that the strategies (metacognitive, cognitive, and social) are appropriate for learners. Every strategy is related to another strategy. Strategies are based on the stages of the writing process (planning, implementation, and revision), presented in three model factors (cognitive, metacognitive, and social strategies) (Junianti, Pratolo, & Tri Wulandari, 2020).

There's probably associate inverse relation between bound sorts of metacognitive activity and improved proficiency. If metacognition occurs when other cognitive processes fail, like once a writing that he or she didn't select the appropriate steps of the writing process, or didn't perceive the supply text, then a metacognitive strategy is also activated to rectify matters. From the researcher's point of view, it can be judged that an important aspect of the intervention is to learn together from others. Students, when expressing their thoughts and ideas, can get feedback from

lecturers and peers, which in turn creates the scope for further improvement. Besides, this intervention supports EFL students to become familiar with academic writing strategies, increase self-confidence, enjoy and be comfortable learning writing skills together by overcoming all related problems (Dülger, 2011; Al-Zubeiry, 2019). The uniqueness of this concept has made this research different from others. Expression of students' ideas and thoughts during writing becomes a behavior that reflects the application of these learning strategies.

The implication of this study is the behaviour of students applying metacognitive strategies in developing English academic writing and zooming into a suitable medium for online learning. In the context of research about the writing processes of university students, the teacher can use this strategy to identify the extent to which the students, mainly those who have just started university in their first year, acknowledge their knowledge and strategies for writing

## Conclusion

Students have used the planning, identifying and correcting errors, revising, monitoring and evaluation steps in the metacognitive strategy. The metacognitive strategy is a special case of cognitive strategy, distinguished by its conscious and active application to control a process when monitoring has indicated that some modification, correction, or resolution must occur for the task to proceed successfully to goal completion. During the writing process, the students showed positive behaviour for each activity carried out through the application of metacognitive strategies. This reflects that students have had engagement during the planning process, writing drafts, editing, and revision. Besides, the results of this study provide a new concept in assessing student behaviour towards the strategies used by teachers in the classroom. This becomes important because the accuracy in selecting learning strategies must be following the needs of students and the development of learning activities to achieve goals

Thus, metacognitive strategy refers to students' global skills and knowledge of cognition to help them increase self-awareness, direct their learning, and monitor their progress. From the results of this study, there are deficiencies in the reliability test that does not involve peer assessment in academic writing classes. This is due to the learning process carried out through zoom. Peer assessment can provide an in-depth analysis concept in observing student behaviour. Therefore, further research can focus on engaging peers in the classroom observation process during the testing of learning strategies and exploring student perceptions of the various aspects of metacognitive strategies.

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## References

Abdollahzadeh, E. (2010). Undergraduate Iranian EFL Learners' Use of Writing Strategies.

*Writing & Pedagogy*, *2*(1), 65–90. https://doi.org/10.1558/wap.v2i1.65

Al-Jarrah, T. M., Al-Jarrah, J. M., Talafhah, R. H., & Bashir, I. (2019). Exploring the effect of metacognitive strategies on writing performance. *Global Journal of Foreign Language Teaching*, *9*(1), 33–50. https://doi.org/10.18844/gjflt.v9i1.3977

Al-Zubeiry, H. Y. A. (2019). The Efficacy of Meta-Cognitive Strategies Instruction in Enhancing Saudi EFL Students' Academic Writing. *International Journal of Social Sciences & Educational Studies*, *5*(4). https://doi.org/10.23918/ijsses.v5i4p71

Arndt, V. (1987). Six writers in search of texts: A protocol-based study of l1 and l2 writing. *ELT Journal*, *41*(4), 257–267. https://doi.org/10.1093/elt/41.4.257

Ary, D., Jacobs, L. C., Sorensen, C., & Razavieh, A. (2010). *Introduction to Research in Education* (8 Edition). CA: Cengage Learning.

Cer, E. (2019). The Instruction of Writing Strategies: The Effect of the Metacognitive Strategy on the Writing Skills of Pupils in Secondary Education. *SAGE Open*, *9*(2), 215824401984268. https://doi.org/10.1177/2158244019842681

Dülger, O. (2011). Meta-cognitive strategies in developing EFL writing skills. *Contemporary Online Language Education Journal*, *1*(2), 82–100.

Goctu, R. (2017). Metacognitive Strategies in Academic Writing. *Journal of Education in Black Sea Region*, *2*(2).

Jianling, L. (2018). The impact of face-to-face oral discussion and online text-chat on L2 Chinese writing. *Journal of Second Language Writing*, *41*, 27–40. https://doi.org/10.1016/J.JSLW.2018.06.005

Junianti, R., Pratolo, B. W., & Tri Wulandari, A. (2020). The Strategies of Learning Writing Used by EFL Learners at a Higher Education Institution. *Ethical Lingua: Journal of Language Teaching and Literature*, *7*(1), 64–73. https://doi.org/10.30605/25409190.131

Keengwe, J., & Georgina, D. (2012). The digital course training workshop for online learning and teaching. *Education and Information Technologies*, *17*(4), 365–379. https://doi.org/10.1007/s10639-011-9164-x

Larenas, C. D., Leiva, L. R., & Navarrete, M. O. (2017). Rhetorical, Metacognitive, and Cognitive Strategies in Teacher Candidates' Essay Writing. *PROFILE Issues in Teachers' Professional Development*, *19*(2), 87–100. https://doi.org/10.15446/profile.v19n2.60231

Liu, M. (2009). AN INVESTIGATION OF COGNITIVE AND METACOGNITIVE STRATEGY USE: CHANGES AND DIFFERENCES. *Indonesian Journal of English Language Teaching*, *5*(2), 6–27. https://doi.org/10.25170/ijelt.v5i2.157

Lv, F., & Chen, H. (2010). A Study of Metacognitive-Strategies-Based Writing Instruction for Vocational College Students. *English Language Teaching*, *3*(3), p136. https://doi.org/10.5539/elt.v3n3p136

Mistar, J., Zuhairi, A., & Parlindungan, F. (2014). Strategies of Learning English Writing Skill by Indonesian Senior High School Students. *Arab World English Journal*, *5*(1). Retrieved

from https://www.awej.org/index.php/volume-5-2014/46-2014-03-20-02-17-45/440-junaidi-mistar-alfan-zuhairi-firman-parlindungan

Nemat Tabrizi, A. R., & Rajaee, M. (2016). The Effect of Metacognitive and Cognitive Writing Strategies on Iranian Elementary Learners' Writing Achievement. *International Journal of Learning and Development*, *6*(3). https://doi.org/10.5296/ijld.v6i3.9935

Nguyen, L. T. C., & Gu, Y. (2013). Strategy-based instruction: A learner-focused approach to developing learner autonomy. *Language Teaching Research*, *17*(1), 9–30. https://doi.org/10.1177/1362168812457528

Panahandeh, E., & Asl, S. E. (2014). The Effect of Planning and Monitoring as Metacognitive Strategies on Iranian EFL Learners' Argumentative Writing Accuracy. *Procedia - Social and Behavioral Sciences*, *98*, 1409–1416. https://doi.org/10.1016/J.SBSPRO.2014.03.559

Paris, A. A. (2003). Cognitive writing strategies. *Disability and Equity in Education Commons*, *1*(2), 115–128.

Pitenoee, M. R., Modaberi, A., & Ardestani, E. M. (2017). The Effect of Cognitive and Metacognitive Writing Strategies on Content of the Iranian Intermediate EFL Learners' Writing. *Journal of Language Teaching and Research*, *8*(3), 594. https://doi.org/10.17507/jltr.0803.19

Rahimi, F., & Karbalaei, A. (2016). The Role of Metacognitive Strategies Training on Developing Writing Skill among Iranian EFL learners. *Journal of Current Research in Science*, *1*, 327–341.

Rendahl, M., & Breuch, L.-A. K. (2013). Toward a Complexity of Online Learning: Learners in Online First-Year Writing. *Computers and Composition*, *30*(4), 297–314. https://doi.org/10.1016/J.COMPCOM.2013.10.002

Sasaki, M. (2000). Toward an Empirical Model of EFL Writing Processes: An Exploratory Study. *Journal of Second Language Writing*, *9*(3), 259–291. https://doi.org/10.1016/S1060-3743(00)00028-X

Teng, F. (2016). Immediate and delayed effects of embedded metacognitive instruction on Chinese EFL students' English writing and regulation of cognition. *Thinking Skills and Creativity*, *22*, 289–302. https://doi.org/10.1016/j.tsc.2016.06.005

Vie, S. (2018). Effective Social Media Use in Online Writing Classes through Universal Design for Learning (UDL) Principles. *Computers and Composition*, *49*, 61–70. https://doi.org/10.1016/j.compcom.2018.05.005

Xiao, Y. (2007). *Applying metacognition in EFL writing instruction in China. Reflections on English Language Teaching* (Vol. 6).

Zimmerman, B., & Schunk, D. H. (2011). *Handbook of self-regulation of learning and performance*. New York: Routledge.

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