AL-MIRAH: JURNAL PENDIDIKAN ISLAM
VOL.2. NO.2. 2020
ISSN ONLINE 26850-2454

Exploring Learning Management System of the Smartphone Application Based e-Learning in Covid-19 Era: Developing Innovation to Investigate the Metacognitive Approach for Students of AIK Lesson

Elihami Elihami[1];

[1]Program Nonformal Education in Muhammadiyah University of Enrekang
✉Corresponding email: elihamid72@gmail.com

Abstract

Exploring Learning Management System of the Smartphone Application Based e-Learning for learners' approach about metacognitive approaches contact on effectiveness, and the association between metacognitive approach and effectiveness on their developing Innovation to Investigate the metacogntive Approach for Students of Al-Islam and Kemuhammadiyahan (AIK) lesson. To examine the effects of approach instruction on students' reading performance, a qualitative interview technique and quantitative research methods including a paired-sample t-test and Person Product Moment Correlation will use to estimate the relationship between metacognitive approaches and effectiveness on students' reading accomplishment of Al-Islam and Kemuhammadiyahan (AIK) lesson. Significance showed that the most frequent use of metacognitive approachwas found to be the metacognitive approach, followed by the cognitive approach. Learning strategies and on language learning documents of Al-Islam and Kemuhammadiyahan (AIK) lesson that are self-directed at continuing recognition of the need to help language learners reflect and improve their beliefs and knowledge about learning metacognitive knowledge explicitly about the function of knowledge in language learning of Al-Islam and Kemuhammadiyahan (AIK) lesson. This article reviews the theoretical literature and research on metacognition to enhance the understanding of approaches to second language acquisition that establish active roles for students, and conclude with consideration of the practical implications for teaching foreign languages and second languages. In addition, there is a significant positive connection between metacognitive approachand effectiveness on their Smartphone application. Reading approach, on the other hand, was unrelated to reading achievement.

Keywords; metacognitive; effectiveness; smartphone; e-learning; Al-Islam and Kemuhammadiyahan; Covid-19

– – – ◆ – – –

INTRODUCTION

The rise of Covid-19 outbreaks in the world so that science and technology provide positive values that can facilitate humans to overcome problems for survival. However, on the other hand there are also negative implications with global development that gives birth to poor spiritual individuals, bringing humans from spiritual beings into a material-individualistic valley, and the existence of God only dwells in the recesses of thought, discussion, sermons both oral and writing. And there will be excessive desire to rule, having fun just looking for worldly pleasures.

Furthermore, the development of social and spiritual institutions has become unbalanced and is far behind the progress of science and technology, which in turn appears to be a deviant culture. If someone can adjust to the existing development, then he can behave normally, but if he is not able to make adjustments to the reality of his life, it will lead to actions that are not fair. To anticipate that humans, especially Muslims do not fall into a pattern of life that deviates from existing rules and norms, it is necessary to strive to stick to Islamic principles, because Islam as a universal religion is in accordance with the demands of the times. Therefore, Islam must be fully understood in the sense of the need for continuity between faith, worship and muamalah in daily life.

On the other hand, when the students pierce higher instruction with the reading stress that are to be found ahead them. Indonesian students' use of metacognitive approachis comparable; but when they are offered with elaborate Indonesian and Smartphone application texts of Al-Islam and Kemuhammadiyahan (AIK) lesson, their use of approach in reading the Indonesian text is more-focused or global; in dissimilarity, when they read the Smartphone applicationtext, they employ more low-level or slight processing approach. EFL students assume that, once reading Smartphone applicationlanguage text, the author's proposed meaning deception surrounded by the printed words, leaving reading process as no more than obtaining meaning from the words on the summon. They approach reading passively, relying heavily on the bilingual dictionary and spending long hours laboring over sentence-by-sentence translations. Although all the effort they make, their reading comprehension still remains poor.

Perceived effectiveness is defined as "people's beliefs about their capabilities to produce designated levels of performance. In converse, students with low effectiveness look upon thing as harder than they really are; they do not perceive that their afford can conduct to better result, so they have less These factors in turn undermine their motivation to gain knowledge and their performance in Englih-ferformance in English-related academic tasks. Since strategic learning and perceived effectiveness have become widely accepted as essential factors to influence student's reading performance, Alfassi (2004) suggest that it is very important for teachers to train students to take active control of their of the comprehension processes. Irwin and Baker (1989) called this "conscious control of the process met

cognition or strategies. To solve this problem about the role metacognition in second language teaching and learning, the present study attempted to maximize the teachers' assistance by training students how to learn and how to procedure information by using various reading approach, in order to augment students' supposed effectiveness and reading comprehension in English, Chamot, A. U. (2004). In this study, two major metacognitive approachnamely cognitive and matacognitive were preferred, and their relationship between metacognitive approachuse and perceived effectiveness as examined.

The use of this metacognitive approachseems to fit in EFL reading comprehension and Al-Islam and Kemuhammadiyahan (AIK) lesson. The third category of this metacognitive approachgives students the opportunity to maximize their abilities in the process of reading comprehension, (Giraldo-O'Meara, M., Fernández-Álvarez, J., & Belloch, A. ,2019). Training strategies, for example, can help students to internalize the text provided by highlighting important ideas from the text being read, (Udosen, A. E., 2019). At the same time, utilizing organizational strategies gives students many ways to understand text by arranging text materials based on the sequence of what ways to understand text by arranging text materials based on the order of thinking that they think is easy understand, such as separating the main ideas from supporting ideas or regulating the relationship between facts into tables, (Dökme, İ., & Ünlü, Z. K., 2019). In order for students to understand the text to the fullest, students can carry out elaboration strategies. In this way, they explain broadly the facts or details of the text content through connecting between the facts in the text or integrating the main ideas and supporting details of the text that they have arranged with their prior knowledge

The metacognitive approachhave a relationship of Al-Islam and Kemuhammadiyahan (AIK) lesson with applying strategies in reading comprehension such as making conclusions, separating the main ideas from the details below, and predicting. Based on the strategies mentioned, this text focuses on how to increase students' victory in reading comprehension through the application of the metacognitive approachused, (Liu, C. , 2019). This paper aims to find out whether those who use the Metacognitive approachcan be effective and the achievement of EFL reading comprehension and how many of those who use the Metacognitive approachinfluence the achievement of EFL reading comprehension during the teaching and learning process. The main objective of this study is to investigate the components of metacognition; namely the metacognitive knowledge, metacognitive monitoring, and metacognitive control of Al-Islam and Kemuhammadiyahan (AIK) lesson. On the other hand, metacognitive monitoring and general intelligence are significantly correlated. Metacognitive knowledge does not contribute to the performance of students' text learning while metacognitive monitoring and metacognitive control, along with

general intelligence, are found to be significant predictors in explaining student text learning performance.

Methodology- This research applies the purposive sampling technique because of certainly consider. Determining the first semester which consist of two classes as the sample of the research in Senior High School in academic year 2019/2020. There will three classes in the first semester which consisted of 97 students. A demographic was administrated to collect information about the subject' background. Results from the questionnaires showed that the most students have acknowledged at most recent six years of formal education in high school before they entered the university; their Smartphone applicationability level was about high-intermediate. The subjects of this study ranged in ages from 18 to 22 years old, with average 18.5 years old. Seventy three percent of the subject did diverse kind of study to improve their Smartphone applicationproficiency in their free time, such as reading newspaper and magazines.

The objective of the reading course was to develop diverse reading skills required to succeed in their studies. In the reading class, students were occupied in working a variety of reading skill/approach, such as previewing vocabulary, predicting reading contents, identifying main ideas, skimming for foremost ideas, scanning for information, making inference and etc. The lessons emphasized the reading of various topics of expository texts, such as education, city life, business, and jobs, lifestyles around the world, global trade, medicine, language and communication.

For the duration of the one-semester Smartphone applicationreading instruction, the metacognitive approachquestionnaires, the effectiveness questionnaires, student's interviews, and the reading comprehension tests were composed and analyzed at the end of the semester. To analyze the questionnaire data, this study involved two major statically procedures: (1) Descriptive statistics, including means and standard deviations, were calculated; and (2) paired sample t-test procedures were computed to compare the differences between student's response to the questionnaire on the

Three foremost metacognitive approachuses (categories of cognitive and metacognitive) in the test at the beginning of the semester and the post-test at the end of the semester. An alpha level of .05 was second-hand for all statically tests.

To analyze the possessions of strategic coaching on students' reading recital, a paired-sample *t*-test was carried out to compare student's show in the reading comprehension tests taken before and after the strategy instruction. Furthermore, Person-Product-Correction (example zero-order correlation coefficients) was used to estimate the relation between metacognitive approachuse and perceived effectiveness on students' reading achievement.

The design of the reading course was to help students understand the contents of the reading materials and mostly develop various skills needed to succeed in their studies. The course emphasized the reading of various

topics of expository texts, such education, business, jobs, city life, lifestyles around the world, global trade, medicine, language, communication and etc.

FINDINGS

Metacognition is one of the best predictors of academic achievement. According to Nelson (1999) metacognition is a type of specific cognition that can be defined as one's cognition about cognition itself. Flavell (1979) defines metacognition as knowledge of cognition and cognition control, (Eddy, S. L., 2019). Metacognition is a multi-faceted structure with three main components, namely metacognitive knowledge, metacognitive monitoring, and metacognitive control (Dunlosky and Metcalfe, 2009). Metacognitive knowledge is what we know about our own cognitive operations (Flavell, 1979). This knowledge is mostly statable and sometimes wrong (Brown, 1987). Metacognitive knowledge involves knowledge about; individual cognitive characteristics (people's knowledge), different cognitive task characteristics (task knowledge) and strategies for different cognitive tasks (knowledge strategies) (Flavell, 1979, 2000). Metacognitive monitoring is an assessment of ongoing cognitive activity (Dunlosky & Metcalfe, 2009). Thanks to metacognitive monitoring, the individual can decide whether he understands the text he has just read or studied the time table with the heart (Schwartz & Perfect, 2002).Metacognitive control is the regulation of ongoing cognitive activity, (Bellon, E., Fias, W., & De Smedt, B. 2019). This involves the decision whether to stop, continue or change the process of cognitive activity, (Chen, W., McCollum, M. A., Bradley, E. B., Nathan, B. R., Chen, D. T., & Worden, M. K., 2019). Therefore, metacognitive control involves conscious and unconscious decisions depending on information from metacognitive monitoring. (Dunlosky & Metcalfe, 2009; Nelson & Narens, 1996).

Metacognitive Experience

Another major conceptual entity in taxonomy is the metacognitive experience. Metacognitive experiences can be fully or less fully conscious and verbal, short or long, simple or complex in context. What makes them the metacognitive experience rather than experience of another type is that they must be done with some cognitive (and often affective) effort or effort, most often now, in progress. For example, if someone suddenly has an anxious feeling that he doesn't understand something and wants and needs to understand it, that feeling will become a metacognitive experience, (Lucangeli, D., Fastame, M. C., Pedron, M., Porru, A., Duca, V., Hitchcott, P. K., & Penna, M. P.. 2019).

A person has metacognitive experience whenever he feels that something is difficult to understand, understand, remember or resolve; if there is a feeling that is far from cognitive goals. Metacognitive experiences are very likely to occur in situations that stimulate a lot of careful thinking, are very conscious, and provide many opportunities for

thoughts and feelings about your own thoughts to emerge, (Kohnen, N., & Retelsdorf, J., 2019). They can also occur anytime before, during or after cognitive effort; it may be more appropriate to occur when cognitive situations are something between truly new and fully familiar; and when attention and mnemonic resources are not fully prioritized by more pressing subjective experiences, such as pain, anxiety, or depression, (Nordahl, H., Hjemdal, O., Hagen, R., Nordahl, H. M., & Wells, A, 2019). Thus, metacognitive experience can be any type of affective or cognitive conscious experience related to behavior in an ongoing cognitive situation or effort. (Flavell, 1979, 1987).

Metacognitive experience can have a very important effect on cognitive goals or tasks, metacognitive knowledge and cognitive actions or strategies. First, they can lead someone to set new goals or revise the old ones. Experience of confusion or failure, for example, can have this effect.Second, metacognitive experience can affect the storage of one's metacognitive knowledge by adding it, deleting it, or revising it, as in Piaget's assimilation and accommodation model, (Aşık, G., & Erktin, E., 2019) & (Makela, M. L., Pei, J. R., Kerns, K. A., MacSween, J. V., Kapasi, A., & Rasmussen, C.2019). Finally, metacognitive experiences can activate strategies aimed at cognitive or metacognitive goals, (Daumiller, M., & Dresel, M., 2019). For example, from the first, someone feels (a metacognitive experience) that he does not know a particular chapter in the text that is good enough to pass the test tomorrow, so he reads it again (cognitive purpose here, to increase your knowledge), Vuopala, E., Näykki, P., Isohätälä, J., & Järvelä, S., 2019). As an example of the latter, one wonders (metacognitive experience) whether he understands enough the chapter to pass the exam tomorrow, so he tries to find out by asking his own question about it and noting how well he is able to answer it (metacognitive goals, here , is to assess one's own knowledge), Ubuz, B., & Erdoğan, B. 2019).

Adding to the concept of 'metacognition' Efklides, A. (2002) introduces other aspects of it, aspects that serve cognition control, that is, metacognitive skills. Because the component of metacognition serves monitoring rather than cognition control (Brown, 1978, 1983), people can refer to this new aspect of metacognition, which serves cognition control. Metacognitive skills refer to conscious control processes such as planning, monitoring progress in processing, allocation of efforts, use of strategies and regulation of cognition, (Ward, R. T., & Butler, D. L. (2019.Before ending with this model, it must be noted that metacognitive knowledge, metacognitive experience, and metacognitive skills form devices that partially overlap. Some experiences have knowledge like their content and some don't. Some knowledge may become aware and consist of such experiences and some may never do it, (Kautzmann, T. R., & Jaques, P. A. 2019).

In addition, metacognitive knowledge, metacognitive experience, and metacognitive skills complement and enrich each other. For example, not only is there a kind of metacognitive knowledge that seems necessary for someone to interpret

correctly and act on metacognitive experience, but on the contrary, metacognitive experience also contributes information about people, assignments, and strategies to the developing metacognitive knowledge store: ideas and feelings that experienced by someone while watching or playing, say, tennis, can contribute to tennis knowledge, (Veas, A., Castejón, J. L., Miñano, P., & Gilar-Corbí, R., 2019).Simply put, it seems that metacognitive knowledge, metacognitive experience and metacognitive skills, constantly inform and bring out one another during cognitive tasks.

Reading Strategy in Reading Comprehension and Al-Islam and Kemuhammadiyahan (AIK) Lesson

Skimming

The skimming strategy of Al-Islam and Kemuhammadiyahan (AIK) lesson is done by readers when they skip details, minor ideas, and examples as a method in reading quickly. Lee Kai and Paula (1979) state that skimming is to understand the relationship between ideas require first motivation or interest in the topic, and secondly a readiness to recognize where the supporting details begin and end, and where the central points are (Nurkaeti, N., Turmudi, T., & Karso, K. , 2019). Skimming is used to quickly identify the main ideas of a text. Skimming is done at a speed three of four times faster than normal reading, (Reinholdt-Dunne, M. L., Blicher, A., Nordahl, H., Normann, N., Esbjørn, B. H., & Wells, A., 2019). People often skim when they have lots of material to red in a limited amount of time.

Scanning

Scanning strategy of Al-Islam and Kemuhammadiyahan (AIK) lesson is a rapid reading to search for the specific information of the text is read. Ken Heland (In Wakkang, 2004) states that scanning is rapid search for specific information rather than general impression. Scanning demands the reader to ignore all about the key item being searched for. It is useful skill for data gathering, review, using reference books, or judging whether a text contains material deserving further study. Lee Kai and Paula (1979) state that is not reading in the strict sense of the words. It is an ability to locate facts quickly to find the answer to specific question. The scanning activity is when the readers want to find out about a word, a place, or a name about a time or date, or about statistic them concrete on a specific section and glance down it.

Reading for the Structure Signals

In reading for the structure signals, students tend to read the foreign language for content words rather than for structure signals of Al-Islam and Kemuhammadiyahan (AIK) lesson. Like in Frence's words, they focus on written grammar signals as follows: Is the author talking about one person or about several people? How do you know?

Inference Technique

The inference techniques in reading are the teacher taught students how to infer meanings from paragraph context of Al-Islam and Kemuhammadiyahan (AIK) lesson. In case, for example

students do not know the word "*maussade*" (cheerless). If they read simply *'ie temps e tait maussade'* (the weather was cherless), they cannot guess what kind of weather it is. But if they read *ie temps etait triste et maussade in lette saison, L1 pleuvait tours les jours* (the weather was sad and cheerless in that season), they can tell that *maussade* has a negative sense and is equally synonymous with *triste* (sad).

Paraphrasing Technique

If a sentence part of a selection seems too difficult, many students will simply skip it, hoping that they are not missing anything essential. Paraphrasing techniques make students try to grasp the meaning of the selesction in it's entirely, (Huang, Z., Hu, Q., & Shao, Y.., 2019).

Providing paraphrases for students: difficult words and expression may be glossed in the foreign language, (Wenden, A. L.1998). An effective language laboratory reading exercise may be prepared as follows: "If sentence part of a selection seems too difficult, many students will simply skip it, hoping that they are not missing anything essensial, (Kudesia, R. S. (2019).

Metaphrasing Technique

Metaphrasing is a technique that developed by Walda E. Sweet in Edward et al. (1977) for teaching students to read Latin. It is equally effective with modern inflected language such as German and Russian. In metaphrasing, the students show both the lexical anmd structural meanings of words such as they occur in the sentence (Walda E. Sweet in Edward et al., 1997).

EFL Reading Comprehension

Many students at the University Muhammadiyah of Parepare are multilingual of Al-Islam and Kemuhammadiyahan (AIK) lesson amd English language lesson. They speak English, Indonesian, Bugis, Mandar and other language. Indonesian is spoken by the majority of the citizenry. Bugis language is spoken by many of the citizenry, irrective of their tribe or ethnicity. The other language also spoken but by fewer Buginess (that is, citizens) include Palopo, Enrekang, Pa'tinjo, Letta, and other language. Thus, the majority of Bugis speak one or two indigeneous language and Indonesians. Smartphone applicationlanguage is the academic language and the official language, although Bugis language and Indonesian is also used in many official contexts.

Most of the students at the University Muhammadiyah of Parepare attend public Smartphone application Departement in the Students Smartphone applicationof Association. They are offered places in the university based on performance in the examination. First year students in the Faculty of Education study course as Education. The lack of the previous content and vocabulary knowledge applicaple to these fields of specifiacation. This argument, however, does not suggest that a wide vocabulary is unnecessary in reading comprehension. In fact, the reverse is the case: a wide general vocabulary is essential for text comprehension. The

argument here is that it is possible for text comprehension toinfluence vocabulary knowledge just as vocabulary knowledge influences comprehension.

Given the above scenario, when these students engange in academic reading in these course, they hardly depend on prior knowledge of the course content and (technical) vocabulary in EFL reading comprehension and they further obtained more improvement in comprehension after strategy, (Vaghi, M. M., Cardinal, R. N., Apergis-Schoute, A. M., Fineberg, N. A., Sule, A., & Robbins, T. W.. 2019).. Such result support findings in the literature (Shang, 2007). Since they are faced with a series of new words as they engange in academic reading, how then do they arrive at the appropriate meanings of the new words? Do they depend solely on understanding of the text help them arrive at the meaning of words? These are some of the question this study will attempt, (Anh, N., Suresh, S., Pratama, M., & Srikanth, N., 2019).

Instrumentation and Procedure

The presents study aimed to investigate the frequency of students' metacognitive approachuse, their perception of self-efficacy, and the relationship of these two constructs on their Smartphone applicationreading performance. First, reading comprehension was assessed using the Reading Comprehension section of the simulated TOEFL test (Philips, 1996). Seven reading passages were selected, each passage follow by 10 to 12 multiple choices reading comprehension questions, with the total number of 60 questions in given test. The test lasted for exactly 60 minutes. The questionnaire, continuing 45 items, consisted of three major categories of reading strategies; cognitive (items 1 to 17), metacognitive (items 18 to 32) and comprehension strategies (items 33 to 45). Students were asked to rate certain statements on a 5 point scale from (1) never or almost never true of me to (5) always or almost always true of me. To form a pilot test, there Smartphone applicationmajor students were asked to comment on the contents of the questionnaire, concerning the meaning and clarity of the statements. The interview, ranged from to 30 to 50 minutes, were all performed in Buginess except the interviewers' questions. The interviewees were informed that the interview would be highly confidential and used for research only. The interviews were tape-recorded and fully transcribed soon afterward.

DISCUSSION

A series of paired-sample *t*-test were carried out to compare students' mean score of approach use, effectiveness, and reading comprehension test taken before and after comprehension tutoring. According to the mean score of post-use, the most frequent use of metacognitive approachwas found to be metacognitive approach, followed by compensation approach, and then followed by cognitive approach. As for effectiveness questionnaire, the mean for effectiveness was 3.49 (SD=.62), and the mean for effectiveness was 3.56

(SD=.62). The result indicate that the average score of post-use and post-effectiveness for each set were all higher than those in the pre-use and pre-efficiency. Although significance differences were found among them at the .05 probability level, it is still of notable importance that students generally increased the frequency of their metacognitive approachuse and perception of effectiveness by the end of the semester. After receiving approach instruction, students scored appreciably ($p<.05$) higher in the post-test than in the pre-test. It is, therefore, assumed that the students amplified their strategy use and discernment of competence in using the approach after metacognitive approachinstruction. Such findings further indicate the importance of approach tutoring on the enlargement comprehension.

To examine the relationship among the approach use, effectiveness, and reading achievement, a zero-order correlation was conducted for the purpose of this study. To minimize the number of variables to be included, only the post-test scores of reading approach, effectiveness, and reading comprehension were used. The result indicate that all the strategies were significantly correlated with effectiveness (correlation coefficients ranged from .44 to .52, $p<.01$). However, no significant relationship was observed between strategy use and reading score. The other findings shows that student's effectiveness beliefs has a correlation (correlation coefficient = .53, p= .01) with their reading achievement, indicating a significant relation of perception of effectiveness on reading development.

The purpose of this study was to explore the relationship of different cognitive, metacognitive and effectiveness variables variables on foreign-language reading accomplishment. More than a few key results emerged beginning this study. First, regarding the effectiveness of strategic instruction on reading achievement, results of the attendance studies demonstrate that students commonly amplified their recurrent use of reading approach. Especially using metacognitive approach for managing learning and overcoming deficiency in Smartphone application and further obtained more improvement in comprehension after approach instruction. Second, regarding the relationship between the strategies learning and effectiveness, end of the correlation make available observed support for significant connection between these two constructs anticipated in the literature. In general, this relationship was consistently observed in all three strategy uses and perceived effectiveness. Exclusively, they use strategies in their Smartphone application reading, the more confidence and personal control they will have over their reading skills. And then most students considered that it is important to learn various reading skills to understand the reading materials more effectively and the use of multiple reading strategies could enhance their reading comprehension. However, some students, and poorer readers in particular, expressed their difficulties in predicting what is to come, what to read quickly, what not to read; integrating their prior knowledge with materials in the text;

determining the meaning of unfamiliar words in the text, as well as dealing with inconsistencies or gaps as needed. Student also reported that the time the teacher spent in respectively explaining to resolve problems. The student's reading comprehension more evocatively than conventional one. These strategies were gifted to revolutionize the students' reading comprehension better than before. The metacognitive approach use and reading comprehension; the result, present problematic findings when taken with the previous studies.

CONCLUSION

The purpose of this study was to explore the relationship of various cognitive, metacognitive, compentation, and effectiveness variables on foreign-language reading achievement. Several key findings emerged from this study. First, regarding the effectiveness of strategic instruction on reading achievement, results of the present study demonstrate that students generally increased their frequent use of reading strategies, especially using metacognitive strategies for managing and overcoming deficiency in Smartphone applicationreading. The purpose of this study is to link metacognitive knowledge and general intelligence. On the other hand, metacognitive monitoring is significantly correlated with general intelligence and both of these variables are significant predictors of text learning performance. Metacognitive control and general intelligence did not correlate significantly, both variables were independent predictors of text learning performance.In general, this relationship was constiently observed in all there strategy uses and perceived self-efficacy. Specially, students report that the more prequently they use strategies in their Smartphone applicationreading, the more confidence and personal control will have over their reading skills. Students express that they are not incline to feel helpless in their learning, and they have high self-perception of learning outcomes.

REFFERENCES

[1] Alfassi, M. (2004). Reading to learn: Effects of combined strategy instruction on high school students. *Journal of Educational research*, 97 (4), 171-184.

[2] Alibali, M. W., Brown, S. A., & Menendez, D. (2019). Understanding strategy change: Contextual, individual, and metacognitive factors. *Advances in child development and behavior*, *56*, 227.

[3] Alindra, D., Fauzan, A., & Asmar, A. (2019, January). Metacognitive Awareness and Its Effect on Students' Problem Solving Ability in Implementing RME Approach. In *International Conference on Islamic Education (ICoIE 2018)*. Atlantis Press.

[4] Anh, N., Suresh, S., Pratama, M., & Srikanth, N. (2019). Interval prediction of wave energy characteristics using meta-cognitive interval type-2 fuzzy inference system. *Knowledge-Based Systems*, *169*, 28-38.

[5] Aras, S., & Erden, F. T. (2019). Documentation panels: supporting young children's self-regulatory and metacognitive

abilities. *International Journal of Early Years Education*, 1-18.

[6] Aşık, G., & Erktin, E. (2019). Metacognitive Experiences: Mediating the Relationship between Metacognitive Knowledge and Problem Solving. *Egitim ve Bilim*, *44*(197).

[7] Baker, L., & Brown, A.L. (1984). *Metacognitive Skills in Reading*. In P.D. Pearson (Ed.), Handbook of reading research (pp. 353-394). New York: Longman.

[8] Baker, W., & Boonkit, K. (2004). *Learning strategies in reading and writing*: EAP contexts; Heinle & Heinle.

[9] Baliram, N., & Ellis, A. K. (2019). The impact of metacognitive practice and teacher feedback on academic achievement in mathematics. *School Science and Mathematics*, *119*(2), 94-104.

[10] Bandura, A. (1994). *Encyclopedia of human behavior* (Vol. 4). Academic Press.

[11] Barnett., M.A. (1989). *More than meets the eye*. Englewood Cliffs, NJ: Prentice Hall Regents.

[12] Bellon, E., Fias, W., & De Smedt, B. (2019). More than number sense: The additional role of executive functions and metacognition in arithmetic. *Journal of experimental child psychology*, *182*, 38-60.

[13] Bork, D. (2019). A Framework for Teaching Conceptual Modeling and Metamodeling Based on Bloom's Revised Taxonomy of Educational Objectives.

[14] Brown, A. (1987) Metacognition, Executive Control, Self-Regulation and other More Mysterious Mechanisms in Weinert, F.E. & Kluwe, R.H. (eds.) *Metacognition, Motivation and Understanding,* Hillsdale, New Jersey: Lawrence Erlbbaaum Associates.

[15] Brown, A.L., Bransford, J.D., Ferrara, R.A. & Campione, J.C. (1983) Learning, remembering and understanding in J.H. Flavell & E.M. Markman (eds.) *Handbook of child psychology: Cognitive development* (Vol.3) 4th ed. New York: Wiley (P.H. Mussen, General Editor).

[16] Brycz, H., Konarski, R., Kleka, P., & Wright, R. (2019). The Metacognitive Self: the Role Of Motivation and an Updated Measurement Tool. *Economics & Sociology*, *12*(1), 208-367.

[17] Carrell, P.L. (1989). *Metacognitive Awareness and Second Language Reading*. The modern language journal, 73 (2), 121-134.

[18] Catherine, S., & Rieh, S. Y. (2019). Knowledge-Context in search systems: Toward information-literate actions.

[19] Catherine, S., & Rieh, S. Y. (2019). Knowledge-Context in search systems: Toward information-literate actions.

[20] Caverly, D. (1997). Teaching reading in a learning assistance center. (ERIC Document Reproduction Serveices No. ED 478 373).

[21] Caverly, D.C. & Orlando, V. P. (1991). Textbook study strategy. In R.F. Flippo & D. C. Caverly (Eds). *Teaching reading and study strategies at the college level*. (pp.86-165). Newark, DE: International Reading Association.

[22] Chamot, A. U. (2004). Issues in language learning strategy research and teaching. *Electronic journal of foreign language teaching*, *1*(1), 14-

26.
[23] Chamot, A. U., & Kupper, L. (1989). Teaching learning strategies in foreign language intstruction. Foreign Language Annals, 22 (1), 13-24.
[24] Chamot, A. U., Robbins, J., & El-Dinary, P. B (1993). *Learning strategies in Japanese foreign language instruction*. (ERIC Document Reproduction Service No. ED 370-346).
[25] Chen, W., McCollum, M. A., Bradley, E. B., Nathan, B. R., Chen, D. T., & Worden, M. K. (2019). Using Instrument-Guided Team Reflection and Debriefing to Cultivate Teamwork Knowledge, Skills, and Attitudes in Pre-Clerkship Learning Teams. *Medical Science Educator*, *29*(1), 45-50.
[26] Cheong, K. W. (2019). Teaching Strategies, Knowledge, Higher-Order Thinking Skills and Creative Musical Product in Music Improvisation. In *Creativity in Music Education* (pp. 201-216). Springer, Singapore.
[27] Choy, S. C., Yim, J. S. C., & Tan, P. L. (2019). Mediating effects of quality learning on metacognitive knowledge, metacognitive experience and outcomes. *Issues in Educational Research*, *29*(1), 1.
[28] Connor, C. M., Day, S. L., Zargar, E., Wood, T. S., Taylor, K. S., Jones, M. R., & Hwang, J. K. (2019). Building word knowledge, learning strategies, and metacognition with the Word-Knowledge e-Book. *Computers & Education*, *128*, 284-311.
[29] Coymak, A. (2019). An Experimental Study of the Effect of Computer Assisted Learning on Metacognitive Performance Development in Psychology Teaching. *Contemporary Educational Technology*, *10*(1), 94-105.
[30] Daumiller, M., & Dresel, M. (2019). Supporting self-regulated learning with digital media using motivational regulation and metacognitive prompts. *The Journal of Experimental Education*, *87*(1), 161-176.
[31] Dökme, İ., & Ünlü, Z. K. (2019). The Challenge of Quantum Physics Problems with Self-Metacognitive Questioning. *Research in Science Education*, 1-18.
[32] Duman, B., & Semerci, Ç. (2019). The Effect of a Metacognition-Based Instructional Practice on the Metacognitive Awareness of the Prospective Teachers. *Universal Journal of Educational Research*, *7*(3), 720-728.
[33] Dunlosky, J. & Metcalfe, J.(2009) *Metacognition,* Sage Publications.
[34] Eddy, S. L. (2019). Recent Research in Science Teaching and Learning. *CBE—Life Sciences Education*, *18*(1), fe1.
[35] Efklides,A.(2002). Feelings and judgments as subjective evaluations of cognitive processes: How reliable are they? In *ΨΥΧΟΛΟΓΙΑ (PSYCHOLOGY), vol.9, no.2. pp.163-184.*
[36] Ehrich, J. F., & Henderson, D. B. (2019). Rasch Analysis of the Metacognitive Awareness Listening Questionnaire (MALQ). *International Journal of Listening*, *33*(2), 101-113.
[37] Elihami, E. (2016). *Meningkatkan Hasil Belajar Al-Islam Dan Kemuhammadiyahan*

Melalui Kuis Dengan Umpan Balik Pada Mahasiswa Kelas. *SAFINA: Jurnal Pendidikan Agama Islam*, *1*(2), 27-37.

[38] Elihami, E. (2019). IMPLEMENTASI LAYANAN BIMBINGAN KELOMPOK DALAM MENINGKATKAN HIGHER OF THINK MAHASISWA BERBASIS KAMPUS MERDEKA. *EduPsyCouns: Journal of Education, Psychology and Counseling*, *1*(1), 79-86.

[39] Elihami, E. (2020). IMPROVING MANAGEMENT FOR LEARNING AL-ISLAM AND KEMUHAMMADIYAHAN IN NONFORMAL DEPARTMENT. *JURNAL EDUKASI NONFORMAL*, *1*(1), 160-165.

[40] Elihami, E. (2020). PERANAN LAPANGAN PERLEMBAGAAN DI LEMBAGA KURSUS DAN PELATIHAN DIAN AYU DI KABUPATEN SIDENRENG RAPPANG. *JURNAL EDUKASI NONFORMAL*, *1*(1), 122-138.

[41] Elihami, E., & Syahid, A. (2018). PENERAPAN PEMBELAJARAN PENDIDIKAN AGAMA ISLAM DALAM MEMBENTUK KARAKTER PRIBADI YANG ISLAMI. *Edumaspul-Jurnal Pendidikan*, *2*(1), 79-96.

[42] Elihami.(2016).The Challenge of Religious Education in Indonesia Multiculturalism. Vol. 5, No. 4, American Research Institute for Policy Development.

[43] Elihami.(2016).The Challenge of Religious Education in Indonesia Multiculturalism. Vol. 5, No. 4, American Research Institute for Policy Development.

[44] Erlin, E., & Fitriani, A. (2019, February). Profile metacognitive awareness of biology education students in microbiology course. In *Journal of Physics: Conference Series* (Vol. 1157, No. 2, p. 022066). IOP Publishing.

[45] Fauzi, K., Amin, M., Dirgeyase, I. W., & Priyatno, A. (2019). Building Learning Path of Mathematical Creative Thinking of Junior Students on Geometry Topics by Implementing Metacognitive Approach. *International Education Studies*, *12*(2), 57-66.

[46] Feldhaus, C., Buckwalter, J., & Wager, E. (2019). Experiential Learning, Action Research, and Metacognitive Reflection in the Senior Capstone.

[47] Firawati, F. (2017). Transformasi Sosial dalam Nilai-Nilai Pendidikan Islam di Kabupaten Sidenreng Rappang. *Edumaspul-Jurnal Pendidikan*, *1*(1), 25-35.

[48] Flavell, J. (1985*). Cognitive Development*. United States of America: Prentice-Hall.

[49] Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *American Psychologist*, 34(10), 906–911.

[50] Flavell, J. H. (2000). Development of children's knowledge about the mental world. *International Journal of Behavioral Development*, 24, 15–23.

[51] Flavell, J.H. (1987). Speculations about the nature and Development of Metacognition in Weinert F.E. & Klue, R.H. (eds..) *Metacognition, Motivation and Understanding.* Hillsdale, New Jersey: Lawrence Erlbaum Associates.

[52] Fomin, A. E., & Bogomolova, E. A. (2019). Influence of reasoning on

knowledge on metacognitive monitoring of the solution of test tasks. *Experimental Psychology (Russia)*, *12*(1), 126-138.

[53] Giraldo-O'Meara, M., Fernández-Álvarez, J., & Belloch, A. (2019). METACOGNITIVE AbILITIES QuESTIONNAIRE (MAQ). *Revista Argentina de Clínica Psicológica*, *28*(1), 67-78.

[54] Gómez Muñoz, L. D., Ramírez, I., & Daniela, M. (2019). Metacognitive strategies to foster professional development in preservice teachers based on a reflective teaching approach.

[55] Guillot, A., & Debarnot, U. (2019). Benefits of motor imagery for human space flight: A brief review of current knowledge and future applications. *Frontiers in Physiology*, *10*.

[56] Herlanti, Y., Hutagalung, F. D., & Sigit, D. V. (2019). Metacognitive Attitude and Knowledge of Biology Teacher Candidates. *Advanced Science Letters*, *25*(1), 138-142.

[57] Huang, Z., Hu, Q., & Shao, Y. (2019). Understanding others' knowledge certainty from inference and information-seeking behaviors in children. *Developmental psychology*.

[58] Kai-Fat, Lee and Paula Flaming. (1979). *Better Reading Skills*. Oxford: Oxford Unversity Press.

[59] Karim, I. (2019). Enhancing The Speaking Skill Using Metacognitive Strategy. *LANGUA: Journal of Linguistics, Literature, and Language Education*, *2*(1), 23-32.

[60] Kautzmann, T. R., & Jaques, P. A. (2019). Effects of adaptive training on metacognitive knowledge monitoring ability in computer-based learning. *Computers & Education*, *129*, 92-105.

[61] Kim, K., Clarianay, R. B., & Kim, Y. (2019). Automatic representation of knowledge structure: enhancing learning through knowledge structure reflection in an online course. *Educational Technology Research and Development*, *67*(1), 105-122.

[62] Kırmızı, Ö., & Tosuncuoğlu, İ. (2019). A review on writing metacognitive awareness of Turkish advanced level EFL learners. *International Online Journal of Education and Teaching*, *6*(1), 136-149.

[63] Ko, L. Y. (2019). A STUDY OF METACOGNITIVE STRATEGIES UTILIZED IN READING AND LISTENING COMPREHENSION: AN INVESTIGATION OF NURSING JUNIOR COLLEGE SMARTPHONE APPLICATIONLEARNERS. *European Journal of Education Studies*.

[64] Kohnen, N., & Retelsdorf, J. (2019). The role of knowledge of connectives in comprehension of a German narrative text. *Journal of Research in Reading*.

[65] Kudesia, R. S. (2019). Mindfulness as metacognitive practice. *Academy of Management Review*, *44*(2), 405-423.

[66] Leganes-Fonteneau, M., Nikolaou, K., Scott, R., & Duka, T. (2019). Knowledge about the predictive value of reward conditioned stimuli modulates their interference with cognitive processes. *Learning & Memory*, *26*(3), 66-76.

[67] Limueco, J. M., & Prudente, M. S. (2019, January). Flipped classroom enhances student's metacognitive awareness. In *Proceedings of the*

10th International Conference on E-Education, E-Business, E-Management and E-Learning (pp. 70-74). ACM.

[68] Lin, S. Y., & Xie, Y. (2019). College students' use of self-generated tag clouds for knowledge integration: evidence from reflections. *Journal of Computing in Higher Education*, 1-25.

[69] Liu, C. (2019). The Use of Listening Metacognitive Strategies in TOEFL Listening Classroom.

[70] Loh, M. Y., & Lee, N. H. (2019). The Impact of Various Methods in Evaluating Metacognitive Strategies in Mathematical Problem Solving. In *Mathematical Problem Solving* (pp. 155-176). Springer, Cham.

[71] Louca, E. P. (2019). Do children know what they know? Metacognitive awareness in preschool children. *New Ideas in Psychology*, *54*, 56-62.

[72] Love, S., Kannis-Dymand, L., & Lovell, G. P. (2019). Development and validation of the metacognitive processes during Performances Questionnaire. *Psychology of Sport and Exercise*, *41*, 91-98.

[73] Lucangeli, D., Fastame, M. C., Pedron, M., Porru, A., Duca, V., Hitchcott, P. K., & Penna, M. P. (2019). Metacognition and errors: the impact of self-regulatory trainings in children with specific learning disabilities. *ZDM*, 1-9.

[74] MacCann-Alfaro, N. (2019). Poster "Metacognitive and Collaborative Arguing through Computers by University Students" in TEEM 2018.

[75] Magen, H., & Emmanouil, T. A. (2019). Estimation in self-initiated working memory for spatial locations. *Psychonomic bulletin & review*, *26*(1), 315-324

[76] Mahdavi, N., & Miri, M. (2019). Co-shaping metacognitive awareness and developing listening comprehension through process-based instruction. *International Journal of Listening*, *33*(1), 53-70.

[77] Makela, M. L., Pei, J. R., Kerns, K. A., MacSween, J. V., Kapasi, A., & Rasmussen, C. (2019). Teaching Children With Fetal Alcohol Spectrum Disorder to Use Metacognitive Strategies. *The Journal of Special Education*, 0022466919832371.

[78] Maras, K., Gamble, T., & Brosnan, M. (2019). Supporting metacognitive monitoring in mathematics learning for young people with autism spectrum disorder: A classroom-based study. *Autism*, *23*(1), 60-70.

[79] Maras, K., Gamble, T., & Brosnan, M. (2019). Supporting metacognitive monitoring in mathematics learning for young people with autism spectrum disorder: A classroom-based study. *Autism*, *23*(1), 60-70.

[80] McEvoy, P. M. (2019). Metacognitive Therapy for Anxiety Disorders: a Review of Recent Advances and Future Research Directions. *Current psychiatry reports*, *21*(5), 29.

[81] McGrath, L., Negretti, R., & Nicholls, K. (2019). Hidden expectations: scaffolding subject specialists' genre knowledge of the assignments they set. *Higher education*, 1-19.

[82] Mellinger, C. D. (2019). Metacognition and self-assessment in specialized translation education:

task awareness and metacognitive bundling. *Perspectives*, 1-18.

[83] Melzer, P. (2019). A Conceptual Framework for Task and Tool Personalisation in IS Education. In *A Conceptual Framework for Personalised Learning* (pp. 47-76). Springer Gabler, Wiesbaden.

[84] Mota, A. R., Körhasan, N. D., Miller, K., & Mazur, E. (2019). Homework as a metacognitive tool in an undergraduate physics course. *Physical Review Physics Education Research*, *15*(1), 010136.

[85] Mudrick, N. V., Azevedo, R., & Taub, M. (2019). Integrating metacognitive judgments and eye movements using sequential pattern mining to understand processes underlying multimedia learning. *Computers in Human Behavior*, *96*, 223-234.

[86] Nelson, T. O (1999). Cognition versus metacognition. P. J. Sternberg (Ed). *The Nature of Cognition* içinde (pp. 625–641). Cambridge: MIT Press.

[87] Ning, H. K. (2019). The bifactor model of the junior Metacognitive Awareness Inventory (Jr. MAI). *Current Psychology*, *38*(2), 367-375.

[88] Nordahl, H., & Wells, A. (2019). In or out of work: A preliminary investigation of mental health, trait anxiety and metacognitive beliefs as predictors of work status. *Clinical Psychologist*, *23*(1), 79-84.

[89] Nordahl, H., Hjemdal, O., Hagen, R., Nordahl, H. M., & Wells, A. (2019). What lies beneath trait-anxiety? Testing the Self-regulatory Executive Function Model of Vulnerability. *Frontiers in psychology*, *10*.

[90] Novia, H., Kaniawati, I., Rusli, A., & Rusdiana, D. (2019, March). The development of metacognitive awareness related to the implementation of metacognitive-based learning. In *Journal of Physics: Conference Series* (Vol. 1170, No. 1, p. 012034). IOP Publishing.

[91] Nurkaeti, N., Turmudi, T., & Karso, K. (2019, February). How to use metacognitive strategy in the open-ended approach?. In *Journal of Physics: Conference Series* (Vol. 1157, No. 2, p. 022119). IOP Publishing.

[92] Oxford, R. L. (1990). Language learning strategies; what every teacher should know, Toronto, Canada: Heinle & Heinle.

[93] OZCAN, B., & FIRAT, T. (2019). Predicting Undergraduate Students' Metacognitive Skills with Self-Construal. *International Online Journal of Educational Sciences*, *11*(1).

[94] Persky, A. M., & Dinsmore, D. L. (2019). Metacognitive changes and sources of confidence judgements in health professions classroom learning. *Currents in Pharmacy Teaching and Learning*.

[95] Philips, D (1996). *Longman preparation course for the TOEFL test*. N.Y. Addison-Weslay.

[96] Pintrich, P.R., & Garcia, T. (1991) Student goal orientation and self-regulation in the college classroom. In M. Maehr & P. R. Pintrich (Eds)., *Advances in motivation and achievement: Goals and self-regulatory* processes. Greenwich, CT: JAI Press.

[97] Pintrich, P.R., Smith, D.F., Garcia, T., & McKeachie, W. (1991). *A manual for the use of the Motivated Strategies for Learning*

Questionnaire (MSLQ) (Tech. Rep. No. 91-B-004). Ann Arbor, Michigan: The Regents of the University of Michigan.

[98] Pintrich. P.R. (1999). The role of motivation in promoting and sustaining self-regulated learning. *International Journal of Educational Research*, 31. 459-470.

[99] Popolo, R., MacBeth, A., Canfora, F., Rebecchi, D., Toselli, C., Salvatore, G., & Dimaggio, G. (2019). Metacognitive interpersonal therapy in groups for over-regulated personality disorders: A single case study. *Journal of Contemporary Psychotherapy*, *49*(1), 49-59.

[100] Pozuelos, J. P., Combita, L. M., Abundis, A., Paz-Alonso, P. M., Conejero, Á., Guerra, S., & Rueda, M. R. (2019). Metacognitive scaffolding boosts cognitive and neural benefits following executive attention training in children. *Developmental science*, *22*(2), e12756.

[101] Purnawarman, P. (2019). EFL students' vocabulary learning strategies and their affixes knowledge. *Journal of Language and Linguistic Studies*, *15*(1), 262-275.

[102] Putra, I. D. G. R. D. (2019). METACOGNITIVE LEARNING STRATEGIES IN SMARTPHONE APPLICATIONLANGUAGE TEACHING & LEARNING. *Yavana Bhāshā: Journal of Smartphone applicationLanguage Education*, *1*(1).

[103] Reinholdt-Dunne, M. L., Blicher, A., Nordahl, H., Normann, N., Esbjørn, B. H., & Wells, A. (2019). Modelling the relationships between metacognitive beliefs, attention control and symptoms in childrenwith and without anxiety disorders: A test of the S-REF model. *Frontiers in Psychology*, *10*, 1205.

[104] Ritchey, K. A., & Smith, S. (2019). Developing a Training Course for Undergraduate Teaching Assistants. *College Teaching*, *67*(1), 50-57.

[105] Schoonen, R. (2019). Are reading and writing building on the same skills? The relationship between reading and writing in L1 and EFL. *Reading and Writing*, *32*(3), 511-535.

[106] Schunk, D. H. (1991). Self-efficacy and academic motivation. *Educational Psychologist*, 26,207-231.

[107] Schwartz, B. L. & Perfect, T., J. (2002) Introduction: Toward an Applied Metacognition. In T. J. Perfect & B. L. Schwartz (Eds.) *Applied Metacognition.* (pp. 1-11). Cambridge: Cambridge University Press.

[108] Şendurur, E., & Yildirim, Z. (2019). Web-Based Metacognitive Scaffolding for Internet Search. *Journal of Educational Technology Systems*, *47*(3), 433-455.

[109] Shang, H. F. (2007, May). Reading strategy training for the development of EFL reading comprehension. *Proceedings of the 24th International Conference on Smartphone applicationTeaching and Learning in the Republic of China* (ROC-TEFL) 424-442, National Chengchi University, Taipei, Taiwan.

[110] Shih, H. C. J., & Huang, S. H. C. (2019). College students' metacognitive strategy use in an EFL flipped classroom. *Computer*

Assisted Language Learning, 1-30.

[111] Smith, C. L., & Rieh, S. Y. (2019, March). Knowledge-Context in Search Systems: Toward Information-Literate Actions. In *Proceedings of the 2019 Conference on Human Information Interaction and Retrieval* (pp. 55-62). ACM.

[112] Sonnenberg, C., & Bannert, M. (2019). Using Process Mining to examine the sustainability of instructional support: How stable are the effects of metacognitive prompting on self-regulatory behavior?. *Computers in Human Behavior*, *96*, 259-272.

[113] Sweet, A.P., & Anderson, J.I. 1993. *Reading Research in to 2000*. London: Lawrence Erlbaum Associate.

[114] Tachie, S. A. (2019). Meta-cognitive Skills and Strategies Application: How this Helps Learners in Mathematics Problem-solving. *EURASIA Journal of Mathematics, Science and Technology Education*, *15*, 5.

[115] Tachie, S. A., & Molepo, J. M. (2019). Exploring Teachers' Meta-Cognitive Skills in Mathematics Classes in Selected Rural Primary Schools in Eastern Cape, South Africa. *Africa Education Review*, *16*(2), 143-161.

[116] Tan, C. C., Chen, C. M., & Lee, H. M. (2019). Effectiveness of a digital pen-based learning system with a reward mechanism to improve learners' metacognitive strategies in listening. *Computer Assisted Language Learning*, 1-26.

[117] Taub, M., & Azevedo, R. (2019). How Does Prior Knowledge Influence Eye Fixations and Sequences of Cognitive and Metacognitive SRL Processes during Learning with an Intelligent Tutoring System?. *International Journal of Artificial Intelligence in Education*, *29*(1), 1-28.

[118] Teeuwen, J., & Salinitri, G. (2019). Transmitting Metacognitive Pedagogy to Math Pre-Service Educators. In *Handbook of Research on Critical Thinking Strategies in Pre-Service Learning Environments* (pp. 410-436). IGI Global.

[119] Teng, F. (2019). The role of metacognitive knowledge and regulation in mediating university EFL learners' writing performance. *Innovation in Language Learning and Teaching*, 1-15.

[120] Teng, F., & Reynolds, B. L. (2019). Effects of individual and group metacognitive prompts on EFL reading comprehension and incidental vocabulary learning. *PloS one*, *14*(5), e0215902.

[121] Ubuz, B., & Erdoğan, B. (2019). Effects of physical manipulative instructions with or without explicit metacognitive questions on geometrical knowledge acquisition. *International Journal of Science and Mathematics Education*, *17*(1), 129-151.

[122] Udosen, A. E. (2019). 26. Effects of Instructional Strategies on Metacognitive Awareness in Reading among Secondary School Students in Akwa Ibom State. *In the Linguistic Paradise: A Festschrift for E. Nolue Emenanjo*, *2*, 283.

[123] Vaghi, M. M., Cardinal, R. N., Apergis-Schoute, A. M., Fineberg, N. A., Sule, A., & Robbins, T. W.

(2019). Action-outcome knowledge dissociates from behavior in obsessive-compulsive disorder following contingency degradation. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, *4*(2), 200-209.

[124] Valeyeva, N. S., Kupriyanov, R., & Valeyeva, E. R. (2019). Metacognition and metacognitive skills: intellectual skills development technology. In *Early Childhood Development: Concepts, Methodologies, Tools, and Applications* (pp. 438-459). IGI Global.

[125] Veas, A., Castejón, J. L., Miñano, P., & Gilar-Corbí, R. (2019). Relationship between parent involvement and academic achievement through metacognitive strategies: A multiple multilevel mediation analysis. *British Journal of Educational Psychology*, *89*(2), 393-411.

[126] Versteeg, M., & Steendijk, P. (2019). Putting post-decision wagering to the test: a measure of self-perceived knowledge in basic sciences?. *Perspectives on medical education*, *8*(1), 9-16.

[127] Vlajčić, D., Caputo, A., Marzi, G., & Dabić, M. (2019). Expatriates managers' cultural intelligence as promoter of knowledge transfer in multinational companies. *Journal of Business Research*, *94*, 367-377.

[128] Vuopala, E., Näykki, P., Isohätälä, J., & Järvelä, S. (2019). Knowledge co-construction activities and task-related monitoring in scripted collaborative learning. *Learning, Culture and Social Interaction*, *21*, 234-249.

[129] Wakkang, Hamzah. 2004. *Teaching Reading Comprehension through Comparative Learning to Third Year Students of SLTP 1 Suppa Pinrang. Unpublished Thesis*. Makassar: PPs UNM.

[130] Ward, R. T., & Butler, D. L. (2019). An Investigation of Metacognitive Awareness and Academic Performance in College Freshmen. *Education*, *139*(3), 120-126.

[131] Weinstein, C. E., & Mayer, R.E (1986). *The teaching of Learning Strategies*.In M. Wittrock (Ed.), Handbook of Research on teaching (pp. 315-327). New York: Macmilan.

[132] Weiss, T. (2019). The Effects of Mediation of Working Memory on Working Memory, Analogical Reasoning, Self-Regulation, and Academic Achievement in Typically Developing Preschoolers. *Journal of Cognitive Education and Psychology*, *17*(2), 214-215.

[133] Wenden, A. L. (1998). Metacognitive knowledge and language learning1. *Applied linguistics*, *19*(4), 515-537.

[134] Wenn, J., O'Connor, M., Breen, L. J., & Rees, C. S. (2019). Exploratory study of metacognitive beliefs about coping processes in prolonged grief symptomatology. *Death studies*, *43*(3), 143-153.

[135] Winstead, L. (2004). Increasing academic motivation and cognition in reading, writing, and matemathics: Meaning-Making strategies. Educational Research Quarterly, 28 (2), 30.

[136] Wulfemeyer, J. (2019). Modeling Metacognition and Providing Background Knowledge via Guided Reading Videos. *Journal of College*

Reading and Learning, 1-14.

[137] Yan, L. (2019, March). A Review on Writing Anxiety and Metacognitive Strategy in the Process of EFL Writing. In *2018 8th International Conference on Education and Management (ICEM 2018)*. Atlantis Press.

[138] Yerdelen-Damar, S., & Eryılmaz, A. (2019). Promoting Conceptual Understanding with Explicit Epistemic Intervention in Metacognitive Instruction: Interaction Between the Treatment and Epistemic Cognition. *Research in Science Education*, 1-29.

[139] Yilmaz, F. G. K., & Yilmaz, R. (2019). Impact of pedagogic agent-mediated metacognitive support towards increasing task and group awareness in CSCL. *Computers & Education*, *134*, 1-14.

[140] Yong, S. T., Gates, P., & Chan, A. T. Y. (2019). Similarities and Differences in Learning of Metacognitive Skills: Computer Games Versus Mathematics Education. *International Journal of Game-Based Learning (IJGBL)*, *9*(1), 1-14.

[141] Zhang, Y., Bohemia, E., & McCardle, J. (2019). Aspects of a study of creative thinking and knowledge application.

[142] Zhao, Q. (2019, May). Study and Practice of Formative Assessment Based on Metacognitive Strategy. In *2019 International Conference on Management, Education Technology and Economics (ICMETE 2019)*. Atlantis Press.

[143] Zheng, L., Li, X., Zhang, X., & Sun, W. (2019). The effects of group metacognitive scaffolding on group metacognitive behaviors, group performance, and cognitive load in computer-supported collaborative learning. *The Internet and Higher Education*.

\\\\\\\\